0001493152-24-04400210-Q RESEARCH FRONTIERS INC 20241107202411071601351601361601360 0 0001493152-24-044002 10-Q 45 20240930 20241107 20241107 RESEARCH FRONTIERS INC 0000793524 6794 112103466 DE 1231 10-Q 34 000-14893 241435389 240 CROSSWAYS PARK DR WOODBURY NY 11797-2033 5163641902 240 CROSSWAYS PARK DR WOODBURY NY 11797-2033 10-Q 1 form10-q.htm false Q3 --12-31 false 0000793524 0000793524 2024-01-01 2024-09-30 0000793524 2024-11-07 0000793524 2024-09-30 0000793524 2023-12-31 0000793524 2023-01-01 2023-09-30 0000793524 2024-07-01 2024-09-30 0000793524 2023-07-01 2023-09-30 0000793524 us-gaap:CommonStockMember 2022-12-31 0000793524 us-gaap:AdditionalPaidInCapitalMember 2022-12-31 0000793524 us-gaap:RetainedEarningsMember 2022-12-31 0000793524 2022-12-31 0000793524 us-gaap:CommonStockMember 2023-12-31 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-12-31 0000793524 us-gaap:RetainedEarningsMember 2023-12-31 0000793524 us-gaap:CommonStockMember 2023-06-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-06-30 0000793524 us-gaap:RetainedEarningsMember 2023-06-30 0000793524 2023-06-30 0000793524 us-gaap:CommonStockMember 2024-06-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-06-30 0000793524 us-gaap:RetainedEarningsMember 2024-06-30 0000793524 2024-06-30 0000793524 us-gaap:CommonStockMember 2023-01-01 2023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-01-01 2023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-01-01 2023-09-30 0000793524 us-gaap:CommonStockMember 2024-01-01 2024-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-01-01 2024-09-30 0000793524 us-gaap:RetainedEarningsMember 2024-01-01 2024-09-30 0000793524 us-gaap:CommonStockMember 2023-07-01 2023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-07-01 2023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-07-01 2023-09-30 0000793524 us-gaap:CommonStockMember 2024-07-01 2024-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-07-01 2024-09-30 0000793524 us-gaap:RetainedEarningsMember 2024-07-01 2024-09-30 0000793524 us-gaap:CommonStockMember 2023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-09-30 0000793524 2023-09-30 0000793524 us-gaap:CommonStockMember 2024-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-09-30 0000793524 us-gaap:RetainedEarningsMember 2024-09-30 0000793524 srt:MinimumMember us-gaap:SalesRevenueNetMember REFR:LicenseAgreementMember 2024-01-01 2024-09-30 0000793524 srt:MaximumMember us-gaap:SalesRevenueNetMember REFR:LicenseAgreementMember 2024-01-01 2024-09-30 0000793524 REFR:OneLicenseAgreementsMember 2024-09-30 0000793524 REFR:LicenseeOneMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-01-01 2024-09-30 0000793524 REFR:LicenseeTwoMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-01-01 2024-09-30 0000793524 REFR:LicenseeThreeMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-01-01 2024-09-30 0000793524 REFR:LicenseeFourMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-01-01 2024-09-30 0000793524 REFR:LicenseeOneMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-01-01 2023-09-30 0000793524 REFR:LicenseeTwoMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-01-01 2023-09-30 0000793524 REFR:LicenseeThreeMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-01-01 2023-09-30 0000793524 REFR:LicenseeFourMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-01-01 2023-09-30 0000793524 REFR:LicenseeOneMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-07-01 2024-09-30 0000793524 REFR:LicenseeTwoMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2024-07-01 2024-09-30 0000793524 REFR:LicenseeOneMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-07-01 2023-09-30 0000793524 REFR:LicenseeTwoMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-07-01 2023-09-30 0000793524 REFR:LicenseeThreeMember us-gaap:SalesRevenueNetMember us-gaap:CustomerConcentrationRiskMember 2023-07-01 2023-09-30 0000793524 srt:MinimumMember 2024-01-01 2024-09-30 0000793524 srt:MaximumMember 2024-01-01 2024-09-30 0000793524 REFR:EmployeesAndDirectorsMember 2024-01-01 2024-09-30 0000793524 REFR:EmployeesAndDirectorsMember 2023-01-01 2023-09-30 0000793524 REFR:TwoThousandNineteenEquityIncentivePlanMember 2024-09-30 0000793524 REFR:OptionsAndWarrantsMember 2024-01-01 2024-09-30 0000793524 REFR:OptionsAndWarrantsMember 2023-01-01 2023-09-30 0000793524 us-gaap:WarrantMember 2024-07-01 2024-09-30 0000793524 us-gaap:WarrantMember 2023-07-01 2023-09-30 0000793524 REFR:SubscriptionAgreementMember 2022-09-14 2022-09-16 0000793524 REFR:SubscriptionAgreementMember 2022-09-16 0000793524 us-gaap:WarrantMember 2022-09-16 0000793524 2022-09-28 2022-09-30 0000793524 us-gaap:CommonStockMember 2022-09-30 0000793524 us-gaap:WarrantMember 2022-09-30 0000793524 REFR:GauzyLtdMember srt:MinimumMember 2023-06-04 0000793524 REFR:GauzyLtdMember srt:MaximumMember 2023-06-04 0000793524 REFR:GauzyLtdMember 2024-09-30 0000793524 REFR:GauzyLtdMember 2023-09-30 0000793524 REFR:GauzyAndVisionSystemsMember 2024-01-01 2024-09-30 0000793524 REFR:GauzyAndVisionSystemsMember 2023-01-01 2023-09-30 0000793524 REFR:GauzyAndVisionSystemsMember 2024-07-01 2024-09-30 0000793524 REFR:GauzyAndVisionSystemsMember 2023-07-01 2023-09-30 0000793524 REFR:GauzyAndVisionSystemsMember 2023-01-01 2023-12-31 iso4217:USD xbrli:shares iso4217:USD xbrli:shares xbrli:pure Â Â Â UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Â FORM 10-Q Â â˜’ QUARTERLY REPORT PURSUANT TO SECTION 13 or 15(d) of THE SECURITIES AND EXCHANGE ACT OF 1934 Â For the quarter ended September 30, 2024 Commission File Number 000-14893 Â RESEARCH FRONTIERS INCORPORATED (Exact name of registrant as specified in its charter) Â delaware Â 11-2103466 (State or other jurisdiction of incorporation or organization) Â (I.R.S. Employer Identification No.) Â 240 CROSSWAYS PARK DRIVE WOODBURY, new york Â 11797-2033 (Address of principal executive offices) Â (Zip Code) Â Registrantâ€™s telephone number, including area code (516) 364-1902 Â Securities registered pursuant to Section 12(b) of the Act: Â Title of Class Â Name of Exchange on Which Registered Common Stock, $0.0001 Par Value Â The NASDAQ Stock Market Â Securities registered pursuant to Section 12(g) of the Act: None Â Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes â˜ No â˜’ Â Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes â˜ No â˜’ Â Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes â˜’ No â˜ Â Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Â§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes â˜’ No â˜ Â Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See the definitions of â€œlarge accelerated filer,â€ â€œaccelerated filer,â€ â€œsmaller reporting companyâ€ and â€œemerging growth companyâ€ in Rule 12b-2 of the Exchange Act. (Check one): Â Large accelerated filer â˜ Â Accelerated filer â˜ Â Non-accelerated filer â˜ Â Smaller reporting company â˜’ Â Emerging growth company â˜ Â If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. â˜ Â Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes â˜ No â˜’ Â Securities registered pursuant to Section 12(b) of the Act: Â Title of Each Class Â Trading Symbol(s) Â Name of each exchange on which registered Common Stock, par value $0.0001 per share Â REFR Â The NASDAQ Stock Market Â Indicate the number of shares outstanding of each of the issuerâ€™s classes of common stock, as of the latest practicable date: As of November 7, 2024, there were outstanding 33,517,787 shares of Common Stock, par value $0.0001 per share. Â Â Â Â Â Â TABLE OF CONTENTS Â Page(s) Â Â Â   Â 2 Â Â RESEARCH FRONTIERS INCORPORATED Condensed Consolidated Balance Sheets Â Â Â Â Â Â Â Â Â September 30, 2024 (Unaudited)Â Â December 31, 2023 (See Note 1)Â Â Â Â Â Â Â Â AssetsÂ Â Â Â Â Â Current assets:Â Â Â Â Â Â Â Â Cash and cash equivalentsÂ $1,647,987Â Â $2,475,958Â Royalties receivable, net of reserves of $1,253,450 in 2024 and 2023, respectivelyÂ Â 1,048,008Â Â Â 1,003,404Â Prepaid expenses and other current assetsÂ Â 154,727Â Â Â 96,784Â Total current assetsÂ Â 2,850,722Â Â Â 3,576,146Â Â Â Â Â Â Â Â Â Â Fixed assets, netÂ Â 20,758Â Â Â 39,598Â Operating lease ROU assetsÂ Â 71,486Â Â Â 178,715Â Deposits and other assetsÂ Â 56,066Â Â Â 56,066Â Total assetsÂ $2,999,032Â Â $3,850,525Â Â Â Â Â Â Â Â Â Â Liabilities and Shareholdersâ€™ EquityÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Current liabilities:Â Â Â Â Â Â Â Â Current portion of operating lease liabilityÂ $109,968Â Â $212,359Â Accounts payableÂ Â 34,306Â Â Â 50,880Â Accrued expensesÂ Â 31,799Â Â Â 14,192Â Total current liabilitiesÂ Â 176,073Â Â Â 277,431Â Â Â Â Â Â Â Â Â Â Operating lease liability, net of current portionÂ Â -Â Â Â 55,363Â Total liabilitiesÂ Â 176,073Â Â Â 332,794Â Â Â Â Â Â Â Â Â Â Shareholdersâ€™ equity:Â Â Â Â Â Â Â Â Common stock, par value $0.0001 per share; authorized 100,000,000 shares, issued and outstanding 33,517,787 in 2024 and 33,509,287 in 2023Â Â 3,352Â Â Â 3,351Â Additional paid-in capitalÂ Â 127,787,890Â Â Â 127,779,221Â Accumulated deficitÂ Â (124,968,283)Â Â (124,264,841) Total shareholdersâ€™ equityÂ Â 2,822,959Â Â Â 3,517,731Â Â Â Â Â Â Â Â Â Â Total liabilities and shareholdersâ€™ equityÂ $2,999,032Â Â $3,850,525Â Â See accompanying notes to condensed consolidated financial statements. Â 3 Â Â RESEARCH FRONTIERS INCORPORATED Condensed Consolidated Statements of Operations (Unaudited) Â Â Â 2024Â Â 2023Â Â 2024Â Â 2023Â Â Â Nine months ended September 30,Â Â Three months ended September 30,Â Â Â 2024Â Â 2023Â Â 2024Â Â 2023Â Â Â Â Â Â Â Â Â Â Â Â Â Â Fee incomeÂ $1,157,380Â Â $597,362Â Â $354,408Â Â $164,146Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Operating expensesÂ Â 1,565,152Â Â Â 1,695,129Â Â Â 454,866Â Â Â 542,635Â Research and developmentÂ Â 409,817Â Â Â 430,150Â Â Â 131,246Â Â Â 135,319Â Total expensesÂ Â 1,974,969Â Â Â 2,125,279Â Â Â 586,112Â Â Â 677,954Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Operating lossÂ Â (817,589)Â Â (1,527,917)Â Â (231,704)Â Â (513,808) Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Net investment incomeÂ Â 78,995Â Â Â 99,463Â Â Â 29,736Â Â Â 41,642Â Other incomeÂ Â 35,152Â Â Â -Â Â Â 35,152Â Â Â -Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Net lossÂ $(703,442)Â $(1,428,454)Â $(166,816)Â $(472,166) Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Basic and diluted net loss per common shareÂ $(0.02)Â $(0.04)Â $(0.00)Â $(0.01) Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Weighted average number of common shares outstandingÂ Â 33,515,327Â Â Â 33,435,074Â Â Â 33,517,787Â Â Â 33,509,287Â Â See accompanying notes to condensed consolidated financial statements. Â 4 Â Â RESEARCH FRONTIERS INCORPORATED Condensed Consolidated Statements of Shareholdersâ€™ Equity (Unaudited) Â For the nine months ended September 30, 2023 and 2024 Â Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Common StockÂ Â Additional Paid-inÂ Â AccumulatedÂ Â Â Â Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Balance, January 1, 2023Â Â 33,150,396Â Â $3,315Â Â $127,150,027Â Â $(122,356,477)Â $4,796,865Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Exercise of warrantsÂ Â 358,891Â Â Â 36Â Â Â 484,466Â Â Â -Â Â Â 484,502Â Net lossÂ Â -Â Â Â -Â Â Â -Â Â Â (1,428,454)Â Â (1,428,454) Balance, September 30, 2023Â Â 33,509,287Â Â $3,351Â Â $127,634,493Â Â $(123,784,931)Â $3,852,913Â Â Â Â Common StockÂ Â Additional Paid-in Â Â AccumulatedÂ Â Â Â Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Balance, January 1, 2024Â Â 33,509,287Â Â $3,351Â Â $127,779,221Â Â $(124,264,841)Â $3,517,731Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Exercise of optionsÂ Â 8,500Â Â Â 1Â Â Â 8,669Â Â Â -Â Â Â 8,670Â Net lossÂ Â -Â Â Â -Â Â Â -Â Â Â (703,442)Â Â (703,442) Balance, September 30, 2024Â Â 33,517,787Â Â $3,352Â Â $127,787,890Â Â $(124,968,283)Â $2,822,959Â Â For the three months ended September 30, 2023 and 2024 Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Common StockÂ Â Additional Paid-inÂ Â AccumulatedÂ Â Â Â Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Balance, June 30, 2023Â Â 33,509,287Â Â $3,351Â Â $127,634,493Â Â $(123,312,765)Â $4,325,079Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Net lossÂ Â -Â Â Â -Â Â Â -Â Â Â (472,166)Â Â (472,166) Balance, September 30, 2023Â Â 33,509,287Â Â $3,351Â Â $127,634,493Â Â $(123,784,931)Â $3,852,913Â Â Â Â Common StockÂ Â Additional Paid-inÂ Â AccumulatedÂ Â Â Â Â Â SharesÂ Â AmountÂ Â CapitalÂ Â DeficitÂ Â TotalÂ Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Balance, June 30, 2024Â Â 33,517,787Â Â $3,352Â Â $127,787,890Â Â $(124,801,467)Â $2,989,775Â BalanceÂ Â 33,517,787Â Â $3,352Â Â $127,787,890Â Â $(124,801,467)Â $2,989,775Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Â Net lossÂ Â -Â Â Â -Â Â Â -Â Â Â (166,816)Â Â (166,816) Balance, September 30, 2024Â Â 33,517,787Â Â $3,352Â Â $127,787,890Â Â $(124,968,283)Â $2,822,959Â BalanceÂ Â 33,517,787Â Â $3,352Â Â $127,787,890Â Â $(124,968,283)Â $2,822,959Â Â See accompanying notes to condensed consolidated financial statements. Â 5 Â Â RESEARCH FRONTIERS INCORPORATED Condensed Consolidated Statements of Cash Flows (Unaudited) Â Â Â 2024Â Â 2023Â Â Â For the nine months ended September 30,Â Â Â 2024Â Â 2023Â Cash flows from operating activities:Â Â Â Â Â Â Â Â Net lossÂ $(703,442)Â $(1,428,454) Adjustments to reconcile net loss to net cash used in operating activities:Â Â Â Â Â Â Â Â Depreciation and amortizationÂ Â 19,582Â Â Â 20,489Â Realized gain on marketable securitiesÂ Â -Â Â Â (26,375) Unrealized gain on marketable securitiesÂ Â -Â Â Â (30,399) ROU asset amortizationÂ Â 107,229Â Â Â 109,051Â Credit loss expenseÂ Â 25,001Â Â Â 95,000Â Change in assets and liabilities:Â Â Â Â Â Â Â Â Royalty receivablesÂ Â (69,605)Â Â (226,645) Prepaid expenses and other assetsÂ Â (57,943)Â Â (63,612) Accounts payable and accrued expensesÂ Â 1,033Â Â Â (52,784) Deferred revenueÂ Â -Â Â Â 3,735Â Operating lease liabilityÂ Â (157,754)Â Â (146,323) Net cash used in operating activitiesÂ Â (835,899)Â Â (1,746,317) Â Â Â Â Â Â Â Â Â Cash flows from investing activities:Â Â Â Â Â Â Â Â Purchases of fixed assetsÂ Â (742)Â Â (1,265) Purchases of marketable securitiesÂ Â -Â Â Â (5,434,386) Sales of marketable securitiesÂ Â -Â Â Â 2,991,535Â Net cash used in investing activitiesÂ Â (742)Â Â (2,444,116) Â Â Â Â Â Â Â Â Â Cash flows from financing activities:Â Â Â Â Â Â Â Â Net proceeds from exercise of options and warrantsÂ Â 8,670Â Â Â 484,502Â Net cash provided by financing activitiesÂ Â 8,670Â Â Â 484,502Â Â Â Â Â Â Â Â Â Â Net decrease in cash and cash equivalentsÂ Â (827,971)Â Â (3,705,931) Â Â Â Â Â Â Â Â Â Cash and cash equivalents at beginning of periodÂ Â 2,475,958Â Â Â 4,230,916Â Cash and cash equivalents at end of periodÂ $1,647,987Â Â $524,985Â Â See accompanying notes to condensed consolidated financial statements. Â 6 Â Â RESEARCH FRONTIERS INCORPORATED Notes to Condensed Consolidated Financial Statements September 30, 2024 (Unaudited) Â Note 1. Basis of Presentation Â The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (â€œGAAPâ€) for interim financial information and with the instructions to Rule 8-03 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. All such adjustments are of a normal recurring nature. Operating results for the three and nine months ended September 30, 2024 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2024. The condensed consolidated balance sheet as of December 31, 2023 has been derived from the audited consolidated financial statements as of that date. For further information, refer to the consolidated financial statements and footnotes thereto included in the Annual Report on Form 10-K relating to Research Frontiers Incorporated for the fiscal year ended December 31, 2023. Â Note 2. Business Â Research Frontiers Incorporated (â€œResearch Frontiersâ€ or the â€œCompanyâ€) operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Such devices, often referred to as â€œlight valvesâ€ or suspended particle devices (â€œSPDsâ€), use colloidal particles that are either incorporated within a liquid suspension or a film, which is usually enclosed between two sheets of glass or plastic having transparent, electrically conductive coatings on the facing surfaces thereof. At least one of the two sheets is transparent. SPD technology, made possible by a flexible light-control film invented by Research Frontiers, allows the user to instantly and precisely control the shading of glass/plastic manually or automatically. SPD technology has numerous product applications, including SPD-Smartâ„¢ windows, sunshades, skylights and interior partitions for homes and buildings; automotive windows, sunroofs, sun visors, sunshades, rear-view mirrors, instrument panels and navigation systems; aircraft windows; museum display panels; eyewear products; and flat panel displays for electronic products. SPD-Smart light control film is now being developed for, or used in, architectural, automotive, marine, aerospace and appliance applications. Â The Company has primarily utilized its cash, cash equivalents, and investments generated from sales of our common stock, proceeds from the exercise of options and warrants, and royalty fees collected to fund its research and development of SPD light valves, for marketing initiatives, and for other working capital purposes. The Companyâ€™s working capital and capital requirements depend upon numerous factors, including the results of research and development activities, competitive and technological developments, the timing and cost of patent filings, and the development of new licensees and changes in the Companyâ€™s relationships with its existing licensees. The degree of dependence of the Companyâ€™s working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements; and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. We have incurred recurring losses since inception and expect to continue to incur losses as a result of costs and expenses related to our research and continued development of our SPD technology and our corporate general and administrative expenses. Our capital requirements and operations to date have been substantially funded through sales of our common stock, exercise of options and warrants and royalty fees collected. As of September 30, 2024, we had working capital of approximately $2.7 million, cash and cash equivalents of approximately $1.6 million, shareholdersâ€™ equity of approximately $2.8 million and an accumulated deficit of approximately $125.0 million. Based on our current expectations of our cash flow shortfall for the next 12 months, our working capital would support our activities for at least the next 12 months from the issuance of these condensed consolidated financial statements. Â 7 Â Â In the event that we are unable to generate sufficient cash from our operating activities or raise additional funds, we may be required to delay, reduce or severely curtail our operations or otherwise impede our on-going business efforts, which could have a material adverse effect on our business, operating results, financial condition and long-term prospects. The Company may seek to obtain additional funding through future equity issuances. There can be no assurance as to the availability or terms upon which such financing and capital might be available. The eventual success of the Company and generation of positive cash flow will be dependent upon the commercialization of products using the Companyâ€™s technology by the Companyâ€™s licensees and payments of continuing royalties on account thereof. Â Note 3. Patent Costs Â The Company expenses costs relating to the development, acquisition or enforcement of patents due to the uncertainty of the recoverability of these items. Â Note 4. Revenue Recognition Â The Company recognizes revenue in accordance with Accounting Standards Codification (â€œASCâ€) 606, Revenue from Contracts with Customers (Topic 606). The standard provides a single comprehensive revenue recognition model for all contracts with customers and supersedes existing revenue recognition guidance. The revenue standard contains principles that an entity will apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. Â ASC 606 follows a five-step approach to determining revenue recognition including: 1) Identification of the contract; 2) Identification of the performance obligations; 3) Determination of the transaction price; 4) Allocation of the transaction price; and 5) Recognition of revenue. Â The Company determined that its license agreements provide for three performance obligations which include: (i) the Grant of Use to its Patent Portfolio (â€œGrant of Useâ€), (ii) Stand-Ready Technical Support (â€œTechnical Supportâ€) including the transfer of trade secrets and other know-how, production of materials, scale-up support, analytical testing, etc., and (iii) access to new Intellectual Property (â€œIPâ€) that may be developed sometime during the course of the contract period (â€œNew Improvementsâ€). Given the nature of IP development, such New Improvements are on an unspecified basis and can occur and be made available to licensees at any time during the contract period. Â When a contract includes more than one performance obligation, the Company needs to allocate the total consideration to each performance obligation based on its relative standalone selling price or estimate the standalone selling price if it is not observable. A standalone selling price is not available for our performance obligations since we do not sell any of the services separately and there is no competitor pricing that is available. As a consequence, the best method for determining the standalone selling price of our Grant of Use performance obligation is through a comparison of the average royalty rate for comparable license agreements as compared to our license agreements. Comparable license agreements must consider several factors including: (i) the materials that are being licensed, (ii) the market application for the licensed materials, and (iii) the financial terms in the license agreements that can increase or decrease the risk/reward nature of the agreement. Â Based on the royalty rate comparison referred to above, any pricing above and beyond the average royalty rate would relate to the Technical Support and New Improvements performance obligations. The Company focuses a significant portion of its time and resources to provide the Technical Support and New Improvements services to its licensees which further supports the conclusions reached using the royalty rate analysis. Â 8 Â Â Â The Technical Support and New Improvements performance obligations are co-terminus over the term of the license agreement. For purposes of determining the transaction price, and recognizing revenue, the Company combined the Technical Support and New Improvements performance obligations because they have the same pattern of transfer and the same term. We maintain a staff of scientists and other professionals whose primary job responsibilities throughout the year are: (i) being available to respond to Technical Support needs of our licensees, and (ii) developing improvements to our technology which are offered to our licensees as New Improvements. Since the costs incurred to satisfy the Technical Support and New Improvements performance obligations are incurred evenly throughout the year, the value of the Technical Support and New Improvements services are recognized throughout the initial contract period as these performance obligations are satisfied. If the agreement is not terminated at the end of the initial contract period, it will automatically renew on the same terms as the initial contract for a one-year period. Consequently, any fees or minimum annual royalty obligations relating to this renewal contract will be allocated similarly to the initial contract over the additional one-year period. Â We recognize revenue when or as the performance obligations in the contract are satisfied. For performance obligations that are fulfilled at a point in time, revenue is recognized at the fulfillment of the performance obligation. Since the IP is determined to be a functional license, the value of the Grant of Use is recognized in the first period of the contract term in which the license agreement is in force. The value of the Technical Support and New Improvements obligations is allocated throughout the contract period based on the satisfaction of its performance obligations. If the agreement is not terminated at the end of the contract period, it will renew on the same terms as the original agreement for a one-year period. Consequently, any fees or minimum annual royalties (â€œMARâ€) relating to this renewal contract will be allocated similarly over that additional year. Â The Companyâ€™s license agreements have a variable royalty fee structure (meaning that royalties are a fixed percentage of sales that vary from period to period) and frequently include a minimum annual royalty commitment. In instances when sales of licensed products by its licensees exceed the MAR, the Company recognizes fee income as the amounts have been earned. Typically, the royalty rate for such sales is 10-15% of the selling price. While this is variable consideration, it is subject to the sales/usage royalty exception to recognition of variable consideration in ASC 606 10-55-65 and therefore is not recognized until the subsequent sales or usage occurs or the MAR period commences. Â Because of the immediate recognition of the Grant of Use performance obligation: (i) the first period of the contract term will generally have a higher percent allocation of the transaction price under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606, and (ii) the remaining periods in the year will have less of the transaction price recognized under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606. After the initial period in the contract term, the revenue for the remaining periods will be based on the satisfaction of the Technical Support and New Improvements obligations. Since most of our license agreements start as of January 1st, the revenue recognized for the contract under ASC 606 in our first quarter will tend to be higher than the accounting guidance used prior to the adoption of ASC 606. Â As of September 30, 2024, the Company had $37,853 in unbilled revenue included in royalty receivables. Â Certain of the contract fees are accrued by, or paid to, the Company in advance of the period in which they are earned resulting in deferred revenue (contract liabilities). Such excess amounts are recorded as deferred revenue and are recognized as revenue in future periods as earned. Contract assets represent unbilled receivables and are presented within accounts receivable, net on the condensed consolidated balance sheets. Â The Company operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Our revenue source comes from the licensing of this technology and all of these license agreements have similar terms and provisions. The majority of the Companyâ€™s licensing fee income comes from the activities of several licensees participating in the automotive market. The Company currently believes that the automotive market will be the largest source of its royalty income over the next several years. The Companyâ€™s royalty income from this market may be influenced by numerous factors including various trends affecting demand in the automotive industry and the rate of introduction of new technology in OEM product lines. In addition to these macro factors, the Companyâ€™s royalty income from the automotive market could also be influenced by specific factors such as whether the Companyâ€™s SPD-SmartGlass technology appears as standard equipment or as an option on a particular vehicle, the number of additional vehicle models that SPD-SmartGlass appears on, the size of each window on a vehicle and the number of windows on a vehicle that use SPD-SmartGlass, fluctuations in the total number of vehicles produced by a manufacturer, and in the percentage of cars within each model produced with SPD-SmartGlass, and changes in pricing or exchange rates. Â 9 Â Â As of September 30, 2024, the Company has one license agreement that is in its initial multi-year term (â€œInitial Termâ€) with continuing performance obligations going forward. The Initial Term of this agreement will end as of December 31, 2024. The Company currently expects this agreement will renew annually at the end of the Initial Term. As of September 30, 2024, the aggregate amount of the revenue to be recognized upon the satisfaction of the remaining performance obligations for this license agreement is $18,000. The revenue for the remaining performance obligations for this license agreement is expected to be recognized evenly throughout the remaining period of the Initial Term. Â Note 5. Fee Income Â Fee income represents amounts earned by the Company under various license and other agreements relating to technology developed by the Company. Â During the first nine months of 2024, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 32%, 31%, 10% and 10% of fee income recognized during such period. During the first nine months of 2023, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 29%, 20%, 20% and 18% of fee income recognized during such period. Â During the three months ended September 30, 2024, two licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 35% and 33% of fee income recognized during such period. During the three months ended September 30, 2023, three licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 47%, 19% and 19% of fee income recognized during such period. Â Note 6. Stock-Based Compensation Â The Company has granted options/warrants to consultants. GAAP requires that all stock-based compensation be recognized as an expense in the condensed consolidated financial statements and that such costs be measured at the fair value of the award at the date of grant. These awards generally vest ratably over 12 to 60 months from the date of grant and the Company charges to operations quarterly the current market value of the options using the Black-Scholes method. During the nine months ended September 30, 2024 and 2023, there were no charges related to options or warrants granted to consultants. Â During the nine months ended September 30, 2024 and 2023, the Company did not grant options to employees or directors. Â There was no compensation expense recorded relating to restricted stock grants to employees and directors during the nine months ended September 30, 2024 and 2023. Â As of September 30, 2024, there were 84,500 shares available for future grant under our 2019 Equity Incentive Plan, which was approved by the Companyâ€™s shareholders in June 2019. Â Note 7. Income Taxes Â Since inception, the Company has incurred losses from operations and as a result has not recorded income tax expense. Benefits related to net operating loss carryforwards and other deferred tax items have been fully reserved since it was more likely than not that the Company would not achieve profitable operations and be able to utilize the benefit of the net operating loss carryforwards. Â Note 8. Basic and Diluted Loss Per Common Share Â Basic net loss per share excludes any dilution. It is based upon the weighted average number of common shares outstanding during the period. Dilutive net loss per share reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock. The Companyâ€™s dilutive loss per share equals basic loss per share for the periods ended September 30, 2024 and 2023, respectively, because all common stock equivalents (i.e., options and warrants) were antidilutive in those periods. The number of options and warrants that were not included (because their effect is antidilutive) were 2,706,872 and 3,314,030 for the periods ended September 30, 2024 and 2023, respectively. Â 10 Â Â Note 9. Equity Â During the nine months ended September 30, 2024, the Company received proceeds of $8,670 in connection with the exercise of options covering 8,500 shares of common stock. During nine months ended September 30, 2023, the Company received proceeds of $484,502 in connection with the exercise of warrants covering 358,891 shares of common stock. No options or warrants were exercised during the three-month periods ended September 30, 2024 and 2023. Â On September 16, 2022, the Company entered into subscription agreements from a group of private accredited investors to sell them 2.0 million shares of common stock of the Company at a price of $2.30 per share (which represents the closing market price of the Companyâ€™s common stock on September 14, 2022, which was the date that the transaction was agreed to). For each share received, the investor also received one warrant (expiring on September 30, 2027) to purchase one share of common stock at an exercise price of $2.76/share. The shares were issued to the investors in a private placement and, along with the shares issued in connection with the exercise of any warrants in the future, are not registered and therefore subject to at least a six-month holding period by the investor from the date of issuance. As of September 30, 2022, the Company received $3,450,000 under these subscription agreements and issued 1,500,000 common shares and issued 1,500,000 warrants. In addition, the Company has an outstanding commitment from a potential investor for the remaining $1,150,000 under these subscription agreements. The Company did not sell any other equity securities during the periods ended September 30, 2024 and 2023. Â As of September 30, 2024, there were 1,500,000 warrants and 1,206,872 options outstanding. Â Note 10. Leases Â The Company determines if an arrangement is a lease at its inception. This determination generally depends on whether the arrangement conveys the right to control the use of an identified fixed asset explicitly or implicitly for a period of time in exchange for consideration. Control of an underlying asset is conveyed if the Company obtains the rights to direct the use of, and to obtain substantially all of the economic benefits from the use of, the underlying asset. Lease expense for variable leases and short-term leases is recognized when the obligation is incurred. Â The Company has an operating lease for our facility with a weighted average remaining lease term of six months as of September 30, 2024. Operating leases are included in right-of-use lease assets, other current liabilities and long-term lease liabilities on the condensed consolidated balance sheets. Right-of-use lease assets and liabilities are recognized at each leaseâ€™s commencement date based on the present value of its lease payments over its respective lease term. The Company does not have an established incremental borrowing rate as it does not have any debt. The Company uses the stated borrowing rate for a lease when readily determinable. When the interest rates implicit in its lease agreements are not readily determinable, the Company used an interest rate based on the marketplace for public debt. The weighted average discount rate associated with operating leases as of September 30, 2024 is 5.5%. Â Operating lease expense for the nine months ended September 30, 2024 was approximately $150,000. The Company has no material variable lease costs or sublease income for the period ended September 30, 2024. Â Maturities of operating lease liabilities as of September 30, 2024 were as follows: Â Schedule of Maturities of Operating Lease Â Â September 30, 2024Â Â Â Â Â For the year ending December 31, 2024Â $56,000Â For the year ending December 31, 2025Â Â 56,000Â Total lease paymentsÂ Â 112,000Â Less: imputed lease interestÂ Â (2,032) Present value of lease liabilitiesÂ $109,968Â Â Note 11. Related Party Â Effective June 4, 2023, the Chairman and CEO of Gauzy, Ltd. (â€œGauzyâ€), one of the Companyâ€™s licensees, joined the Board of the Company. Gauzyâ€™s license agreement has been in effect since September 17, 2017 and provides for minimum annual royalties and earned royalties relating to sales of SPD-SmartGlass architectural window products. Because the Company collects a 10-15% percentage royalty from the higher-priced end product sales by Gauzyâ€™s customers purchasing their SPD-Smart light control film, under its license agreement with Gauzy, the Company does not collect a royalty on sales by Gauzy of SPD-Smart light control film to these licensee customers. In addition, the Companyâ€™s licensee Vision Systems, Inc. (â€œVision Systemsâ€) is a 100% owned subsidiary of Gauzy. For the nine months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 12% and 23%, respectively, of the Companyâ€™s total fee income. For the three months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 10% and 21%, respectively, of the Companyâ€™s total fee income. In addition, as of September 30, 2024 and December 31, 2023, the Companyâ€™s accounts receivable from Gauzy and Vision Systems represented 6% and 8%, respectively, of the Companyâ€™s total royalty receivables, before reserves. Â Note 12. Other Income Â During the three and nine months ended September 30, 2024, the Company received $35,152 in Employee Retention Credits, a refundable tax credit available under the Coronavirus Aid, Relief, and Economic Securities Act (â€œCARES Actâ€) that was designed to keep employees on the payroll during the COVID-19 pandemic. There were no such credits received during the three and nine months ended September 30, 2023. Â 11 Â Â Item 2. Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations Â Critical Accounting Policies Â The following accounting policies are important to understanding our financial condition and results of operations and should be read as an integral part of the discussion and analysis of the results of our operations and financial position. For additional accounting policies, see Note 2 to our December 31, 2023 consolidated financial statements, â€œSummary of Significant Accounting Policies.â€ Â The Company recognizes revenue in accordance with ASC 606, Revenue from Contracts with Customers. The Company determined that its license agreements provide for three performance obligations: (i) Grant of Use, (ii) Technical Support, and (iii) New Improvements. Â The best method for determining standalone selling price of our Grant of Use performance obligation is through a comparison of the average royalty rate for comparable license agreements as compared to our license agreements. Based on the royalty rate comparison referred to above, any pricing above and beyond the average royalty rate would relate to the Technical Support and New Improvements performance obligations. Â We recognize revenue when or as the performance obligations in the contract are satisfied. For performance obligations that are fulfilled at a point in time, revenue is recognized at the fulfillment of the performance obligation. Since the IP is determined to be a functional license, the value of the Grant of Use is recognized in the first period of the contract term in which the license agreement is in force. Since the costs incurred to satisfy the Technical Support and New Improvements performance obligations are incurred evenly throughout the year, the value of the Technical Support and New Improvements services are recognized throughout the contract period as these performance obligations are satisfied. Â The Company operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Our revenue source comes from the licensing of this technology and all of these license agreements have similar terms and provisions. Â The Company has entered into license agreements covering products using the Companyâ€™s SPD technology. When royalties from the sales of licensed products by a licensee exceed its contractual minimum annual royalties, the excess amount is recognized by the Company as fee income in the period that it was earned. Certain of the fees are accrued by, or paid to, the Company in advance of the period in which they are earned, resulting in deferred revenue. Â Royalty receivables are stated less allowance for credit loss. The allowance represents estimated uncollectible receivables usually due to licenseesâ€™ potential insolvency. The allowance includes amounts for certain licensees where risk of default has been specifically identified. The Company evaluates the collectability of its receivables on at least a quarterly basis and records appropriate allowances for uncollectible accounts when necessary. Â 12 Â Â On occasion, the Company may issue to consultants either options or warrants to purchase shares of common stock of the Company at specified share prices. These options or warrants may vest based upon specific services being performed or performance criteria being met. In accounting for equity instruments that are issued to other than employees for acquiring, or in conjunction with selling, goods or services, the Company is required to record consulting expenses based upon the fair value of such options or warrants on the earlier of the service period or the period that such options or warrants vest as determined using a Black-Scholes option pricing model and are marked to market quarterly using the Black-Scholes option valuation model. Â The preparation of condensed consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the condensed consolidated financial statements and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from these estimates. Â Results of Operations Â Overview Â The majority of the Companyâ€™s fee income comes from the activities of several licensees participating in the automotive market. The Company currently believes that the automotive market will be the largest source of its royalty income over the next several years. The Companyâ€™s royalty income from this market may be influenced by numerous factors including various trends affecting demand in the automotive industry and the rate of introduction of new technology in OEM product lines. In addition to these macro factors, the Companyâ€™s royalty income from the automotive market could also be influenced by specific factors such as whether the Companyâ€™s SPD-SmartGlass technology appears as standard equipment or as an option on a particular vehicle, the number of additional vehicle models that SPD-SmartGlass appears on, the size of each window on a vehicle and the number of windows on a vehicle that use SPD-SmartGlass, fluctuations in the total number of vehicles produced by a manufacturer, and in the percentage of cars within model produced with SPD-SmartGlass, and changes in pricing or exchange rates. Â Certain license fees, which are paid to the Company in advance of the accounting period in which they are earned resulting in the recognition of deferred revenue for the current accounting period, will be recognized as fee income in future periods. Also, licensees offset some or all of their royalty payments on sales of licensed products for a given period by applying these advance payments towards such earned royalty payments. Â The Company has received royalty revenues from sales of products using the Companyâ€™s technology that were accretive to the Companyâ€™s royalty revenue. Production efficiencies are expected to continue and accelerate with the introduction of the higher vehicle production volumes for various car models going forward, and the Company expects that lower pricing per square foot of the Companyâ€™s technology could expand the market opportunities, adoption rates, and revenues for its technology in automotive and non-automotive applications. The Company expects to generate additional royalty income from the near-term introduction of additional new car and aircraft models from other OEMs (original equipment manufacturers), continued growth of sales of products using the Companyâ€™s technology for the marine industry in yachts and other watercraft, in trains, in museums, and in larger architectural projects. Â Because the Companyâ€™s license agreements typically provide for the payment of royalties by a licensee on product sales within 45 days after the end of the quarter in which a sale of a licensed product occurs (with some of the Companyâ€™s more recent license agreements providing for payments on a monthly basis), and because of the time period which typically will elapse between a customer order and the sale of the licensed product and installation in a home, office building, automobile, aircraft, boat or any other product, there could be a delay between when economic activity between a licensee and its customer occurs and when the Company gets paid its royalty resulting from such activity. Â 13 Â Â Three months ended September 30, 2024 compared to the three months ended September 30, 2023 Â The Companyâ€™s fee income from licensing activities for the three months ended September 30, 2024 was $354,408 as compared to $164,146 for the three months ended September 30, 2023. This increase in fee income of $190,262 (116%) was primarily the result of higher royalties from the automotive and aircraft markets as compared to the third quarter of 2023. The Company expects revenue in all market segments to increase further as new car models and other products using the Companyâ€™s SPD-SmartGlass technology are introduced into the market. Â Operating expenses decreased by $87,769 for the three months ended September 30, 2024 to $454,866 from $542,635 for the three months ended September 30, 2023. This decrease is the result of lower credit loss expense ($75,000), as well as lower marketing and investor relations costs ($22,000), lower patent costs ($21,000) and lower allocated insurance costs ($5,000), partially offset by higher payroll and related costs ($30,000). Â Research and development expenditures decreased by $4,073 to $131,246 for the three months ended September 30, 2024 from $135,319 for the three months ended September 30, 2023. This decrease is primarily a result of lower allocated insurance costs ($5,000). Â The Companyâ€™s net investment income, consisting of interest income, for the three months ended September 30, 2024 was $29,736 as compared to income of $41,642 for the three months ended September 30, 2023 with the change due to lower cash balances available for investment. Â The Company recorded $35,152 of other income for the three months ended September 30, 2024 relating to an Employee Retention Credit, a refundable tax credit available under the Coronavirus Aid, Relief, and Economic Securities Act (â€œCARES Actâ€) that was designed to keep employees on the payroll during the Covid-19 pandemic. Â As a consequence of the factors discussed above, the Companyâ€™s net loss was $166,816 ($0.00 per common share) for the three months ended September 30, 2024 as compared to net loss of $472,166 ($0.01 per common share) for the three months ended September 30, 2023. Â Nine months ended September 30, 2024 compared to the nine months ended September 30, 2023 Â The Companyâ€™s fee income from licensing activities for the nine months ended September 30, 2024 was $1,157,380 as compared to $597,362 for the nine months ended September 30, 2023. This increase in fee income of $560,018 (94%) was the result of higher royalties from the automotive, aircraft and architectural markets as compared to the first nine months of 2023. The Company expects revenue in all market segments to increase further as new car models and other products using the Companyâ€™s SPD-SmartGlass technology are introduced into the market. Â Operating expenses decreased by $129,977 for the nine months ended September 30, 2024 to $1,565,152 from $1,695,129 for the nine months ended September 30, 2023. This decrease is the result of lower credit loss expense ($70,000) as well as lower investor relations and marketing costs ($47,000), lower payroll and related costs ($13,000) as well as lower patent costs ($24,000), partially offset by higher foreign withholding tax expenses ($24,000). Â Research and development expenditures decreased by $20,333 to $409,817 for the nine months ended September 30, 2024 from $430,150 for the nine months ended September 30, 2023. This decrease is a result of lower allocated insurance costs ($11,000), lower allocated facility costs ($6,000), as well as lower equipment rental costs ($4,000). Â The Companyâ€™s net investment income, consisting of interest income, for the nine months ended September 30, 2024 was $78,995 as compared to income of $99,463 for the nine months ended September 30, 2023 with the change due to lower cash balances available for investment. Â 14 Â Â The Company recorded $35,152 of other income for the nine months ended September 30, 2024 relating to an Employee Retention Credit, a refundable tax credit available under the Coronavirus Aid, Relief, and Economic Securities Act (â€œCARES Actâ€) that was designed to keep employees on the payroll during the COVID-19 pandemic. Â As a consequence of the factors discussed above, the Companyâ€™s net loss was $703,442 ($0.02 per common share) for the nine months ended September 30, 2024 as compared to net loss of $1,428,454 ($0.04 per common share) for the nine months ended September 30, 2023. Â Financial Condition, Liquidity and Capital Resources Â The Company has primarily utilized its cash, cash equivalents, and investments generated from sales of our common stock, proceeds from the exercise of options and warrants, and royalty fees collected to fund its research and development of SPD light valves, for marketing initiatives, and for other working capital purposes. The Companyâ€™s working capital and capital requirements depend upon numerous factors, including, but not limited to, the results of research and development activities, competitive and technological developments, the timing and costs of patent filings, and the development of new licensees and changes in the Companyâ€™s relationship with existing licensees. The degree of dependence of the Companyâ€™s working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements, and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. Â During the nine months ended September 30, 2024, the Companyâ€™s cash and cash equivalents balance decreased by $827,971 as a result of cash used to fund operations of $835,899 partially offset by cash generated from the exercise options of $8,670. As of September 30, 2024, the Company had cash and cash equivalents of approximately $1.6 million, working capital of $2.7 million and total shareholdersâ€™ equity of $2.8 million. Â Our quarterly projected cash flow shortfall, based on our current operations, adjusted for any non-recurring cash expenses for the next 12 months and adjusted for additional royalties expected to be received for use of our products in new production, for the next 12 months, is approximately $200,000 to $250,000 per quarter. We may eliminate some operating expenses in the future, which will further reduce our cash flow shortfall if needed. Based on these assumptions, we currently expect to have sufficient working capital for more than the next five years of operations. Â The Company expects to use its cash to fund its research and development of SPD light valves, its expanded marketing initiatives, and for other working capital purposes. The Company believes that its current cash and cash equivalents would fund its operations for more than the next five years. There can be no assurances that expenditures will not exceed the anticipated amounts or that additional financing, if required, will be available when needed or, if available, that its terms will be favorable or acceptable to the Company. Eventual success of the Company and generation of positive cash flow will be dependent upon the extent of commercialization of products using the Companyâ€™s technology by the Companyâ€™s licensees and payments of continuing royalties on account thereof. To date, the Company has not generated sufficient revenue from its licensees to fully fund its operations. Â Item 3. Quantitative and Qualitative Disclosures About Market Risk Â The information required by Item 3 has been disclosed in Item 7A of the Companyâ€™s Annual Report on Form 10-K for the year ended December 31, 2023. There has been no material change in the disclosure regarding market risk. Â Item 4. Controls and Procedures Â Evaluation of Disclosure Controls and Procedures Â Our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act, are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We designed our disclosure controls and procedures to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officer, to allow timely decisions regarding required disclosure. Our Chief Executive Officer and acting interim Chief Financial Officer, with assistance from other members of our management, has reviewed the effectiveness of our disclosure controls and procedures as of September 30, 2024, and, based on his evaluation, has concluded that our disclosure controls and procedures were effective. Â 15 Â Â Changes in Internal Control Over Financial Reporting Â There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during the three months ended September 30, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Â Forward-Looking Statements Â The information set forth in this Report and in all publicly disseminated information about the Company, including the narrative contained in â€œManagementâ€™s Discussion and Analysis of Financial Condition and Results of Operationsâ€ above, includes â€œforward-looking statementsâ€ within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the safe harbor created by that section. Readers are cautioned not to place undue reliance on these forward-looking statements as they speak only as of the date hereof and are not guaranteed. Â PART II. OTHER INFORMATION Â Item 6. Exhibits Â 31.1 Â Rule 13a-14(a)/15d-14(a) Certification of Joseph M. Harary - Filed herewith. Â Â Â 32.1 Â Section 1350 Certification of Joseph M. Harary - Filed herewith. Â Â Â 101.INS Â Inline XBRL Instance Document Â Â Â 101.SCH Â Inline XBRL Taxonomy Extension Schema Document Â Â Â 101.CAL Â Inline XBRL Taxonomy Extension Calculation Linkbase Document Â Â Â 101.DEF Â Inline XBRL Taxonomy Extension Definition Linkbase Document Â Â Â 101.LAB Â Inline XBRL Taxonomy Extension Label Linkbase Document Â Â Â 101.PRE Â Inline XBRL Taxonomy Extension Presentation Linkbase Document Â Â Â 104 Â Cover Page Interactive Data File (embedded within the Inline XBRL document) Â 16 Â Â SIGNATURES Â Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunder duly authorized. Â Â RESEARCH FRONTIERS INCORPORATED Â (Registrant) Â Â Â /s/ Joseph M. Harary Â Joseph M. Harary, President, CEO, acting interim CFO and Treasurer Â (Principal Executive Officer and Principal Financial Officer) Â Date: November 7, 2024 Â 17 Â EX-31.1 2 ex31-1.htm Â EXHIBIT 31.1 Â CERTIFICATION Â I, Joseph M. Harary, certify that: Â 1. I have reviewed this quarterly report on Form 10-Q of Research Frontiers Incorporated (the â€œregistrantâ€); Â 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; Â 3. Based on my knowledge, the condensed consolidated financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; Â 4. The registrantâ€™s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have: Â Â a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; Â Â Â Â b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; Â Â Â Â c) Evaluated the effectiveness of the registrantâ€™s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and Â Â Â Â d) Disclosed in this report any change in the registrantâ€™s internal control over financial reporting that occurred during the registrantâ€™s most recent fiscal quarter (the registrantâ€™s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrantâ€™s internal control over financial reporting; and Â 5. The registrantâ€™s other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrantâ€™s auditors and the audit committee of the registrantâ€™s board of directors (or persons performing the equivalent functions): Â Â a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrantâ€™s ability to record, process, summarize and report financial information; and Â Â Â Â b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrantâ€™s internal control over financial reporting. Â Dated: November 7, 2024 /s/ Joseph M. Harary Â Joseph M. Harary Â President, Chief Executive Officer and acting interim Chief Financial Officer Â Â Â EX-32.1 3 ex32-1.htm Â EXHIBIT 32.1 Â CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 Â In connection with the Quarterly Report of Research Frontiers Incorporated (the â€œCompanyâ€) on Form 10-Q for the quarter ended September 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the â€œReportâ€), I, Joseph M. Harary, President and Chief Executive Officer and Principal Executive Officer and acting interim Chief Financial Officer and Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that: Â 1. The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934; and Â Â 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. Â /s/ Joseph M. Harary Â Joseph M. Harary Â President, Chief Executive Officer and Principal Â Executive Officer and acting interim Chief Financial Â Officer and Principal Financial Officer Â November 7, 2024 Â Â Â Â EX-101.SCH 4 refr-20240930.xsd XBRL SCHEMA FILE 00000001 - Document - Cover link:presentationLink

link:calculationLink link:definitionLink 00000002 - Statement - Condensed Consolidated Balance Sheets link:presentationLink link:calculationLink link:definitionLink 00000003 - Statement - Condensed Consolidated Balance Sheets (Parenthetical) link:presentationLink link:calculationLink link:definitionLink 00000004 - Statement - Condensed Consolidated Statements of Operations (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000005 - Statement - Condensed Consolidated Statements of Shareholders' Equity (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000006 - Statement - Condensed Consolidated Statements of Cash Flows (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000007 - Disclosure - Basis of Presentation link:presentationLink link:calculationLink link:definitionLink 00000008 - Disclosure - Business link:presentationLink link:calculationLink link:definitionLink 00000009 - Disclosure - Patent Costs link:presentationLink link:calculationLink link:definitionLink 00000010 - Disclosure - Revenue Recognition link:presentationLink link:calculationLink link:definitionLink 00000011 - Disclosure - Fee Income link:presentationLink link:calculationLink link:definitionLink 00000012 - Disclosure - Stock-Based Compensation link:presentationLink link:calculationLink link:definitionLink 00000013 - Disclosure - Income Taxes link:presentationLink link:calculationLink link:definitionLink 00000014 - Disclosure - Basic and Diluted Loss Per Common Share link:presentationLink link:calculationLink link:definitionLink 00000015 - Disclosure - Equity link:presentationLink link:calculationLink link:definitionLink 00000016 - Disclosure - Leases link:presentationLink link:calculationLink link:definitionLink 00000017 - Disclosure - Related Party link:presentationLink link:calculationLink link:definitionLink 00000018 - Disclosure - Other Income link:presentationLink link:calculationLink link:definitionLink 00000019 - Disclosure - Leases (Tables) link:presentationLink link:calculationLink link:definitionLink 00000020 - Disclosure - Business (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000021 - Disclosure - Revenue Recognition (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000022 - Disclosure - Fee Income (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000023 - Disclosure - Stock-Based Compensation (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000024 - Disclosure - Basic and Diluted Loss Per Common Share (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000025 - Disclosure - Equity (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000026 - Disclosure - Schedule of Maturities of Operating Lease (Details) link:presentationLink link:calculationLink link:definitionLink 00000027 - Disclosure - Leases (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000028 - Disclosure - Related Party (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000029 - Disclosure - Other Income (Details Narrative) link:presentationLink link:calculationLink link:definitionLink EX-101.CAL 5 refr-20240930_cal.xml XBRL CALCULATION FILE EX-101.DEF 6 refr-20240930_def.xml XBRL DEFINITION FILE EX-101.LAB 7 refr-20240930_lab.xml XBRL LABEL FILE Equity Components [Axis] Common Stock [Member] Additional Paid-in Capital [Member] Retained Earnings [Member] Statistical Measurement [Axis] Minimum [Member] Concentration Risk Benchmark [Axis] Revenue Benchmark [Member] Collaborative Arrangement and Arrangement Other than Collaborative [Axis] License Agreement [Member] Maximum [Member] One License Agreements [Member] Product and Service [Axis] Licensee One [Member] Concentration Risk Type [Axis] Customer Concentration Risk [Member] License Two [Member] License Three [Member] Licensee Four [Member] Title and Position [Axis] Employees and Directors [Member] 2019 Equity Incentive Plan [Member] Antidilutive Securities [Axis] Options and Warrants [Member] Warrant [Member] Subscription Agreement [Member] Legal Entity [Axis] Gauzy Ltd [Member] Ownership [Axis] Gauzy and Vision Systems [Member] Cover [Abstract] Document Type Amendment Flag Amendment Description Document Registration Statement Document Annual Report Document Quarterly Report Document Transition Report Document Shell Company Report Document Shell Company Event Date Document Period Start Date Document Period End Date Document Fiscal Period Focus Document Fiscal Year Focus Current Fiscal Year End Date Entity File Number Entity Registrant Name Entity Central Index Key Entity Primary SIC Number Entity Tax Identification Number Entity Incorporation, State or Country Code Entity Address, Address Line One Entity Address, Address Line Two Entity Address, Address Line Three Entity Address, City or Town Entity Address, State or Province Entity Address, Country Entity Address, Postal Zip Code Country Region City Area Code Local Phone Number Extension Written Communications Soliciting Material Pre-commencement Tender Offer Pre-commencement Issuer Tender Offer Title of 12(b) Security No Trading Symbol Flag Trading Symbol Security Exchange Name Title of 12(g) Security Security Reporting Obligation Annual Information Form Audited Annual Financial Statements Entity Well-known Seasoned Issuer Entity Voluntary Filers Entity Current Reporting Status Entity Interactive Data Current Entity Filer Category Entity Small Business Entity Emerging Growth Company Elected Not To Use the Extended Transition Period Document Accounting Standard Other Reporting Standard Item Number Entity Shell Company Entity Public Float Entity Bankruptcy Proceedings, Reporting Current Entity Common Stock, Shares Outstanding Documents Incorporated by Reference [Text Block] Entity Listing, Par Value Per Share Statement of Financial Position [Abstract] Assets Current assets: Cash and cash equivalents Royalties receivable, net of reserves of $1,253,450 in 2024 and 2023, respectively Prepaid expenses and other current assets Total current assets Fixed assets, net Operating lease ROU assets Deposits and other assets Total assets Liabilities and Shareholdersâ€™ Equity Current liabilities: Current portion of operating lease liability Accounts payable Accrued expenses Total current liabilities Operating lease liability, net of current portion Total liabilities Shareholdersâ€™ equity: Common stock, par value $0.0001 per share; authorized 100,000,000 shares, issued and outstanding 33,517,787 in 2024 and 33,509,287 in 2023 Additional paid-in capital Accumulated deficit Total shareholdersâ€™ equity Total liabilities and shareholdersâ€™ equity Royalties receivables, reserves Common stock, par value Common stock, shares authorized Common stock, shares issued Common stock, shares outstanding Income Statement [Abstract] Fee income Operating expenses Research and development Total expenses Operating loss Net investment income Other income Net loss Basic net loss per common share Diluted net loss per common share Weighted average number of common shares outstanding - Basic Weighted average number of common shares outstanding - Diluted Statement [Table] Statement [Line Items] Balance Balance, shares Exercise of warrants Exercise of warrants, shares Net loss Exercise of options Exercise of options, shares Balance Balance, shares Statement of Cash Flows [Abstract] Cash flows from operating activities: Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization Realized gain on marketable securities Unrealized gain on marketable securities ROU asset amortization Credit loss expense Change in assets and liabilities: Royalty receivables Prepaid expenses and other assets Accounts payable and accrued expenses Deferred revenue Operating lease liability Net cash used in operating activities Cash flows from investing activities: Purchases of fixed assets Purchases of marketable securities Sales of marketable securities Net cash used in investing activities Cash flows from financing activities: Net proceeds from exercise of options and warrants Net cash provided by financing activities Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of period Cash and cash equivalents at end of period Organization, Consolidation and Presentation of Financial Statements [Abstract] Basis of Presentation Business Goodwill and Intangible Assets Disclosure [Abstract] Patent Costs Revenue from Contract with Customer [Abstract] Revenue Recognition Fee Income Fee Income Compensation Related Costs [Abstract] Stock-Based Compensation Income Tax Disclosure [Abstract] Income Taxes Earnings Per Share [Abstract] Basic and Diluted Loss Per Common Share Equity [Abstract] Equity Leases [Abstract] Leases Related Party Transactions [Abstract] Related Party Other Income and Expenses [Abstract] Other Income Schedule of Maturities of Operating Lease [custom:WorkingCapital-0] Cash and Cash Equivalents, at Carrying Value Equity, Attributable to Parent Retained Earnings (Accumulated Deficit) Royalty rate on selling price Unbilled receivables current Revenue remaining performance obligations Nature of Operation, Product Information, Concentration of Risk [Table] Product Information [Line Items] Concentration risk percentage Deferred Compensation Arrangement with Individual, Excluding Share-Based Payment and Postretirement Benefit [Table] Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items] Stock based compensation be recognized Stock options granted Restricted stock options granted Shares available for future grant Antidilutive Security, Excluded EPS Calculation [Table] Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items] Anti-dilutive securities effect Accumulated Other Comprehensive Income (Loss) [Table] Accumulated Other Comprehensive Income (Loss) [Line Items] Proceeds from stock options exercised Number of shares issued Proceeds from warrant exercises Options exercised during period Warrants exercised during period Shares issued price per share Warrant expiring term Warrants exercise price Proceeds from issuance or sale of equity Number of shares issued Number of warrants issued Proceeds from expects to receive the remaining amount Warrants outstanding Options outstanding For the year ending December 31, 2024 For the year ending December 31, 2025 Total lease payments Less: imputed lease interest Present value of lease liabilities Weighted average remaining lease term Weighted-average discount rate Operating lease expense Variable lease costs Sublease income Royalty percentage Subsidiary, ownership percentage Fee income percentage Related party percentage Refundable tax credit Stock Issued During Period Value Stock Warrants of Exercised. Stock issued during period shares warrants exercised. Realized gain on marketable securities. The cash inflow associated with the amount received from holders exercising their stock options and warrants. Working capital. Non-recurring cash expenses. One License Agreements [Member] Fee Income Disclosure [Text Block] Licensee One [Member] License Two [Member] License Three [Member] Licensee Four [Member] Employees and Directors [Member] 2019 Equity Incentive Plan [Member] Options and Warrants [Member] Subscription Agreement [Member] Proceeds from expects to receive the remaining amount. Royalty percentage. Gauzy Ltd [Member] Fee income percentage. Gauzy and Vision Systems [Member] Refundable tax credit. Unrealized gain on marketable securities. Royalty rate on selling price. License Agreement [Member] Assets, Current Assets [Default Label] Liabilities, Current Liabilities Liabilities and Equity Operating Expenses Operating Income (Loss) Shares, Outstanding RealizedGainOnMarketableSecurities UnrealizedGainOnMarketableSecurities Increase (Decrease) in Accounts Receivable Increase (Decrease) in Prepaid Expense and Other Assets Net Cash Provided by (Used in) Operating Activities Payments to Acquire Property, Plant, and Equipment Payments to Acquire Marketable Securities Net Cash Provided by (Used in) Investing Activities Net Cash Provided by (Used in) Financing Activities Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Period Increase (Decrease), Including Exchange Rate Effect Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Including Disposal Group and Discontinued Operations Fee Income Disclosure [Text Block] Shares, Issued Lessee, Operating Lease, Liability, to be Paid Lessee, Operating Lease, Liability, Undiscounted Excess Amount Operating Lease, Liability EX-101.PRE 8 refr-20240930_pre.xml XBRL PRESENTATION FILE XML 10 R1.htm IDEA: XBRL DOCUMENT v3.24.3 Cover - $ / shares 9 Months Ended Sep. 30, 2024 Nov. 07, 2024 Cover [Abstract] Â Â Document Type 10-Q Â Amendment Flag false Â Document Quarterly Report true Â Document Transition Report false Â Document Period End Date Sep. 30, 2024 Â Document Fiscal Period Focus Q3 Â Document Fiscal Year Focus 2024 Â Current Fiscal Year End Date --12-31 Â Entity File Number 000-14893 Â Entity Registrant Name RESEARCH FRONTIERS INCORPORATED Â Entity Central Index Key 0000793524 Â Entity Tax Identification Number 11-2103466 Â Entity Incorporation, State or Country Code DE Â Entity Address, Address Line One 240 CROSSWAYS PARK DRIVE Â Entity Address, City or Town WOODBURY Â Entity Address, State or Province NY Â Entity Address, Postal Zip Code 11797-2033 Â City Area Code (516) Â Local Phone Number 364-1902 Â Title of 12(b) Security Common Stock, par value $0.0001 per share Â Trading Symbol REFR Â Security Exchange Name NASDAQ Â Entity Current Reporting Status Yes Â Entity Interactive Data Current Yes Â Entity Filer Category Non-accelerated Filer Â Entity Small Business true Â Entity Emerging Growth Company false Â Entity Shell Company false Â Entity Common Stock, Shares Outstanding Â 33,517,787 Entity Listing, Par Value Per Share $ 0.0001 Â X - DefinitionBoolean flag that is true when the XBRL content amends previously-filed or accepted submission. + ReferencesNo definition available. + Details Name: dei_AmendmentFlag Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionArea code of city + ReferencesNo definition available. + Details Name: dei_CityAreaCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionCover page. + ReferencesNo definition available. + Details Name: dei_CoverAbstract Namespace Prefix: dei_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionEnd date of current fiscal year in the format --MM-DD. + ReferencesNo definition available. + Details Name: dei_CurrentFiscalYearEndDate Namespace Prefix: dei_ Data Type: xbrli:gMonthDayItemType Balance Type: na Period Type: duration X - DefinitionFiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalPeriodFocus Namespace Prefix: dei_ Data Type: dei:fiscalPeriodItemType Balance Type: na Period Type: duration X - DefinitionThis is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalYearFocus Namespace Prefix: dei_ Data Type: xbrli:gYearItemType Balance Type: na Period Type: duration X - DefinitionFor the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD. + ReferencesNo definition available. + Details Name: dei_DocumentPeriodEndDate Namespace Prefix: dei_ Data Type: xbrli:dateItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as an quarterly report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Form 10-Q -Number 240 -Section 308 -Subsection a + Details Name: dei_DocumentQuarterlyReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as a transition report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Forms 10-K, 10-Q, 20-F -Number 240 -Section 13 -Subsection a-1 + Details Name: dei_DocumentTransitionReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word 'Other'. + ReferencesNo definition available. + Details Name: dei_DocumentType Namespace Prefix: dei_ Data Type: dei:submissionTypeItemType Balance Type: na Period Type: duration X - DefinitionAddress Line 1 such as Attn, Building Name, Street Name + ReferencesNo definition available. + Details Name: dei_EntityAddressAddressLine1 Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the City or Town + ReferencesNo definition available. + Details Name: dei_EntityAddressCityOrTown Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionCode for the postal or zip code + ReferencesNo definition available. + Details Name: dei_EntityAddressPostalZipCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the state or province. + ReferencesNo definition available. + Details Name: dei_EntityAddressStateOrProvince Namespace Prefix: dei_ Data Type: dei:stateOrProvinceItemType Balance Type: na Period Type: duration X - DefinitionA unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityCentralIndexKey Namespace Prefix: dei_ Data Type: dei:centralIndexKeyItemType Balance Type: na Period Type: duration X - DefinitionIndicate number of shares or other units outstanding of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument. + ReferencesNo definition available. + Details Name: dei_EntityCommonStockSharesOutstanding Namespace Prefix: dei_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionIndicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesNo definition available. + Details Name: dei_EntityCurrentReportingStatus Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionIndicate if registrant meets the emerging growth company criteria. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityEmergingGrowthCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionCommission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen. + ReferencesNo definition available. + Details Name: dei_EntityFileNumber Namespace Prefix: dei_ Data Type: dei:fileNumberItemType Balance Type: na Period Type: duration X - DefinitionIndicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityFilerCategory Namespace Prefix: dei_ Data Type: dei:filerCategoryItemType Balance Type: na Period Type: duration X - DefinitionTwo-character EDGAR code representing the state or country of incorporation. + ReferencesNo definition available. + Details Name: dei_EntityIncorporationStateCountryCode Namespace Prefix: dei_ Data Type: dei:edgarStateCountryItemType Balance Type: na Period Type: duration X -

DefinitionBoolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-T -Number 232 -Section 405 + Details Name: dei_EntityInteractiveDataCurrent Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionThe par value per share of security quoted in same currency as Trading currency. Example: '0.01'. + ReferencesNo definition available. + Details Name: dei_EntityListingParValuePerShare Namespace Prefix: dei_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityRegistrantName Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityShellCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionIndicates that the company is a Smaller Reporting Company (SRC). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntitySmallBusiness Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe Tax Identification Number (TIN), also known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityTaxIdentificationNumber Namespace Prefix: dei_ Data Type: dei:employerIdItemType Balance Type: na Period Type: duration X - DefinitionLocal phone number for entity. + ReferencesNo definition available. + Details Name: dei_LocalPhoneNumber Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionTitle of a 12(b) registered security. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b + Details Name: dei_Security12bTitle Namespace Prefix: dei_ Data Type: dei:securityTitleItemType Balance Type: na Period Type: duration X - DefinitionName of the Exchange on which a security is registered. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection d1-1 + Details Name: dei_SecurityExchangeName Namespace Prefix: dei_ Data Type: dei:edgarExchangeCodeItemType Balance Type: na Period Type: duration X - DefinitionTrading symbol of an instrument as listed on an exchange. + ReferencesNo definition available. + Details Name: dei_TradingSymbol Namespace Prefix: dei_ Data Type: dei:tradingSymbolItemType Balance Type: na Period Type: duration XML 11 R2.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets - USD ($) Sep. 30, 2024 Dec. 31, 2023 Current assets: Â Â Cash and cash equivalents $ 1,647,987 $ 2,475,958 Royalties receivable, net of reserves of $1,253,450 in 2024 and 2023, respectively 1,048,008 1,003,404 Prepaid expenses and other current assets 154,727 96,784 Total current assets 2,850,722 3,576,146 Fixed assets, net 20,758 39,598 Operating lease ROU assets 71,486 178,715 Deposits and other assets 56,066 56,066 Total assets 2,999,032 3,850,525 Current liabilities: Â Â Current portion of operating lease liability 109,968 212,359 Accounts payable 34,306 50,880 Accrued expenses 31,799 14,192 Total current liabilities 176,073 277,431 Operating lease liability, net of current portion 55,363 Total liabilities 176,073 332,794 Shareholdersâ€™ equity: Â Â Common stock, par value $0.0001 per share; authorized 100,000,000 shares, issued and outstanding 33,517,787 in 2024 and 33,509,287 in 2023 3,352 3,351 Additional paid-in capital 127,787,890 127,779,221 Accumulated deficit (124,968,283) (124,264,841) Total shareholdersâ€™ equity 2,822,959 3,517,731 Total liabilities and shareholdersâ€™ equity $ 2,999,032 $ 3,850,525 X - DefinitionCarrying value as of the balance sheet date of liabilities incurred (and for which invoices have typically been received) and payable to vendors for goods and services received that are used in an entity's business. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10 + Details Name: us-gaap_AccountsPayableCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after allowance for credit loss, of right to consideration from customer for product sold and service rendered in normal course of business, classified as current. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481990/310-10-45-2 + Details Name: us-gaap_AccountsReceivableNetCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionCarrying value as of the balance sheet date of obligations incurred and payable, pertaining to costs that are statutory in nature, are incurred on contractual obligations, or accumulate over time and for which invoices have not yet been received or will not be rendered. Examples include taxes, interest, rent and utilities. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_AccruedLiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionValue received from shareholders in common stock-related transactions that are in excess of par value or stated value and amounts received from other stock-related transactions. Includes only common stock transactions (excludes preferred stock transactions). May be called contributed capital, capital in excess of par, capital surplus, or paid-in capital. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_AdditionalPaidInCapitalCommonStock Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of asset recognized for present right to economic benefit. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 12: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 13: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 30: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Assets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of asset recognized for present right to economic benefit, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_AssetsCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_AssetsCurrentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashAndCashEquivalentsAtCarryingValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAggregate par or stated value of issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note: elements for number of nonredeemable common shares, par value and other disclosure concepts are in another section within stockholders' equity. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_CommonStockValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of liability recognized for present obligation requiring transfer or otherwise providing economic benefit to others. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(26)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 15: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(14)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap_Liabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(32)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LiabilitiesAndStockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionTotal obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-5Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 21: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_LiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_LiabilitiesCurrentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's right to use underlying asset under operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseRightOfUseAsset Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of noncurrent assets classified as other. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_OtherAssetsNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of asset related to consideration paid in advance for costs that provide economic benefits in future periods, and amount of other assets that are expected to be realized or consumed within one year or the normal operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_PrepaidExpenseAndOtherAssetsCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -

Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 360 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478451/942-360-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of accumulated undistributed earnings (deficit). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-11Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(23)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StockholdersEquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 12 R3.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets (Parenthetical) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Statement of Financial Position [Abstract] Â Â Royalties receivables, reserves $ 1,253,450 $ 1,253,450 Common stock, par value $ 0.0001 $ 0.0001 Common stock, shares authorized 100,000,000 100,000,000 Common stock, shares issued 33,517,787 33,509,287 Common stock, shares outstanding 33,517,787 33,509,287 X - DefinitionAmount of allowance for credit loss on accounts receivable, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479344/326-20-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-4 + Details Name: us-gaap_AllowanceForDoubtfulAccountsReceivableCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionFace amount or stated value per share of common stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe maximum number of common shares permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommonStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionTotal number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockSharesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares of common stock outstanding. Common stock represent the ownership interest in a corporation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3 + Details Name: us-gaap_CommonStockSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StatementOfFinancialPositionAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 13 R4.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Operations (Unaudited) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Income Statement [Abstract] Â Â Â Â Fee income $ 354,408 $ 164,146 $ 1,157,380 $ 597,362 Operating expenses 454,866 542,635 1,565,152 1,695,129 Research and development 131,246 135,319 409,817 430,150 Total expenses 586,112 677,954 1,974,969 2,125,279 Operating loss (231,704) (513,808) (817,589) (1,527,917) Net investment income 29,736 41,642 78,995 99,463 Other income 35,152 35,152 Net loss $ (166,816) $ (472,166) $ (703,442) $ (1,428,454) Basic net loss per common share $ (0.00) $ (0.01) $ (0.02) $ (0.04) Diluted net loss per common share $ (0.00) $ (0.01) $ (0.02) $ (0.04) Weighted average number of common shares outstanding - Basic 33,517,787 33,509,287 33,515,327 33,435,074 Weighted average number of common shares outstanding - Diluted 33,517,787 33,509,287 33,515,327 33,435,074 X - DefinitionThe amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareBasic Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic

10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareDiluted Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionAmount of realized and unrealized gain (loss) on investment. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(9)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(7)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/recommendedDisclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_GainLossOnInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncomeStatementAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionGenerally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Excludes Selling, General and Administrative Expense. + ReferencesNo definition available. + Details Name: us-gaap_OperatingCostsAndExpenses Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionGenerally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Includes selling, general and administrative expense. + ReferencesNo definition available. + Details Name: us-gaap_OperatingExpenses Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe net result for the period of deducting operating expenses from operating revenues. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 + Details Name: us-gaap_OperatingIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of revenue and income classified as other. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 6 -Subparagraph (SX 210.12-14(Column E)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 6 -Subparagraph (SX 210.12-14(Column E)(Footnote 4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 6 -Subparagraph (SX 210.12-14(Column E)(Footnote 6)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-6Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(1)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1 + Details Name: us-gaap_OtherIncome Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of expense for research and development. Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 730 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482916/730-10-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 912 -SubTopic 730 -Name Accounting Standards Codification -Section 25 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479532/912-730-25-1 + Details Name: us-gaap_ResearchAndDevelopmentExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI

https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-4 + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-16 + Details Name: us-gaap_WeightedAverageNumberOfDilutedSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10 + Details Name: us-gaap_WeightedAverageNumberOfSharesOutstandingBasic Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration XML 14 R5.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Shareholders' Equity (Unaudited) - USD ($) Common Stock [Member] Additional Paid-in Capital [Member] Retained Earnings [Member] Total Balance at Dec. 31, 2022 $ 3,315 $ 127,150,027 $ (122,356,477) $ 4,796,865 Balance, shares at Dec. 31, 2022 33,150,396 Â Â Â Exercise of warrants $ 36 484,466 484,502 Exercise of warrants, shares 358,891 Â Â Â Net loss (1,428,454) (1,428,454) Balance at Sep. 30, 2023 $ 3,351 127,634,493 (123,784,931) 3,852,913 Balance, shares at Sep. 30, 2023 33,509,287 Â Â Â Balance at Jun. 30, 2023 $ 3,351 127,634,493 (123,312,765) 4,325,079 Balance, shares at Jun. 30, 2023 33,509,287 Â Â Â Net loss (472,166) (472,166) Exercise of options, shares 0 Â Â Â Balance at Sep. 30, 2023 $ 3,351 127,634,493 (123,784,931) 3,852,913 Balance, shares at Sep. 30, 2023 33,509,287 Â Â Â Balance at Dec. 31, 2023 $ 3,351 127,779,221 (124,264,841) 3,517,731 Balance, shares at Dec. 31, 2023 33,509,287 Â Â Â Net loss (703,442) (703,442) Exercise of options $ 1 8,669 8,670 Exercise of options, shares 8,500 Â Â Â Balance at Sep. 30, 2024 $ 3,352 127,787,890 (124,968,283) 2,822,959 Balance, shares at Sep. 30, 2024 33,517,787 Â Â Â Balance at Jun. 30, 2024 $ 3,352 127,787,890 (124,801,467) 2,989,775 Balance, shares at Jun. 30, 2024 33,517,787 Â Â Â Net loss (166,816) (166,816) Exercise of options, shares 0 Â Â Â Balance at Sep. 30, 2024 $ 3,352 $ 127,787,890 $ (124,968,283) $ 2,822,959 Balance, shares at Sep. 30, 2024 33,517,787 Â Â Â X - DefinitionStock issued during period shares warrants exercised. + ReferencesNo definition available. + Details Name: REFR_StockIssuedDuringPeriodSharesWarrantsExercised Namespace Prefix: REFR_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionStock Issued During Period Value Stock Warrants of Exercised. + ReferencesNo definition available. + Details Name: REFR_StockIssuedDuringPeriodValueStockWarrantsOfExercised Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionNumber of shares issued which are neither cancelled nor held in the treasury. + ReferencesNo definition available. + Details Name: us-gaap_SharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of share options (or share units) exercised during the current period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionValue of stock issued as a result of the exercise of stock options. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodValueStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 15 R6.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Cash Flows (Unaudited) - USD ($) 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Cash flows from operating activities: Â Â Net loss $ (703,442) $ (1,428,454) Adjustments to reconcile net loss to net cash used in operating activities: Â Â Depreciation and amortization 19,582 20,489 Realized gain on marketable securities (26,375) Unrealized gain on marketable securities (30,399) ROU asset amortization 107,229 109,051 Credit loss expense 25,001 95,000 Change in assets and liabilities: Â Â Royalty receivables (69,605) (226,645) Prepaid expenses and other assets (57,943) (63,612) Accounts payable and accrued expenses 1,033 (52,784) Deferred revenue 3,735 Operating lease liability (157,754) (146,323) Net cash used in operating activities (835,899) (1,746,317) Cash flows from investing activities: Â Â Purchases of fixed assets (742) (1,265) Purchases of marketable securities (5,434,386) Sales of marketable securities 2,991,535 Net cash used in investing activities (742) (2,444,116) Cash flows from financing activities: Â Â Net proceeds from exercise of options and warrants 8,670 484,502 Net cash provided by financing activities 8,670 484,502 Net decrease in cash and cash equivalents (827,971) (3,705,931) Cash and cash equivalents at beginning of period 2,475,958 4,230,916 Cash and cash equivalents at end of period $ 1,647,987 $ 524,985 X - DefinitionThe cash inflow associated with the amount received from holders exercising their stock options and warrants. + ReferencesNo definition available. + Details Name: REFR_NetProceedsFromExerciseOfOptionsAndWarrants Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionRealized gain on marketable securities. + ReferencesNo definition available. + Details Name: REFR_RealizedGainOnMarketableSecurities Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionUnrealized gain on marketable securities. + ReferencesNo definition available. + Details Name: REFR_UnrealizedGainOnMarketableSecurities Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_AdjustmentsToReconcileNetIncomeLossToCashProvidedByUsedInOperatingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; including, but not limited to, disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-8Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsIncludingDisposalGroupAndDiscontinuedOperations Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of increase (decrease) in cash, cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; including effect from exchange rate change. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -SubTopic 230 -Topic 830 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477401/830-230-45-1 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 360 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_DepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the amounts payable to vendors for goods and services received and the amount of obligations and expenses incurred but not paid. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsPayableAndAccruedLiabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in amount due within one year (or one business cycle) from customers for the credit sale of goods and services. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsReceivable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of increase (decrease) in obligation to transfer good or service to customer for which consideration has been received or is receivable. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 912 -SubTopic 310 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478345/912-310-45-11Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInContractWithCustomerLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncreaseDecreaseInOperatingCapitalAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of increase (decrease) in obligation for operating lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(1) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_IncreaseDecreaseInOperatingLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of increase (decrease) in prepaid expenses, and assets classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInPrepaidDeferredExpenseAndOtherAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cash inflow (outflow) from financing activities, including discontinued operations. Financing activity cash flows include obtaining resources from owners and providing them with a return on, and a return of, their investment; borrowing money and repaying amounts borrowed, or settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from investing activities, including discontinued operations. Investing activity cash flows include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant, and equipment and other productive assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from operating activities, including discontinued operations. Operating activity cash flows include transactions, adjustments, and changes in value not defined as investing or financing activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_NetCashProvidedByUsedInOperatingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInOperatingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of periodic reduction over lease term of carrying amount of right-of-use asset from operating lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_OperatingLeaseRightOfUseAssetAmortizationExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash outflow for purchase of marketable security. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 320 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481830/320-10-45-11 + Details Name: us-gaap_PaymentsToAcquireMarketableSecurities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow associated with the acquisition of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale; includes cash outflows to pay for construction of self-constructed assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 13 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-13 + Details Name: us-gaap_PaymentsToAcquirePropertyPlantAndEquipment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash inflow associated with the aggregate amount received by the entity through sale or maturity of marketable securities (held-to-maturity or available-for-sale) during the period. + ReferencesNo definition available. + Details Name: us-gaap_ProceedsFromSaleAndMaturityOfMarketableSecurities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of expense (reversal of expense) for expected credit loss on accounts receivable. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479319/326-20-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_ProvisionForDoubtfulAccounts Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration XML 16 R7.htm IDEA: XBRL DOCUMENT v3.24.3 Basis of Presentation 9 Months Ended Sep. 30, 2024 Organization, Consolidation and Presentation of Financial Statements [Abstract] Â Basis of Presentation Note 1. Basis of Presentation Â The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (â€œGAAPâ€) for interim financial information and with the instructions to Rule 8-03 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. All such adjustments are of a normal recurring nature. Operating results for the three and nine months ended September 30, 2024 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2024. The condensed consolidated balance sheet as of December 31, 2023 has been derived from the audited consolidated financial statements as of that date. For further information, refer to the consolidated financial statements and footnotes thereto included in the Annual Report on Form 10-K relating to Research Frontiers Incorporated for the fiscal year ended December 31, 2023. Â X - DefinitionThe entire disclosure for the basis of accounting, or basis of presentation, used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 235 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/235/tableOfContent + Details Name: us-gaap_BasisOfAccounting Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 17 R8.htm IDEA: XBRL DOCUMENT v3.24.3 Business 9 Months Ended Sep. 30, 2024 Organization, Consolidation and Presentation of Financial Statements [Abstract] Â Business Note 2. Business Â Research Frontiers Incorporated (â€œResearch Frontiersâ€ or the â€œCompanyâ€) operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Such devices, often referred to as â€œlight valvesâ€ or suspended particle devices (â€œSPDsâ€), use colloidal particles that are either incorporated within a liquid suspension or a film, which is usually enclosed between two sheets of glass or plastic having transparent, electrically conductive coatings on the facing surfaces thereof. At least one of the two sheets is transparent. SPD technology, made possible by a flexible light-control film invented by Research Frontiers, allows the user to instantly and precisely control the shading of glass/plastic manually or automatically. SPD technology has numerous product applications, including SPD-Smartâ„¢ windows, sunshades, skylights and interior partitions for homes and buildings; automotive windows, sunroofs, sun visors, sunshades, rear-view mirrors, instrument panels and navigation systems; aircraft windows; museum display panels; eyewear products; and flat panel displays for electronic products. SPD-Smart light control film is now being developed for, or used in, architectural, automotive, marine, aerospace and appliance applications. Â The Company has primarily utilized its cash, cash equivalents, and investments generated from sales of our common stock, proceeds from the exercise of options and warrants, and royalty fees collected to fund its research and development of SPD light valves, for marketing initiatives, and for other working capital purposes. The Companyâ€™s working capital and capital requirements depend upon numerous factors, including the results of research and development activities, competitive and technological developments, the timing and cost of patent filings, and the development of new licensees and changes in the Companyâ€™s relationships with its existing licensees. The degree of dependence of the Companyâ€™s working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements; and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. We have incurred recurring losses since inception and expect to continue to incur losses as a result of costs and expenses related to our research and continued development of our SPD technology and our corporate general and administrative expenses. Our capital requirements and operations to date have been substantially funded through sales of our common stock, exercise of options and warrants and royalty fees collected. As of September 30, 2024, we had working capital of approximately $2.7 million, cash and cash equivalents of approximately $1.6 million, shareholdersâ€™ equity of approximately $2.8 million and an accumulated deficit of approximately $125.0 million. Based on our current expectations of our cash flow shortfall for the next 12 months, our working capital would support our activities for at least the next 12 months from the issuance of these condensed consolidated financial statements. Â Â In the event that we are unable to generate sufficient cash from our operating activities or raise additional funds, we may be required to delay, reduce or severely curtail our operations or otherwise impede our on-going business efforts, which could have a material adverse effect on our business, operating results, financial condition and long-term prospects. The Company may seek to obtain additional funding through future equity issuances. There can be no assurance as to the availability or terms upon which such financing and capital might be available. The eventual success of the Company and generation of positive cash flow will be dependent upon the commercialization of products using the Companyâ€™s technology by the Companyâ€™s licensees and payments of continuing royalties on account thereof. Â X - DefinitionThe entire disclosure for the nature of an entity's business, major products or services, principal markets including location, and the relative importance of its operations in each business and the basis for the determination, including but not limited to, assets, revenues, or earnings. For an entity that has not commenced principal operations, disclosures about the risks and uncertainties related to the activities in which the entity is currently engaged and an understanding of what those activities are being directed toward. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Topic 275 -Publisher FASB -URI https://asc.fasb.org/275/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-1 + Details Name: us-gaap_NatureOfOperations Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 18 R9.htm IDEA: XBRL DOCUMENT v3.24.3 Patent Costs 9 Months Ended Sep. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] Â Patent Costs Note 3. Patent Costs Â The Company expenses costs relating to the development, acquisition or enforcement of patents due to the uncertainty of the recoverability of these items. Â X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for all or part of the information related to intangible assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-4Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/985-20/tableOfContent + Details Name: us-gaap_IntangibleAssetsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 19 R10.htm IDEA: XBRL DOCUMENT v3.24.3 Revenue Recognition 9 Months Ended Sep. 30, 2024 Revenue from Contract with Customer [Abstract] Â Revenue Recognition Note 4. Revenue Recognition Â The Company recognizes revenue in accordance with Accounting Standards Codification (â€œASCâ€) 606, Revenue from Contracts with Customers (Topic 606). The standard provides a single comprehensive revenue recognition model for all contracts with customers and supersedes existing revenue recognition guidance. The revenue standard contains principles that an entity will apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. Â ASC 606 follows a five-step approach to determining revenue recognition including: 1) Identification of the contract; 2) Identification of the performance obligations; 3) Determination of the transaction price; 4) Allocation of the transaction price; and 5) Recognition of revenue. Â The Company determined that its license agreements provide for three performance obligations which include: (i) the Grant of Use to its Patent Portfolio (â€œGrant of Useâ€), (ii) Stand-Ready Technical Support (â€œTechnical Supportâ€) including the transfer of trade secrets and other know-how, production of materials, scale-up support, analytical testing, etc., and (iii) access to new Intellectual Property (â€œIPâ€) that may be developed sometime during the course of the contract period (â€œNew Improvementsâ€). Given the nature of IP development, such New Improvements are on an unspecified basis and can occur and be made available to licensees at any time during the contract period. Â When a contract includes more than one performance obligation, the Company needs to allocate the total consideration to each performance obligation based on its relative standalone selling price or estimate the standalone selling price if it is not observable. A standalone selling price is not available for our performance obligations since we do not sell any of the services separately and there is no competitor pricing that is available. As a consequence, the best method for determining the standalone selling price of our Grant of Use performance obligation is through a comparison of the average royalty rate for comparable license agreements as compared to our license agreements. Comparable license agreements must consider several factors including: (i) the materials that are being licensed, (ii) the market application for the licensed materials, and (iii) the financial terms in the license agreements that can increase or decrease the risk/reward nature of the agreement. Â Based on the royalty rate comparison referred to above, any pricing above and beyond the average royalty rate would relate to the Technical Support and New Improvements performance obligations. The Company focuses a significant portion of its time and resources to provide the Technical Support and New Improvements services to its licensees which further supports the conclusions reached using the royalty rate analysis. Â Â Â The Technical Support and New Improvements performance obligations are co-terminus over the term of the license agreement. For purposes of determining the transaction price, and recognizing revenue, the Company combined the Technical Support and New Improvements performance obligations because they have the same pattern of transfer and the same term. We maintain a staff of scientists and other professionals whose primary job responsibilities throughout the year are: (i) being available to respond to Technical Support needs of our licensees, and (ii) developing improvements to our technology which are offered to our licensees as New Improvements. Since the costs incurred to satisfy the Technical Support and New Improvements performance obligations are incurred evenly throughout the year, the value of the Technical Support and New Improvements services are recognized throughout the initial contract period as these performance obligations are satisfied. If the agreement is not terminated at the end of the initial contract period, it will automatically renew on the same terms as the initial contract for a one-year period. Consequently, any fees or minimum annual royalty obligations relating to this renewal contract will be allocated similarly to the initial contract over the additional one-year period. Â We recognize revenue when or as the performance obligations in the contract are satisfied. For performance obligations that are fulfilled at a point in time, revenue is recognized at the fulfillment of the performance obligation. Since the IP is determined to be a functional license, the value of the Grant of Use is recognized in the first period of the contract term in which the license agreement is in force. The value of the Technical Support and New Improvements obligations is allocated throughout the contract period based on the satisfaction of its performance obligations. If the agreement is not terminated at the end of the contract period, it will renew on the same terms as the original agreement for a one-year period. Consequently, any fees or minimum annual royalties (â€œMARâ€) relating to this renewal contract will be allocated similarly over that additional year. Â The Companyâ€™s license agreements have a variable royalty fee structure (meaning that royalties are a fixed percentage of sales that vary from period to period) and frequently include a minimum annual royalty commitment. In instances when sales of licensed products by its licensees exceed the MAR, the Company recognizes fee income as the amounts have been earned. Typically, the royalty rate for such sales is 10-15% of the selling price. While this is variable consideration, it is subject to the sales/usage royalty exception to recognition of variable consideration in ASC 606 10-55-65 and therefore is not recognized until the subsequent sales or usage occurs or the MAR period commences. Â Because of the immediate recognition of the Grant of Use performance obligation: (i) the first period of the contract term will generally have a higher percent allocation of the transaction price under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606, and (ii) the remaining periods in the year will have less of the transaction price recognized under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606. After the initial period in the contract term, the revenue for the remaining periods will be based on the satisfaction of the Technical Support and New Improvements obligations. Since most of our license agreements start as of January 1st, the revenue recognized for the contract under ASC 606 in our first quarter will tend to be higher than the accounting guidance used prior to the adoption of ASC 606. Â As of September 30, 2024, the Company had $37,853 in unbilled revenue included in royalty receivables. Â Certain of the contract fees are accrued by, or paid to, the Company in advance of the period in which they are earned resulting in deferred revenue (contract liabilities). Such excess amounts are recorded as deferred revenue and are recognized as revenue in future periods as earned. Contract assets represent unbilled receivables and are presented within accounts receivable, net on the condensed consolidated balance sheets. Â The Company operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Our revenue source comes from the licensing of this technology and all of these license agreements have similar terms and provisions. The majority of the Companyâ€™s licensing fee income comes from the activities of several licensees participating in the automotive market. The Company currently believes that the automotive market will be the largest source of its royalty income over the next several years. The Companyâ€™s royalty income from this market may be influenced by numerous factors including various trends affecting demand in the automotive industry and the rate of introduction of new technology in OEM product lines. In addition to these macro factors, the Companyâ€™s royalty income from the automotive market could also be influenced by specific factors such as whether the Companyâ€™s SPD-SmartGlass technology appears as standard equipment or as an option on a particular vehicle, the number of additional vehicle models that SPD-SmartGlass appears on, the size of each window on a vehicle and the number of windows on a vehicle that use SPD-SmartGlass, fluctuations in the total number of vehicles produced by a manufacturer, and in the percentage of cars within each model produced with SPD-SmartGlass, and changes in pricing or exchange rates. Â Â As of September 30, 2024, the Company has one license agreement that is in its initial multi-year term (â€œInitial Termâ€) with continuing performance obligations going forward. The Initial Term of this agreement will end as of December 31, 2024. The Company currently expects this agreement will renew annually at the end of the Initial Term. As of September 30, 2024, the aggregate amount of the revenue to be recognized upon the satisfaction of the remaining performance obligations for this license agreement is $18,000. The revenue for the remaining performance obligations for this license agreement is expected to be recognized evenly throughout the remaining period of the Initial Term. Â X - ReferencesNo definition available. + Details Name: us-gaap_RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure of revenue from contract with customer to transfer good or service and to transfer nonfinancial asset. Includes, but is not limited to, disaggregation of revenue, credit loss recognized from contract with customer, judgment and change in judgment related to contract with customer, and asset recognized from cost incurred to obtain or fulfill contract with customer. Excludes insurance and lease contracts. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-9Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-15Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-13Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Topic 606 -Publisher FASB -URI https://asc.fasb.org/606/tableOfContent + Details Name: us-gaap_RevenueFromContractWithCustomerTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 20 R11.htm IDEA: XBRL DOCUMENT v3.24.3 Fee Income 9 Months Ended Sep. 30, 2024 Fee Income Â Fee Income Note 5. Fee Income Â Fee income represents amounts earned by the Company under various license and other agreements relating to technology developed by the Company. Â During the first nine months of 2024, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 32%, 31%, 10% and 10% of fee income recognized during such period. During the first nine months of 2023, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 29%, 20%, 20% and 18% of fee income recognized during such period. Â During the three months ended September 30, 2024, two licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 35% and 33% of fee income recognized during such period. During the three months ended September 30, 2023, three licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 47%, 19% and 19% of fee income recognized during such period. Â X - ReferencesNo definition available. + Details Name: REFR_DisclosureFeeIncomeAbstract Namespace Prefix: REFR_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionFee Income Disclosure [Text Block] + ReferencesNo definition available. + Details Name: REFR_FeeIncomeDisclosureTextBlock Namespace Prefix: REFR_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 21 R12.htm IDEA: XBRL DOCUMENT v3.24.3 Stock-Based Compensation 9 Months Ended Sep. 30, 2024 Compensation Related Costs [Abstract] Â Stock-Based Compensation Note 6. Stock-Based Compensation Â The Company has granted options/warrants to consultants. GAAP requires that all stock-based compensation be recognized as an expense in the condensed consolidated financial statements and that such costs be measured at the fair value of the award at the date of grant. These awards generally vest ratably over 12 to 60 months from the date of grant and the Company charges to operations quarterly the current market value of the options using the Black-Scholes method. During the nine months ended September 30, 2024 and 2023, there were no charges related to options or warrants granted to consultants. Â During the nine months ended September 30, 2024 and 2023, the Company did not grant options to employees or directors. Â There was no compensation expense recorded relating to restricted stock grants to employees and directors during the nine months ended September 30, 2024 and 2023. Â As of September 30, 2024, there were 84,500 shares available for future grant under our 2019 Equity Incentive Plan, which was approved by the Companyâ€™s shareholders in June 2019. Â X - ReferencesNo definition available. + Details Name: us-gaap_CompensationRelatedCostsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for compensation costs, including compensated absences accruals, compensated absences liability, deferred compensation arrangements and income statement compensation items. Deferred compensation arrangements may include a description of an arrangement with an individual employee, which is generally an employment contract between the entity and a selected officer or key employee containing a promise by the employer to pay certain amounts at designated future dates, usually including a period after retirement, upon compliance with stipulated requirements. This type of arrangement is distinguished from broader based employee benefit plans as it is usually tailored to the employee. Disclosure also typically includes the amount of related compensation expense recognized during the reporting period, the number of shares (units) issued during the period under such arrangements, and the carrying amount as of the balance sheet date of the related liability. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 710 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/710/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 710 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482969/710-10-50-1 + Details Name: us-gaap_CompensationRelatedCostsGeneralTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 22 R13.htm IDEA: XBRL DOCUMENT v3.24.3 Income Taxes 9 Months Ended Sep. 30, 2024 Income Tax Disclosure [Abstract] Â Income Taxes Note 7. Income Taxes Â Since inception, the Company has incurred losses from operations and as a result has not recorded income tax expense. Benefits related to net operating loss carryforwards and other deferred tax items have been fully reserved since it was more likely than not that the Company would not achieve profitable operations and be able to utilize the benefit of the net operating loss carryforwards. Â X - ReferencesNo definition available. + Details Name: us-gaap_IncomeTaxDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for income tax. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 231 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-231Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12C -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12CReference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12B -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12BReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 270 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477891/740-270-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 6.I.5.Q1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-13Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(h)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/740/tableOfContentReference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-14Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-21Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 17 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-17Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 11.C) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482603/740-30-50-2 + Details Name: us-gaap_IncomeTaxDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 23 R14.htm IDEA: XBRL DOCUMENT v3.24.3 Basic and Diluted Loss Per Common Share 9 Months Ended Sep. 30, 2024 Earnings Per Share [Abstract] Â Basic and Diluted Loss Per Common Share Note 8. Basic and Diluted Loss Per Common Share Â Basic net loss per share excludes any dilution. It is based upon the weighted average number of common shares outstanding during the period. Dilutive net loss per share reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock. The Companyâ€™s dilutive loss per share equals basic loss per share for the periods ended September 30, 2024 and 2023, respectively, because all common stock equivalents (i.e., options and warrants) were antidilutive in those periods. The number of options and warrants that were not included (because their effect is antidilutive) were 2,706,872 and 3,314,030 for the periods ended September 30, 2024 and 2023, respectively. Â Â X - ReferencesNo definition available. + Details Name: us-gaap_EarningsPerShareAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for earnings per share. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/260/tableOfContentReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-3 + Details Name: us-gaap_EarningsPerShareTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 24 R15.htm IDEA: XBRL DOCUMENT v3.24.3 Equity 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Equity Note 9. Equity Â During the nine months ended September 30, 2024, the Company received proceeds of $8,670 in connection with the exercise of options covering 8,500 shares of common stock. During nine months ended September 30, 2023, the Company received proceeds of $484,502 in connection with the exercise of warrants covering 358,891 shares of common stock. No options or warrants were exercised during the three-month periods ended September 30, 2024 and 2023. Â On September 16, 2022, the Company entered into subscription agreements from a group of private accredited investors to sell them 2.0 million shares of common stock of the Company at a price of $2.30 per share (which represents the closing market price of the Companyâ€™s common stock on September 14, 2022, which was the date that the transaction was agreed to). For each share received, the investor also received one warrant (expiring on September 30, 2027) to purchase one share of common stock at an exercise price of $2.76/share. The shares were issued to the investors in a private placement and, along with the shares issued in connection with the exercise of any warrants in the future, are not registered and therefore subject to at least a six-month holding period by the investor from the date of issuance. As of September 30, 2022, the Company received $3,450,000 under these subscription agreements and issued 1,500,000 common shares and issued 1,500,000 warrants. In addition, the Company has an outstanding commitment from a potential investor for the remaining $1,150,000 under these subscription agreements. The Company did not sell any other equity securities during the periods ended September 30, 2024 and 2023. Â As of September 30, 2024, there were 1,500,000 warrants and 1,206,872 options outstanding. Â X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for equity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-6Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480237/815-40-50-6Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(e)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/505/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 16 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-16Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic

10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18 + Details Name: us-gaap_StockholdersEquityNoteDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 25 R16.htm IDEA: XBRL DOCUMENT v3.24.3 Leases 9 Months Ended Sep. 30, 2024 Leases [Abstract] Â Leases Note 10. Leases Â The Company determines if an arrangement is a lease at its inception. This determination generally depends on whether the arrangement conveys the right to control the use of an identified fixed asset explicitly or implicitly for a period of time in exchange for consideration. Control of an underlying asset is conveyed if the Company obtains the rights to direct the use of, and to obtain substantially all of the economic benefits from the use of, the underlying asset. Lease expense for variable leases and short-term leases is recognized when the obligation is incurred. Â The Company has an operating lease for our facility with a weighted average remaining lease term of six months as of September 30, 2024. Operating leases are included in right-of-use lease assets, other current liabilities and long-term lease liabilities on the condensed consolidated balance sheets. Right-of-use lease assets and liabilities are recognized at each leaseâ€™s commencement date based on the present value of its lease payments over its respective lease term. The Company does not have an established incremental borrowing rate as it does not have any debt. The Company uses the stated borrowing rate for a lease when readily determinable. When the interest rates implicit in its lease agreements are not readily determinable, the Company used an interest rate based on the marketplace for public debt. The weighted average discount rate associated with operating leases as of September 30, 2024 is 5.5%. Â Operating lease expense for the nine months ended September 30, 2024 was approximately $150,000. The Company has no material variable lease costs or sublease income for the period ended September 30, 2024. Â Maturities of operating lease liabilities as of September 30, 2024 were as follows: Â Schedule of Maturities of Operating Lease Â Â September 30, 2024Â Â Â Â Â For the year ending December 31, 2024Â $56,000Â For the year ending December 31, 2025Â Â 56,000Â Total lease paymentsÂ Â 112,000Â Less: imputed lease interestÂ Â (2,032) Present value of lease liabilitiesÂ $109,968Â Â X - ReferencesNo definition available. + Details Name: us-gaap_LeasesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for operating leases of lessee. Includes, but is not limited to, description of operating lease and maturity analysis of operating lease liability. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/842-20/tableOfContent + Details Name: us-gaap_LesseeOperatingLeasesTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 26 R17.htm IDEA: XBRL DOCUMENT v3.24.3 Related Party 9 Months Ended Sep. 30, 2024 Related Party Transactions [Abstract] Â Related Party Note 11. Related Party Â Effective June 4, 2023, the Chairman and CEO of Gauzy, Ltd. (â€œGauzyâ€), one of the Companyâ€™s licensees, joined the Board of the Company. Gauzyâ€™s license agreement has been in effect since September 17, 2017 and provides for minimum annual royalties and earned royalties relating to sales of SPD-SmartGlass architectural window products. Because the Company collects a 10-15% percentage royalty from the higher-priced end product sales by Gauzyâ€™s customers purchasing their SPD-Smart light control film, under its license agreement with Gauzy, the Company does not collect a royalty on sales by Gauzy of SPD-Smart light control film to these licensee customers. In addition, the Companyâ€™s licensee Vision Systems, Inc. (â€œVision Systemsâ€) is a 100% owned subsidiary of Gauzy. For the nine months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 12% and 23%, respectively, of the Companyâ€™s total fee income. For the three months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 10% and 21%, respectively, of the Companyâ€™s total fee income. In addition, as of September 30, 2024 and December 31, 2023, the Companyâ€™s accounts receivable from Gauzy and Vision Systems represented 6% and 8%, respectively, of the Companyâ€™s total royalty receivables, before reserves. Â X - ReferencesNo definition available. + Details Name: us-gaap_RelatedPartyTransactionsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for related party transactions. Examples of related party transactions include transactions between (a) a parent company and its subsidiary; (b) subsidiaries of a common parent; (c) and entity and its principal owners; and (d) affiliates. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-6Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 850 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483326/850-10-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(2)(g)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(2)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(2)(e)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 850 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/850/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 850 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483326/850-10-50-6Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 850 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483326/850-10-50-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 850 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483326/850-10-50-1 + Details Name: us-gaap_RelatedPartyTransactionsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 27 R18.htm IDEA: XBRL DOCUMENT v3.24.3 Other Income 9 Months Ended Sep. 30, 2024 Other Income and Expenses [Abstract] Â Other Income Note 12. Other Income Â During the three and nine months ended September 30, 2024, the Company received $35,152 in Employee Retention Credits, a refundable tax credit available under the Coronavirus Aid, Relief, and Economic Securities Act (â€œCARES Actâ€) that was designed to keep employees on the payroll during the COVID-19 pandemic. There were no such credits received during the three and nine months ended September 30, 2023. X - DefinitionThe entire disclosure for interest and other income. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Topic 610 -Publisher FASB -URI https://asc.fasb.org/610/tableOfContent + Details Name: us-gaap_InterestAndOtherIncomeTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OtherIncomeAndExpensesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 28 R19.htm IDEA: XBRL DOCUMENT v3.24.3 Leases (Tables) 9 Months Ended Sep. 30, 2024 Leases [Abstract] Â Schedule of Maturities of Operating Lease Maturities of operating lease liabilities as of September 30, 2024 were as follows: Â Schedule of Maturities of Operating Lease Â Â September 30, 2024Â Â Â Â Â For the year ending December 31, 2024Â $56,000Â For the year ending December 31, 2025Â Â 56,000Â Total lease paymentsÂ Â 112,000Â Less: imputed lease interestÂ Â (2,032) Present value of lease liabilitiesÂ $109,968Â X - ReferencesNo definition available. + Details Name: us-gaap_LeasesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of undiscounted cash flows of lessee's operating lease liability. Includes, but is not limited to, reconciliation of undiscounted cash flows to operating lease liability recognized in statement of financial position. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityMaturityTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 29 R20.htm IDEA: XBRL DOCUMENT v3.24.3 Business (Details Narrative) - USD ($) Sep. 30, 2024 Jun. 30, 2024 Dec. 31, 2023 Sep. 30, 2023 Jun. 30, 2023 Dec. 31, 2022 Organization, Consolidation and Presentation of Financial Statements [Abstract] Â Â Â Â Â Â [custom:WorkingCapital-0] $ 2,700,000 Â Â Â Â Â Cash and Cash Equivalents, at Carrying Value 1,647,987 Â $ 2,475,958 Â Â Â Equity, Attributable to Parent 2,822,959 $ 2,989,775 3,517,731 $ 3,852,913 $ 4,325,079 $ 4,796,865 Retained Earnings (Accumulated Deficit) $ 124,968,283 Â $ 124,264,841 Â Â Â X - DefinitionWorking capital. + ReferencesNo definition available. + Details Name: REFR_WorkingCapital Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashAndCashEquivalentsAtCarryingValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of accumulated undistributed earnings (deficit). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-11Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(23)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 30 R21.htm IDEA: XBRL DOCUMENT v3.24.3 Revenue Recognition (Details Narrative) 9 Months Ended Sep. 30, 2024 USD ($) Unbilled receivables current $ 37,853 One License Agreements [Member] Â Revenue remaining performance obligations $ 18,000 Minimum [Member] | Revenue Benchmark [Member] | License Agreement [Member] Â Royalty rate on selling price 10.00% Maximum [Member] | Revenue Benchmark [Member] | License Agreement [Member] Â Royalty rate on selling price 15.00% X - DefinitionRoyalty rate on selling price. + ReferencesNo definition available. + Details Name: REFR_RoyaltyRateOnSellingPrice Namespace Prefix: REFR_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionAmount of transaction price allocated to performance obligation that has not been recognized as revenue. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -SubTopic 10 -Topic 606 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-13 + Details Name: us-gaap_RevenueRemainingPerformanceObligation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount received for services rendered and products shipped, but not yet billed, for non-contractual agreements due within one year or the normal operating cycle, if longer. + ReferencesNo definition available. + Details Name: us-gaap_UnbilledReceivablesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_TypeOfArrangementAxis=REFR_OneLicenseAgreementsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ConcentrationRiskByBenchmarkAxis=us-gaap_SalesRevenueNetMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-

gaap_TypeOfArrangementAxis=REFR_LicenseAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 31 R22.htm IDEA: XBRL DOCUMENT v3.24.3 Fee Income (Details Narrative) - Revenue Benchmark [Member] - Customer Concentration Risk [Member] 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Licensee One [Member] Â Â Â Â Product Information [Line Items] Â Â Â Â Concentration risk percentage 35.00% 47.00% 32.00% 29.00% License Two [Member] Â Â Â Â Product Information [Line Items] Â Â Â Â Concentration risk percentage 33.00% 19.00% 31.00% 20.00% License Three [Member] Â Â Â Â Product Information [Line Items] Â Â Â Â Concentration risk percentage Â 19.00% 10.00% 20.00% Licensee Four [Member] Â Â Â Â Product Information [Line Items] Â Â Â Â Concentration risk percentage Â Â 10.00% 18.00% X - DefinitionFor an entity that discloses a concentration risk in relation to quantitative amount, which serves as the "benchmark" (or denominator) in the equation, this concept represents the concentration percentage derived from the division. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 825 -SubTopic 10 -Section 50 -Paragraph 21 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-21Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 825 -SubTopic 10 -Section 50 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-20Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 18 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-18Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-20 + Details Name: us-gaap_ConcentrationRiskPercentage1 Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_ProductInformationLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: srt_ProductOrServiceAxis=REFR_LicenseeOneMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ConcentrationRiskByBenchmarkAxis=us-gaap_SalesRevenueNetMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_ConcentrationRiskByTypeAxis=us-gaap_CustomerConcentrationRiskMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ProductOrServiceAxis=REFR_LicenseeTwoMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ProductOrServiceAxis=REFR_LicenseeThreeMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_ProductOrServiceAxis=REFR_LicenseeFourMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 32 R23.htm IDEA: XBRL DOCUMENT v3.24.3 Stock-Based Compensation (Details Narrative) - shares 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 2019 Equity Incentive Plan [Member] Â Â Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items] Â Â Shares available for future grant 84,500 Â Employees and Directors [Member] Â Â Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items] Â Â Stock options granted 0 0 Restricted stock options granted 0 0 Minimum [Member] Â Â Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items] Â Â Stock based compensation be recognized 12 months Â Maximum [Member] Â Â Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items] Â Â Stock based compensation be recognized 60 months Â X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_DeferredCompensationArrangementWithIndividualExcludingShareBasedPaymentsAndPostretirementBenefitsLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionPeriod over which grantee's right to exercise award under share-based payment arrangement is no longer contingent on satisfaction of service or performance condition, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. Includes, but is not limited to, combination of market, performance or service condition. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardVestingPeriod1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe difference between the maximum number of shares (or other type of equity) authorized for issuance under the plan (including the effects of amendments and adjustments), and the sum of: 1) the number of shares (or other type of equity) already issued upon exercise of options or other equity-based awards under the plan; and 2) shares (or other type of equity) reserved for issuance on granting of outstanding awards, net of cancellations and forfeitures, if applicable. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 10 -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionGross number of share options (or share units) granted during the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_TypeOfArrangementAxis=REFR_TwoThousandNineteenEquityIncentivePlanMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=REFR_EmployeesAndDirectorsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 33 R24.htm IDEA: XBRL DOCUMENT v3.24.3 Basic and Diluted Loss Per Common Share (Details Narrative) - shares 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Options and Warrants [Member] Â Â Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items] Â Â Anti-dilutive securities effect 2,706,872 3,314,030 X - DefinitionSecurities (including those issuable pursuant to contingent stock agreements) that could potentially dilute basic earnings per share (EPS) or earnings per unit (EPU) in the future that were not included in the computation of diluted EPS or EPU because to do so would increase EPS or EPU amounts or decrease loss per share or unit amounts for the period presented. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1 + Details Name: us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareByAntidilutiveSecuritiesAxis=REFR_OptionsAndWarrantsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 34 R25.htm IDEA: XBRL DOCUMENT v3.24.3 Equity (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2022 Sep. 16, 2022 Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Proceeds from issuance or sale of equity $ 3,450,000 Â Â Â Â Â Proceeds from expects to receive the remaining amount $ 1,150,000 Â Â Â Â Â Warrants outstanding Â Â 1,500,000 Â 1,500,000 Â Options outstanding Â Â 1,206,872 Â 1,206,872 Â Subscription Agreement [Member] Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Number of shares issued Â 2,000,000.0 Â Â Â Â Shares issued price per share Â $ 2.30 Â Â Â Â Common Stock [Member] Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Proceeds from stock options exercised Â Â Â Â $ 8,670 Â Number of shares issued Â Â Â Â 8,500 358,891 Proceeds from warrant exercises Â Â Â Â Â $ 484,502 Options exercised during period Â Â 0 0 8,500 Â Number of shares issued 1,500,000 Â Â Â Â Â Warrant [Member] Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Warrants exercised during period Â Â 0 0 Â Â Warrant expiring term Â Sep. 30, 2027 Â Â Â Â Warrants exercise price Â $ 2.76 Â Â Â Â Number of warrants issued 1,500,000 Â Â Â Â Â X - DefinitionProceeds from expects to receive the remaining amount. + ReferencesNo definition available. + Details Name: REFR_ProceedsFromExpectsToReceiveRemainingAmount Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20 + Details Name: us-gaap_AccumulatedOtherComprehensiveIncomeLossLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionExercise price per share or per unit of warrants or rights outstanding. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-3 + Details Name: us-gaap_ClassOfWarrantOrRightExercisePriceOfWarrantsOrRights1 Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionNumber of securities into which the class of warrant or right may be converted. For example, but not limited to, 500,000 warrants may be converted into 1,000,000 shares. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-3 + Details Name: us-gaap_ClassOfWarrantOrRightNumberOfSecuritiesCalledByWarrantsOrRights Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of warrants or rights outstanding. + ReferencesNo definition available. + Details Name: us-gaap_ClassOfWarrantOrRightOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionThe cash inflow from the issuance of common stock, preferred stock, treasury stock, stock options, and other types of equity. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3 + Details Name: us-gaap_ProceedsFromIssuanceOrSaleOfEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash inflow from exercise of option under share-based payment arrangement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2A -Subparagraph (a) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2A + Details Name: us-gaap_ProceedsFromStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash inflow associated with the amount received from holders exercising their stock warrants. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromWarrantExercises Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionNumber of non-option equity instruments exercised by participants. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of options outstanding, including both vested and non-vested options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares of stock issued as of the balance sheet date, including shares that had been issued and were previously outstanding but which are now held in the treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2 + Details Name: us-gaap_SharesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionPer share or per unit amount of equity securities issued. + ReferencesNo definition available. + Details Name: us-gaap_SharesIssuedPricePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionNumber of new stock issued during the period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section

S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesNewIssues Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of share options (or share units) exercised during the current period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionExpiration date of outstanding warrant and right embodying unconditional obligation requiring redemption by transferring asset at specified or determinable date or upon event certain to occur, in YYYY-MM-DD format. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (bbb)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482106/820-10-50-2 + Details Name: us-gaap_WarrantsAndRightsOutstandingMaturityDate Namespace Prefix: us-gaap_ Data Type: xbrli:dateItemType Balance Type: na Period Type: instant X - Details Name: us-gaap_TypeOfArrangementAxis=REFR_SubscriptionAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_CommonStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_WarrantMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 35 R26.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Maturities of Operating Lease (Details) Sep. 30, 2024 USD ($) Leases [Abstract] Â For the year ending December 31, 2024 $ 56,000 For the year ending December 31, 2025 56,000 Total lease payments 112,000 Less: imputed lease interest (2,032) Present value of lease liabilities $ 109,968 X - ReferencesNo definition available. + Details Name: us-gaap_LeasesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease having initial or remaining lease term in excess of one year to be paid in remainder of current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payments in excess of discounted obligation for lease payments for operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityUndiscountedExcessAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 36 R27.htm IDEA: XBRL DOCUMENT v3.24.3 Leases (Details Narrative) 9 Months Ended Sep. 30, 2024 USD ($) Leases [Abstract] Â Weighted average remaining lease term 6 months Weighted-average discount rate 5.50% Operating lease expense $ 150,000 Variable lease costs 0 Sublease income $ 0 X - ReferencesNo definition available. + Details Name: us-gaap_LeasesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of single lease cost, calculated by allocation of remaining cost of lease over remaining lease term. Includes, but is not limited to, single lease cost, after impairment of right-of-use asset, calculated by amortization of remaining right-of-use asset and accretion of lease liability. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeaseCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionWeighted average discount rate for operating lease calculated at point in time. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeaseWeightedAverageDiscountRatePercent Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionWeighted average remaining lease term for operating lease, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeaseWeightedAverageRemainingLeaseTerm1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - DefinitionAmount of sublease income excluding finance and operating lease expense. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_SubleaseIncome Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of variable lease cost, excluded from lease liability, recognized when obligation for payment is incurred for finance and operating leases. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_VariableLeaseCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration XML 37 R28.htm IDEA: XBRL DOCUMENT v3.24.3 Related Party (Details Narrative) 3 Months Ended 9 Months Ended 12 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Jun. 04, 2023 Gauzy Ltd [Member] Â Â Â Â Â Â Subsidiary, ownership percentage 100.00% 100.00% 100.00% 100.00% Â Â Gauzy Ltd [Member] | Minimum [Member] Â Â Â Â Â Â Royalty percentage Â Â Â Â Â 10.00% Gauzy Ltd [Member] | Maximum [Member] Â Â Â Â Â Â Royalty percentage Â Â Â Â Â 15.00% Gauzy and Vision Systems [Member] Â Â Â Â Â Â Fee income percentage 10.00% 21.00% 12.00% 23.00% Â Â Related party percentage Â 6.00% Â 8.00% Â X - DefinitionFee income percentage. + ReferencesNo definition available. + Details Name: REFR_FeeIncomePercentage Namespace Prefix: REFR_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionRoyalty percentage. + ReferencesNo definition available. + Details Name: REFR_RoyaltyPercentage Namespace Prefix: REFR_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionThe parent entity's interest in net assets of the subsidiary, expressed as a percentage. + ReferencesNo definition available. + Details Name: us-gaap_MinorityInterestOwnershipPercentageByParent Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionIdentify the stated interest rate per the agreement, for example, leasing and debt arrangements between related parties. + ReferencesNo definition available. + Details Name: us-gaap_RelatedPartyTransactionRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - Details Name: srt_OwnershipAxis=REFR_GauzyLtdMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: dei_LegalEntityAxis=REFR_GauzyLtdMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: dei_LegalEntityAxis=REFR_GauzyAndVisionSystemsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 38 R29.htm IDEA: XBRL DOCUMENT v3.24.3 Other Income (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2024 Other Income and Expenses [Abstract] Â Â Refundable tax credit $ 35,152 $ 35,152 X - DefinitionRefundable tax credit. + ReferencesNo definition available. + Details Name: REFR_RefundableTaxCredit Namespace Prefix: REFR_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OtherIncomeAndExpensesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration EXCEL 39 Financial_Report.xlsx IDEA: XBRL DOCUMENT begin 644 Financial_Report.xlsx M4$L#!!0 ("^ 9UD'04UB@0 +$ 0 9&]C4')O<',O87!P+GAM M;$V./0L",1!$ _IQO;=!P-!2L+(/)QLOD&1 LD)^OCG!CVX>;QA&WPIG M*N*I#BV&5(_C(I(/ !47BK9.7:=N')=HI6-Y #OGDK7A.YNJQ<&4GPZ4A!0W_J=0U[(UEA_6&#MI7E!+ P04 M " O@&=9>0 U$$>X K @ $0 &1O8U!R;W!S+V-O=ULS9+/ [YXB8>F;-P9VD% (71[43PI""XHWD(RNQML_I",M/OVMG&WB^@##>,S,+]]\ M]/I*5(^Q)"Q$$D\ICU\$I3_4 M]J'A_ 8GQI:Q;69]] M)>8WSKVPE'2-NV'GR:WMWOWU@?<.;ZTJ]BM]N&R&YD$W[OKC^\+L(NV#LSOYC MX[-#SVQ[^=_A#H7Q^^F8;)WQ!#LN^\N%+$=<+T\VUE?IN/G!D[C_\'GV?EHX3'CR9FO(G[WR:<@%W>!R=$#R5B@ZWPF>=J8=:.R-2M=0*!+&"FH_EG&A'9KX]!WJ+#(3A_2A$^WC7)3\0&:&$OXG<7?X>*!U-\!!A)B6[(@Y2D_)3K<3UA2$!,[\&TY88\O=G=X H-ANTO#2.@5#_6IP!1X;/@-Y:2:K*C6J.&8^(DWF$\AG&K9 MB8$H=\0'5BFK?*,>60)K$)0LCR(/U=71U9DC^+DOB>.?@I:)J5\1 &FQ :4 %R_*?I[Z.^O\)'7EP@J8F2E MN&N$V#JXQE<%1&&+4,X#3AI7[)EZBWKJ%K:4;6=6S!N36/N6OPEOO\I@[;+BZ,YX_FF[S.UQK]4SVQ_P^DR!Y/]/Q\/Z\XXP8K&I@$*N"AH4Q$DIC]HD*N5.>):MU[O46S_NYO.T\79?_%UQ/!)!K%4E@J&;SP3T\XCYT4Q,^>JPVM[M9>[NPJ2]J,/(OXK\L'Q$6K8[$4JY!=0\%,QN*?%#Z0=RX6WO1+N*N]!/VIX+AO.X%:.JB4<4^#\GI9KR^TE%F6UH&B6&ZBG8V$-"JN<#)H/2#X;Z2A32"CP&]:PMR 9Q4XD+^Z6-]+U]1XC!Q5,0>/;%\<1U:,A_)3BVJ8WAUB7T]PT,FRPN.CI$1SRB2]^+?YU9F==_GQP;H:B]F,'QOTDE6&!A27L)<Y/?!%1QOW&^0$[,;%QGJ\HJ@F55AVI;5N-!7$W@C/!UR]M2+Z53+H]7.-!I+8S6J^\C/NXCC7BBPJ*_7XY.C-\AJE1MEW2>=1*%9Z68!<,&4 N\(H2][[)!NE0Q@7B<9?_!FATVSU6TEGI"DW/ZL04Y.NDE0O)IHC2C0-3F28LR>98:2XK5OK:U>O=%KM5I%>O$>XP1!(((!\;KZ.]@VGW@XE!:>^C+4MM_JY2D=S!=KB%F(RF[!:-%YYB85MUI>QUCY]=]0K@N0^F%+,DSQE0>_KK$AFG=IKLE'W[%19;-RNBUM\ @\A'M0%I-%64>5,0M_P\DS^HDH51Z.3IPFJV>N_'KP5]GUM/Q)X@:F3&\?0:KVDC5M9`!(!\;[^<B.FHT#Q66/6B4PXHJ=:ZC:\<0CAWX<8-FS.0&8(I-@KK!&U:6>V2F=6GQ&ZRH'\@X.7>B@_ 6VS$-W9&NHIEX9U6+3!9N6+J=UIZSL*_4YZDH[A3@!LXRD^:KN Z!TLKG"]K<6"YI_AN&^"25X:!)$5G(.K/\5FNZ2!=KCAM9!0H@0&V/WE7[HFT5(_%Z]5HH%AK::=WT_0TQP;4.53:9R=A7T:\.NB,!V/C>HJ]P:X6RV!^?2Z#T(NK^QR9@#L2T]5CS^L^/]"?4^BS(N&/6N8N0T^I8ZT;9\?@5>9@[_N49E9,4+9ZF6K/UL33A7OR6/3K3ZBK5K=.4QR4I\C)\ZR\FDNG2C4%*_IC\F1(WYMHIP^5:.F[&@V'&(FUGMLQN(FMH9T@;EJYEJGY;2?[+3VE52!@^QK^R^8\6 M5[TXO!]!&%+I4?5!YBWP:O($:QH5K2^O!0L]Z+@62%*&K<-[.X+>F%$HQ=RBXNNG'!4@(A0GJRXIZBH((_PW5[H-JJ8MCK!A=P>*>\QP:.O\9MR3H^%4!'I\/HVQ!!I:S^R9<0ZKN)E;ZGIO?M0-(H:57!D<"VZ_>UY:-?07Y]!4R:\6SB8R9B'VQ$7H:+NYX9[G_-=1+/HR'VZ5Z;J?@&]E1H+N,:B"VMF$1:,Z'2DG1F2@!9*KE%J^\/+O6Y1]9@=N4G4QLK>)4^2J[#\`'UU>,4EJ`:X$X,VDOF67&E!KTNO<0RB=O(JLFXY5&N]TWI)QR-;[=VGVWNJ]NG@U\Q*1BNV[OCEOJ\`1J!K(L0FPTHD8YYTULPQ9P[=5:>!(7]X9^0GQPHF1ZY^]21KYPHLP(&TG8[^;2Q\9YMP?JK4P)V]'\<@FTF_[>E$L\<+,0WTK3?HWLFC%K\[K1>!\P3:)B:1TXGTX:89UJ7N[Z]`P97]!OH#HO!=Q5+4A[PH=L9W&2L'ARGT@.0:=S:9@SU4V84CDJ9!$\9L'R8GOO9D!"S;Q.8J94QNF+O.=U)4<66V+W8

(BN; M)WMIA3@R #]V](:$-. GC'P6P/_T@BT-:"71@A:@YJZVW"OA9LQQ2:C2NQ1 MI='@3;_4ZM?6H%=6ZD)Y5!7\FX&=FDQ%F4+:>8K@38H\2YF"QJ."!]2#DD@L MT6\;7C&=5XG>/95LFV:
>8^NT-/C#+W[\?W(5= 5[=!=M&'OFK#D3%@??1:E M6DLTA_"IQ7XV;)\,V+L@0:<#>>=7AC@PZ?.2;:^1[/R/B$6KIS_1R<]]&Y_]% MGW]W]!,Q_*XH_-J??\;?IW(A"GXH
O3G[;-4%0SJOVRI;IQ1NS,]T]W(#5OP ML0-3F>35CCN3GW[H?>+3>>W=#9[2V?S-W)VDA':980.>9]\X!QE=59L"6AL MH]I6KPR[B1]0ZL4C=W J;66 XB/S8.\7-^[@@B?R0=+ 3ID'' M-
!ADVLXUY0KQEXV>F-2<>,C.(I- QJ'!I5I'Q90$OJ!P;@/PT$8X(8C"VX M, DP2>R4PXYR.$CY S'/73%X<8&VF9]F%A%"4!-3_)7T%=7 R4_?FF>EP%/M2
M@ZR;J(OBS=\@WJE@1[M/_,T2.3<<6M/HI"[#,,9F8=B -"+87 YF-F#D^=0L MHKDU-"4Q/9I43AF3 V,RR/B.R6R!RI8W@DD!0;44<&:2:U;9JX;T>N.9$C20
M^+C#WK6'30'LL!Y].^P<]\.V$@_ND2:S+-_JT\5_8^]_F[U_&7L[K,?>#CO' M_K"%P\-[N"_UH17HLQVL!"N.RFWQ# + >M8 SAQ;954L!?0:\45J@O&*@SM M#VX8W5$41Z8^5J27$!,Y.^,S\(FY)[
B*7B-S@EUV 'BX2W@=PK55I=5JO[. M[9Q45J15*KM/FU0VI%4J]^@@7_!J5=^@2&"1KM!?Z[3-_JU+:<'!_?-E=!G5JTR..#G? FAO.L(NELUMRQ-0XE-?8WP+)021?VZ MYBSEE0;
TLAU&M#!^CNNB; E!+ P04 " O@&=9,QE#M>P% #9) M& 'AL+W=O4BM0G3-JG3J5FW#],^^!+?!15P"LZE_>]GRXVSAP\I<$DO=];#\\^/6# MF1]I]:7>$<+ MR(OZ]O9CK'].\>I-
SM2X/HMW9.2__- JP(S?EH].O6^(GC; M)!6Y@UPW= JT!!5YN)V]A^]2%(F$)N+OC!SKBV,@ MAG)/Z1=Q\OOV=N:*'I&<;)B P/SKB2Q)G@LDWH^O+>CLW*9(O#Q^1O^U&3P?
MS#VNR9+F_V1;MKN=Q3.P)0_XD+-/]/@;:0<4"+P-S>OF$QS;6'<&-H>:T:)- MYCTHLO+TC;^U1%PD(#20@-H$)"5XX4"'UR9X<@O10(+?)OA2 O0&$H(VH1FZ M_1K<@,_K
M%7CUX^NYPWBG!+2S:3OPX=0!-B!HN"'63.Z^0+^_4B*>U+]IX%9FF'>;WE7 MN/)P#NYPMKW)2K#$^XSQEG^;P M:W6^8.A\P5"#XP_@?, Y+C<$8 969/,6>/ -0"Y".N9/2%&#)&:,IX7GP6#N
M/%WRJ@9!%,' =5'4CURID3<0(2\(_4@*3=50/TK"..P:[PW>.P_>&S/X-Z 6 MBJQ'D7!"#"027"\))2*,38L)^UV]QQMR.^,S)DM+.*M0N= WT$=<<;XT-XX([)$5GN MO2A*$(*R]M10KCT?
A=QU*=K3N2(811X%9 M,&C/)EIJ"ZU/?&<^H-E]&*NR,75*5;8$M((:QQ*Y?$I%LE*O!_8)ZPP+-#L6 M3576KS+=D5:I&)@[#1+X_7^ 5M,]5M,U%[@ ?G9N 9CLQ=96B+NSCP%46 M*L8V)]^P-
M%26VC]Q\B=?T&C_(MV6)5':EH&M:>&"NW%+O1#91]#C45)G$31P$8& MZGP"FKR5<9T*W5Z&7GM6-S.LHJ6VT/K$=^X$F=V)::%B3IVP4+$%M$*J+[J! M81A#^?'!B, ^89VK0.-
W/$849J2N[>6J;&YPLCJM;G?80NN3W?D7-,J_C"M% MX:B948T:G!G5T.&JK,:;JW+G)-"H?8QI55FSK3 P,[[0ABT9Q,MM85V(MZY M>"M$O/3S$5>/65F#G#QP>/=MQ-
FJ3N_1G$X8W3Q63B_%5A>\9+<2J>UZ3>73#2O$_FJ$1\\[OARI=K5BHN2B39XFITC2]F)#$+*HM_.-NK@VMDJ,R%^&9N_LZO M1IY!Q J6:>."PL^.S5A1&$^
XWOC=-2^TRP\O'[V_JDB#V3F5+&9*/[EN5Y= MC9(1RMF";@M])_9_L890:/QEHE#5OVA?V\;1"&5;I<6Z60P(UKRL?^EC$XB# M!>#'OH T"\CI@F!@@=\L\"NB-;**UD>JZ?12BCV2QAJ\F8LJ-
M5J8,-+D\9[M+>&O'-;IZ4R4.22%Y0BNE"AX3C7/91TFW.P M>8_&Z.'^(WKWZ_O+B08HQN$D:UY[4[^6#+PV19]%J5<*_0FOSX_73X!"RX,\ M\[@A3H?W;/,!^=
[OB'@DL."9O7RY[X#CMV'U*W_^4%A-Q!95Q!92K!&4G:2: ME\MZWW+-F;JPA:UV&]C=FIJ^4!N:L1%*UB0[#<&<^;P3,Z.XA2U M<8J<.?
S(P&G&:=UPRQS1M9":_Z@>V)C7[L*#A.$T3$[3VK7+!MKIUQYA9,M4W*,U)I$?AW9> M2WXZD+&T99:Z,_;U 5&EH,Q^MJW2_K;R8D+2 MDWUE,TN]$-MA8J^32,\)="89*%[=&-CCQLBE5?
&_KX./0^?H+28I6#F#: \ M$'+LEIP5+9?,-*HJJ*HJV(+3.2^&6U7C\TR]ZES>CB- N@@0]X823[303Z:? M,[XS]6&MBL;+T7:.TL@+3Q-EL2,DBH*!BL;=<("=RCN]E6Q#>?Z\F>I4";UB MLLF=%;;?
AQ/&:>"?PK;817Z$R0#J3M"Q6]&OLTQLC61NZ%/5?"I%R#*Y91T5 M*_+ 4IA^#W??:AR2.!G0>MR)/79J)*C8@DDH8=@7.U9N[;7[!IFUMLK&T2$+ M/_:'=DPGQ-BMQ%_;V:-@\-'2UO63E4Q?
8,X.'G5\,[+'5,O&?SP&P37T4W/ MY.TX"ITZ8[<\WVYEMJ*F.\$7X((_0AX=S:FOO>.X-_;K#")]JJ#=)-W)] M!/7%TY';Z2MJGO05?1P&?N GT0"S3M2)4S*G][1X+:LW:+"=%>Z/,VF*PZ%F M1CJ=)FZ=
[C4'6X%9N5D4N;_+;%8D" *,A]+1"3=YW6?]@I<4OAQ_WAG(6;_K MS^7M. K=($!^_FF_D2)C+&_BP!Z9S#CH$NQ4L3%C?#W3[*F4M+2W#-+7^R2* MO=-D]JV") B]@6F&=%,!<4\%
[28$)CN>PT:5WD;]KZ5$WLW#1#W M-&"PYRR3U2@]5/Q,/&N+MCW+4R_!1N*NT7T$Q*G\>F'BLW0C[TP]0>^J$@W M'A#W>#;HRH1G.VY&5ID@"["<8&+G(KC_X
0((X3,/DE$??,""^EPZV@VY0 M(.YOW3]@3^NCIW/GE^@R]F]3EZYZ8^UO],)21'P12Z)?>AQBB*NN3\OI&BTUU MV#P76HMU=;EB-&?2&,#?%T+HYQOS@O;_*Z;_U!+ P04 " O@&=9=NSX
M;AX$!8"0 & 'AL+W=OCAL5;:C9/*^^8JRUQ182U<:AK4=+,TMA:>MG:5 MN<:B*(-2K;)!GK_.:B%U,AF%LSL[&9G6*ZGQSH)KZUK8S0R568^3?K(]N)>K MRO-!-ADU8H5S]!^;.TN[;
(=2RAJUDT:#Q>4XF?:O9AVM@3Q;& M?.+-NW*$03]/> .*L5 1.-SAYGL3++B_GJ+?AM)\U\6PN&-47_(MTE?CY#*!$I>B5?[>K'_&SI]7C%<8Y<(OK#O9/(&B==[4G3(QJ*6._^*QB\.W M*
PZA4'@'0T%EF^$%Y.1-6NP+$UHO BN!FTB)S4G9>XMW4K2\Y.9<-*!6<*= M18?:"X[5*/,$S0)9T<'(LS@&9@?X;W1OG+PDRZQ/-3/B-*.UV#+:S8X"3C' M)H5A?@:#?'!Q F^X\W,8\
(;/X'VP*Z'EE^#>&=P8[8R2I8B5HN$06.DX9MV0=,)B]?]%_G MUR?!+F.,E?C<=>/X6C-N"W"GNB*$S="+V1>@6M%FTI/990 M&"H&[>*JBS=MEKO0NJ?05N(!88&H@0PWPI*40K4E
K%FO0A\:'%IC"=1HFWQF*,E1 G1M41V@4M+8L"'/R3%%?X2MM5P26OC68MK[T%#B.$MTYZAMNF"4 MB?O*(H8X:"I)J&,S06XF,.<TSN#:%&>_UH+^4J?ZZ<%T*% HTS5(07
M\F^$(471Q2!2V(DBY=N:FFL$]E[+_[R1B!V\8:D4:"[!LK6$8O?KZ8RG)1U1 MN?K(^S1P[[#^& Y)=YMN?HB,,]6Z);U[;(SU0)7!8Q'Z^?DO9$_%O/(+H=H1
MEFKCUE(6)5I'U4GO@K0B@^.!IY3\)VHI'&N-V=ZTJ]&NPDSGHJ8.$??[G3W MV3"-T_))/'YSO!=V12\<%"Y)-4]_>)6 C7,\;KQIPNQ<&$^3."PK^O1!RP)T MSU';;MC [F-J\A502P,$% @
+X!G69FI9Z0'"0 ;14 !@ !X;"]W M;W)K=7H#134SM5BF0KSF7C2U4N MF]IYF!U7/)>'K7V R*:(,@@P "A9_5[ND'2DNUXYB612?3M=/?I!B]V/MS& MABBIN]:Z>#EK4NK>+9>Q;*C5<>$[M M-
FYV=2'/KL/5A>^3-8ZN@XI]V^JP_T#6[RYGI[/QP1>S:1(_6%Y=='I#-Y1^ MZZX#_EI.6BK3DHO&.Q6HOIR]/WWWX8S/RX'?#>WBP6_%D:R]O^4_?JHN9R?L
M$%DJ$VO0^&]+'\E:5@0WO@XZ9Y-)%CS\/6K_++$CEK6.]-';/TR5FLO9VYFJ MJ-:]35_\[M\TQ/.*]97>1OE7[8:S)S-5]C'Y=A"&!ZUQ^7]]-^#P=P16@\!* M_,Z&Q,M/.NFKB^!W*O!I:.,?
$JI(PSGC."DW*>"M@5RZ^M!'/(GQ8IF@C9\M MRT'R0Y93*ZL1E<^K)Y5>$/=0KT\F:O5R>KL M&?TOI]!>BKZ7W]#W2]AH9_[4G/VY^NA=]-94.A>#]J1UH$@NY0>^5I^-TZXT
MVJH;/"147HKJO^_7,074SO^>0B@[D%U.B136IHLCUC=7'\:)7ZM;"KZ/L.(9 M2*6[SN(\LQ&<0\YM+W8@^^(&Y9U0.&=O5^>H %?!\3D =NP,EVN\W0L"41PW M"#L8SB;7E&A4F-
]%XUO*)]:]L:P]GF=7O23R4'/POLZ_U-9$'X[M8?Z'%UL> MNJT)0=XR=J&7AD2?D\V&'.IHDRDV[B-8-9X7VH0RZ#]-]LY5BP3TK:I,!)C[M0?YJ$O?!P3:M@QZ\N7MG $IB:J8#Z*,"[JCP-
4MYJM<(ZQ_IP-Z<+06 M_%[;M%KO@,V M8PL6H*DTU/#8=SIB R[G2#ZS2!EJT00' @[XC[;9NK8.IXIH%#*9P5ZC,M MFQ)??4P%'3(K2B.KDY,R8/QQV..30>R@]\3T-#EXUVFSQ,TQ/X!+*Y!AO3
M19DADCN09Y2A.2E;%+^*N4T@*8V,%W$I#X3]5] ?P0V420.V01;II8WGTP/D MD'+.)[2@^MJC[$QMJ#KG/(!AT'[%WP ^%RH'2!E(]JFWU:0%Q 4%AWZ=BS>Z MJLRX_!TCVC()!;\UU?TI;8N'H?
K'97ILY4%FGLC"XPP,SF, $P\XO<7@YPD' M8XXVTBR%00HP,G)R6%KJF6-R&B0EN9*@!^,+]0=EC<"DEXT&LPT_Q#(F*LQB M\2KE/773BDQW'1I^7)R,ZRE/28@.8@583
^=PE8S_J.L8\5C:B#)Q'24T5\M M(^;@DP^F)'_2;<7ND(S&=[5I?]&ZPOU"XL\59NB3Y90(3^X5[%2 M@6G-*U+LU[(.&)GJ3'@<10/*V#3/D.U?
4NLSS(H=293B+H19N08/CA%.TQEJY^,@8R7QX/$\>21;?]]/%:S5*%ACV M@1IOJV&G1[N+/+Q^TNC;433/0+YREWW;Y^SCIFQ*DYZ2/%V]6IR,#N,&PHW/ MS"'(2=NC+,-+(FX]>?
$31I$QLP5T>HV1GN1NP&[%S-@9#6'J(9)Q'QA*M)6KYGI2 M8BF'(>722^:W;H./9[G/'I?HPPH3&):3M\ M0.&>&[=JQ1G9/+D,'- U;EU/G3A>6SJ];T_S)[3[X_E#Y,\Z;'"90>O7$#U9O'DU
M4R%_W,M_)-_)!6U3[@(R,^&<"*? #O:^_3^ <;F+ZP7OT?4$L#!!0 (M "^ 9UD@UK&PO=V]R:W-H965T&UL MA51-;]LP++WW5U>>L%%,@0(=50$\$GWT4.'H-W'8=A!L1E;J"RY(ITT_WZ2
MG'@9D&:76*+X'A\5/8XWQCY1Q3:'IQ,QOY_)#P0^*%W,#@.UD: M\^0W=\\4D2KP^G(5)BS9Q@NL8Y^G;SG'6?4E_3 P_6>_5/HW?6R%(1SHW[* M@]M)=!U!@2O1*GXPFR^XZ^?2\^5&4?
B%39=[.8P@;XE-O0,[!;74W5>\[.[A M '"=O)(=X TZ.X*!96W@D4VMF8#UF<[-K\(K0:T$R>U_U,>V;I3Z7"<+02C M9I@;8AK'[!A]/,YWZ%F'3E]!OX=[H[DB^*@++/[%QTY)+R?=RYFE)PD?L1G
M,#F'-$E')_B&?7O#P#=\A>^S,<5&*@5"%W"G6>A2+A7"E B9X%92K@RU%N'7 M=$LW2/Y?>P:NBJCXU6\<6ZH$3E.(N<,0^UN(NU[-YN[J^7"BAU'?P^@4^W__MHI/HX]J^&L:SX0
.J>%;A6=S4S="P%?G.L)")P)9%$)EKH$-L 5NF>_=G9N MG@YW!GKN94D@\F,!=1N5.3HS\"LH DE"(H6]^A6YVC9#0S>^@P?LIB;-5JQ ME$KR]JR+$H)DK&D QVXQ/GCT-=HR6-
L+;C5W[[^/]M-CVIGF;WHW>NZ%+:4F M4+ART&3P[C("V]FYV[!I@H66AITAP]R$Q"M3W#G*^,N=+?Q!?]9FOT!4$L# M!!0 ("^ 9UF&PO=V]R:W-H965TVOW^^J^[6]L_AT MFJ04NE:-
TZ815I7OCZ[/WGZ\I/6\X!:K=S@;T&6S(WY1A]NB_=',U)(52KO M2(+$?P_J1E45"8(:OP>91VE+>9X'G<X=Y3^5[8=MLRE4S>%F^DT7W?+]T9LC4:A2
M]E7WQ:S^IH(]+TE>;BK'_XJ57WOY^DCDO>M,'5Z&:K5N_/_R,?AA\,V8$7 MSL,+YZRWWXBU_"0[^>&=-2MA:36DT1]L*K\-Y71#0;GO++[5>*_[\$4]J*97
MXHO*S:+1Y*EWIQT$T]>G>1#RT0LY/R#D+^*S:;JE$$VA2K&[Y]"H:35>=3J MX_F3 N]5.Q47LXDXGYU?/B'O(EEYP?(N_L#*TII:W$!7BVR I[NEN&$?*RO^ M>3UW_/Q?^QS@Y5_NET^5\]:U,E?
OCU :3MD'=?3AA^ .7LVNGM#^,FE_^93T MY\;H22'[5?S9=")[G(H].XBO2Y7=F+J5S1K5Q__HQS^]$LU551N;"&;7'E7 M7N-SWW2Z68C[3C:%M(6#MPM=ZERRS!<_?/?
F_'QV=7U_PW^=71V+5-[7$[$W M0([%9C%"3KSX:EJ=TQL"$C+ZOS05<,4)*4I4]XGK5"MDVUHC\Z7H# JT4Q9U M0TI%>U@W 2MWD55_@V[?B[%C<%@KZ)W5-
;JE$GG0YTJ<[UF2T9)6609(\H69 M5WK!W[HK<7$L/@451C(AL'2(U-K=:ZNQ.6QN(8Q^1^M@V?%R^-1K!%,&XZ MBENT7A40)CNAX=,*0AJGA%Q8I0"O>
1W/>@"WC<6Z_#XD#UBM=3PJW>:>BM> MZ&/6\B=HV9'*OT(PO$[[W,D.PK,[8SL$29L4_.'BF 43B((L3IN3+V@N:_%5 MYNR6G>L0:<<)?Q$J"Z?3E@P+($I M*
[E'#FC06NZ;3HT'G2B7E;9G45/M=TZ&71[ERS@,-5R+>8*T7M TVP1/(?\ M[] +1=';:!UJS<+;6SE*D=.F2*)_ILUK"K"/==QHFOV$>FGX761F;UG2[5W< ME!;#]!
[1WA8A)"U&^3>B;URK=Y;_@1#:O*]?)"ZDO.* M$R0DH7(9S*5,W;5N9,]4_+94328WST,..E$;J .W8<_F4.).6&:LBD:I@B,C M?;DIGRVF0SPAWZ$4K"]"K%$$)/NE9D0'"G(%Y;M5E22&
(1QC7T?'@'U49!%7 MKD!U4;;4<<>#"W4)B0+>; P*94Y@38Z;RNL]V3A';]ZXV4J9J3(P5)VFH$;M7C?\)HGC4(2,HETA& M5*^$/5:TYGE0V83MXJVZ1FV)VQK(4/GF35DR+0FN"9
M'*M^[Q4V]=&8PQ^C":;U$MI*N0\3^2]TCO0C^P:8<[R&QC).D!/#/]8LD:(/Q6 MNPVXR@<$>H&&8-:R0CV2E:R+7\INW .7TH4%!*N&E=E=-?4@?%!(C:Z6L@T6
MDBJ5*)':!IUNT)8BQB9$\BZF(IPK\DH07@0,]6OM-Q!Z-,(J-*K,8WM2I1@T MW :U:$6)5M7DFL'-UJ3+\,6A#:P(53O4Q43@.,4+%?ZFE^#N;Z=6K4 % LQD MT?=1S%1\I#+*C-]F%
(M!R$#6E0T>EW-@T823-:8=/PIXLS8^3??'=V7ZJO#5 MRE!$"U-'R6*O(4D[P^7?E+CG)G0I#6B[HI1W&OV9F +RE(2&UD)@P7!>X"* M(7^HS*!*Z,/92"7QI$JI2D/73<
:6G796^YSH7>Y"*Y(+\^SGLG\()/2GH2BW(GSZ8"\Y=H>]L:\BN: M^394[)"D2?"M9ZT#[C=N!$BO>2!'SW;X?]1Q2+M<]C[KUV*>)S/,@)A'G5G;0 MUZ-.I"0!2?T"L@8=CNI6-
YTD:DWP5Y;TBLLU,4XWHBU0J 2]P,XHX&RU-(2! M5M-<+?YMYI16+6'+7%=@B"K!(,9RWG:MI*5P>'CQ.#)JT%X 5]NN8WP##3B<
M,FZ2!1PYCB2"I.JA\P):=B315&:Q@#EG*C**$7W8053'<;D=A*NZY>.ED)M?@ M8Q_@(7,(B2O7?3*J.QF;1%.%>5>MJKO1I]2"K/A*RYY9*JE_:*8U9Q?8FFHB^ MIRYH-U!PIZ16.\/<+2IN-
T"WT@;XH2"G:7?45&NE4]M/B&2LM+$&GH, M%.)<47#(C'> .>4WYGOU[U776F4F221MQ/.RDCX,B)AZ*JUQ_J2L@&+J?+K MOL:S!G0ZH?
LP;IZ,$3P0P&OGE0*^YYOA'X]#FT8.")*M:^2_I0B;_9HFO))% MP8,7OMS1^S>5I3BFD7,%]DJ]Q\<2K?0:M.&6]%C'#SP:B(%95^5L T=E1Z@ M\6@*
<\,M9[(9W]TPVT+,PZN<&"V^[<;UA]F!@@;3IJ&_0II3>Z=E(5BWBV3 M,8L;*Q6<4KK4KYO3SO<.+#0P\C>]D%2L0)6Y+G:J?=U6X)EU.HJ2&X%L5J%N M%V@:$7PQ4"A]H\H"$SC(*?
Y4J1XLT9VB].0N"PEIK%YH2N?:-=O^?X2>$V?1 MS]=?TIR[7:!9*%%#QK (-A4@)OJE$4G4T_$&;G;V^VGODP1U:(A5 @:GE11" M,6B]MLJY)'Y1*]FDJ69C$=49G3@]0BLX!M([XIG4K66E?#%F#]2,^4
KY (Q M//[KF'.LM-&<9B%S /8!J92Z\ZSH5OBVS0=YR'TXS'#9?+U% M"]5CK@+C03S&?APS$=^@%:&:*I/$5G3X5[PW%QA6_B[(5CZNFX]]$]V&3QE
M$9TB9%Y'Y/#93)R]%!\]78K3@*YK56AZPZ.M78Q8G^];.:D/X8+3JP%TLUR MNR)[,BF6>L'$RDDHM.F@ZH.8/696F?/UYH$ M81B//:P&?]SBLD.@0*'9 MCF
22_XN490HZC/7C0T8N#?:DLP=^QO.H(U\EOX.:>0TMK)33>R=(1JHP+?RD+\;VX>#UY_)"W"A+,TBV73R,\XQ\>6Y[.O%# MP1,CD9H4'TND&:9X\%6:F$3(AM2LURS.PPA-
''W%]8(E19CVX[&V>)'4J #8 M8:HY1@SIA)(P#=D?$2I2:5LH9LA16 H7I<86WY:CFXVR9_B/68@O(]:ERR/I MG.)3/[Y-:2C.P"-_2E4:X.V%E-ZLGF*NZF.,PM_!03F=$
MID+4\78VEQ7[E"_\W/BPGPZ5L8@!@@X?F@7ZVISF>G*.4PMNZ*$$'Q8U"_2L M5)Z#7(,\R#)G*U;AM!L;WU_]^GD'L*[GRKI MQO70MA0Y0BH7;E<%"*3V)>MG2[H$"3V ,,#G9$_%\!?0]U68P! R]
("^ %] M#BO0#PL5#YFWM(DJQ L51R,NI/ =R0JQ,RN_<905H^@WI*5^E1LMRW@O.CP; M(R$,Q.6,SV/R- M++[8WE:++[G0G!<>;.,9--WO//KGG+?N^>W7\>75[NP:;U.TOV.*S*JF3NGG
M,J:TZ2(Q?/\5#].HQ9?HA-.ZZ0.WVGN"L#",@,;2:;T'B*&\A-$;[1B1B+9X M>O0)K>:M/(!VF7I$:?!9]*XX/ZCZ\8=NG'9&W*%.?+?TA(/E L(7?([- MW"#*"&TI\W1K2(F;)SCFB)(N=:$G?WK/Q$E!_%Z"
<>0" ",!P &0 'AL+W=O^ON,K$GJHF35H^VTH4AL4#$P)M>W:3F\0BMC/;:>E^_Z=M!0!'9LV M*8H_*$J[SRS MY30X#B##G#65O5.KS]CY<3N^5%7&OV'5Q@Z3 -
+&6"4Z,"D07+8M>^S^PP[@ M.'H#$'> V.MN%_(J+YEELXE6*] NFMAZOI*R>[>%+MN82SY?\E;D6.WH=ZY+AU-U2O6E I]V@7F(P^_AA>!B=[5$VVBH; M[6/_C;*]V->5?5$6>^,!/!&
[;H^W78T^4EH#3*C&M-IO">F\NY-A8D&0/1'B&5^TWO0ZX:O5D826Z:.KU$1P4(AM$!4".4 M1H?(R6SGD$8[BYVY 0E_BX?5M5:/G)(:JW4OB2$9$K=[XA/2X9[A\:Y@6Y+O
MC59TQOWHLL%H4"_HIFQ/;!?[M2_U-[[X5V2,:0)'#0>\ZH(56%Y%]IZ.*>/W3W6G&.Q52H"[V6# +]X6 MR^WL]JHY;ROL4WA[3]TP77!)R8$Y0:F0:/!T3@ W=;^=F!5[>OM0EFJWKY;TG6)
MV@70]UQ1KG8#M\#V I[] E!+ P04 " O@&=9=9(;DG(/H" ";!@ &0 M 'AL+W=O\BKWKI[*YQTE_?F36X5 6D7F#G]7TSLSOC2:/-@\T1 M'3R5A;+3('>NN@Y#F^98"MO7%2JRK+4IA2/1;$);&129#RJ+,
(ZB<5@*J8+9 MQ.N69C;1M2NDPJ4!6Y>E,\++'0S#0;!7G$O-[EC13B;5&*#*W1?JZ4A*>Q0 M,EFBLE(K,+B>!O/!]6+$_M[AF\3&'IR!*TFT?F#A4S8-(DX("TP=(PCZV^(- M%@4#41J/.\R@H^3
P_,>_;VOG6I)A,4;77R7F5R"^)*/:JZMAGO*2%W\Z8K--FR$88T%$IR$E0T#BWWX,)\O:6H?:TEDX'+A0!0%6$^4>*+TD"A! M\D[U1LE?9"(FH0"?V(X@%0%@C_ SEC//I
N9^2M<2R54*@6#DX(VAN/HK"6U M=9J3/]R490H;&V8P#$$DK(4TL!5%:C:#77B.HHL[,!&SP5?>Y&19[WH,Z@0H- ME?0,6(6.#$U?0H+>HH%!#.,(;FLCU:;'0(HN \IV/I#G ^AU4ZX).>^?N,^9
M#L,+S[WO>B8S4)JY#?8::@P)<]NCK/Z%\)$&H>&?J]'%913!L4<8'BR,$LW& MKT5+;:J5:W='I^TV[[Q=.'_BPHP'(@ M. 8 !D !X;"]W;W)K&ULA55-\N+JLP+WW5Q >
ML%,1NT[ZL2X)T+0;UD.'HMG'8=A!MNE8J"QY$ETG^_6C9#?+AC2]Q+W+1]G[G@<0=XZ,O4 9@6UU/U3K(?WL.X2%X I ,@#;K[M0D'EC2 QGUK3@?79S.87P6I
LSBI_4=9DN53R3B:W^K^\:OVX$:Z7!G76H0?5YDCRQ?BYS[+/>-D/Z-ODDO7B!QG$?>!0_N$T?SM MFY.SY/T!O9.MWLDAJE<_QT'T?FV?#>'1^0AVJ6$I=8Y'_J?QS7$,5"%@.5<,!'K;58
+\ROX#2FAIX%%CA\QT(70"G"6Y,QPT0,-H0A[FQ?!<\@2]' M_.9QS2/$X0@6J+&4Y#A+^>(D,J"1C@9>O0K5(!?6;GC>=,(6?27#\JQO-@R: M/*DDK!V7?4+
($#64K5(;&%P7X+PW3H*.A=6&/[J2C\@95 D=E/*"=FT?=:95 M13@2>261B1MK6*[(%/YO/4,(VVR@):GD;PQ466\03!E"]@:'O(U@WY6)=[JY M1KL*,XN1IM74-
_9V=SL6K_I\#>]GZEWPJXD2U98,C09G9]&8/LYU0=DFC ; M,D,\;<*RXM&.UB?P>6GX]@R!+#]LYC_5!+ P04 " O@&=9+#KXUQ\# M_(!P &0 'AL+W=O!?HALQTDAA202
:HBE0I!/PY5#QM[$]]8[[H[:P+_OK/KX 84HDJ]IV/OU MWKPWZQE/UL;>4XGHX+%2FJ91Z5Q]DB24EU@]BDV-FG>6QE;"\=2N$JHMBB* M*I5D:7]45$+J:#8):S=V-
C&-4U+CC05JJDK8ISDJLYY&@^AYX5:N2N<7DMFD M%BN\0_>MOK$\2SJ60E:H21H-%I?3Z&QP,A_Y\^' =XEKVAJ#=[(PYMY/KHII ME'I!J#!WGD'PZP'/42E/Q#)^;SBC+J0';H^?V3\&
[^QE(0C/C?HA"U=.HW$$ M!2Y%N?RJM67_"C9_WGB\WBL(3UNW941I!WI SU0;,"BJIV[=X#1A"S!<"'Y!M M %G0W08**B^$$[.)-6NP_C2S^4&P&M L3FI_*7?.\]YDG)O-!X-MJ5!)>ZP.(E/F&1
MG=+L6>D\VTMXAW4,PO/69]-]O -^?#P#=\@^]26"WUJO4:3,+/LP4YRQ_* MKUU^6[K1;CI?/"=4BQRG$5<'H7W :'9X,#A*3_>?('75B1_O8_^^:]A+OEOW% M,.R-8_C'J.VYGN86HQO^S?L4-O
Q5TV!Q!Q/4'@.KL08KAQ("L540%,SC2L1 MUJ& >$4\H.5^ +J]%LQDEI"WP0(G ;<6U(S9OMT#%]9#2>TYBP="HRSP?$I;32Q MC=CPO'84CE<_6$*^7!L,\9H1I#9U1/?5A@ M+AI"$$JI-,11Y8-
0G"^=S)&B)FI!YP>]/N/N!9V)56!PB5#T]ZQ.CX?02V[;OMQ)DJ]+]% M<=PYP[#D7Q5?X#WEX8O?3/Q ;]W^P^@^,*B![C!Y&JW[!ZM2^M"&G6VZJ][V6&Q@
MG6%(E_ 6:WXD+^Z"2YR5' MAX.+ B0UU4H@44'P(0RS&#-U!)X.XZ#9K:\F+2CH"9;%?E/)R /$8#-QL:^5F^ U>V.4CBXKV0?W5J"3>XN-#A1S+KR*(@-0;M<.I8T<3P#7?:
M86/6LN6O&+^2X%5W"^'W(S#(H9JM&YYX^U=D[6AM"F*M^+GO9=XU5E@<'(4SU2%\1@@"&9^FKD^P!)T:^P8U3"SR+`R6E#.+5<>9XK](5I*[;"BO1[X1)BKL.<+K;:[Q"+%QO^+(M;)Q12DJX.I#
Y4:.A"Q(<^4#8=8ZE"A+[J<@\-D*>?OE4[A1>X?E7DJ<8(80A=^]KWC%9"&SZ#UL&RB[4R%H8[8GT%N@K3/UW#Q3EF^T?RH_@_)+T4?1H.(W?M@0-QWQ3X]U&EW]O8?"$6/1$!OW]9H$J;#9HUIJ!V;S?^KU
_%;U@]O@>5;LZ.(!Q(FSMV4S$J1YVKW]8HP%E'3Y9#W].C>=D6]K]2[8Z9@$!NN^^&;4^RB?EPZ>EF^O@B%-F)F,J"DC#:YH@1I+&T(C$\3<%6>#_%$`*

XML 40 Show.js IDEA: XBRL DOCUMENT // Edgar(tm) Renderer was created by staff of the U.S. Securities and Exchange Commission. Data and content created by government employees within the scope of their employment are not subject to domestic copyright protection. 17 U.S.C. 105. var Show={};Show.LastAR=null,Show.showAR=function(a,r,w){if(Show.LastAR)Show.hideAR();var e=a;while(e&&e.nodeName!='TABLE')e=e.nextSibling;if(!e||e.nodeName!='TABLE'){var ref=((window)?w.document:document).getElementById(r);if(ref){e=ref.cloneNode(!0); e.removeAttribute('id');a.parentNode.appendChild(e)}} if(e)e.style.display='block';Show.LastAR=e};Show.hideAR=function(){Show.LastAR.style.display='none'};Show.toggleNext=function(a){var e=a;while(e.nodeName!='DIV')e=e.nextSibling;if(!e.style){}else if(!e.style.display){}else{var d,p_;if(e.style.display=='none'){d='block';p='-'}else{d='none';p='+'} e.style.display=d;if(a.textContent){a.textContent=p+a.textContent.substring(1)}else{a.innerText=p+a.innerText.substring(1)}}} XML 41 report.css IDEA: XBRL DOCUMENT /* Updated 2009-11-04 */ /* v2.2.0.24 */ /* DefRef Styles */ .report table.authRefData{ background-color: #def; border: 2px solid #2F4497; font-size: 1em; position: absolute; } .report table.authRefData a { display: block; font-weight: bold; } .report table.authRefData p { margin-top: 0px; } .report table.authRefData .hide { background-color: #2F4497; padding: 1px 3px 0px 0px; text-align: right; } .report table.authRefData .hide a:hover { background-color: #2F4497; } .report table.authRefData .body { height: 150px; overflow: auto; width: 400px; } .report table.authRefData table{ font-size: 1em; } /* Report Styles */ .pl a, .pl a:visited { color: black; text-decoration: none; } /* table */ .report { background-color: white; border: 2px solid #acf; clear: both; color: black; font: normal 8pt Helvetica, Arial, san-serif; margin-bottom: 2em; } .report hr { border: 1px solid #acf; } /* Top labels */ .report th { background-color: #acf; color: black; font-weight: bold; text-align: center; } .report th.void { background-color: transparent; color: #000000; font: bold 10pt Helvetica, Arial, san-serif; text-align: left; } .report .pl { text-align: left; vertical-align: top; white-space: normal; width: 200px; white-space: normal; /* word-wrap: break-word; */ } .report td.pl a.a { cursor: pointer; display: block; width: 200px; overflow: hidden; } .report td.pl div.a { width: 200px; } .report td.pl a:hover { background-color: #ffc; } /* Header rows... */ .report tr.rh { background-color: #acf; color: black; font-weight: bold; } /* Calendars... */ .report .rc { background-color: #f0f0f0; } /* Even rows... */ .report .re, .report .reu { background-color: #def; } .report .reu td { border-bottom: 1px solid black; } /* Odd rows... */ .report .ro, .report .rou { background-color: white; } .report .rou td { border-bottom: 1px solid black; } .report .rou table td, .report .reu table td { border-bottom: 0px solid black; } /* styles for footnote marker */ .report .fn { white-space: nowrap; } /* styles for numeric types */ .report .num, .report .nump { text-align: right; white-space: nowrap; } .report .nump { padding-left: 2em; } .report .nump { padding: 0px 0.4em 0px 2em; } /* styles for text types */ .report .text { text-align: left; white-space: normal; } .report .text .big { margin-bottom: 1em; width: 17em; } .report .text .more { display: none; } .report .text .note { font-style: italic; font-weight: bold; } .report .text .small { width: 10em; } .report sup { font-style: italic; } .report .outerFootnotes { font-size: 1em; } XML 43 FilingSummary.xml IDEA: XBRL DOCUMENT 3.24.3 html 81 141 1 false 21 0 false 4 false false R1.htm 00000001 - Document - Cover Sheet http://smartglass.com/role/Cover Cover Cover 1 false false R2.htm 00000002 - Statement - Condensed Consolidated Balance Sheets Sheet http://smartglass.com/role/BalanceSheets Condensed Consolidated Balance Sheets Statements 2 false false R3.htm 00000003 - Statement - Condensed Consolidated Balance Sheets (Parenthetical) Sheet http://smartglass.com/role/BalanceSheetsParenthetical Condensed Consolidated Balance Sheets (Parenthetical) Statements 3 false false R4.htm 00000004 - Statement - Condensed Consolidated Statements of Operations (Unaudited) Sheet http://smartglass.com/role/StatementsOfOperations Condensed Consolidated Statements of Operations (Unaudited) Statements 4 false false R5.htm 00000005 - Statement - Condensed Consolidated Statements of Shareholders' Equity (Unaudited) Sheet http://smartglass.com/role/StatementsOfShareholdersEquity Condensed Consolidated Statements of Shareholders' Equity (Unaudited) Statements 5 false false R6.htm 00000006 - Statement - Condensed Consolidated Statements of Cash Flows (Unaudited) Sheet http://smartglass.com/role/StatementsOfCashFlows Condensed Consolidated Statements of Cash Flows (Unaudited) Statements 6 false false R7.htm 00000007 - Disclosure - Basis of Presentation Sheet http://smartglass.com/role/BasisOfPresentation Basis of Presentation Notes 7 false false R8.htm 00000008 - Disclosure - Business Sheet http://smartglass.com/role/Business Business Notes 8 false false R9.htm 00000009 - Disclosure - Patent Costs Sheet http://smartglass.com/role/PatentCosts Patent Costs Notes 9 false false R10.htm 00000010 - Disclosure - Revenue Recognition Sheet http://smartglass.com/role/RevenueRecognition Revenue Recognition Notes 10 false false R11.htm 00000011 - Disclosure - Fee Income Sheet http://smartglass.com/role/FeeIncome Fee Income Notes 11 false false R12.htm 00000012 - Disclosure - Stock-Based Compensation Sheet http://smartglass.com/role/Stock-basedCompensation Stock-Based Compensation Notes 12 false false R13.htm 00000013 - Disclosure - Income Taxes Sheet http://smartglass.com/role/IncomeTaxes Income Taxes Notes 13 false false R14.htm 00000014 - Disclosure - Basic and Diluted Loss Per Common Share Sheet http://smartglass.com/role/BasicAndDilutedLossPerCommonShare Basic and Diluted Loss Per Common Share Notes 14 false false R15.htm 00000015 - Disclosure - Equity Sheet http://smartglass.com/role/Equity Equity Notes 15 false false R16.htm 00000016 - Disclosure - Leases Sheet http://smartglass.com/role/Leases Leases Notes 16 false false R17.htm 00000017 - Disclosure - Related Party Sheet http://smartglass.com/role/RelatedParty Related Party Notes 17 false false R18.htm 00000018 - Disclosure - Other Income Sheet http://smartglass.com/role/OtherIncome Other Income Notes 18 false false R19.htm 00000019 - Disclosure - Leases (Tables) Sheet http://smartglass.com/role/LeasesTables Leases (Tables) Tables http://smartglass.com/role/Leases 19 false false R20.htm 00000020 - Disclosure - Business (Details Narrative) Sheet http://smartglass.com/role/BusinessDetailsNarrative Business (Details Narrative) Details http://smartglass.com/role/Business 20 false false R21.htm 00000021 - Disclosure - Revenue Recognition (Details Narrative) Sheet http://smartglass.com/role/RevenueRecognitionDetailsNarrative Revenue Recognition (Details Narrative) Details http://smartglass.com/role/RevenueRecognition 21 false false R22.htm 00000022 - Disclosure - Fee Income (Details Narrative) Sheet http://smartglass.com/role/FeeIncomeDetailsNarrative Fee Income (Details Narrative) Details http://smartglass.com/role/FeeIncome 22 false false R23.htm 00000023 - Disclosure - Stock-Based Compensation (Details Narrative) Sheet http://smartglass.com/role/Stock-basedCompensationDetailsNarrative Stock-Based Compensation (Details Narrative) Details http://smartglass.com/role/Stock-basedCompensation 23 false false R24.htm 00000024 - Disclosure - Basic and Diluted Loss Per Common Share (Details Narrative) Sheet http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative Basic and Diluted Loss Per Common Share (Details Narrative) Details http://smartglass.com/role/BasicAndDilutedLossPerCommonShare 24 false false R25.htm 00000025 - Disclosure - Equity (Details Narrative) Sheet http://smartglass.com/role/EquityDetailsNarrative Equity (Details Narrative) Details http://smartglass.com/role/Equity 25 false false R26.htm 00000026 - Disclosure - Schedule of Maturities of Operating Lease (Details) Sheet http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails Schedule of Maturities of Operating Lease (Details) Details 26 false false R27.htm 00000027 - Disclosure - Leases (Details Narrative) Sheet http://smartglass.com/role/LeasesDetailsNarrative Leases (Details Narrative) Details http://smartglass.com/role/LeasesTables 27 false false R28.htm 00000028 - Disclosure - Related Party (Details Narrative) Sheet http://smartglass.com/role/RelatedPartyDetailsNarrative Related Party (Details Narrative) Details http://smartglass.com/role/RelatedParty 28 false false R29.htm 00000029 - Disclosure - Other Income (Details Narrative) Sheet http://smartglass.com/role/OtherIncomeDetailsNarrative Other Income (Details Narrative) Details http://smartglass.com/role/OtherIncome 29 false false All Reports Book All Reports form10-q.htm refr-20240930.xsd refr-20240930_cal.xml refr-20240930_def.xml refr-20240930_lab.xml refr-20240930_pre.xml http://fasb.org/us-gaap/2024 http://xbrl.sec.gov/dei/2024 true true JSON 46 MetaLinks.json IDEA: XBRL DOCUMENT { "version": "2.2", "instance": { "form10-q.htm": { "nsprefix": "REFR", "nsuri": "http://smartglass.com/20240930", "dts": { "inline": { "local": ["form10-q.htm"] }, "schema": { "local": ["refr-20240930.xsd"], "remote": ["http://www.xbrl.org/2003/xbrl-instance-2003-12-31.xsd", "http://www.xbrl.org/2003/xbrl-linkbase-2003-12-31.xsd", "http://www.xbrl.org/2003/xl-2003-12-31.xsd", "http://www.xbrl.org/2003/xlink-2003-12-31.xsd", "http://www.xbrl.org/2005/xbrldt-2005.xsd", "http://www.xbrl.org/2006/ref-2006-02-27.xsd", "http://www.xbrl.org/lrr/role/negated-2009-12-16.xsd", "http://www.xbrl.org/lrr/role/net-2009-12-16.xsd", "http://www.xbrl.org/lrr/role/reference-2009-12-16.xsd", "https://www.xbrl.org/2020/extensible-enumerations-2.0.xsd", "https://www.xbrl.org/dtr/type/2020-01-21/types.xsd", "https://www.xbrl.org/dtr/type/2022-03-31/types.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-2024.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-roles-2024.xsd", "https://xbrl.fasb.org/srt/2024/elts/srt-types-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-gaap-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-roles-2024.xsd", "https://xbrl.fasb.org/us-gaap/2024/elts/us-types-2024.xsd", "https://xbrl.sec.gov/country/2024/country-2024.xsd", "https://xbrl.sec.gov/dei/2024/dei-2024.xsd", "https://xbrl.sec.gov/stpr/2024/stpr-2024.xsd"] }, "calculationLink": { "local": ["refr-20240930_cal.xml"] }, "definitionLink": { "local": ["refr-20240930_def.xml"] }, "labelLink": { "local": ["refr-20240930_lab.xml"] }, "presentationLink": { "local": ["refr-20240930_pre.xml"] } }, "keyStandard": 129, "keyCustom": 12, "axisStandard": 10, "axisCustom": 0, "memberStandard": 8, "memberCustom": 12, "hidden": { "total": 23, "http://xbrl.sec.gov/dei/2024": 5, "http://fasb.org/us-gaap/2024": 15, "http://smartglass.com/20240930": 3 }, "contextCount": 81, "entityCount": 1, "segmentCount": 21, "elementCount": 246, "unitCount": 4, "baseTaxonomies": { "http://fasb.org/us-gaap/2024": 273, "http://xbrl.sec.gov/dei/2024": 30 }, "report": { "R1": { "role": "http://smartglass.com/role/Cover", "longName": "00000001 - Document - Cover", "shortName": "Cover", "isDefault": "true", "groupType": "document", "subGroupType": "", "menuCat": "Cover", "order": "1", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "dei:DocumentType", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["span", "b", "span", "p", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "dei:DocumentType", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["span", "b", "span", "p", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R2": { "role": "http://smartglass.com/role/BalanceSheets", "longName": "00000002 - Statement - Condensed Consolidated Balance Sheets", "shortName": "Condensed Consolidated Balance Sheets", "isDefault": "false", "groupType": "statement", "subGroupType": "", "menuCat": "Statements", "order": "2", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:CashAndCashEquivalentsAtCarryingValue", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:AccountsReceivableNetCurrent", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "unique": true } }, "R3": { "role": "http://smartglass.com/role/BalanceSheetsParenthetical", "longName": "00000003 - Statement - Condensed Consolidated Balance Sheets (Parenthetical)", "shortName": "Condensed Consolidated Balance Sheets (Parenthetical)", "isDefault": "false", "groupType": "statement", "subGroupType": "parenthetical", "menuCat": "Statements", "order": "3", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:AllowanceForDoubtfulAccountsReceivableCurrent", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:AllowanceForDoubtfulAccountsReceivableCurrent", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R4": { "role": "http://smartglass.com/role/StatementsOfOperations", "longName": "00000004 - Statement - Condensed Consolidated Statements of Operations (Unaudited)", "shortName": "Condensed Consolidated Statements of Operations (Unaudited)", "isDefault": "false", "groupType": "statement", "subGroupType": "", "menuCat": "Statements", "order": "4", "firstAnchor": { "contextRef": "From2024-07-012024-09-30", "name": "us-gaap:RevenueFromContractWithCustomerExcludingAssessedTax", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-07-012024-09-30", "name": "us-gaap:RevenueFromContractWithCustomerExcludingAssessedTax", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R5": { "role": "http://smartglass.com/role/StatementsOfShareholdersEquity", "longName": "00000005 - Statement - Condensed Consolidated Statements of Shareholders' Equity (Unaudited)", "shortName": "Condensed Consolidated Statements of Shareholders' Equity (Unaudited)", "isDefault": "false", "groupType": "statement", "subGroupType": "", "menuCat": "Statements", "order": "5", "firstAnchor": { "contextRef": "AsOf2022-12-31_us-gaap_CommonStockMember", "name": "us-gaap:StockholdersEquity", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2022-12-31_us-gaap_CommonStockMember", "name": "us-gaap:StockholdersEquity", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R6": { "role": "http://smartglass.com/role/StatementsOfCashFlows", "longName": "00000006 - Statement - Condensed Consolidated Statements of Cash Flows (Unaudited)", "shortName": "Condensed Consolidated Statements of Cash Flows (Unaudited)", "isDefault": "false", "groupType": "statement", "subGroupType": "", "menuCat": "Statements", "order": "6", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:NetIncomeLoss", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:DepreciationAndAmortization", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "unique": true } }, "R7": { "role": "http://smartglass.com/role/BasisOfPresentation", "longName": "00000007 - Disclosure - Basis of Presentation", "shortName": "Basis of Presentation", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "7", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:BasisOfAccounting", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:BasisOfAccounting", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R8": { "role": "http://smartglass.com/role/Business", "longName": "00000008 - Disclosure - Business", "shortName": "Business", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "8", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:NatureOfOperations", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:NatureOfOperations", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R9": { "role": "http://smartglass.com/role/PatentCosts", "longName": "00000009 - Disclosure - Patent Costs", "shortName": "Patent Costs", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "9", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:IntangibleAssetsDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:IntangibleAssetsDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R10": { "role": "http://smartglass.com/role/RevenueRecognition", "longName": "00000010 - Disclosure - Revenue Recognition", "shortName": "Revenue Recognition", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "10", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:RevenueFromContractWithCustomerTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:RevenueFromContractWithCustomerTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R11": { "role": "http://smartglass.com/role/FeeIncome", "longName": "00000011 - Disclosure - Fee Income", "shortName": "Fee Income", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "11", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "REFR:FeeIncomeDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "REFR:FeeIncomeDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R12": { "role": "http://smartglass.com/role/Stock-basedCompensation", "longName": "00000012 - Disclosure - Stock-Based Compensation", "shortName": "Stock-Based Compensation", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "12", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:CompensationRelatedCostsGeneralTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:CompensationRelatedCostsGeneralTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R13": { "role": "http://smartglass.com/role/IncomeTaxes", "longName": "00000013 - Disclosure - Income Taxes", "shortName": "Income Taxes", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "13", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:IncomeTaxDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:IncomeTaxDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R14": { "role": "http://smartglass.com/role/BasicAndDilutedLossPerCommonShare", "longName": "00000014 - Disclosure - Basic and Diluted Loss Per Common Share", "shortName": "Basic and Diluted Loss Per Common Share", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "14", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:EarningsPerShareTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:EarningsPerShareTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R15": { "role": "http://smartglass.com/role/Equity", "longName": "00000015 - Disclosure - Equity", "shortName": "Equity", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "15", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:StockholdersEquityNoteDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:StockholdersEquityNoteDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R16": { "role": "http://smartglass.com/role/Leases", "longName": "00000016 - Disclosure - Leases", "shortName": "Leases", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "16", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:LesseeOperatingLeasesTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:LesseeOperatingLeasesTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R17": { "role": "http://smartglass.com/role/RelatedParty", "longName": "00000017 - Disclosure - Related Party", "shortName": "Related Party", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "17", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:RelatedPartyTransactionsDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:RelatedPartyTransactionsDisclosureTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R18": { "role": "http://smartglass.com/role/OtherIncome", "longName": "00000018 - Disclosure - Other Income", "shortName": "Other Income", "isDefault": "false", "groupType": "disclosure", "subGroupType": "", "menuCat": "Notes", "order": "18", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:InterestAndOtherIncomeTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:InterestAndOtherIncomeTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R19": { "role": "http://smartglass.com/role/LeasesTables", "longName": "00000019 - Disclosure - Leases (Tables)", "shortName": "Leases (Tables)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "tables", "menuCat": "Tables", "order": "19", "firstAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:LesseeOperatingLeaseLiabilityMaturityTableTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-01to2024-09-30", "name": "us-gaap:LesseeOperatingLeaseLiabilityMaturityTableTextBlock", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R20": { "role": "http://smartglass.com/role/BusinessDetailsNarrative", "longName": "00000020 - Disclosure - Business (Details Narrative)", "shortName": "Business (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "20", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "REFR:WorkingCapital", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "-5", "ancestors": ["span", "span", "p", "us-gaap:NatureOfOperations", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "REFR:WorkingCapital", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "-5", "ancestors": ["span", "span", "p", "us-gaap:NatureOfOperations", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R21": { "role": "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "longName": "00000021 - Disclosure - Revenue Recognition (Details Narrative)", "shortName": "Revenue Recognition (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "21", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:UnbilledReceivablesCurrent", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "p", "us-gaap:RevenueFromContractWithCustomerTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:UnbilledReceivablesCurrent", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "p", "us-gaap:RevenueFromContractWithCustomerTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R22": { "role": "http://smartglass.com/role/FeeIncomeDetailsNarrative", "longName": "00000022 - Disclosure - Fee Income (Details Narrative)", "shortName": "Fee Income (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "22", "firstAnchor": { "contextRef": "From2024-07-012024-09-30_custom_LicenseeOneMember_us-gaap_SalesRevenueNetMember_us-gaap_CustomerConcentrationRiskMember", "name": "us-gaap:ConcentrationRiskPercentage1", "unitRef": "Pure", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "REFR:FeeIncomeDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-07-012024-09-30_custom_LicenseeOneMember_us-gaap_SalesRevenueNetMember_us-gaap_CustomerConcentrationRiskMember", "name": "us-gaap:ConcentrationRiskPercentage1", "unitRef": "Pure", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "REFR:FeeIncomeDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R23": { "role": "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative", "longName": "00000023 - Disclosure - Stock-Based Compensation (Details Narrative)", "shortName": "Stock-Based Compensation (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "23", "firstAnchor": { "contextRef": "AsOf2024-09-30_custom_TwoThousandNineteenEquityIncentivePlanMember", "name": "us-gaap:ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant", "unitRef": "Shares", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "us-gaap:CompensationRelatedCostsGeneralTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30_custom_TwoThousandNineteenEquityIncentivePlanMember", "name": "us-gaap:ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant", "unitRef": "Shares", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "us-gaap:CompensationRelatedCostsGeneralTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R24": { "role": "http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative", "longName": "00000024 - Disclosure - Basic and Diluted Loss Per Common Share (Details Narrative)", "shortName": "Basic and Diluted Loss Per Common Share (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "24", "firstAnchor": { "contextRef": "From2024-01-012024-09-30_custom_OptionsAndWarrantsMember", "name": "us-gaap:AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount", "unitRef": "Shares", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "us-gaap:EarningsPerShareTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-01-012024-09-30_custom_OptionsAndWarrantsMember", "name": "us-gaap:AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount", "unitRef": "Shares", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "us-gaap:EarningsPerShareTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R25": { "role": "http://smartglass.com/role/EquityDetailsNarrative", "longName": "00000025 - Disclosure - Equity (Details Narrative)", "shortName": "Equity (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "25", "firstAnchor": { "contextRef": "From2022-09-282022-09-30", "name": "us-gaap:ProceedsFromIssuanceOrSaleOfEquity", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "p", "us-gaap:StockholdersEquityNoteDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2022-09-282022-09-30", "name": "us-gaap:ProceedsFromIssuanceOrSaleOfEquity", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["span", "span", "p", "us-gaap:StockholdersEquityNoteDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R26": { "role": "http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails", "longName": "00000026 - Disclosure - Schedule of Maturities of Operating Lease (Details)", "shortName": "Schedule of Maturities of Operating Lease (Details)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "26", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "us-gaap:LesseeOperatingLeaseLiabilityMaturityTableTextBlock", "us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["td", "tr", "table", "us-gaap:LesseeOperatingLeaseLiabilityMaturityTableTextBlock", "us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R27": { "role": "http://smartglass.com/role/LeasesDetailsNarrative", "longName": "00000027 - Disclosure - Leases (Details Narrative)", "shortName": "Leases (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "27", "firstAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:OperatingLeaseWeightedAverageRemainingLeaseTerm1", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["span", "span", "p", "us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "AsOf2024-09-30", "name": "us-gaap:OperatingLeaseWeightedAverageRemainingLeaseTerm1", "unitRef": null, "xsiNil": "false", "lang": "en-US", "decimals": null, "ancestors": ["span", "span", "p", "us-gaap:LesseeOperatingLeasesTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } }, "R28": { "role": "http://smartglass.com/role/RelatedPartyDetailsNarrative", "longName": "00000028 - Disclosure - Related Party (Details Narrative)", "shortName": "Related Party (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "28", "firstAnchor": { "contextRef": "AsOf2024-09-30_custom_GauzyLtdMember", "name": "us-gaap:MinorityInterestOwnershipPercentageByParent", "unitRef": "Pure", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "span", "p", "us-gaap:RelatedPartyTransactionsDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true }, "uniqueAnchor": { "contextRef": "AsOf2023-06-04_custom_GauzyLtdMember_srt_MinimumMember", "name": "REFR:RoyaltyPercentage", "unitRef": "Pure", "xsiNil": "false", "lang": null, "decimals": "INF", "ancestors": ["span", "span", "p", "us-gaap:RelatedPartyTransactionsDisclosureTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "unique": true } }, "R29": { "role": "http://smartglass.com/role/OtherIncomeDetailsNarrative", "longName": "00000029 - Disclosure - Other Income (Details Narrative)", "shortName": "Other Income (Details Narrative)", "isDefault": "false", "groupType": "disclosure", "subGroupType": "details", "menuCat": "Details", "order": "29", "firstAnchor": { "contextRef": "From2024-07-012024-09-30", "name": "REFR:RefundableTaxCredit", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["REFR:RefundableTaxCredit", "span", "span", "span", "p", "us-gaap:InterestAndOtherIncomeTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true }, "uniqueAnchor": { "contextRef": "From2024-07-012024-09-30", "name": "REFR:RefundableTaxCredit", "unitRef": "USD", "xsiNil": "false", "lang": null, "decimals": "0", "ancestors": ["REFR:RefundableTaxCredit", "span", "span", "span", "p", "us-gaap:InterestAndOtherIncomeTextBlock", "body", "html"], "reportCount": 1, "baseRef": "form10-q.htm", "first": true, "unique": true } } }, "tag": { "us-gaap_AccountsPayableCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccountsPayableCurrent", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesCurrent", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Accounts payable", "documentation": "Carrying value as of the balance sheet date of liabilities incurred (and for which invoices have typically been received) and payable to vendors for goods and services received that are used in an entity's business. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer)." } } }, "auth_ref": ["r18", "r370"] }, "us-gaap_AccountsReceivableNetCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccountsReceivableNetCurrent", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Royalties receivable, net of reserves of $1,253,450 in 2024 and 2023, respectively", "documentation": "Amount, after allowance for credit loss, of right to consideration from customer for product sold and service rendered in normal course of business, classified as current." } } }, "auth_ref": ["r426"] }, "us-gaap_AccruedLiabilitiesCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccruedLiabilitiesCurrent", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesCurrent", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Accrued expenses", "documentation": "Carrying value as of the balance sheet date of obligations incurred and payable, pertaining to costs that are statutory in nature, are incurred on contractual obligations, or accumulate over time and for which invoices have not yet been received or will not be rendered. Examples include taxes, interest, rent and utilities. Used to reflect the current portion of the liabilities (due within one year or within the normal operating cycle if longer)." } } }, "auth_ref": ["r20"] }, "us-gaap_AccumulatedOtherComprehensiveIncomeLossLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccumulatedOtherComprehensiveIncomeLossLineItems", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Accumulated Other Comprehensive Income (Loss) [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r68", "r69", "r215", "r216", "r217", "r218", "r219", "r220"] }, "us-gaap_AccumulatedOtherComprehensiveIncomeLossTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AccumulatedOtherComprehensiveIncomeLossTable", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Accumulated Other Comprehensive Income (Loss) [Table]", "documentation": "Disclosure of information about components of accumulated other comprehensive income (loss)." } } }, "auth_ref": ["r68", "r69", "r215", "r216", "r217", "r218", "r219", "r220"] }, "us-gaap_AdditionalPaidInCapitalCommonStock": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AdditionalPaidInCapitalCommonStock", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_StockholdersEquity", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Additional paid-in capital", "documentation": "Value received from shareholders in common stock-related transactions that are in excess of par value or stated value and amounts received from other stock-related transactions. Includes only common stock transactions (excludes preferred stock transactions). May be called contributed capital, capital in excess of par, capital surplus, or paid-in capital." } } }, "auth_ref": ["r28"] }, "us-gaap_AdditionalPaidInCapitalMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AdditionalPaidInCapitalMember", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Additional Paid-in Capital [Member]", "documentation": "Excess of issue price over par or stated value of the entity's capital stock and amounts received from other transactions involving the entity's stock or stockholders." } } }, "auth_ref": ["r278", "r416", "r417", "r418", "r419", "r436", "r482"] }, "us-gaap_AdjustmentsToReconcileNetIncomeLossToCashProvidedByUsedInOperatingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AdjustmentsToReconcileNetIncomeLossToCashProvidedByUsedInOperatingActivitiesAbstract", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Adjustments to reconcile net loss to net cash used in operating activities:" } } }, "auth_ref": [] }, "us-gaap_AllowanceForDoubtfulAccountsReceivableCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AllowanceForDoubtfulAccountsReceivableCurrent", "crdr": "credit", "presentation": ["http://smartglass.com/role/BalanceSheetsParenthetical"], "lang": { "en-us": { "role": { "label": "Royalties receivables, reserves", "documentation": "Amount of allowance for credit loss on accounts receivable, classified as current." } } }, "auth_ref": ["r64", "r116", "r120"] }, "dei_AmendmentDescription": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "AmendmentDescription", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Amendment Description", "documentation": "Description of changes contained within amended document." } } }, "auth_ref": [] }, "dei_AmendmentFlag": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "AmendmentFlag", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Amendment Flag", "documentation": "Boolean flag that is true when the XBRL content amends previously-filed or accepted submission." } } }, "auth_ref": [] }, "dei_AnnualInformationForm": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "AnnualInformationForm", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Annual Information Form", "documentation": "Boolean flag with value true on a form if it is an annual report containing an annual information form." } } }, "auth_ref": ["r400"] }, "us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Anti-dilutive securities effect", "documentation": "Securities (including those issuable pursuant to contingent stock agreements) that could potentially dilute basic earnings per share (EPS) or earnings per unit (EPU) in the future that were not included in the computation of diluted EPS or EPU because to do so would increase EPS or EPU amounts or decrease loss per share or unit amounts for the period presented." } } }, "auth_ref": ["r100"] }, "us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareByAntidilutiveSecuritiesAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareByAntidilutiveSecuritiesAxis", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Antidilutive Securities [Axis]", "documentation": "Information by type of antidilutive security." } } }, "auth_ref": ["r10"] }, "us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareLineItems", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": [] }, "us-gaap_AntidilutiveSecuritiesNameDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AntidilutiveSecuritiesNameDomain", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "Incremental common shares attributable to securities that were not included in diluted earnings per share (EPS) because to do so would increase EPS amounts or decrease loss per share amounts for the period presented." } } }, "auth_ref": ["r10"] }, "us-gaap_ArrangementsAndNonarrangementTransactionsMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ArrangementsAndNonarrangementTransactionsMember", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "Collaborative arrangement and arrangement other than collaborative applicable to revenue-generating activity or operations." } } }, "auth_ref": ["r198"] }, "us-gaap_Assets": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "Assets", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total assets", "label": "Assets [Default Label]", "documentation": "Amount of asset recognized for present right to economic benefit." } } }, "auth_ref": ["r46", "r52", "r63", "r76", "r104", "r106", "r110", "r111", "r117", "r130", "r131", "r132", "r133", "r134", "r135", "r136", "r137", "r138", "r199", "r201", "r214", "r246", "r301", "r357", "r358", "r370", "r385", "r432", "r433", "r443"] }, "us-gaap_AssetsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AssetsAbstract", "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Assets" } } }, "auth_ref": [] }, "us-gaap_AssetsCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AssetsCurrent", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total current assets", "label": "Assets, Current", "documentation": "Amount of asset recognized for present right to economic benefit, classified as current." } } }, "auth_ref": ["r59", "r65", "r76", "r117", "r130", "r131", "r132", "r133", "r134", "r135", "r136", "r137", "r138", "r199", "r201", "r214", "r370", "r432", "r433", "r443"] }, "us-gaap_AssetsCurrentAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AssetsCurrentAbstract", "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Current assets:" } } }, "auth_ref": [] }, "dei_AuditedAnnualFinancialStatements": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "AuditedAnnualFinancialStatements", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Audited Annual Financial Statements", "documentation": "Boolean flag with value true on a form if it is an annual report containing audited financial statements." } } }, "auth_ref": ["r400"] }, "us-gaap_BasisOfAccounting": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "BasisOfAccounting", "presentation": ["http://smartglass.com/role/BasisOfPresentation"], "lang": { "en-us": { "role": { "label": "Basis of Presentation", "documentation": "The entire disclosure for the basis of accounting, or basis of presentation, used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS)." } } }, "auth_ref": ["r40"] }, "us-gaap_CashAndCashEquivalentsAtCarryingValue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CashAndCashEquivalentsAtCarryingValue", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets", "http://smartglass.com/role/BusinessDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Cash and cash equivalents", "verboseLabel": "Cash and Cash Equivalents, at Carrying Value", "documentation": "Amount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation." } } }, "auth_ref": ["r9", "r61", "r353"] }, "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsIncludingDisposalGroupAndDiscontinuedOperations": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsIncludingDisposalGroupAndDiscontinuedOperations", "crdr": "debit", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "periodStartLabel": "Cash and cash equivalents at beginning of period", "periodEndLabel": "Cash and cash equivalents at end of period", "label": "Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Including Disposal Group and Discontinued Operations", "documentation": "Amount of cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; including, but not limited to, disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates." } } }, "auth_ref": ["r9", "r37", "r74"] }, "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "totalLabel": "Net decrease in cash and cash equivalents", "label": "Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Period Increase (Decrease), Including Exchange Rate Effect", "documentation": "Amount of increase (decrease) in cash, cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; including effect from exchange rate change. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates." } } }, "auth_ref": ["r0", "r37"] }, "dei_CityAreaCode": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CityAreaCode", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "City Area Code", "documentation": "Area code of city" } } }, "auth_ref": [] }, "us-gaap_ClassOfWarrantOrRightExercisePriceOfWarrantsOrRights1": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ClassOfWarrantOrRightExercisePriceOfWarrantsOrRights1", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Warrants exercise price", "documentation": "Exercise price per share or per unit of warrants or rights outstanding." } } }, "auth_ref": ["r151"] }, "us-gaap_ClassOfWarrantOrRightNumberOfSecuritiesCalledByWarrantsOrRights": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ClassOfWarrantOrRightNumberOfSecuritiesCalledByWarrantsOrRights", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Number of warrants issued", "documentation": "Number of securities into which the class of warrant or right may be converted. For example, but not limited to, 500,000 warrants may be converted into 1,000,000 shares." } } }, "auth_ref": ["r151"] }, "us-gaap_ClassOfWarrantOrRightOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ClassOfWarrantOrRightOutstanding", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Warrants outstanding", "documentation": "Number of warrants or rights outstanding." } } }, "auth_ref": [] }, "us-gaap_CommonStockMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockMember", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Common Stock [Member]", "documentation": "Stock that is subordinate to all other stock of the issuer." } } }, "auth_ref": ["r376", "r377", "r378", "r380", "r381", "r382", "r383", "r416", "r417", "r419", "r436", "r481", "r482"] }, "us-gaap_CommonStockParOrStatedValuePerShare": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockParOrStatedValuePerShare", "presentation": ["http://smartglass.com/role/BalanceSheetsParenthetical"], "lang": { "en-us": { "role": { "label": "Common stock, par value", "documentation": "Face amount or stated value per share of common stock." } } }, "auth_ref": ["r27"] }, "us-gaap_CommonStockSharesAuthorized": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockSharesAuthorized", "presentation": ["http://smartglass.com/role/BalanceSheetsParenthetical"], "lang": { "en-us": { "role": { "label": "Common stock, shares authorized", "documentation": "The maximum number of common shares permitted to be issued by an entity's charter and bylaws." } } }, "auth_ref": ["r27", "r289"] }, "us-gaap_CommonStockSharesIssued": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockSharesIssued", "presentation": ["http://smartglass.com/role/BalanceSheetsParenthetical"], "lang": { "en-us": { "role": { "label": "Common stock, shares issued", "documentation": "Total number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury." } } }, "auth_ref": ["r27"] }, "us-gaap_CommonStockSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockSharesOutstanding", "presentation": ["http://smartglass.com/role/BalanceSheetsParenthetical"], "lang": { "en-us": { "role": { "label": "Common stock, shares outstanding", "documentation": "Number of shares of common stock outstanding. Common stock represent the ownership interest in a corporation." } } }, "auth_ref": ["r5", "r27", "r289", "r307", "r482", "r483"] }, "us-gaap_CommonStockValue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockValue", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_StockholdersEquity", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Common stock, par value $0.0001 per share; authorized 100,000,000 shares, issued and outstanding 33,517,787 in 2024 and 33,509,287 in 2023", "documentation": "Aggregate par or stated value of issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note: elements for number of nonredeemable common shares, par value and other disclosure concepts are in another section within stockholders' equity." } } }, "auth_ref": ["r27", "r247", "r370"] }, "us-gaap_CompensationRelatedCostsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CompensationRelatedCostsAbstract", "lang": { "en-us": { "role": { "label": "Compensation Related Costs [Abstract]" } } }, "auth_ref": [] }, "us-gaap_CompensationRelatedCostsGeneralTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CompensationRelatedCostsGeneralTextBlock", "presentation": ["http://smartglass.com/role/Stock-basedCompensation"], "lang": { "en-us": { "role": { "label": "Stock-Based Compensation", "documentation": "The entire disclosure for compensation costs, including compensated absences accruals, compensated absences liability, deferred compensation arrangements and income statement compensation items. Deferred compensation arrangements may include a description of an arrangement with an individual employee, which is generally an employment contract between the entity and a selected officer or key employee containing a promise by the employer to pay certain amounts at designated future dates, usually including a period after retirement, upon compliance with stipulated requirements. This type of arrangement is distinguished from broader based employee benefit plans as it is usually tailored to the employee. Disclosure also typically includes the amount of related compensation expense recognized during the reporting period, the number of shares (units) issued during the period under such arrangements, and the carrying amount as of the balance sheet date of the related liability." } } }, "auth_ref": ["r164", "r165"] }, "us-gaap_ConcentrationRiskBenchmarkDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskBenchmarkDomain", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "The denominator in a calculation of a disclosed concentration risk percentage." } } }, "auth_ref": ["r11", "r12", "r16", "r17", "r114", "r347"] }, "us-gaap_ConcentrationRiskByBenchmarkAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskByBenchmarkAxis", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Concentration Risk Benchmark [Axis]", "documentation": "Information by benchmark of concentration risk." } } }, "auth_ref": ["r11", "r12", "r16", "r17", "r114", "r270", "r347"] }, "us-gaap_ConcentrationRiskByTypeAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskByTypeAxis", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Concentration Risk Type [Axis]", "documentation": "Information by type of concentration risk, for example, but not limited to, asset, liability, net assets, geographic, customer, employees, supplier, lender." } } }, "auth_ref": ["r11", "r12", "r16", "r17", "r114", "r347", "r408"] }, "us-gaap_ConcentrationRiskPercentage1": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskPercentage1", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Concentration risk percentage", "documentation": "For an entity that discloses a concentration risk in relation to quantitative amount, which serves as the \"benchmark\" (or denominator) in the equation, this concept represents the concentration percentage derived from the division." } } }, "auth_ref": ["r11", "r12", "r16", "r17", "r114"] }, "us-gaap_ConcentrationRiskTypeDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskTypeDomain", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "For an entity that discloses a concentration risk as a percentage of some financial balance or benchmark, identifies the type (for example, asset, liability, net assets, geographic, customer, employees, supplier, lender) of the concentration." } } }, "auth_ref": ["r11", "r12", "r16", "r17", "r114", "r347"] }, "dei_CountryRegion": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CountryRegion", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Country Region", "documentation": "Region code of country" } } }, "auth_ref": [] }, "dei_CoverAbstract": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CoverAbstract", "lang": { "en-us": { "role": { "label": "Cover [Abstract]", "documentation": "Cover page." } } }, "auth_ref": [] }, "dei_CurrentFiscalYearEndDate": { "xbrltype": "gMonthDayItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CurrentFiscalYearEndDate", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Current Fiscal Year End Date", "documentation": "End date of current fiscal year in the format --MM-DD." } } }, "auth_ref": [] }, "us-gaap_CustomerConcentrationRiskMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CustomerConcentrationRiskMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Customer Concentration Risk [Member]", "documentation": "Reflects the percentage that revenues in the period from one or more significant customers is to net revenues, as defined by the entity, such as total net revenues, product line revenues, segment revenues. The risk is the materially adverse effects of loss of a significant customer." } } }, "auth_ref": ["r41", "r114"] }, "us-gaap_DeferredCompensationArrangementWithIndividualExcludingShareBasedPaymentsAndPostretirementBenefitsLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DeferredCompensationArrangementWithIndividualExcludingShareBasedPaymentsAndPostretirementBenefitsLineItems", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Deferred Compensation Arrangement with Individual, Excluding Share-Based Payments and Postretirement Benefits [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": [] }, "us-gaap_DepreciationAndAmortization": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DepreciationAndAmortization", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Depreciation and amortization", "documentation": "The current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production." } } }, "auth_ref": ["r3", "r13"] }, "REFR_DisclosureFeeIncomeAbstract": { "xbrltype": "stringItemType", "nsuri": "http://smartglass.com/20240930", "localname": "DisclosureFeeIncomeAbstract", "lang": { "en-us": { "role": { "label": "Fee Income" } } }, "auth_ref": [] }, "dei_DocumentAccountingStandard": { "xbrltype": "accountingStandardItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentAccountingStandard", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Accounting Standard", "documentation": "The basis of accounting the registrant has used to prepare the financial statements included in this filing This can either be 'U.S. GAAP', 'International Financial Reporting Standards', or 'Other'." } } }, "auth_ref": ["r399"] }, "dei_DocumentAnnualReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentAnnualReport", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Annual Report", "documentation": "Boolean flag that is true only for a form used as an annual report." } } }, "auth_ref": ["r397", "r399", "r400"] }, "dei_DocumentFiscalPeriodFocus": { "xbrltype": "fiscalPeriodItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentFiscalPeriodFocus", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Fiscal Period Focus", "documentation": "Fiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY." } } }, "auth_ref": [] }, "dei_DocumentFiscalYearFocus": { "xbrltype": "gYearItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentFiscalYearFocus", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Fiscal Year Focus", "documentation": "This is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006." } } }, "auth_ref": [] }, "dei_DocumentPeriodEndDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentPeriodEndDate", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Period End Date", "documentation": "For the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD." } } }, "auth_ref": [] }, "dei_DocumentPeriodStartDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentPeriodStartDate", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Period Start Date", "documentation": "The start date of the period covered in the document, in YYYY-MM-DD format." } } }, "auth_ref": [] }, "dei_DocumentQuarterlyReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentQuarterlyReport", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role":

{ "label": "Document Quarterly Report", "documentation": "Boolean flag that is true only for a form used as an quarterly report." } } }, "auth_ref": ["r398"] },
"dei_DocumentRegistrationStatement": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentRegistrationStatement", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Registration Statement", "documentation": "Boolean flag that is true only for a form used as a registration
statement." } } }, "auth_ref": ["r386"] }, "dei_DocumentShellCompanyEventDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"DocumentShellCompanyEventDate", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Shell Company Event Date", "documentation": "Date
of event requiring a shell company report." } } }, "auth_ref": ["r399"] }, "dei_DocumentShellCompanyReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024",
"localname": "DocumentShellCompanyReport", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Shell Company Report", "documentation":
"Boolean flag that is true for a Shell Company Report pursuant to section 13 or 15(d) of the Exchange Act." } } }, "auth_ref": ["r399"] }, "dei_DocumentTransitionReport": { "xbrltype":
"booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentTransitionReport", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label":
"Document Transition Report", "documentation": "Boolean flag that is true only for a form used as a transition report." } } }, "auth_ref": ["r401"] }, "dei_DocumentType": { "xbrltype":
"submissionTypeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentType", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label":
"Document Type", "documentation": "The type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC
submission type, or the word 'Other'." } } }, "auth_ref": [] }, "dei_DocumentsIncorporatedByReferenceTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/dei/2024",
"localname": "DocumentsIncorporatedByReferenceTextBlock", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Documents Incorporated by Reference
[Text Block]", "documentation": "Documents incorporated by reference." } } }, "auth_ref": ["r389"] }, "us-gaap_EarningsPerShareAbstract": { "xbrltype": "stringItemType", "nsuri":
"http://fasb.org/us-gaap/2024", "localname": "EarningsPerShareAbstract", "lang": { "en-us": { "role": { "label": "Earnings Per Share [Abstract]" } } }, "auth_ref": [] }, "us-
gaap_EarningsPerShareBasic": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EarningsPerShareBasic", "presentation": [
"http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Basic net loss per common share", "documentation": "The amount of net income (loss) for the period
per each share of common stock or unit outstanding during the reporting period." } } }, "auth_ref": ["r71", "r83", "r84", "r85", "r86", "r87", "r88", "r93", "r95", "r97", "r98", "r99", "r103",
"r194", "r197", "r211", "r212", "r244", "r253", "r354"] }, "us-gaap_EarningsPerShareDiluted": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname":
"EarningsPerShareDiluted", "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Diluted net loss per common share", "documentation":
"The amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been
outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period." } } }, "auth_ref": ["r71", "r83", "r84",
"r85", "r86", "r87", "r88", "r95", "r97", "r98", "r99", "r103", "r194", "r197", "r211", "r212", "r244", "r253", "r354"] }, "us-gaap_EarningsPerShareTextBlock": { "xbrltype": "textBlockItemType",
"nsuri": "http://fasb.org/us-gaap/2024", "localname": "EarningsPerShareTextBlock", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShare"], "lang": { "en-us": {
"role": { "label": "Basic and Diluted Loss Per Common Share", "documentation": "The entire disclosure for earnings per share." } } }, "auth_ref": ["r92", "r100", "r101", "r102"] },
"REFR_EmployeesAndDirectorsMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "EmployeesAndDirectorsMember", "presentation": [
"http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Employees and Directors [Member]", "documentation": "Employees and Directors
[Member]" } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine1": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressAddressLine1",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line One", "documentation": "Address Line 1 such as Attn, Building Name,
Street Name" } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine2": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"EntityAddressAddressLine2", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line Two", "documentation": "Address Line 2
such as Street or Suite number" } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine3": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"EntityAddressAddressLine3", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line Three", "documentation": "Address Line 3
such as an Office Park" } } }, "auth_ref": [] }, "dei_EntityAddressCityOrTown": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"EntityAddressCityOrTown", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, City or Town", "documentation": "Name of the City or
Town" } } }, "auth_ref": [] }, "dei_EntityAddressCountry": { "xbrltype": "countryCodeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressCountry", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Country", "documentation": "ISO 3166-1 alpha-2 country code." } } }, "auth_ref": [] },
"dei_EntityAddressPostalZipCode": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressPostalZipCode", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Postal Zip Code", "documentation": "Code for the postal or zip code" } } }, "auth_ref": [] },
"dei_EntityAddressStateOrProvince": { "xbrltype": "stateOrProvinceItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressStateOrProvince", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, State or Province", "documentation": "Name of the state or province." } } }, "auth_ref": [] },
"dei_EntityBankruptcyProceedingsReportingCurrent": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityBankruptcyProceedingsReportingCurrent",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Bankruptcy Proceedings, Reporting Current", "documentation": "For registrants involved in
bankruptcy proceedings during the preceding five years, the value Yes indicates that the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the
Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court; the value No indicates the registrant has not. Registrants not involved in
bankruptcy proceedings during the preceding five years should not report this element." } } }, "auth_ref": ["r392"] }, "dei_EntityCentralIndexKey": { "xbrltype": "centralIndexKeyItemType",
"nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCentralIndexKey", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Central Index
Key", "documentation": "A unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK." } } }, "auth_ref": ["r388"] },
"dei_EntityCommonStockSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCommonStockSharesOutstanding", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Common Stock, Shares Outstanding", "documentation": "Indicate number of shares or other units outstanding
of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each
class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity
Listings, Instrument." } } }, "auth_ref": [] }, "dei_EntityCurrentReportingStatus": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"EntityCurrentReportingStatus", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Current Reporting Status", "documentation": "Indicate 'Yes'
or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter
period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's
current or most recent filing containing the related disclosure." } } }, "auth_ref": [] }, "dei_EntityDomain": { "xbrltype": "domainItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
"EntityDomain", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "All the names of the entities being reported upon in
a document. Any legal structure used to conduct activities or to hold assets. Some examples of such structures are corporations, partnerships, limited liability companies, grantor trusts, and
other trusts. This item does not include business and geographical segments which are included in the geographical or business segments domains." } } }, "auth_ref": [] },
"dei_EntityEmergingGrowthCompany": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityEmergingGrowthCompany", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Emerging Growth Company", "documentation": "Indicate if registrant meets the emerging growth company
criteria." } } }, "auth_ref": ["r388"] }, "dei_EntityExTransitionPeriod": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityExTransitionPeriod",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Elected Not To Use the Extended Transition Period", "documentation": "Indicate if an emerging
growth company has elected not to use the extended transition period for complying with any new or revised financial accounting standards." } } }, "auth_ref": ["r405"] },
"dei_EntityFileNumber": { "xbrltype": "fileNumberItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityFileNumber", "presentation": ["http://smartglass.com/role/Cover"],
"lang": { "en-us": { "role": { "label": "Entity File Number", "documentation": "Commission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence
number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen." } } }, "auth_ref": [] }, "dei_EntityFilerCategory": { "xbrltype":
"filerCategoryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityFilerCategory", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label":
"Entity Filer Category", "documentation": "Indicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these
categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure." } } }, "auth_ref": [
"r388"] }, "dei_EntityIncorporationStateCountryCode": { "xbrltype": "edgarStateCountryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityIncorporationStateCountryCode",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Incorporation, State or Country Code", "documentation": "Two-character EDGAR code
representing the state or country of incorporation." } } }, "auth_ref": [] }, "dei_EntityInteractiveDataCurrent": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024",
"localname": "EntityInteractiveDataCurrent", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Interactive Data Current", "documentation":
"Boolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12
months (or for such shorter period that the registrant was required to submit such files)." } } }, "auth_ref": ["r402"] }, "dei_EntityListingParValuePerShare": { "xbrltype": "perShareItemType",
"nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityListingParValuePerShare", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Listing,
Par Value Per Share", "documentation": "The par value per share of security quoted in same currency as Trading currency. Example: '0.01'." } } }, "auth_ref": [] },
"dei_EntityPrimarySicNumber": { "xbrltype": "sicNumberItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityPrimarySicNumber", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Primary SIC Number", "documentation": "Primary Standard Industrial Classification (SIC) Number for the
Entity." } } }, "auth_ref": ["r400"] }, "dei_EntityPublicFloat": { "xbrltype": "monetaryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityPublicFloat", "crdr": "credit",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Public Float", "documentation": "The aggregate market value of the voting and non-voting
common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last
business day of the registrant's most recently completed second fiscal quarter." } } }, "auth_ref": [] }, "dei_EntityRegistrantName": { "xbrltype": "normalizedStringItemType", "nsuri":
"http://xbrl.sec.gov/dei/2024", "localname": "EntityRegistrantName", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Registrant Name",
"documentation": "The exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC." } } }, "auth_ref": ["r388"] },
"dei_EntityShellCompany": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityShellCompany", "presentation": ["http://smartglass.com/role/Cover"],
"lang": { "en-us": { "role": { "label": "Entity Shell Company", "documentation": "Boolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act." }
} }, "auth_ref": ["r388"] }, "dei_EntitySmallBusiness": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntitySmallBusiness", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Small Business", "documentation": "Indicates that the company is a Smaller Reporting Company (SRC)." } } },
"auth_ref": ["r388"] }, "dei_EntityTaxIdentificationNumber": { "xbrltype": "employerIdItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityTaxIdentificationNumber",
"presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Tax Identification Number", "documentation": "The Tax Identification Number (TIN), also
known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS." } } }, "auth_ref": ["r388"] }, "dei_EntityVoluntaryFilers": { "xbrltype": "yesNoItemType",
"nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityVoluntaryFilers", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Voluntary Filers",
"documentation": "Indicate 'Yes' or 'No' if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act." } } }, "auth_ref": [] },
"dei_EntityWellKnownSeasonedIssuer": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityWellKnownSeasonedIssuer", "presentation": [
"http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Well-known Seasoned Issuer", "documentation": "Indicate 'Yes' or 'No' if the registrant is a well-known seasoned
issuer, as defined in Rule 405 of the Securities Act. Is used on Form Type: 10-K, 10-Q, 8-K, 20-F, 6-K, 10-K/A, 10-Q/A, 20-F/A, 6-K/A, N-CSR, N-Q, N-1A." } } }, "auth_ref": ["r403"] }, "us-
gaap_EquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EquityAbstract", "lang": { "en-us": { "role": { "label": "Equity [Abstract]" } } },
"auth_ref": [] }, "us-gaap_EquityComponentDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EquityComponentDomain", "presentation": [
"http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "documentation": "Components of equity are
the parts of the total Equity balance including that which is allocated to common, preferred, treasury stock, retained earnings, etc." } } }, "auth_ref": ["r5", "r57", "r68", "r69", "r70", "r78",
"r79", "r80", "r82", "r87", "r89", "r91", "r105", "r118", "r119", "r125", "r152", "r185", "r186", "r191", "r192", "r193", "r195", "r196", "r197", "r203", "r204", "r205", "r206", "r207", "r208", "r210",
"r215", "r216", "r217", "r218", "r219", "r220", "r221", "r223", "r233", "r252", "r264", "r265", "r266", "r278", "r330"] }, "dei_Extension": { "xbrltype": "normalizedStringItemType", "nsuri":
"http://xbrl.sec.gov/dei/2024", "localname": "Extension", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Extension", "documentation": "Extension
number for local phone number." } } }, "auth_ref": [] }, "REFR_FeeIncomeDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://smartglass.com/20240930", "localname":
"FeeIncomeDisclosureTextBlock", "presentation": ["http://smartglass.com/role/FeeIncome"], "lang": { "en-us": { "role": { "verboseLabel": "Fee Income", "documentation": "Fee Income
Disclosure [Text Block]", "label": "Fee Income Disclosure [Text Block]" } } }, "auth_ref": [] }, "REFR_FeeIncomePercentage": { "xbrltype": "percentItemType", "nsuri":
"http://smartglass.com/20240930", "localname": "FeeIncomePercentage", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Fee
income percentage", "documentation": "Fee income percentage." } } }, "auth_ref": [] }, "us-gaap_GainLossOnInvestments": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-
gaap/2024", "localname": "GainLossOnInvestments", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_NetIncomeLoss", "weight":
1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Net investment income", "documentation": "Amount of
realized and unrealized gain (loss) on investment." } } }, "auth_ref": ["r34", "r35", "r406"] }, "REFR_GauzyAndVisionSystemsMember": { "xbrltype": "domainItemType", "nsuri":
"http://smartglass.com/20240930", "localname": "GauzyAndVisionSystemsMember", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": {
"label": "Gauzy and Vision Systems [Member]", "documentation": "Gauzy and Vision Systems [Member]" } } }, "auth_ref": [] }, "REFR_GauzyLtdMember": { "xbrltype": "domainItemType",
"nsuri": "http://smartglass.com/20240930", "localname": "GauzyLtdMember", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label":
"Gauzy Ltd [Member]", "documentation": "Gauzy Ltd [Member]" } } }, "auth_ref": [] }, "us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract": { "xbrltype": "stringItemType", "nsuri":
"http://fasb.org/us-gaap/2024", "localname": "GoodwillAndIntangibleAssetsDisclosureAbstract", "lang": { "en-us": { "role": { "label": "Goodwill and Intangible Assets Disclosure [Abstract]" } } },

"auth_ref": [] }, "us-gaap_IncomeStatementAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeStatementAbstract", "lang": { "en-us": { "role": { "label": "Income Statement [Abstract]" } } }, "auth_ref": [] }, "us-gaap_IncomeTaxDisclosureAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeTaxDisclosureAbstract", "lang": { "en-us": { "role": { "label": "Income Tax Disclosure [Abstract]" } } }, "auth_ref": [] }, "us-gaap_IncomeTaxDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeTaxDisclosureTextBlock", "presentation": ["http://smartglass.com/role/IncomeTaxes"], "lang": { "en-us": { "role": { "label": "Income Taxes", "documentation": "The entire disclosure for income tax." } } }, "auth_ref": ["r77", "r178", "r179", "r180", "r181", "r182", "r183", "r184", "r187", "r188", "r189", "r190", "r274", "r364"] }, "us-gaap_IncreaseDecreaseInAccountsPayableAndAccruedLiabilities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInAccountsPayableAndAccruedLiabilities", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 9.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Accounts payable and accrued expenses", "documentation": "The increase (decrease) during the reporting period in the amounts payable to vendors for goods and services received and the amount of obligations and expenses incurred but not paid." } } }, "auth_ref": ["r2"] }, "us-gaap_IncreaseDecreaseInAccountsReceivable": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInAccountsReceivable", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": -1.0, "order": 7.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Royalty receivables", "label": "Increase (Decrease) in Accounts Receivable", "documentation": "The increase (decrease) during the reporting period in amount due within one year (or one business cycle) from customers for the credit sale of goods and services." } } }, "auth_ref": ["r2"] }, "us-gaap_IncreaseDecreaseInContractWithCustomerLiability": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInContractWithCustomerLiability", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 10.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Deferred revenue", "documentation": "Amount of increase (decrease) in obligation to transfer good or service to customer for which consideration has been received or is receivable." } } }, "auth_ref": ["r242", "r413"] }, "us-gaap_IncreaseDecreaseInOperatingCapitalAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInOperatingCapitalAbstract", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Change in assets and liabilities:" } } }, "auth_ref": [] }, "us-gaap_IncreaseDecreaseInOperatingLeaseLiability": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInOperatingLeaseLiability", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 11.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Operating lease liability", "documentation": "Amount of increase (decrease) in obligation for operating lease." } } }, "auth_ref": ["r409", "r413"] }, "us-gaap_IncreaseDecreaseInPrepaidDeferredExpenseAndOtherAssets": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncreaseDecreaseInPrepaidDeferredExpenseAndOtherAssets", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": -1.0, "order": 8.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Prepaid expenses and other assets", "label": "Increase (Decrease) in Prepaid Expense and Other Assets", "documentation": "Amount of increase (decrease) in prepaid expenses, and assets classified as other." } } }, "auth_ref": ["r2"] }, "us-gaap_IntangibleAssetsDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IntangibleAssetsDisclosureTextBlock", "presentation": ["http://smartglass.com/role/PatentCosts"], "lang": { "en-us": { "role": { "label": "Patent Costs", "documentation": "The entire disclosure for all or part of the information related to intangible assets." } } }, "auth_ref": ["r122", "r123", "r124", "r350", "r351"] }, "us-gaap_InterestAndOtherIncomeTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "InterestAndOtherIncomeTextBlock", "presentation": ["http://smartglass.com/role/OtherIncome"], "lang": { "en-us": { "role": { "label": "Other Income", "documentation": "The entire disclosure for interest and other income." } } }, "auth_ref": ["r410"] }, "us-gaap_LeasesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LeasesAbstract", "lang": { "en-us": { "role": { "label": "Leases [Abstract]" } } }, "auth_ref": [] }, "dei_LegalEntityAxis": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "LegalEntityAxis", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Legal Entity [Axis]", "documentation": "The set of legal entities associated with a report." } } }, "auth_ref": [] }, "us-gaap_LesseeOperatingLeaseLiabilityMaturityTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeaseLiabilityMaturityTableTextBlock", "presentation": ["http://smartglass.com/role/LeasesTables"], "lang": { "en-us": { "role": { "label": "Schedule of Maturities of Operating Lease", "documentation": "Tabular disclosure of undiscounted cash flows of lessee's operating lease liability. Includes, but is not limited to, reconciliation of undiscounted cash flows to operating lease liability recognized in statement of financial position." } } }, "auth_ref": ["r441"] }, "us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeaseLiabilityPaymentsDue", "crdr": "credit", "calculation": { "http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails"], "lang": { "en-us": { "role": { "totalLabel": "Total lease payments", "label": "Lessee, Operating Lease, Liability, to be Paid", "documentation": "Amount of lessee's undiscounted obligation for lease payment for operating lease." } } }, "auth_ref": ["r231"] }, "us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths", "crdr": "credit", "calculation": { "http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails": { "parentTag": "us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails"], "lang": { "en-us": { "role": { "label": "For the year ending December 31, 2025", "documentation": "Amount of lessee's undiscounted obligation for lease payment for operating lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach)." } } }, "auth_ref": ["r231"] }, "us-gaap_LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear", "crdr": "credit", "calculation": { "http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails": { "parentTag": "us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails"], "lang": { "en-us": { "role": { "label": "For the year ending December 31, 2024", "documentation": "Amount of lessee's undiscounted obligation for lease payment for operating lease having initial or remaining lease term in excess of one year to be paid in remainder of current fiscal year." } } }, "auth_ref": ["r441"] }, "us-gaap_LesseeOperatingLeaseLiabilityUndiscountedExcessAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeaseLiabilityUndiscountedExcessAmount", "crdr": "credit", "presentation": ["http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails"], "lang": { "en-us": { "role": { "negatedLabel": "Less: imputed lease interest", "label": "Lessee, Operating Lease, Liability, Undiscounted Excess Amount", "documentation": "Amount of lessee's undiscounted obligation for lease payments in excess of discounted obligation for lease payments for operating lease." } } }, "auth_ref": ["r231"] }, "us-gaap_LesseeOperatingLeasesTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LesseeOperatingLeasesTextBlock", "presentation": ["http://smartglass.com/role/Leases"], "lang": { "en-us": { "role": { "label": "Leases", "documentation": "The entire disclosure for operating leases of lessee. Includes, but is not limited to, description of operating lease and maturity analysis of operating lease liability." } } }, "auth_ref": ["r222"] }, "us-gaap_Liabilities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "Liabilities", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesAndStockholdersEquity", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total liabilities", "label": "Liabilities", "documentation": "Amount of liability recognized for present obligation requiring transfer or otherwise providing economic benefit to others." } } }, "auth_ref": ["r8", "r19", "r20", "r21", "r22", "r23", "r24", "r25", "r76", "r117", "r130", "r131", "r132", "r133", "r134", "r135", "r136", "r137", "r138", "r200", "r201", "r202", "r214", "r288", "r355", "r385", "r432", "r443", "r444"] }, "us-gaap_LiabilitiesAndStockholdersEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesAndStockholdersEquity", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total liabilities and shareholders\u2019 equity", "label": "Liabilities and Equity", "documentation": "Amount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any." } } }, "auth_ref": ["r32", "r47", "r249", "r370", "r415", "r428", "r440"] }, "us-gaap_LiabilitiesAndStockholdersEquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesAndStockholdersEquityAbstract", "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Liabilities and Shareholders\u2019 Equity" } } }, "auth_ref": [] }, "us-gaap_LiabilitiesCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesCurrent", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Liabilities", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "totalLabel": "Total current liabilities", "label": "Liabilities, Current", "documentation": "Total obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer." } } }, "auth_ref": ["r21", "r60", "r76", "r117", "r130", "r131", "r132", "r133", "r134", "r135", "r136", "r137", "r138", "r200", "r201", "r202", "r214", "r370", "r432", "r443", "r444"] }, "us-gaap_LiabilitiesCurrentAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "LiabilitiesCurrentAbstract", "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Current liabilities:" } } }, "auth_ref": [] }, "REFR_LicenseAgreementMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "LicenseAgreementMember", "presentation": ["http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "License Agreement [Member]", "documentation": "License Agreement [Member]" } } }, "auth_ref": [] }, "REFR_LicenseeFourMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "LicenseeFourMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Licensee Four [Member]", "documentation": "Licensee Four [Member]" } } }, "auth_ref": [] }, "REFR_LicenseeOneMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "LicenseeOneMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Licensee One [Member]", "documentation": "Licensee One [Member]" } } }, "auth_ref": [] }, "REFR_LicenseeThreeMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "LicenseeThreeMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "License Three [Member]", "documentation": "License Three [Member]" } } }, "auth_ref": [] }, "REFR_LicenseeTwoMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "LicenseeTwoMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "License Two [Member]", "documentation": "License Two [Member]" } } }, "auth_ref": [] }, "dei_LocalPhoneNumber": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "LocalPhoneNumber", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Local Phone Number", "documentation": "Local phone number for entity." } } }, "auth_ref": [] }, "srt_MaximumMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "MaximumMember", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Maximum [Member]" } } }, "auth_ref": ["r126", "r127", "r128", "r129", "r167", "r176", "r213", "r241", "r262", "r263", "r269", "r280", "r281", "r337", "r338", "r339", "r340", "r341", "r348", "r349", "r359", "r360", "r362", "r365", "r366", "r367", "r368", "r372", "r434", "r445", "r446", "r447", "r448", "r449", "r450"] }, "srt_MinimumMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "MinimumMember", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Minimum [Member]" } } }, "auth_ref": ["r126", "r127", "r128", "r129", "r167", "r176", "r213", "r241", "r262", "r263", "r269", "r280", "r281", "r337", "r338", "r339", "r340", "r341", "r348", "r349", "r359", "r360", "r362", "r365", "r366", "r367", "r372", "r434", "r445", "r446", "r447", "r448", "r449", "r450"] }, "us-gaap_MinorityInterestOwnershipPercentageByParent": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "MinorityInterestOwnershipPercentageByParent", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Subsidiary, ownership percentage", "documentation": "The parent entity's interest in net assets of the subsidiary, expressed as a percentage." } } }, "auth_ref": [] }, "us-gaap_NatureOfOperations": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NatureOfOperations", "presentation": ["http://smartglass.com/role/Business"], "lang": { "en-us": { "role": { "label": "Business", "documentation": "The entire disclosure for the nature of an entity's business, major products or services, principal markets including location, and the relative importance of its operations in each business and the basis for the determination, including but not limited to, assets, revenues, or earnings. For an entity that has not commenced principal operations, disclosures about the risks and uncertainties related to the activities in which the entity is currently engaged and an understanding of what those activities are being directed toward." } } }, "auth_ref": ["r53", "r55"] }, "us-gaap_NetCashProvidedByUsedInFinancingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInFinancingActivities", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "totalLabel": "Net cash provided by financing activities", "label": "Net Cash Provided by (Used in) Financing Activities", "documentation": "Amount of cash inflow (outflow) from financing activities, including discontinued operations. Financing activity cash flows include obtaining resources from owners and providing them with a return on, and a return of, their investment; borrowing money and repaying amounts borrowed, or settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit." } } }, "auth_ref": ["r73"] }, "us-gaap_NetCashProvidedByUsedInFinancingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInFinancingActivitiesAbstract", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Cash flows from financing activities:" } } }, "auth_ref": [] }, "us-gaap_NetCashProvidedByUsedInInvestingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInInvestingActivities", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "totalLabel": "Net cash used in investing activities", "label": "Net Cash Provided by (Used in) Investing Activities", "documentation": "Amount of cash inflow (outflow) from investing activities, including discontinued operations. Investing activity cash flows include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant, and equipment and other productive assets." } } }, "auth_ref": ["r73"] }, "us-gaap_NetCashProvidedByUsedInInvestingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInInvestingActivitiesAbstract", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Cash flows from investing activities:" } } }, "auth_ref": [] }, "us-gaap_NetCashProvidedByUsedInOperatingActivities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInOperatingActivities", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseIncludingExchangeRateEffect", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "totalLabel": "Net cash used in operating activities", "label": "Net Cash Provided by (Used in) Operating Activities", "documentation": "Amount of cash inflow (outflow) from operating activities, including discontinued operations. Operating activity cash flows include transactions, adjustments, and changes in value not defined as investing or financing activities." } } }, "auth_ref": ["r37", "r38", "r39"] }, "us-gaap_NetCashProvidedByUsedInOperatingActivitiesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetCashProvidedByUsedInOperatingActivitiesAbstract", "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Cash flows from operating activities:" } } }, "auth_ref": [] }, "us-gaap_NetIncomeLoss": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "NetIncomeLoss", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 1.0 }, "http://smartglass.com/role/StatementsOfOperations": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows", "http://smartglass.com/role/StatementsOfOperations", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "totalLabel": "Net loss", "label": "Net loss", "documentation": "The portion of profit or loss for the period, net of income taxes, which is attributable to the parent." } } }, "auth_ref": ["r33", "r39", "r48", "r58", "r66", "r67", "r70", "r76", "r81", "r83", "r84", "r85", "r86", "r87", "r90", "r91", "r96", "r117", "r130", "r131", "r132", "r133", "r134", "r135", "r136", "r137", "r138", "r194", "r197", "r212", "r214", "r251", "r309", "r328", "r329", "r384", "r432"] }, "REFR_NetProceedsFromExerciseOfOptionsAndWarrants": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "NetProceedsFromExerciseOfOptionsAndWarrants", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInFinancingActivities", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Net proceeds from exercise of options and warrants", "documentation": "The cash inflow associated with the amount received from holders exercising their stock options and warrants." } } }, "auth_ref": [] }, "dei_NoTradingSymbolFlag": { "xbrltype": "trueItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "NoTradingSymbolFlag", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "No Trading Symbol Flag", "documentation": "Boolean flag that is true only for a security having no trading symbol." } } }, "auth_ref": [] }, "REFR_OneLicenseAgreementsMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "OneLicenseAgreementsMember", "presentation": ["http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "One License Agreements [Member]", "documentation": "One License Agreements [Member]" } } }, "auth_ref": [] }, "us-gaap_OperatingCostsAndExpenses": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingCostsAndExpenses", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_OperatingExpenses", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Operating expenses", "documentation": "Generally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Excludes Selling, General and Administrative Expense." } } }, "auth_ref": [] }, "us-gaap_OperatingExpenses": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingExpenses", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_OperatingIncomeLoss", "weight": -1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "totalLabel": "Total expenses", "label": "Operating Expenses", "documentation": "Generally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Includes selling, general and administrative expense." } } }, "auth_ref": [] }, "us-gaap_OperatingIncomeLoss": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingIncomeLoss", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_NetIncomeLoss", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "totalLabel": "Operating loss", "label": "Operating Income (Loss)", "documentation": "The net result for the period of deducting operating expenses from operating revenues." } } }, "auth_ref": ["r51", "r356", "r420", "r421", "r422", "r423", "r424"] }, "us-gaap_OperatingLeaseCost": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseCost", "crdr": "debit", "presentation": ["http://smartglass.com/role/LeasesDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Operating lease expense", "documentation": "Amount of single lease cost, calculated by allocation of remaining cost of lease over remaining lease term. Includes, but is not limited to, single lease cost, after impairment of right-of-use asset, calculated by amortization of remaining right-of-use asset and accretion of lease liability." } } }, "auth_ref": ["r226", "r369"] }, "us-gaap_OperatingLeaseLiability": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseLiability", "crdr": "credit", "presentation": ["http://smartglass.com/role/ScheduleOfMaturitiesOfOperatingLeaseDetails"], "lang": { "en-us": { "role": { "totalLabel": "Present value of lease liabilities", "label": "Operating Lease, Liability", "documentation": "Present value of lessee's discounted obligation for lease payments from operating lease." } } }, "auth_ref": ["r225"] }, "us-gaap_OperatingLeaseLiabilityCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseLiabilityCurrent", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesCurrent", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Current portion of operating lease liability", "documentation": "Present value of lessee's discounted obligation for lease payments from operating lease, classified as current." } } }, "auth_ref": ["r225"] }, "us-gaap_OperatingLeaseLiabilityNoncurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseLiabilityNoncurrent", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Liabilities", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Operating lease liability, net of current portion", "documentation": "Present value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent." } } }, "auth_ref": ["r225"] }, "us-gaap_OperatingLeaseRightOfUseAsset": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseRightOfUseAsset", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Operating lease ROU assets", "documentation": "Amount of lessee's right to use underlying asset under operating lease." } } }, "auth_ref": ["r224"] }, "us-gaap_OperatingLeaseRightOfUseAssetAmortizationExpense": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseRightOfUseAssetAmortizationExpense", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 5.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "ROU asset amortization", "documentation": "Amount of periodic reduction over lease term of carrying amount of right-of-use asset from operating lease." } } }, "auth_ref": ["r414"] }, "us-gaap_OperatingLeaseWeightedAverageDiscountRatePercent": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseWeightedAverageDiscountRatePercent", "presentation": ["http://smartglass.com/role/LeasesDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Weighted-average discount rate", "documentation": "Weighted average discount rate for operating lease calculated at point in time." } } }, "auth_ref": ["r230", "r369"] }, "us-gaap_OperatingLeaseWeightedAverageRemainingLeaseTerm1": { "xbrltype": "durationItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OperatingLeaseWeightedAverageRemainingLeaseTerm1", "presentation": ["http://smartglass.com/role/LeasesDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Weighted average remaining lease term", "documentation": "Weighted average remaining lease term for operating lease, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days." } } }, "auth_ref": ["r229", "r369"] }, "REFR_OptionsAndWarrantsMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "OptionsAndWarrantsMember", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Options and Warrants [Member]", "documentation": "Options and Warrants [Member]" } } }, "auth_ref": [] }, "us-gaap_OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OrganizationConsolidationAndPresentationOfFinancialStatementsAbstract", "lang": { "en-us": { "role": { "label": "Organization, Consolidation and Presentation of Financial Statements [Abstract]" } } }, "auth_ref": [] }, "us-gaap_OtherAssetsNoncurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OtherAssetsNoncurrent", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 4.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Deposits and other assets", "documentation": "Amount of noncurrent assets classified as other." } } }, "auth_ref": ["r62"] }, "us-gaap_OtherIncome": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OtherIncome", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_NetIncomeLoss", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Other income", "documentation": "Amount of revenue and income classified as other." } } }, "auth_ref": ["r254", "r310", "r342", "r343", "r344"] }, "us-gaap_OtherIncomeAndExpensesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "OtherIncomeAndExpensesAbstract", "lang": { "en-us": { "role": { "label": "Other Income and Expenses [Abstract]" } } }, "auth_ref": [] }, "dei_OtherReportingStandardItemNumber": { "xbrltype": "otherReportingStandardItemNumberItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "OtherReportingStandardItemNumber", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Other Reporting Standard Item Number", "documentation": "\"Item 17\" or \"Item 18\" specified when the basis of accounting is neither US GAAP nor IFRS." } } }, "auth_ref": ["r399"] }, "srt_OwnershipAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "OwnershipAxis", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Ownership [Axis]" } } }, "auth_ref": [] }, "srt_OwnershipDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "OwnershipDomain", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "auth_ref": [] }, "us-gaap_PaymentsToAcquireMarketableSecurities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PaymentsToAcquireMarketableSecurities", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInInvestingActivities", "weight": -1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Purchases of marketable securities", "label": "Payments to Acquire Marketable Securities", "documentation": "Amount of cash outflow for purchase of marketable security." } } }, "auth_ref": ["r427"] }, "us-gaap_PaymentsToAcquirePropertyPlantAndEquipment": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PaymentsToAcquirePropertyPlantAndEquipment", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInInvestingActivities", "weight": -1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Purchases of fixed assets", "label": "Payments to Acquire Property, Plant, and Equipment", "documentation": "The cash outflow associated with the acquisition of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale; includes cash outflows to pay for construction of self-constructed assets." } } }, "auth_ref": ["r36"] }, "dei_PreCommencementIssuerTenderOffer": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "PreCommencementIssuerTenderOffer", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Pre-commencement Issuer Tender Offer", "documentation": "Boolean flag that is true when the Form 8-K filing is intended to satisfy the filing obligation of the registrant as pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act." } } }, "auth_ref": ["r393"] }, "dei_PreCommencementTenderOffer": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "PreCommencementTenderOffer", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Pre-commencement Tender Offer", "documentation": "Boolean flag that is true when the Form 8-K filing is intended to satisfy the filing obligation of the registrant as pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act." } } }, "auth_ref": ["r395"] }, "us-gaap_PrepaidExpenseAndOtherAssetsCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PrepaidExpenseAndOtherAssetsCurrent", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Prepaid expenses and other current assets", "documentation": "Amount of asset related to consideration paid in advance for costs that provide economic benefits in future periods, and amount of other assets that are expected to be realized or consumed within one year or the normal operating cycle, if longer." } } }, "auth_ref": ["r411"] }, "REFR_ProceedsFromExpectsToReceiveRemainingAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "ProceedsFromExpectsToReceiveRemainingAmount", "crdr": "credit", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Proceeds from expects to receive the remaining amount", "documentation": "Proceeds from expects to receive the remaining amount." } } }, "auth_ref": [] }, "us-gaap_ProceedsFromIssuanceOrSaleOfEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProceedsFromIssuanceOrSaleOfEquity", "crdr": "debit", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Proceeds from issuance or sale of equity", "documentation": "The cash inflow from the issuance of common stock, preferred stock, treasury stock, stock options, and other types of equity." } } }, "auth_ref": ["r1", "r272"] }, "us-gaap_ProceedsFromSaleAndMaturityOfMarketableSecurities": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProceedsFromSaleAndMaturityOfMarketableSecurities", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInInvestingActivities", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Sales of marketable securities", "documentation": "The cash inflow associated with the aggregate amount received by the entity through sale or maturity of marketable securities (held-to-maturity or available-for-sale) during the period." } } }, "auth_ref": [] }, "us-gaap_ProceedsFromStockOptionsExercised": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProceedsFromStockOptionsExercised", "crdr": "debit", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Proceeds from stock options exercised", "documentation": "Amount of cash inflow from exercise of option under share-based payment arrangement." } } }, "auth_ref": ["r1", "r7"] }, "us-gaap_ProceedsFromWarrantExercises": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProceedsFromWarrantExercises", "crdr": "debit", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Proceeds from warrant exercises", "documentation": "The cash inflow associated with the amount received from holders exercising their stock warrants." } } }, "auth_ref": ["r412"] }, "us-gaap_ProductInformationLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProductInformationLineItems", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Product Information [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": [] }, "srt_ProductOrServiceAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "ProductOrServiceAxis", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Product and Service [Axis]" } } }, "auth_ref": ["r112", "r243", "r255", "r256", "r257", "r258", "r259", "r260", "r261", "r352", "r361", "r371", "r372", "r373", "r374", "r375", "r430", "r431", "r435", "r452", "r453", "r454", "r455", "r456", "r457", "r458", "r459", "r460", "r461", "r462", "r463", "r464", "r465", "r466", "r467", "r468", "r469", "r470", "r471", "r472", "r473", "r474", "r475", "r476", "r477", "r478", "r479", "r480"] }, "srt_ProductsAndServicesDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "ProductsAndServicesDomain", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "auth_ref": ["r112", "r243", "r255", "r256", "r257", "r258", "r259", "r260", "r261", "r352", "r361", "r371", "r372", "r373", "r374", "r375", "r430", "r431", "r435", "r452", "r453", "r454", "r455", "r456", "r457", "r458", "r459", "r460", "r461", "r462", "r463", "r464", "r465", "r466", "r467", "r468", "r469", "r470", "r471", "r472", "r473", "r474", "r475", "r476", "r477", "r478", "r479", "r480"] }, "us-gaap_PropertyPlantAndEquipmentNet": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "PropertyPlantAndEquipmentNet", "crdr": "debit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Fixed assets, net", "documentation": "Amount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures." } } }, "auth_ref": ["r4", "r232", "r245", "r250", "r370"] }, "us-gaap_ProvisionForDoubtfulAccounts": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ProvisionForDoubtfulAccounts", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 6.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Credit loss expense", "documentation": "Amount of expense (reversal of expense) for expected credit loss on accounts receivable." } } }, "auth_ref": ["r72", "r121"] }, "srt_RangeAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "RangeAxis", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Statistical Measurement [Axis]" } } }, "auth_ref": ["r126", "r127", "r128", "r129", "r166", "r167", "r173", "r174", "r175", "r176", "r213", "r239", "r240", "r241", "r262", "r263", "r269", "r280", "r281", "r337", "r338", "r339", "r340", "r341", "r348", "r349", "r359", "r360", "r362", "r365", "r366", "r367", "r368", "r372", "r378", "r429", "r434", "r438", "r446", "r447", "r448", "r449", "r450"] }, "srt_RangeMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "RangeMember", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "auth_ref": ["r126", "r127", "r128", "r129", "r166", "r167", "r173", "r174", "r175", "r176", "r213", "r239", "r240", "r241", "r262", "r263", "r269", "r280", "r281", "r337", "r338", "r339", "r340", "r341", "r348", "r349", "r359", "r360", "r362", "r365", "r366", "r367", "r368", "r372", "r378", "r429", "r434", "r438", "r446", "r447", "r448", "r449", "r450"] }, "REFR_RealizedGainOnMarketableSecurities": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "RealizedGainOnMarketableSecurities", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": -1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Realized gain on marketable securities", "documentation": "Realized gain on marketable securities.", "label": "RealizedGainOnMarketableSecurities" } } }, "auth_ref": [] }, "REFR_RefundableTaxCredit": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "RefundableTaxCredit", "crdr": "credit", "presentation": ["http://smartglass.com/role/OtherIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Refundable tax credit", "documentation": "Refundable tax credit." } } }, "auth_ref": [] }, "us-gaap_RelatedPartyTransactionRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RelatedPartyTransactionRate", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Related party percentage", "documentation": "Identify the stated interest rate per the agreement, for example, leasing and debt arrangements between related parties." } } }, "auth_ref": [] }, "us-gaap_RelatedPartyTransactionsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RelatedPartyTransactionsAbstract", "lang": { "en-us": { "role": { "label": "Related Party Transactions [Abstract]" } } }, "auth_ref": [] }, "us-gaap_RelatedPartyTransactionsDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RelatedPartyTransactionsDisclosureTextBlock", "presentation": ["http://smartglass.com/role/RelatedParty"], "lang": { "en-us": { "role": { "label": "Related Party", "documentation": "The entire disclosure for related party transactions. Examples of related party transactions include transactions between (a) a parent company and its subsidiary; (b) subsidiaries of a common parent; (c) and entity and its principal owners; and (d) affiliates." } } }, "auth_ref": ["r234", "r235", "r236", "r237", "r238", "r275", "r276", "r277", "r313", "r314", "r315", "r334", "r336"] }, "us-gaap_ResearchAndDevelopmentExpense": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ResearchAndDevelopmentExpense", "crdr": "debit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_OperatingExpenses", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Research and development", "documentation": "Amount of expense for research and development. Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity." } } }, "auth_ref": ["r177", "r351", "r357", "r451"] }, "us-gaap_RetainedEarningsAccumulatedDeficit": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RetainedEarningsAccumulatedDeficit", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_StockholdersEquity", "weight": 1.0, "order": 3.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets", "http://smartglass.com/role/BusinessDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Accumulated deficit", "negatedLabel": "Retained Earnings (Accumulated Deficit)", "documentation": "Amount of accumulated undistributed earnings (deficit)." } } }, "auth_ref": ["r29", "r44", "r248", "r267", "r268", "r273", "r290", "r370"] }, "us-gaap_RetainedEarningsMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RetainedEarningsMember", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Retained Earnings [Member]", "documentation": "Accumulated undistributed earnings (deficit)." } } }, "auth_ref": ["r57", "r78", "r79", "r80", "r82", "r87", "r89", "r91", "r118", "r119", "r125", "r185", "r186", "r191", "r192", "r193", "r195", "r196", "r197", "r203", "r205", "r206", "r208", "r210", "r221", "r223", "r264", "r266", "r278", "r482"] }, "us-gaap_RevenueFromContractWithCustomerAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueFromContractWithCustomerAbstract", "lang": { "en-us": { "role": { "label": "Revenue from Contract with Customer [Abstract]" } } }, "auth_ref": [] }, "us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueFromContractWithCustomerExcludingAssessedTax", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfOperations": { "parentTag": "us-gaap_OperatingIncomeLoss", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Fee income", "documentation": "Amount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise." } } }, "auth_ref": ["r49", "r50", "r104", "r107", "r108", "r109", "r111", "r112", "r113", "r114", "r161", "r162", "r243"] }, "us-gaap_RevenueFromContractWithCustomerTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueFromContractWithCustomerTextBlock", "presentation": ["http://smartglass.com/role/RevenueRecognition"], "lang": { "en-us": { "role": { "label": "Revenue Recognition", "documentation": "The entire disclosure of revenue from contract with customer to transfer good or service and to transfer nonfinancial asset. Includes, but is not limited to, disaggregation of revenue, credit loss recognized from contract with customer, judgment and change in judgment related to contract with customer, and asset recognized from cost incurred to obtain or fulfill contract with customer. Excludes insurance and lease contracts." } } }, "auth_ref": ["r56", "r153", "r154", "r155", "r156", "r157", "r158", "r159", "r160", "r163"] }, "us-gaap_RevenueRemainingPerformanceObligation": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "RevenueRemainingPerformanceObligation", "crdr": "credit", "presentation": ["http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Revenue remaining performance obligations", "documentation": "Amount of transaction price allocated to performance obligation that has not been recognized as revenue." } } }, "auth_ref": ["r54"] }, "REFR_RoyaltyPercentage": { "xbrltype": "percentItemType", "nsuri": "http://smartglass.com/20240930", "localname": "RoyaltyPercentage", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Royalty percentage", "documentation": "Royalty percentage." } } }, "auth_ref": [] }, "REFR_RoyaltyRateOnSellingPrice": { "xbrltype": "percentItemType", "nsuri": "http://smartglass.com/20240930", "localname": "RoyaltyRateOnSellingPrice", "presentation": ["http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Royalty rate on selling price", "documentation": "Royalty rate on selling price." } } }, "auth_ref": [] }, "us-gaap_SalesRevenueNetMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SalesRevenueNetMember", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Revenue Benchmark [Member]", "documentation": "Revenue from sale of product and rendering of service and other sources of income, when it serves as benchmark in concentration of risk calculation." } } }, "auth_ref": ["r114", "r407"] }, "us-gaap_ScheduleOfAntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfAntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareTable", "presentation": ["http://smartglass.com/role/BasicAndDilutedLossPerCommonShareDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Antidilutive Security, Excluded EPS Calculation [Table]", "documentation": "Disclosure of information about security that could potentially dilute basic earnings per share (EPS) in future that was not included in calculation of diluted EPS." } } }, "auth_ref": ["r10"] }, "us-gaap_ScheduleOfDeferredCompensationArrangementWithIndividualExcludingShareBasedPaymentsAndPostretirementBenefitsByTitleOfIndividualAndByTypeOfDeferredCompensationTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfDeferredCompensationArrangementWithIndividualExcludingShareBasedPaymentsAndPostretirementBenefitsByTitleOfIndividualAndByTypeOfDeferredCompensationTable", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Deferred Compensation Arrangement with Individual, Excluding Share-Based Payment and Postretirement Benefit [Table]", "documentation": "Disclosure of information about arrangements that are not equity-based payments, or pension and other postretirement benefits, with individual employees. The arrangements (for example, profit sharing, deferred bonuses or certain split-dollar life insurance arrangements) are generally based on employment contracts between the entity and one or more selected officers or key employees, and which contain a promise by the employer to pay certain amounts at designated future dates, sometimes including a period after retirement, upon compliance with stipulated requirements. This type of arrangement is distinguished from broader based employee benefit plans as it is usually tailored to the employee. Disclosure also typically includes the amount of related compensation expense recognized during the reporting period and the carrying amount as of the balance sheet date of the related liability." } } }, "auth_ref": ["r14", "r45"] }, "us-gaap_ScheduleOfProductInformationTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ScheduleOfProductInformationTable", "presentation": ["http://smartglass.com/role/FeeIncomeDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Nature of Operation, Product Information, Concentration of Risk [Table]", "documentation": "Disclosure of information about concentration risk of product within nature of operation." } } }, "auth_ref": [] }, "dei_Security12bTitle": { "xbrltype": "securityTitleItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "Security12bTitle", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Title of 12(b) Security", "documentation": "Title of a 12(b) registered security." } } }, "auth_ref": ["r387"] }, "dei_Security12gTitle": { "xbrltype": "securityTitleItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "Security12gTitle", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Title of 12(g) Security", "documentation": "Title of a 12(g) registered security." } } }, "auth_ref": ["r391"] }, "dei_SecurityExchangeName": { "xbrltype": "edgarExchangeCodeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "SecurityExchangeName", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Security Exchange Name", "documentation": "Name of the Exchange on which a security is registered." } } }, "auth_ref": ["r390"] }, "dei_SecurityReportingObligation": { "xbrltype": "securityReportingObligationItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "SecurityReportingObligation", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Security Reporting Obligation", "documentation": "15(d), indicating whether the security has a reporting obligation under that section of the Exchange Act." } } }, "auth_ref": ["r396"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardVestingPeriod1": { "xbrltype": "durationItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardVestingPeriod1", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Stock based compensation be recognized", "documentation": "Period over which grantee's right to exercise award under share-based payment arrangement is no longer contingent on satisfaction of service or performance condition, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. Includes, but is not limited to, combination of market, performance or service condition." } } }, "auth_ref": ["r363"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Restricted stock options granted", "documentation": "The number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan)." } } }, "auth_ref": ["r172"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Warrants exercised during period", "documentation": "Number of non-option equity instruments exercised by participants." } } }, "auth_ref": ["r6"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGrant", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Shares available for future grant", "documentation": "The difference between the maximum number of shares (or other type of equity) authorized for issuance under the plan (including the effects of amendments and adjustments), and the sum of: 1) the number of shares (or other type of equity) already issued upon exercise of options or other equity-based awards under the plan; and 2) shares (or other type of equity) reserved for issuance on granting of outstanding awards, net of cancellations and forfeitures, if applicable." } } }, "auth_ref": ["r15"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Stock options granted", "documentation": "Gross number of share options (or share units) granted during the period." } } }, "auth_ref": ["r170"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Options outstanding", "documentation": "Number of options outstanding, including both vested and non-vested options." } } }, "auth_ref": ["r168", "r169"] }, "us-gaap_SharesIssued": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SharesIssued", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "verboseLabel": "Number of shares issued", "label": "Shares, Issued", "documentation": "Number of shares of stock issued as of the balance sheet date, including shares that had been issued and were previously outstanding but which are now held in the treasury." } } }, "auth_ref": ["r5"] }, "us-gaap_SharesIssuedPricePerShare": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SharesIssuedPricePerShare", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Shares issued price per share", "documentation": "Per share or per unit amount of equity securities issued." } } }, "auth_ref": [] }, "us-gaap_SharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SharesOutstanding", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "periodStartLabel": "Balance, shares", "periodEndLabel": "Balance, shares", "label": "Shares, Outstanding", "documentation": "Number of shares issued which are neither cancelled nor held in the treasury." } } }, "auth_ref": [] }, "dei_SolicitingMaterial": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "SolicitingMaterial", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Soliciting Material", "documentation": "Boolean flag that is true when the Form 8-K filing is intended to satisfy the filing obligation of the registrant as soliciting material pursuant to Rule 14a-12 under the Exchange Act." } } }, "auth_ref": ["r394"] }, "us-gaap_StatementEquityComponentsAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementEquityComponentsAxis", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Equity Components [Axis]", "documentation": "Information by component of equity." } } }, "auth_ref": ["r5", "r27", "r30", "r31", "r57", "r68", "r69", "r70", "r78", "r79", "r80", "r82", "r87", "r89", "r91", "r105", "r118", "r119", "r125", "r152", "r185", "r186", "r191", "r192", "r193", "r195", "r196", "r197", "r203", "r204", "r205", "r206", "r207", "r208", "r210", "r215", "r216", "r217", "r218", "r219", "r220", "r221", "r223", "r233", "r252", "r264", "r265", "r266", "r278", "r330"] }, "us-gaap_StatementLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementLineItems", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Statement [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r78", "r79", "r80", "r105", "r223", "r243", "r271", "r279", "r282", "r283", "r284", "r285", "r286", "r287", "r289", "r292", "r293", "r294", "r295", "r296", "r297", "r298", "r299", "r300", "r302", "r303", "r304", "r305", "r306", "r308", "r311", "r312", "r316", "r317", "r318", "r319", "r320", "r321", "r322", "r323", "r324", "r325", "r326", "r327", "r330", "r379"] }, "us-gaap_StatementOfCashFlowsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementOfCashFlowsAbstract", "lang": { "en-us": { "role": { "label": "Statement of Cash Flows [Abstract]" } } }, "auth_ref": [] }, "us-gaap_StatementOfFinancialPositionAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementOfFinancialPositionAbstract", "lang": { "en-us": { "role": { "label": "Statement of Financial Position [Abstract]" } } }, "auth_ref": [] }, "us-gaap_StatementOfStockholdersEquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementOfStockholdersEquityAbstract", "auth_ref": [] }, "us-gaap_StatementTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StatementTable", "presentation": ["http://smartglass.com/role/RelatedPartyDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Statement [Table]", "documentation": "Disclosure of information about statement of comprehensive income, income, other comprehensive income, financial position, cash flows, and shareholders' equity." } } }, "auth_ref": ["r78", "r79", "r80", "r105", "r115", "r223", "r243", "r271", "r279", "r282", "r283", "r284", "r285", "r286", "r287", "r289", "r292", "r293", "r294", "r295", "r296", "r297", "r298", "r299", "r300", "r302", "r303", "r304", "r305", "r306", "r308", "r311", "r312", "r316", "r317", "r318", "r319", "r320", "r321", "r322", "r323", "r324", "r325", "r326", "r327", "r330", "r379"] }, "us-gaap_StockIssuedDuringPeriodSharesNewIssues": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockIssuedDuringPeriodSharesNewIssues", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Number of shares issued", "documentation": "Number of new stock issued during the period." } } }, "auth_ref": ["r5", "r26", "r27", "r44", "r272", "r330", "r345"] }, "us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockIssuedDuringPeriodSharesStockOptionsExercised", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Exercise of options, shares", "verboseLabel": "Options exercised during period", "documentation": "Number of share options (or share units) exercised during the current period." } } }, "auth_ref": ["r5", "r26", "r27", "r44", "r171"] }, "REFR_StockIssuedDuringPeriodSharesWarrantsExercised": { "xbrltype": "sharesItemType", "nsuri": "http://smartglass.com/20240930", "localname": "StockIssuedDuringPeriodSharesWarrantsExercised", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Exercise of warrants, shares", "documentation": "Stock issued during period shares warrants exercised." } } }, "auth_ref": [] }, "us-gaap_StockIssuedDuringPeriodValueStockOptionsExercised": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockIssuedDuringPeriodValueStockOptionsExercised", "crdr": "credit", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Exercise of options", "documentation": "Value of stock issued as a result of the exercise of stock options." } } }, "auth_ref": ["r5", "r27", "r30", "r31", "r44"] }, "REFR_StockIssuedDuringPeriodValueStockWarrantsOfExercised": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "StockIssuedDuringPeriodValueStockWarrantsOfExercised", "crdr": "credit", "presentation": ["http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "label": "Exercise of warrants", "documentation": "Stock Issued During Period Value Stock Warrants of Exercised." } } }, "auth_ref": [] }, "us-gaap_StockholdersEquity": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquity", "crdr": "credit", "calculation": { "http://smartglass.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesAndStockholdersEquity", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://smartglass.com/role/BalanceSheets", "http://smartglass.com/role/BusinessDetailsNarrative", "http://smartglass.com/role/StatementsOfShareholdersEquity"], "lang": { "en-us": { "role": { "totalLabel": "Total shareholders\u2019 equity", "periodStartLabel": "Balance", "periodEndLabel": "Balance", "label": "Equity, Attributable to Parent", "documentation": "Amount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest." } } }, "auth_ref": ["r27", "r30", "r31", "r42", "r291", "r307", "r331", "r332", "r370", "r385", "r415", "r428", "r440", "r482"] }, "us-gaap_StockholdersEquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquityAbstract", "presentation": ["http://smartglass.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Shareholders\u2019 equity:" } } }, "auth_ref": [] }, "us-gaap_StockholdersEquityNoteDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "StockholdersEquityNoteDisclosureTextBlock", "presentation": ["http://smartglass.com/role/Equity"], "lang": { "en-us": { "role": { "label": "Equity", "documentation": "The entire disclosure for equity." } } }, "auth_ref": ["r43", "r75", "r139", "r140", "r141", "r142", "r143", "r144", "r145", "r146", "r147", "r148", "r149", "r150", "r152", "r209", "r333", "r335", "r346"] }, "us-gaap_SubleaseIncome": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "SubleaseIncome", "crdr": "credit", "presentation": ["http://smartglass.com/role/LeasesDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Sublease income", "documentation": "Amount of sublease income excluding finance and operating lease expense." } } }, "auth_ref": ["r228", "r369"] }, "REFR_SubscriptionAgreementMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "SubscriptionAgreementMember", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Subscription Agreement [Member]", "documentation": "Subscription Agreement [Member]" } } }, "auth_ref": [] }, "srt_TitleOfIndividualAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "TitleOfIndividualAxis", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Title and Position [Axis]" } } }, "auth_ref": ["r425", "r442"] }, "srt_TitleOfIndividualWithRelationshipToEntityDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "TitleOfIndividualWithRelationshipToEntityDomain", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "auth_ref": [] }, "dei_TradingSymbol": { "xbrltype": "tradingSymbolItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "TradingSymbol", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Trading Symbol", "documentation": "Trading symbol of an instrument as listed on an exchange." } } }, "auth_ref": [] }, "REFR_TwoThousandNineteenEquityIncentivePlanMember": { "xbrltype": "domainItemType", "nsuri": "http://smartglass.com/20240930", "localname": "TwoThousandNineteenEquityIncentivePlanMember", "presentation": ["http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "2019 Equity Incentive Plan [Member]", "documentation": "2019 Equity Incentive Plan [Member]" } } }, "auth_ref": [] }, "us-gaap_TypeOfArrangementAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "TypeOfArrangementAxis", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative", "http://smartglass.com/role/RevenueRecognitionDetailsNarrative", "http://smartglass.com/role/Stock-basedCompensationDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Collaborative Arrangement and Arrangement Other than Collaborative [Axis]", "documentation": "Information by collaborative arrangement and arrangement other than collaborative applicable to revenue-generating activity or operations." } } }, "auth_ref": ["r198"] }, "us-gaap_UnbilledReceivablesCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "UnbilledReceivablesCurrent", "crdr": "debit", "presentation": ["http://smartglass.com/role/RevenueRecognitionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Unbilled receivables current", "documentation": "Amount received for services rendered and products shipped, but not yet billed, for non-contractual agreements due within one year or the normal operating cycle, if longer." } } }, "auth_ref": [] }, "REFR_UnrealizedGainOnMarketableSecurities": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "UnrealizedGainOnMarketableSecurities", "crdr": "credit", "calculation": { "http://smartglass.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": -1.0, "order": 4.0 } }, "presentation": ["http://smartglass.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "negatedLabel": "Unrealized gain on marketable securities", "documentation": "Unrealized gain on marketable securities.", "label": "UnrealizedGainOnMarketableSecurities" } } }, "auth_ref": [] }, "us-gaap_VariableLeaseCost": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "VariableLeaseCost", "crdr": "debit", "presentation": ["http://smartglass.com/role/LeasesDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Variable lease costs", "documentation": "Amount of variable lease cost, excluded from lease liability, recognized when obligation for payment is incurred for finance and operating leases." } } }, "auth_ref": ["r227", "r369"] }, "us-gaap_WarrantMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "WarrantMember", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Warrant [Member]", "documentation": "Security that gives the holder the right to purchase shares of stock in accordance with the terms of the instrument, usually upon payment of a specified amount." } } }, "auth_ref": ["r376", "r377", "r380", "r381", "r382", "r383"] }, "us-gaap_WarrantsAndRightsOutstandingMaturityDate": { "xbrltype": "dateItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "WarrantsAndRightsOutstandingMaturityDate", "presentation": ["http://smartglass.com/role/EquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Warrant expiring term", "documentation": "Expiration date of outstanding warrant and right embodying unconditional obligation requiring redemption by transferring asset at specified or determinable date or upon event certain to occur, in YYYY-MM-DD format." } } }, "auth_ref": ["r437", "r438", "r439"] }, "us-gaap_WeightedAverageNumberOfDilutedSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "WeightedAverageNumberOfDilutedSharesOutstanding", "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Weighted average number of common shares outstanding - Diluted", "documentation": "The average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period." } } }, "auth_ref": ["r94", "r99"] }, "us-gaap_WeightedAverageNumberOfSharesOutstandingBasic": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "WeightedAverageNumberOfSharesOutstandingBasic", "presentation": ["http://smartglass.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Weighted average number of common shares outstanding - Basic", "documentation": "Number of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period." } } }, "auth_ref": ["r93", "r99"] }, "REFR_WorkingCapital": { "xbrltype": "monetaryItemType", "nsuri": "http://smartglass.com/20240930", "localname": "WorkingCapital", "crdr": "credit", "presentation": ["http://smartglass.com/role/BusinessDetailsNarrative"], "lang": { "en-us": { "role": { "label": "[custom:WorkingCapital-0]", "documentation": "Working capital." } } }, "auth_ref": [] }, "dei_WrittenCommunications": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "WrittenCommunications", "presentation": ["http://smartglass.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Written Communications", "documentation": "Boolean flag that is true when the Form 8-K filing is intended to satisfy the filing obligation of the registrant as written communications pursuant to Rule 425 under the Securities Act." } } }, "auth_ref": ["r404"] } } } }, "std_ref": { "r0": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "SubTopic": "230", "Topic": "830", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477401/830-230-45-1" }, "r1": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "14", "Subparagraph": "(a)", "SubTopic": "10", "Topic": "230", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-14" }, "r2": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Subparagraph": "(a)", "SubTopic": "10", "Topic": "230", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r3": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Subparagraph": "(b)", "SubTopic": "10", "Topic": "230", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r4": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "SubTopic": "10", "Topic": "360", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482099/360-10-50-1" }, "r5": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "SubTopic": "10", "Topic": "505", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-2" }, "r6": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)(1)(iv)(02)", "SubTopic": "10", "Topic": "718", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r7": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2A", "Subparagraph": "(a)", "SubTopic": "10", "Topic": "718", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2A" }, "r8": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(22))", "SubTopic": "10", "Topic": "210", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r9": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "230", "SubTopic": "10", "Section": "45", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-4" }, "r10": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "260", "SubTopic": "10", "Section": "50", "Paragraph": "1", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482662/260-10-50-1" }, "r11": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "275", "SubTopic": "10", "Section": "50", "Paragraph": "18", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482861/275-10-50-18" }, "r12": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "275", "SubTopic": "10", "Section": "50", "Paragraph": "20", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482861/275-10-50-20" }, "r13": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "360", "SubTopic": "10", "Section": "50", "Paragraph": "1", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482099/360-10-50-1" }, "r14": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "710", "SubTopic": "10", "Section": "25", "Paragraph": "11", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483070/710-10-25-11" }, "r15": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "718", "SubTopic": "10", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r16": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "825", "SubTopic": "10", "Section": "50", "Paragraph": "20", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482907/825-10-50-20" }, "r17": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Name": "Accounting Standards Codification", "Topic": "825", "SubTopic": "10", "Section": "50", "Paragraph": "21", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482907/825-10-50-21" }, "r18": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(19)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r19": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(19))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r20": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(20))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r21": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(21))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r22": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(23))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r23": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(24))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r24": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(25))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r25": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(26))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r26": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(28))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r27": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(29))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r28": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(30)(a)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r29": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(30)(a)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r30": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(30))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r31": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(31))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r32": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(32))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r33": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.5-03(20))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483621/220-10-S99-2" }, "r34": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.5-03(7)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483621/220-10-S99-2" }, "r35": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.5-03(9)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483621/220-10-S99-2" }, "r36": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "13", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-13" }, "r37": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "24", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-24" }, "r38": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "25", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-25" }, "r39": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r40": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "235", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/235/tableOfContent" }, "r41": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "275", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "18", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482861/275-10-50-18" }, "r42": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SAB Topic 4.E)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480418/310-10-S99-2" }, "r43": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "505", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/505/tableOfContent" }, "r44": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.3-04)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480008/505-10-S99-1" }, "r45": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "710", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "30", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483043/710-10-30-1" }, "r46": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "942", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.9-03(11))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478546/942-210-S99-1" }, "r47": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "942", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.9-03(23))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478546/942-210-S99-1" }, "r48": { "role": "http://fasb.org/us-gaap/role/ref/legacyRef", "Topic": "942", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.9-04(22))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478524/942-220-S99-1" }, "r49": { "role": "http://fasb.org/us-gaap/role/ref/otherTransitionRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r50": { "role": "http://fasb.org/us-gaap/role/ref/otherTransitionRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r51": { "role": "http://fasb.org/us-gaap/role/ref/otherTransitionRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r52": { "role": "http://fasb.org/us-gaap/role/ref/otherTransitionRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r53": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(a)", "SubTopic": "10", "Topic": "275", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482861/275-10-50-1" }, "r54": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(a)", "SubTopic": "10", "Topic": "606", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-13" }, "r55": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Name": "Accounting Standards Codification", "Topic": "275", "Publisher": "FASB", "URI": "https://asc.fasb.org/275/tableOfContent" }, "r56": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Name": "Accounting Standards Codification", "Topic": "606", "Publisher": "FASB", "URI": "https://asc.fasb.org/606/tableOfContent" }, "r57": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "105", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479343/105-10-65-6" }, "r58": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "205", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483499/205-20-50-7" }, "r59": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483467/210-10-45-1" }, "r60": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "5", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483467/210-10-45-5" }, "r61": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r62": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(17))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r63": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(18))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r64": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(4))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r65": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(9))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r66": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1A", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482790/220-10-45-1A" }, "r67": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1B", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482790/220-10-45-1B" }, "r68": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482765/220-10-50-4" }, "r69": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482765/220-10-50-5" }, "r70": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482765/220-10-50-6" }, "r71": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.5-03(25))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483621/220-10-S99-2" }, "r72": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "220", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.5-03(5))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483621/220-10-S99-2" }, "r73": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "24", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-24" }, "r74": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "8", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482913/230-10-50-8" }, "r75": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "235", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.4-08(e)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480678/235-10-S99-1" }, "r76": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "235", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.4-08(g)(1)(ii))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480678/235-10-S99-1" }, "r77": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "235", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.4-08(h)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480678/235-10-S99-1" }, "r78": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "23", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-23" }, "r79": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "24", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-24" }, "r80": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "5", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-5" }, "r81": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(b)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-1" }, "r82": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(b)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-1" }, "r83": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "11", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-11" }, "r84": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "11", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-11" }, "r85": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-3" }, "r86": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-4" }, "r87": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-6" }, "r88": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-7" }, "r89": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-7" }, "r90": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "8", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-8" }, "r91": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "9", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-9" }, "r92": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/260/tableOfContent" }, "r93": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "10", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-10" }, "r94": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "16", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-16" }, "r95": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-2" }, "r96": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "60B", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-60B" }, "r97": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "60B", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-60B" }, "r98": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "7", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482689/260-10-45-7" }, "r99": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482662/260-10-50-1" }, "r100": { "role":

"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(c)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482662/260-10-50-1" }, "r101": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name":
"Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482662/260-10-50-2" }, "r102": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147482662/260-10-50-3" }, "r103": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "55", "Paragraph": "15", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482635/260-10-55-15" }, "r104": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "270", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(i)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482964/270-10-50-1" }, "r105": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "272", "SubTopic": "10", "Name":
"Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483014/272-10-45-1" }, "r106": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "22", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147482810/280-10-50-22" }, "r107": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "22", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-22" }, "r108": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "22", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-22" }, "r109": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "30", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-30" },
"r110": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "30",
"Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-30" }, "r111": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(ee)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r112": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "40", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-40" }, "r113": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "41", "Subparagraph": "(a)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-41" }, "r114": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "280", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "42", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-42" }, "r115": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "13", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147481990/310-10-45-13" }, "r116": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481962/310-10-50-4" }, "r117": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "323", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481687/323-10-50-3" }, "r118": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "326", "SubTopic": "10", "Name":
"Accounting Standards Codification", "Section": "65", "Paragraph": "4", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479654/326-10-65-4" }, "r119": {
"role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "326", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "5", "Subparagraph": "(c)(2)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479654/326-10-65-5" }, "r120": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "326", "SubTopic": "20", "Name":
"Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479344/326-20-45-1" }, "r121": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "326", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479319/326-20-50-13" }, "r122": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "350", "SubTopic": "30",
"Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/350-30/tableOfContent" }, "r123": { "role": "http://www.xbrl.org/2003/role/disclosureRef",
"Topic": "350", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(a)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147482665/350-30-50-3" }, "r124": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "350", "SubTopic": "30", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482665/350-30-50-4" }, "r125": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "350", "SubTopic": "60", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147476166/350-60-65-1" }, "r126": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "450", "SubTopic": "20", "Name":
"Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483076/450-20-50-4" }, "r127": {
"role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "450", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "9", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483076/450-20-50-9" }, "r128": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "450", "SubTopic": "20", "Name":
"Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SAB Topic 5.Y.Q2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480102/450-20-
S99-1" }, "r129": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "450", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1",
"Subparagraph": "(SAB Topic 5.Y.Q4)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480102/450-20-S99-1" }, "r130": { "role": "http://www.xbrl.org/2003/role/disclosureRef",
"Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1A", "Subparagraph": "(SX 210.13-01(a)(4)(i))", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" }, "r131": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "S99", "Paragraph": "1A", "Subparagraph": "(SX 210.13-01(a)(4)(iii)(A))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" },
"r132": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1A",
"Subparagraph": "(SX 210.13-01(a)(4)(iv))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" }, "r133": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1A", "Subparagraph": "(SX
210.13-01(a)(5))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" }, "r134": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1B", "Subparagraph": "(SX 210.13-02(a)(4)(i))", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147480097/470-10-S99-1B" }, "r135": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "S99", "Paragraph": "1B", "Subparagraph": "(SX 210.13-02(a)(4)(iii)(A))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1B" },
"r136": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1B",
"Subparagraph": "(SX 210.13-02(a)(4)(iii)(B))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1B" }, "r137": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1B", "Subparagraph": "(SX
210.13-02(a)(4)(iv))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1B" }, "r138": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "470",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1B", "Subparagraph": "(SX 210.13-02(a)(5))", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147480097/470-10-S99-1B" }, "r139": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "13", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-13" }, "r140": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-13" }, "r141": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(g)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-13" },
"r142": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13",
"Subparagraph": "(h)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-13" }, "r143": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(i)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147481112/505-10-50-13" }, "r144": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "14", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-14" }, "r145": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "14", "Subparagraph": "(b)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-14" }, "r146": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "14", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-14" },
"r147": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "16",
"Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-16" }, "r148": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "18", "Subparagraph": "(a)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147481112/505-10-50-18" }, "r149": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "18", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-18" }, "r150": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "18", "Subparagraph": "(d)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-18" }, "r151": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-3" }, "r152": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.3-
04)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480008/505-10-S99-1" }, "r153": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "10", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-10" }, "r154": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12", "Subparagraph": "(a)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-12" }, "r155": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-12" },
"r156": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12",
"Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-12" }, "r157": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606",
"SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12", "Subparagraph": "(d)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147479806/606-10-50-12" }, "r158": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "12", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-12" }, "r159": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(b)(2)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-13" }, "r160": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "15", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-15" }, "r161": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(a)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-4" }, "r162": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name":
"Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-5" }, "r163": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "9", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147479806/606-10-50-9" }, "r164": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "710", "Name": "Accounting Standards Codification",
"Publisher": "FASB", "URI": "https://asc.fasb.org/710/tableOfContent" }, "r165": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "710", "SubTopic": "10", "Name": "Accounting
Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482969/710-10-50-1" }, "r166": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "715", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(d)(i)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480506/715-20-50-1" }, "r167": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "715", "SubTopic": "80", "Name":
"Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480576/715-80-50-5" }, "r168": {
"role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)(1)
(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r169": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10",
"Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)(1)(ii)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2"
}, "r170": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2",
"Subparagraph": "(c)(1)(iv)(01)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r171": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic":
"718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)(1)(iv)(02)", "Publisher": "FASB", "URI":
"https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r172": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards
Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)(2)(iii)(01)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r173": { "role":
"http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(f)(2)(ii)",
"Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r174": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name":
"Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(f)(2)(iii)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" },
"r175": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2",
"Subparagraph": "(f)(2)(iv)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r176": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic":
"720", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483359/720-20-50-1" },

"r177": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "730", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482916/730-10-50-1" }, "r178": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/740/tableOfContent" }, "r179": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-12" }, "r180": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12B", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-12B" }, "r181": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "12C", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-12C" }, "r182": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "14", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-14" }, "r183": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "17", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-17" }, "r184": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "21", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482685/740-10-50-21" }, "r185": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "8", "Subparagraph": "(d)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482615/740-10-65-8" }, "r186": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "8", "Subparagraph": "(d)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482615/740-10-65-8" }, "r187": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SAB Topic 6.I.5.Q1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479360/740-10-S99-1" }, "r188": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SAB Topic 11.C)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479360/740-10-S99-2" }, "r189": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "270", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477891/740-270-50-1" }, "r190": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482603/740-30-50-2" }, "r191": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "323", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(d)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478666/740-323-65-2" }, "r192": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "323", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(d)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478666/740-323-65-2" }, "r193": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "323", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478666/740-323-65-2" }, "r194": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "323", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(g)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478666/740-323-65-2" }, "r195": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "740", "SubTopic": "323", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(g)(4)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478666/740-323-65-2" }, "r196": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "805", "SubTopic": "60", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(d)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147476176/805-60-65-1" }, "r197": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "805", "SubTopic": "60", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(g)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147476176/805-60-65-1" }, "r198": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "808", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479402/808-10-50-1" }, "r199": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "810", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "25", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481231/810-10-45-25" }, "r200": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "810", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "25", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481231/810-10-45-25" }, "r201": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "810", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(bb)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481203/810-10-50-3" }, "r202": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "810", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481203/810-10-50-3" }, "r203": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r204": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(h)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r205": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(h)(1)(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r206": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(h)(1)(iii)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r207": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(h)(1)(iv)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r208": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "6", "Subparagraph": "(i)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480528/815-20-65-6" }, "r209": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480237/815-40-50-6" }, "r210": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(e)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480175/815-40-65-1" }, "r211": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(e)(4)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480175/815-40-65-1" }, "r212": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "815", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(f)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480175/815-40-65-1" }, "r213": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(bbb)(2)(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482106/820-10-50-2" }, "r214": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "825", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "28", "Subparagraph": "(f)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482907/825-10-50-28" }, "r215": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "17", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481694/830-30-45-17" }, "r216": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "20", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481694/830-30-45-20" }, "r217": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "20", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481694/830-30-45-20" }, "r218": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "20", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481694/830-30-45-20" }, "r219": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "20", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481694/830-30-45-20" }, "r220": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "830", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481674/830-30-50-1" }, "r221": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "8", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479832/842-10-65-8" }, "r222": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/842-20/tableOfContent" }, "r223": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "35", "Paragraph": "12A", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479165/842-20-35-12A" }, "r224": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479041/842-20-45-1" }, "r225": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479041/842-20-45-1" }, "r226": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r227": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r228": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r229": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(g)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r230": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(g)(4)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r231": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-6" }, "r232": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-7A" }, "r233": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "848", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(a)(3)(iii)(03)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483550/848-10-65-2" }, "r234": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "850", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/850/tableOfContent" }, "r235": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "850", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483326/850-10-50-1" }, "r236": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "850", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483326/850-10-50-1" }, "r237": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "850", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483326/850-10-50-1" }, "r238": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "850", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483326/850-10-50-6" }, "r239": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-3" }, "r240": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "860", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481420/860-30-50-7" }, "r241": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "910", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482546/910-10-50-6" }, "r242": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "912", "SubTopic": "310", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "11", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478345/912-310-45-11" }, "r243": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "924", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SAB Topic 11.L)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479941/924-10-S99-1" }, "r244": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "942", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.9-04(27))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478524/942-220-S99-1" }, "r245": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "942", "SubTopic": "360", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478451/942-360-50-1" }, "r246": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-03(a)(12))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478777/944-210-S99-1" }, "r247": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-03(a)(22))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478777/944-210-S99-1" }, "r248": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-03(a)(23)(a)(4))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478777/944-210-S99-1" }, "r249": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-03(a)(25))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478777/944-210-S99-1" }, "r250": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-03(a)(8))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478777/944-210-S99-1" }, "r251": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-04(18))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477250/944-220-S99-1" }, "r252": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-04(19))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477250/944-220-S99-1" }, "r253": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-04(23))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477250/944-220-S99-1" }, "r254": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "220", "Name": "Accounting Standards

Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.7-04(4))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477250/944-220-S99-1" }, "r255": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column A))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r256": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column B))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r257": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column C))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r258": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column D))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r259": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column E))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r260": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-17(Column F))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477965/944-235-S99-2" }, "r261": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4E", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4E" }, "r262": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-5" }, "r263": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r264": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480016/944-40-65-2" }, "r265": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(f)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480016/944-40-65-2" }, "r266": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(f)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480016/944-40-65-2" }, "r267": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(g)(2)(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480016/944-40-65-2" }, "r268": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "2", "Subparagraph": "(h)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480016/944-40-65-2" }, "r269": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SAB Topic 5.W.Q2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479583/944-40-S99-1" }, "r270": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "944", "SubTopic": "825", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1B", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477351/944-825-50-1B" }, "r271": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-03(d))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479886/946-10-S99-3" }, "r272": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-03(i)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479886/946-10-S99-3" }, "r273": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "11", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480990/946-20-50-11" }, "r274": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480990/946-20-50-13" }, "r275": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480990/946-20-50-2" }, "r276": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480990/946-20-50-5" }, "r277": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480990/946-20-50-6" }, "r278": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "205", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "4", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478009/946-205-45-4" }, "r279": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "4", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477796/946-210-45-4" }, "r280": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478795/946-210-50-6" }, "r281": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(f)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478795/946-210-50-6" }, "r282": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r283": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(12)(b)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r284": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(12)(b)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r285": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(12)(b)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r286": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(13)(a)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r287": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(13)(a)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r288": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(14))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r289": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(16)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r290": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(17))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r291": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(19))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r292": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(2)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r293": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(2)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r294": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(3)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r295": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(3)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r296": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(3)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r297": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(6)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r298": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(6)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r299": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(6)(d))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r300": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(6)(e))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r301": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(8))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r302": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(9)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r303": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(9)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r304": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(9)(d))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r305": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-04(9)(e))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-1" }, "r306": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.6-05(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-2" }, "r307": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.6-05(4))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479170/946-210-S99-2" }, "r308": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "3", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479105/946-220-45-3" }, "r309": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "7", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479105/946-220-45-7" }, "r310": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(1)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r311": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r312": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(2)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r313": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(2)(c))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r314": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(2)(e))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r315": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(2)(g)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r316": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r317": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r318": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r319": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(5))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r320": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(6))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r321": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(a)(7))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r322": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(1))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r323": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r324": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(3))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r325": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(5))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r326": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(6))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r327": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(7)(c)(7))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r328": {

"role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.6-07(9))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-1" }, "r329": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(1)(d))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" }, "r330": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(4)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" }, "r331": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(6))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" }, "r332": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(7))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" }, "r333": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477968/946-235-50-2" }, "r334": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477968/946-235-50-2" }, "r335": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477968/946-235-50-2" }, "r336": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "235", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477968/946-235-50-2" }, "r337": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.12-12(Column A)(Footnote 2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-1" }, "r338": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-12A(Column A)(Footnote 2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-2" }, "r339": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.12-12B(Column A)(Footnote 4)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-3" }, "r340": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.12-12B(Column A)(Footnote 4)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-3" }, "r341": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "6", "Subparagraph": "(SX 210.12-14(Column A)(Footnote 2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-6" }, "r342": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "6", "Subparagraph": "(SX 210.12-14(Column E)(2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-6" }, "r343": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "6", "Subparagraph": "(SX 210.12-14(Column E)(Footnote 4))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-6" }, "r344": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "6", "Subparagraph": "(SX 210.12-14(Column E)(Footnote 6)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-6" }, "r345": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "505", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478448/946-505-50-2" }, "r346": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "946", "SubTopic": "505", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478448/946-505-50-6" }, "r347": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "954", "SubTopic": "310", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478785/954-310-50-2" }, "r348": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "976", "SubTopic": "310", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477332/976-310-50-1" }, "r349": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "978", "SubTopic": "310", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479230/978-310-50-1" }, "r350": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "985", "SubTopic": "20", "Name": "Accounting Standards Codification", "Publisher": "FASB", "URI": "https://asc.fasb.org/985-20/tableOfContent" }, "r351": { "role": "http://www.xbrl.org/2003/role/disclosureRef", "Topic": "985", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481283/985-20-50-2" }, "r352": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "13H", "Subparagraph": "(a)", "SubTopic": "40", "Topic": "944", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480046/944-40-55-13H" }, "r353": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483467/210-10-45-1" }, "r354": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "260", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "52", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482635/260-10-55-52" }, "r355": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "30", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-30" }, "r356": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "31", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-31" }, "r357": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "48", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482785/280-10-55-48" }, "r358": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "49", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482785/280-10-55-49" }, "r359": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "12A", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481933/310-10-55-12A" }, "r360": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "505", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "13", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481112/505-10-50-13" }, "r361": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "91", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479777/606-10-55-91" }, "r362": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "715", "SubTopic": "80", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "8", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480547/715-80-55-8" }, "r363": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "718", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(a)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480429/718-10-50-2" }, "r364": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "740", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "231", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482663/740-10-55-231" }, "r365": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "103", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482078/820-10-55-103" }, "r366": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "107", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482078/820-10-55-107" }, "r367": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "107", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482078/820-10-55-107" }, "r368": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "107", "Subparagraph": "(e)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482078/820-10-55-107" }, "r369": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "53", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479589/842-20-55-53" }, "r370": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "852", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "10", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481372/852-10-55-10" }, "r371": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "944", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479401/944-30-55-2" }, "r372": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "29F", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480046/944-40-55-29F" }, "r373": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "9C", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480046/944-40-55-9C" }, "r374": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "9E", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480046/944-40-55-9E" }, "r375": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "944", "SubTopic": "80", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "18", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480078/944-80-55-18" }, "r376": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(b)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478795/946-210-50-1" }, "r377": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(a)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478795/946-210-50-6" }, "r378": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "210", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477439/946-210-55-1" }, "r379": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "310", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "1", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477802/946-310-45-1" }, "r380": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.12-12(Column A)(Footnote 2)(i))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-1" }, "r381": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "2", "Subparagraph": "(SX 210.12-12A(Column A)(Footnote 2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-2" }, "r382": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.12-12B(Column A)(Footnote 1)(a))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-3" }, "r383": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "320", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "6", "Subparagraph": "(SX 210.12-14(Column A)(Footnote 2))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477271/946-320-S99-6" }, "r384": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "830", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "10", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479168/946-830-55-10" }, "r385": { "role": "http://www.xbrl.org/2003/role/exampleRef", "Topic": "946", "SubTopic": "830", "Name": "Accounting Standards Codification", "Section": "55", "Paragraph": "12", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479168/946-830-55-12" }, "r386": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12" }, "r387": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12", "Subsection": "b" }, "r388": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12", "Subsection": "b-2" }, "r389": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12", "Subsection": "b-23" }, "r390": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12", "Subsection": "d1-1" }, "r391": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12", "Subsection": "g" }, "r392": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "12, 13, 15d" }, "r393": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "13e", "Subsection": "4c" }, "r394": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "14a", "Subsection": "12" }, "r395": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "14d", "Subsection": "2b" }, "r396": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Exchange Act", "Number": "240", "Section": "15", "Subsection": "d" }, "r397": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Form 10-K", "Number": "249", "Section": "310" }, "r398": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Form 10-Q", "Number": "240", "Section": "308", "Subsection": "a" }, "r399": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Form 20-F", "Number": "249", "Section": "220", "Subsection": "f" }, "r400": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Form 40-F", "Number": "249", "Section": "240", "Subsection": "f" }, "r401": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Forms 10-K, 10-Q, 20-F", "Number": "240", "Section": "13", "Subsection": "a-1" }, "r402": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Regulation S-T", "Number": "232", "Section": "405" }, "r403": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Securities Act", "Number": "230", "Section": "405" }, "r404": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Securities Act", "Number": "230", "Section": "425" }, "r405": { "role": "http://www.xbrl.org/2003/role/presentationRef", "Publisher": "SEC", "Name": "Securities Act", "Number": "7A", "Section": "B", "Subsection": "2" }, "r406": { "role": "http://www.xbrl.org/2003/role/recommendedDisclosureRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r407": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "18", "SubTopic": "10", "Topic": "275", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482861/275-10-50-18" }, "r408": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1B", "SubTopic": "825", "Topic": "944", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147477351/944-825-50-1B" }, "r409": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(g)(1)", "SubTopic": "20", "Topic": "842", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-4" }, "r410": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Name": "Accounting Standards Codification", "Topic": "610", "Publisher": "FASB", "URI": "https://asc.fasb.org/610/tableOfContent" }, "r411": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "210", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.5-02(9))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480566/210-10-S99-1" }, "r412": { "role":

"http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "14", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-14" }, "r413": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r414": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "230", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "28", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482740/230-10-45-28" }, "r415": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "235", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SX 210.4-08(g)(1)(ii))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480678/235-10-S99-1" }, "r416": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "23", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-23" }, "r417": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "24", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-24" }, "r418": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "5", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483421/250-10-45-5" }, "r419": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "250", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483443/250-10-50-6" }, "r420": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "270", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1", "Subparagraph": "(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482964/270-10-50-1" }, "r421": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "22", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-22" }, "r422": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "30", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-30" }, "r423": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(ee)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r424": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "280", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "32", "Subparagraph": "(f)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482810/280-10-50-32" }, "r425": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "13", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481990/310-10-45-13" }, "r426": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "310", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481990/310-10-45-2" }, "r427": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "320", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "11", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481830/320-10-45-11" }, "r428": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "323", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481687/323-10-50-3" }, "r429": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "410", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "10", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481931/410-30-50-10" }, "r430": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "450", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "9", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483076/450-20-50-9" }, "r431": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "450", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1", "Subparagraph": "(SAB Topic 5.Y.Q2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480102/450-20-S99-1" }, "r432": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1A", "Subparagraph": "(SX 210.13-01(a)(4)(ii))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" }, "r433": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "470", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "1A", "Subparagraph": "(SX 210.13-01(a)(4)(iii))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480097/470-10-S99-1A" }, "r434": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "470", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "1B", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481139/470-20-50-1B" }, "r435": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "606", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479806/606-10-50-5" }, "r436": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "815", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "65", "Paragraph": "1", "Subparagraph": "(e)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480175/815-40-65-1" }, "r437": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(bbb)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482106/820-10-50-2" }, "r438": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(bbb)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482106/820-10-50-2" }, "r439": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "820", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(bbb)(2)(i)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482106/820-10-50-2" }, "r440": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "825", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "28", "Subparagraph": "(f)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147482907/825-10-50-28" }, "r441": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "842", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478964/842-20-50-6" }, "r442": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "850", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147483326/850-10-50-2" }, "r443": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "852", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481404/852-10-50-7" }, "r444": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "852", "SubTopic": "10", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481404/852-10-50-7" }, "r445": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-3" }, "r446": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-3" }, "r447": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "3", "Subparagraph": "(c)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-3" }, "r448": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(b)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-4" }, "r449": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(b)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-4" }, "r450": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "860", "SubTopic": "20", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4", "Subparagraph": "(b)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147481326/860-20-50-4" }, "r451": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "912", "SubTopic": "730", "Name": "Accounting Standards Codification", "Section": "25", "Paragraph": "1", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479532/912-730-25-1" }, "r452": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "30", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2B", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479432/944-30-50-2B" }, "r453": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4B", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4B" }, "r454": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4B", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4B" }, "r455": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4C", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4C" }, "r456": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4D", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4D" }, "r457": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "4G", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-4G" }, "r458": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-5" }, "r459": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-5" }, "r460": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-5" }, "r461": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "5", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-5" }, "r462": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r463": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r464": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r465": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r466": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(4)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r467": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(5)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r468": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(b)(6)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r469": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "6", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-6" }, "r470": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r471": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(b)(1)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r472": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(b)(2)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r473": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(b)(3)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r474": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r475": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7A", "Subparagraph": "(d)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7A" }, "r476": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7B", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7B" }, "r477": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7B", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7B" }, "r478": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "40", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "7B", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480081/944-40-50-7B" }, "r479": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "80", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(b)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480109/944-80-50-2" }, "r480": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "944", "SubTopic": "80", "Name": "Accounting Standards Codification", "Section": "50", "Paragraph": "2", "Subparagraph": "(c)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147480109/944-80-50-2" }, "r481": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "946", "SubTopic": "205", "Name": "Accounting Standards Codification", "Section": "45", "Paragraph": "4", "Subparagraph": "(a)", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147478009/946-205-45-4" }, "r482": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(4)(b))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" }, "r483": { "role": "http://www.xbrl.org/2009/role/commonPracticeRef", "Topic": "946", "SubTopic": "220", "Name": "Accounting Standards Codification", "Section": "S99", "Paragraph": "3", "Subparagraph": "(SX 210.6-09(7))", "Publisher": "FASB", "URI": "https://asc.fasb.org/1943274/2147479134/946-220-S99-3" } } } ZIP 47 0001493152-24-044002-xbrl.zip IDEA: XBRL DOCUMENT begin 644 0001493152-24-044002-xbrl.zip M4$L#!!0 ("^ 9UD=:X=>Z0< &8[* 97@S,2TQ+FAT;>U;;4\; MN1;^'BG_P8MTJR(E!-KEK@@KEK@392$#"-BL6N##1:W?WHS'@27SSCU/8DS?[Z?8X] MDQ=(@>Y2FG!3J229\:7[H_7;1JE::'SHG;7PR^M?L=7L7G5:S M$3YQMU'<;IY>M?]@'WM_7'1^WDETYH[8P?[(L9Y,A6678L)N=,JS6KA08Q^% MD'3$4GUWH:^=T6EQSXK.KXO]U1.>2C4]>JQ'7];*/T4 N--ZD_7MZ+C9H 8Q(]?_<"P>_S ,GHC M!T/WG.";IZW.?S]T3[N]:N7]P=Y!LW':VVDJYN'S#%0gRVSL4:X&]XORXN:AHEVIUE>7/4HM4IIK=NM!J7'6I&R#Mbo*R5/ZTEHFHTLSFFNNfj2UO@FKCOhJ%9+L#FRSGLGx2QJRTNTz_QCIDFZTCUQ7/l3I4YzXcWNW2JZQ@9d9>%A9Hc5$G5b!n5A!8O[w 8(eLWmT2.O@6qkR&e9v*p5YlpK*y4=5@SuR5!=Z@rlJ$E*8yU\YS;8KHK$9UV@2&+e5RPQp8rG7l'D4s#N*=:X1'Kk8(A=YVSKRm6k}^QC.QwRq-x!dEe^Sg%YY6"BKSRY(NQM Fq;d9&F%9'k7D!&JA~8"2/*(h(&"N5)gJ/Gq8Z[B!J"nS*dTDGXi<a79$U4s^C[]'aJ*o~0<?<!j^8j(v6!J[z6X[yJ*TV$+6"3\%'{H5@CE"f+F7(!U

M"QJ..V)$WH.*Y)D+&@XO(T>(>K<+|U7 V]KX,EKE.6%%&Z+BG3%7,46K130, M=1-)(B(GQY DNR*%-,M /"$.#S]7)Y5\/(Z*")]MR%WU=>X>@?&4[0*?E1:4 MGDL68^75N5C6+_!WAF),"<
=1S@H(?M4GH-L+:ZNXY6>4Y8\8;H;CL(6;F[M=Z21SL2*C*>_LU)_OR)FILR&C]+T;/MW:VORT\<; / S[YQ_^R8.X7&6UN8NG ML&.1WW-O3PQ]A"?5RL(>]EXV< :. Y[%TNL!"9?
P%M)FFTCDA'HB]^AI[4KH? M2P#TC;S%"D#\8BE(PB?E)=%_M>)#G$^YQ #\0LVSR)\"[FZ/.;;"-MCCN_F MVT^4*K)1Z$%"E>@(DDXS(RF@(L6^:';2,[!\EO8X(3/D=SD^N^6?>"F/]I^@
M30L./YP\<","CI6^D\>H;<7,=7YI]X]<&*I D+!*:F&W93$#-D^A$QBZ'U$1 MO*O\%&*[DWI=L+8[]76TRO_C.<1)-BV2[0915@W:)WQH"/7T#^D5,EL+6PV9
MC;4:"]IO9'Q0/&QHBFA2I".EIP)W)T,=(DB^).(0W0=V9.56[HDJO??*=QG; MJ&T)\"'A_=99!U&V^RV&K81QG+W38!FH]M;5^?Q'7SG^F(-A@OX9M9C6]-M@.FN#?8I
M,3QHD:@[&T]1L,YG$>5T;L.N0D;&[PUXY#>Y?R MWW3M83''..>>>=$3W_74RZ[AOHN]XXKOR_-\N:Y8A,LF4"+Q-68DOV^?I>[F M4UPRI61]LX'I*F=N8;X;-.%A4I=38C."S-LL
I@&O2<;7IRE]VO_E!+ P04 M " O@&=9"*HC*@$)("@ &5X,S(M,2YH=&WM6NMOVD@0_X[$&M_S"=%%$[F6>:7@LND@%S\8D"Q^VL31+NK[]9OR"//M*2"M)$ M_0[LOOYCRZ#OA$+!BO
MQD'8!IQ>7)@'<1SXV;68WL15XK$%;X-->4Q%!:L.)V-K6U_5)3[SUNVO:4SF M1NP_F@*L=(_X/ H[:ET*1(],?]"6!//F[S9ZP1;+:>)?@U5Y7_W1F] RK7#II MU9IQO=?=F2F_#"V[1]_79Y8Q-
/]:94S&Y=+T?&:>:RC;FARJ1,-3(9@G>E@;K,>-M;- MZN332+\ K6_)D5:CT3I4*W]F4?AG%<7,76<7&7>H%-ZHG3*^2Y,,7B[9 >?4 MCEG X9K%2XB7%#ZNB$#O>6N8T3 0,00N?HHH$?
82A@+%."HB,+@="!PG,77@ M6"X\\]S+5=#!WY(^/I()-]> !L)'K=6/B$(D2BY3)4#1,J=<,FD84W^. M%TX:"@9*ZS60"%SFH>P"F$GME6"H/0+"'=!O["7A"P]HT&=1)(W 7SG305"P
MI((B]&UHJ4$Y,@4,!?X*(AHNX4,-SH@@8]U@S10T8M+IB9K^DE$7E:'RF%U1 MF+@NLO&H')L*OFT6$N\SXP1=RQ? 9#0R/Q,U9)S@*ESTL*ABO%S*)Z 9THK, MLPK&MY 1HD"X$M&*(-
(X@,9;R,MD1FE2)]4CB1.$D];MZ?DDF;:9?).(,>$T MJDYN/+H&S9;"2,$E'^]]#VQ:LT>K^!*\F\3+W<8 MMDN5K,-6K<%W]YYB6G6"H];@Q\!^,3182UI"BZK>.[*P_)G8[IYLMH4%4C0
MRQ43U,?;$,FDV23:.<%")Z!Y>NR\2E,NQ+4VF7M4*=)K4["*VI7F?G;SN MR#]P[2]?]U+C#QA+NYU9-S'^EQ9:1U:KC*,S81/D@3$/B8FC..6Q[.($]D MPF0C$^*.+G-6D%(]2<;3?=EP]SO#3/3G-
]KZ'G$_A>:*#T*/.:D3GJ40:?2 MGBVG*WF57K1O>+61T2Q\$.M3"Y*6^O?(^9OT[-??)"4Q)3?%M, M[J VOY"T_.+,Z*28ORF4^(+B?M%8D%7"O';3^XO1.X7D1ES*<#/W$W)Z7WA
M;K^X&P=7R9V_%.$?Z=V_@R+IN73W;,!OU2IF#/6<-DS)@G90P.6*V[+WW7I\-2I!QY) M:ET^RD^?[QPCPAW9 U]=__M8]\^S_]<@5=0D61W^^W^53K5>_[__=Y'Z-#+Q8_A1U?
CW;&2;DP_OWS[_/Y]_M[^>;/GS/ELOE]R_PS!E]Z,-+X'-<-LN^_WEWVQ%":QD9-4P!55$SDN*K#ZL M7A]^ZSS:UQ79]KC\Q/X[_WYI:?Q;:?&"^^'"^_I+SZ-FX*-Y^]AI/RH;6HYC MB^O@H$\X+
]RL>I8%F/$.T<_+]NWB<3/X^<6C[TU=4(V!IH\%$Y,05LIGLER& M*F[@6R1A(]"R$_WX^U)XVKE/**R]SA)QO#N%7_<%P\&XA'SHMK^)?X'?X'+V
M@U,C,Q2$B?/P0##Z9%GK%_Z'=4U!1N#3Y#>>QR53SYBS"3*"_<>_?@^_AG>X M3)9W[5;4[J]ISX*W8/W2\RE#-Y>!PC_T/-2N7;>=IXRQH)M#13",R M93Y[!N*&!.DBQ<#_/IFR]:"+3^_I?U.?
Q]A@4&%@B@QZG\M._9U5--9%]9KIX M]V>.2/_VIYF)7LSW1";?X[?)TR4__552@O_!P!C,IF0+_/5'NRY?U=S]Y=^(5R6?H2FV5C MO)TO]Q@#F- P^_]**P-Q 4
\5=%7\A0:^ITI5@HA[]]6TG^W(G9^=WW_[]-\(7\@% =T'$ M91#O-IIHNAD9$]>N16LJ9LA9%2^K"TI=E=#+5S3K9?'_BF4^'X5C"I>8W:YZ M;,]2EG1]_*,(2W"]SDC0D='C>L0TT#4,\K,
(RP#C7[6LI?@E@+9:N]QK3774 MR[D7F>"?A%^BB'?9[(&.9K/XY<=S_%.+@KXFS1C#G"GHW[,!U@ ?[,9FN M/,8P-M ST];&@I]F/TCC3^CR !2-)#_9KTFR,5&$V0=&U50$OY-?/H#20#K6
M.1OLB0A%=02_T_UHV1 M)?Q[032!2;+\&:/B/>+O(OF#1T#/+@A?]GKO^E.)]=?./W!$#> M#<]X3^R[&18#MNC/0%1,*"7S_LEQ!%-PB!VN3L8]%.5@-QK>,5,R:TL]&%?
Z*A]2+%^9D'[(K1'/A!Q>+%R2"MV6R9.V.F MJDR?Q9H &W3C@RHKV,SJ4P06=B,\Y@CI=>Q:C]%9$,)XBC#ZIR 8V +_"C 4 M-\"0CPL#. 4?,J8F/M0-8X]DJZF.B4-%[KN@3!'YW0]!OTQH8F+47I
NR@:2 MPF&K9^VQU\;N$?9I]9]@J_@#QAT:]Y'NWPC';HW,!C(]*F\UPX@(9%4;CS65 M['@5?*5#PE>1)*('L$X49*FN5H6); K**EC+V*ZD2^:$WC+6,\4.6<_N7A, MP6^]DA>S$N7Y9> M1VY6P!<-
E^7L5A:LC01%GB/I!NN3IGHGZ]8M?05U$'8KP.+2#C MN>T@NU?U/<*VM;)@\NK@B%TA^E],)PV/="\(9NCZM0P,?5UOT^+#>GV.K(E MS, ;-KI:17R0&/O@D(PO7H&?)XHK@_XUF9?
LK0]KKU)?P0":T_6+NEX<;JW5H)-OLM1$(O^X?.CV4) M?C&0D+':\^+;D?L/^L?OK]L\L5*Y$KO,VL1BHXNF@E)X/F!<+V)WUK=_L M$CDGQF\>Y'@X9_?(X6F:XR21P]LIFITC9V5.X&30Y-%9?
R=Q>]-9ZUR*$\4 MN=8^CL0@K,PDG29R^1C(W1_G6C]3HWIG38!V$&0O,(B&X$ O?F[]1L*0O$P4 M691-"BO[FS.\MXFF@CM>>9&-LPO[L:4]?WH?^ D7 M<.\#H=O2!G!
[LP$KB+T^VGW[A%^[[^%"5;D,]\^]8,W L;)?CJV\S61PR=6 M\&BLX/XBH17$)3S@\5G!5V>"Q H>@Q5\!;)G"^O/H]X^Q8]'T1_MC(K^E9D@4?23'H>A?A^PG&>[L'3FYQ
H>C17,O3:Q$RMX?%;PU9D@L8+'8 5? MB^PQ.07WAYP8)=5O7S_:@^/_XO_;GW[VV> S5<97/;MES_89YS-U8DQ46*HCL-0'27;1,FA>_L<0W64_2=QN\7?/N,IW@D0=;Q6\%79X+$*AZ#%=P?
V5>>.QJZV;N357D\'=,].BP!X\J, M-GI"ZA0UD(6!GDB&O_5N91$C'%6&.B)(/EU^P0CXT!;4(;)\ 7_UX&,C*T1A MR]JF8KR9.KFWH2T;#Y>S2Z2*H[&@/WCY,A#[.X4%KB!H#BHPPW=(:$@!(,)
M@\F;',&D"7A)9$EMRRY\9'(4B)+:]T12R*;*O)C[0UX).N89/6._QY?Q*L. M$49)*"WJ!*W66-HEO7"ZG_,*M"S<$W8!$,,)X 1)7B0@F(K@K$;S6 MIGHB@:$D<(&[J1 3
8S=K9E$@$D$*^!;%[RB[7C>*7Q(!)A%@(GZ'$(\]D DPB MP$0$#RF"20281(") ,XU!5-,S@"3"/#MB]]Q-3^%%;\D DPBP$3\]NA^%!/\ M9V+]WK[X'>6,BHWBEUB_Q/HEXGDO9P++&-?&$T6;
(614\#=E'8FFII]P*PZP05P-U&N@)KB?$* M9;P2IGL33'=9MN*2R;A',QF7VULR:@6Q$W7Y M!HG,P[7GV9SM"-T(T_GLUI2L4I(W<0 N(?G#+1H*2HT Z_*!O+O=27G&,9VV M>V>F YD/RD>G?
H9^<#XZU(']:_*1[]S#B]E3Y!J@7/-91;HQDB?Q>>;4#K1\ MUXLDY'PEZ3S0^239?D6SOLN IL[,P [6"9\6:5#UP1M-3A5#G2HFK)*B?@!%HK^",D+G<9
MH?!F8SI&NF!]R\F(\'OW@Q>PINN+5TC5QK*ZX9L;\>'_;,"R][_=V]^,QA;^ MO'H]3? ?0]'HTWOYY0/>@#;5163@Y>P C) @@6!]>H\!NTBE4I\FC&'.%*PS M!I@[/S!L=F(R72S/!M-
STQ;&PMJFOX@S70P4P\^,F-'\KJ!P8>=?[_D0'> MS@B*/,2_@AI94&"?C(F@NK^0&0AC69EIV/0-\]PASQ%Z>SB?_^;+60_?GH/ M"UY\>C^YV#_L]"/_EZ]@3$L8(B:3N?B$,6A_GZZ:,;4)6=G^
M3*:OF5C'6S]EB5S!%!F_W/F>;NOZ9@V.,U+11_?F!R&RM 46?(B E:Q'K97 MIL^SYWG[C6RQ+6OUU[>,_9Q!MC@-+QP5X"V#_U+^X;]6[M*MZI5K]US]?W
M_8N3W4FG5KUOU[OU6B=5;5PQM9_5SY7&38VI-N_NZIU.O=G8O#WN^+;'6=O[M4>E\KC=NNLU&,G5U7CUGN&P^5]Z\I41N]L)MU\WV78]N"!;R17KIE;,%'L*. M9B9SI8E3<
BAM*@G0LB79;-LKT?^5,;QV%SY/;]\Z%^W'VM%O!RV@*]F$A]\ M%AG+'VNC@3^E:&J+V&,NO&";(+WS,;.&%4 'QL\7??WSR[8;,8;L;*+;RQX MYBVSS['"
[F>;K(]MODVOOX]T9=9&$TTW@SFH\HA^%W^YY,OW?&P,&FCZ6##_M/9-?S]]35.0H)KZ%/E8*Q_$6CX8@2#E8]P<06CI;[=5]K=6OOV%],NM9KM M+M,Z;W?N*XTNTVTR6'5WL7YF6)[1=(;-
_R,]8[3!:1*W^[F66I@BQF.**M4N MT[QFV#*?.\W-!4F=*?05A+^E*/BGHJP._SW#K 5_GPB29N/\]\OV<;]GC78]: MH@@3 X-C_XE$)9],/?KZ3T@W95%0;&11S]6*O" MQ-E&'G;Q7]I<:SJ!W1PAYI%)X-
4"4F,7]_P/GW3(DF!<8!&N;;+U[_ZO8 MN+ROYW>B;20H+L+OC21A-D,XHE5]2[<0I'0\@)Y==-#$1)D>/IM>VF7-M\MK MV<#D_H4_=HU_8@3O\Y>2[9:>IF4)E7=CEXM!^_"!!]
D57V4B;OX,GZ8/!9+SY\NMSS]B^C.-SJX>*)3<5 M_M2"0_&6&S97*? ABX7_I-!%"%.?%;2O_$_+8_1R5]W!4&PUEPX12Q@8F=#!7 MR8.!|"A?
*^6BN!NV*B^SE1<.R%%W:[5V]7/JNMUL8(^BW6']C6]SC7TH'+%? MO3F_I_:"\9."M""74!&=]#!" 9C3) (AP(2(V-*F@8CCHB=>W>;>_T+O:G@ M-*$WK1AI1[GRG]V4M3KPH $>S =F,ID@710
77Z=PGIT2ET5-1U'1Z1-FM13 M5[4ICK!F54U:H6)NK^N_KK_-NW_NT"[\K(R!1#@^,M%$UYY]/R,%I==UD%K MX3Z[D) B/ N0[]^C9V)QN\,IK"M5S>W=,?%)9L!.3H^1E[FUZN'6KO!2MTY=
M14+Y=0[65_ZW5GL>5G_D1SLQA1R[S(8K #]]8-D,QV;Y7*$0Q=\ZAB 1X^I4 MC-,_1/!=IY&;_Z?IC(;C3YWY,]5E0Y)%)HOD4,0=RHXD-V*,&5O41*]CPG M/W,['ELJO$,KM+?(PO7S]GGG/!
(/6\.Y])/E6;_*)+ WM/,E1GU;86CB-4=V M-DY(COU^2]'CMU0D24>&8?WG5E81N\)GF4RNOS_RO^<;K)"'+?LLP0 6GZ6403:OXCTV]]SVKP11]
MF(P;7[*YRZZQ&X+R*PFZ@.3LXD>S>75YW_ZU@B1I2@@WIF)'D-;7B2O6U%LX MAL,NR8K0\>;[3?;F\\#KY<$KA8ZYE>CR 7QVH6+&F&GZPR8VWI4WE82/^Q=9
M/HA56QKF&>6W/%F=X[A7]UGE]YX?\(7=B&U^)1]ZH(L5N9K@L'RE1?PR! MX]Y=90MA-,@9,!,=RZT\$10&O2"1S^#/\9>)3+>[2:!_2QQ;_&BD3*@R4A3:.2A%2: MP;*B3,'>,
(*,!*S$)+1T@,E9VA(\B0I^:K5^"_MJ(?5F<1VAKO1CYZS=/?W M,??EV<*%\M)J2:_&+T:XH>Y"$=28BCRT/LO1X/)O';;DU5$0PC.: Z5EI!R8--]MJ+.(+1+@S6#C]&
MLCABVHX*^6O==#I6C4!'9]NEF?_)GD,E"=,2=.:[H$S1*?B\I^.==T>4(1N5 MSE7E#T4Z*)NU4G]A' EC@@GR_T9(XX0
M%B>X&)"1*6E<]5ZRP0C,,W:=,@^]]HP_C@0#TTS"OS"F$'4]!B.A@:S21!C87#A9/$Z%_##]IFXI\]3F60 MFV%\U1AIIP] S%_]@NF'_5DPECF:O&SMX1U6^PAA%$_[?_.X'GR*'X)H+#6@?
X"@P!!@!0,DREG&4F8&>=+"1UO M 5AUJNOX9=K0A5>$0YO5?1(%X>'+RW-1=L[+NTGN!%38!\-S=O$+QA\$9ZPL MH<7&W9;K$Q6!OTA^@:\Q2X]ET\1"@!3,VKJF0E2FS-
(,PB':C*F#YXA9!8XA MK@13H*TB/OE>+ (B,]$,T^4,]O S:A"R* D4!]G>*@>S" M60V7_;@*//)K]J/IV,8'+/!22^#9SX'<6L^N -5^THY46*Z?X6ROP\EU$;_T MGRI!/HYUWB5I\&-,@T>&F-I_0O@66)T
NL3-2SIUNY;1XTEQ'R,=*@OL$W 3 M"KPV!?S>4FFI732]UG/!8&L=*R_?[2]5G5B5U[4JKW @U[$<'P!UR?E9BDN\DD;> MO9P;LHJ,%5D$H5Y^_EGMWW1]2M=0LVPX0/;RSSP;9I?
DVCN5^"VFN4Z$UB] M[O,2KWGKQ>TW;\A+5?L,,^A[L0<7 [9^X>=;'>?"8OB9+|_(!!0B_ER M89@O.6D\4' \2*V.0Z$"D.;.S*9C#,AVD1P7B%!:@F^I" +&?
KH@;,UQ@C[M2HY&_2?@_-23E<#$?^<](VMH2WJX[+7Y\ 5; 4K]ZV 5_+E>*@GM[_>YX4[-M?I *#NCH<<,8VNPG/\4C29Q3:RX9N>%B'SA=8M&:X(X2BI'MR 8M_]==75] MLB.'SFS1BR^];]$Q
O%"KFK?9U+M]R?5]OZWBT+.&E%4 M*THT/LLUX;X]%5YR.SGKY3WMOGX8@F]3)X+,/$%-LE.E(/'+8$;[GAUU:(D\ M%DC]_).S^,=2EE1/!C//]R]??CQ>?KF[4G;3@\9[>G0] -![>!*&.!#7/H4
MBAWWKOZ!69_<]HW*Y.>/Z>Z.10!'@]8+\(4@?>.&<4-Y?]\+.U+@G=0%Q&VT MAQ8< 7]S$:--39*S@N25[1Y8,1ZM_+8;<1D1?>)"CY$8GPP=,3(;]AH(
M8YC,A!0DB230@M'3'Y@*>:2A/9$!T]EBF@$>3<-+,F*>X5\N0#843I*/$^:C METTU%V_VY'IO(DM4FE@6V_!Y1S/_L%BR^()=L%84G1-(,1;6*[*7+/XF4?H M*O;ET"P6NJ)/F(K>E G&NJ29$A+EL:"
<,=8?C'_/ZHWK,P8N;R)+VG=G\7PZ MSQ;3Q5+1%BL;7N>HT;;>@*$0!S@\ZVBDZCF%=/+U%3W2XI/Q M^,?Y2]WEZ*S&5&%RQ\%D@*A4CW1634%UJ)2,=',G]5).8URJNHDL-8>6Z
MDBKD)5;.I5>O<865)VO,N39\! ;&0S#8YD?\]N,4]3 \GB5]]G[/,OY7Q[;; MJ]%L@7LLB0>9.B/D39MY/+F>Z?!FQ9>=H$5+7 T4,GQ?A"AJ0-QP/;]EO\W&E MC4_;[;!]#NO&NR7$Z4AXR/015C48P
E!MAM9A6!1<]U<_&-6[K='W0S[QZN M7DL2IP'K[S-!NI%O]Q!2]"^ZE ML[L]:GO-'%QPCLJUM\+2D->-B KJ@*10^\$ATRX8?RO&/M8(_H1!M7GMM=,E
M6R5U^UC:4TE\^_7^X;"[-\'&T!BE_^_V+&^R0P(QWB@_\6_O1P M4 !95'#^)H]H#_XEH#U+(22DH Q:SF,X((=-@O#>BI-_$*ID;TY@]]>^TT
MX+DT;Z(U#\'.Q0S+)HHSX;5$<1Y4<1:,+NI8$3+<.7,GJ,*O2$2G@/-*-L2I M84#1'CB9%5509H9,G-6%*@5=2YNAX9DV,J:*/W,;Z-57XW66R[!]T)\P6Z]8 M#ZM8BY9BY<^9;]
7+6,'$Z:C@H[$/U#LOX.*531C"K79E;XV-;WV"*8M&P^) MWGP]O9DHS833$]5Y6*59LI1F[AR\2E/7%(,HS):NB4@"'9EHQ%?4B!DVR6TF MS)8HQ==6BGV?
7F39LXM6I=UEZG4FPS2[GVMMIMZX;K;O*MUZLT%UX]]*^1-6 M/32K)HKO)$!]QV2HK1ZRV6+6^Q<,[47D9R7S83]_5WZT)?%CPP,4**(;VB 3LXS#:W>8>]/;;+>;[4]W=G6:NW6]O%)K
M>G%/D8]V=&'OFP](C M,JM*YKS(C#&M(YP*]D_KD&1CH@@8;:]FHO"300-F47A'NX1_U%D:PPM4^/>. M6R W5V9=PZY^M$KRU6"8_37_^2W/2E,7Q#[Q -W=GL]P)Y[%_3F_2_E0?/W M[-
L?/7^(/2T[^-NPP/NMD;0%!OS&TW)PEBTMC;W%_<3T6=V^]\('EJ8R<7 MK\V:KX/U@$D,AT4Z7)HYC.>OCC$! ^;"6 MM5C!HP2,")I"D%1=]H;>MHDKP'^@G?A(4Z+VHF%5!U^'. M))
(XP"3FZKVQ4*G.[[X]]N:Z-KC[,^AGVW_^[$6P;4Z%,5!GUO%)"[J_7Y M1$4/*E)$^ -[,2/+N?^@6)\]S[%!G[K?U:LR?]OU[#H%CQFU:+ AU $6#&O M-F#,;]X0R"31=RQ70Y<%)M\'X#L1/I6\
[(7R&Y3)P+Z/I6'' M!"^AG4OGBOET.5_:'=H#A3]GUN/TEC.CC1TLO'4E7VK10#];*,@*MN/8D-6%ZC'2(8HG)\]&9SI70V MNUDC'L@1VS'Z@GDRNP7ZLI@GL[DMT1=H10HN7=;2T420I=K+!-
3V)@VX0X M3XS@-R;5T>R!FQFERUSNU1Q'_RX#!^.>75B[81#=#]UOULB5D(GYH@=O<5(MF]OCS"CKA&+<$/2,8 +B^Z'Y7+K(;?9" \<;AT7>7T^T8*43VXLM%]+%"TF;- M$X-F@6HHNRHI
0]GBS6.:6DQ0%N$2+;(C @7]BT)L)X5/YXN%-)LK[%EE[-#'-XD MWU$!$ZBO.8_;]$TP.68M15!-;+ @_3*!LV[L]D,NN;Y0VGKA2WM\-U+-QSCN M8NB<]K7\@B1+!Y\]PD'CAW7X"\]"[%#<
XKSA#9]*.,O2+C+EBM\;'56CF= M+V^+NT)NG))D#6_0QW>(L% ;4!,':5<14=>I&&#%#P]+ MI7011'L7K+R;LE:!$>|-316=F,(M45]4=*W]_O8\ON/V9Y161 U7:*(9LNE. M3KSQT"&0(A'$-
>RM@TLONCTL;T)]TN* >:<*#; MX3=?^?SRK.D/V=?(<(9-.7!P>:.== BG,:Q7HG(C>8V1M&E?0:%.<2,N$B&< M#:\EBFS\1$.Y7$YG^>B)!K+%^*KBC9(G4#T48]9MT6OM,E,A1*%)LL!()+G;M?
VU=-HV?@O0M3@P8 M)ZMBU[T]"]"2XM=[M4]'>M(9-]9FO>.&V.N_Z?3FTGC&_O[]H_!4EE^[$LZF M_D33B3^E#1C-EV;S&2-F!=''2X[=ECLB/S/&.>"E^Y4VNVG"X77CMU?1#,!?K) MI?
AA#,NE^7QY'^FURX"ZTY8P]Y0Y>N7L\]G-_[E]7TG?2@Z)9ZPA8"Y:GV'6A.. @LE8**0K<6I]D9TA7/0]DI:] M%;]$%6[J3+W-%?+J_W6%OSA:U=A;@3]W=F\V+K]10!-&-?6;"L^EB>;.3S+8
MT2D5K"YB5\^QN31;WDNMTL96D&#E03+:EO; ;F2NF;7>7/SYXW]8^UP=[^DH M.4Q]VU\XYP]"#FJ]MI+P^)7RQ4(Z6^1/TSIO(VKEV#$"5RRF:7X3O?F 4[;*[LD\&0.)&?DE
M,Y(E">%G,]4Y^;6O*UCBN;,+C&>H6*+!A,HBQ#F/+\<.%_/Y-%_8;)VYRCJ6^4]G-O ;^-,;FR5Y-_\,4]3]HCZ +-RK'+ M[<+Z1HGR"$.<8#41/S3E.1R;[KM?:=(6_7@=HZ,"9J,7MNY /LO&.9(/7>4?
M=*Z." C)05H^/'R\O(M MUT6/\S_(F=6PXO/+ R-68#;,YZU1$>511]%F7W__#O7Y]8-2-@,0VIRSV; 9 M]7KCVFLS6N1+&P=;Q(4VR+ZV/V:36TV7-8*/)T".S*,P8L\9\I1N9(T^4Y
MDA@_GUP&\PG]=L5Y+X]46,R::*Q7D'#%?Q!OFZXOK[.IOGHG[?8\ZHTOKM2 M[JXYN1_A\V$)[P<@ GN&K1;W$CPR:X;",) EV;")KV (V6PVG:7_C\R3E"1I M1C:,*9*(!B9="%/3,/$?(%WAYY#
=@ZIDW4"F'.2Y9L"I_6+W]CUW$$A669, M=MUGFPMX [XM*VU9' WI[B>O>[9KVY$)3W<>GBW9L/6O.V%+%X[B@!A/L=L@ M\GPZSO;3Q<#A8^$'Z?@9H1R-_RSMI#$>*DX?];-
Z'Z7:OO7_VMZ]Y43.-7S?C MPD'X+UCIQ+.#>^*_8!"WT]S ?]ERFHO-?_Q!CU+\[G<$DO>[9(A/-G-1Y9' M>?(4"EW!"N$6G0A\]?H>G3BM&H> H"-85E)8@2W6U*DQD4U!<^_4'9D/SZ.]
M*WS^\B7.B-ZM:AH7P(PP2:#!4FD\!ZV:&@C#L-+%Q>_E)$CUC!=*F];171: M: R4,BZVDB)H+&+%SNU%]MR-)VUD"K**I)J@]JYCYC8HH3L=3!<+/*S201=GT MRUZ^=MO._?C*21/EV$X@7;9
M%0O8V=D9X<7[Q+BA=(S$>HJUQ"A*^32I=QFA1.->!MSL,NI=:N2:S+3)K*] ML6GI'?=I:.GWD_2S-6IG]_TC.@TU5F;[3YB/U[!O;Q$BZ)P@OX@)BP*IC& M<>ERB!: Y+PT
KV"U4R$.M%5]++R)2$*V9(U#=PUE:)T.%L%;_86G^A[&=* M6ZN\)-)N_OL:YM6&GRMXSCT+Q-4#'5_^G/!1A$UDCV(,[]<2K[4$RU^)U2!AH
M(O@(B8/5)N)59E_8=^IN<87CZIMEE]3)ZUSH>)H]Z2"4$D11&^,%X0H31M5, MO("I =M95TB*[BLD!I(]J*(,'K=]WZ1Q_A8P$4#3M;+G M6H]E^=Y\6BJW"[.A>315?,"X4'^MUT-NFA8*O1\
[2*Y_9+-MS??[< MF,RRSS\>.RJ7\EO54'D@FX7H;;_1-[=WJ]U+_.WGAK;Y_1EZM'[57ZN?7> M^/O+9NFF?'\JEK\7+OML^83I5]4*GKIQO^\;6C9]E>UB%Z?;B1BV]?= MPXM;58+@;
<@]8L98%XT,!F&MAK68^T;MH$]L^<7N2$>1/[GU_D+]%%WKVAA[<:33Z8=LC]I3 R,3Z;4749D"96 F M+OY'Z@HOO;%0G7W.*8+1]]P&%7X*+<&QR#GMZT+
[Q),_6\$<&V=_&Z!6*KE>T/BP&//DG8!ZD5G\EVF)ZKO'G M(*;SA3SV7D^TKR@;'C>Y@;%OKF+3A3+&(K?M..>3P.(FKRKV;,4<]]I*(;Z6 M>@,XW."BY&)W,>5S7+K
[^76O]PGQV(@01='>)]7V&M3-'+EI[7EA>]7OWW_MW2P^#>X^Q\FFA*I_C%+K;D--;AZE!=RQTX?'7C.]EDSQ3$TN=I(DERVG2VQ0 MN^]&[/^%Y>
[12;?!NN5B)SER?!9]")MS6PGA8LO<,H.:BYVF8'DVS>WGPO>$ M<"&L>/Q$ Y]/\^Q>.H,V7K+I,#).)"=W>V.36O2Q89V3U"K2<-O_.S7XPSU MW&LG+6UQ>/,7'2S1*;8]WR)T+!>A;S9I8-
LEP399]=@Q*H?CTWR:*R;DVK%\ MK;7=]:]9+A72++N7&RK^6F)ML-?YV%%WH5A,E_-'-UPW.0U(@-G[;4"@[U@G M]2]WFN%X^ UCH5&_7;NC@]]>5>;#;YQ Z&.#CF>UG7M P9USQC?,%8C
'?Q M/+]\A S-BID):;8SI?B9+/?G082-WA9^1W,E$GG.6P40N2]3A:)&WR? /;S M73BX4"V|V;Z>+ HW>201,@@K4)AG^70I1*G2A0F#D@"S+$ $^B U%P.R(T@
MJR!L3;6N/B'#)$U;;K_CF_ZYV^CT]\] 7NL:\08R&=D!QE?)>Y"CRD DO?0U M8F>/BJ5TN;SM.>71(W"3GQ$[FU,NIW,A;GTZX%:A$'|F<[A:M+FZ1GNJD:VP"=7-6[-T^LL36&+5H&$H^-P
M='ZG')W,5TR .4)@-I;7X^#1GTIW_M7OH]K?[96W%EV+H+:X0@A+KN M1/H]@3WNB8,;4GL>DL3TCZ*,HPU.ZQ6S?#H7P@4//6APX\#R-TZT#9%Z(4*D
MOO)$(,>5TKD8Q\0)T>*=0!2BC&5=0;1"(5UBHY=0)B2+=+^"1C#*&-9ADN2*7 M9D.TD40E6)=+B\L <(3 [/) ;H)(N/4,6:>^,K$QA,)Y[.7SD]E31NC0/9HF? MMI+SWR[HGBYCWWIBWVU+D.*ZT]
(W$N]*$=7*A+W]\2(ZMPLV5F&-R3!D.;PX M%<$PZ.?VF/*[7RL^_?W[!;RCXV;OAU^OOTU_OS\(MY/F'RO*>"VOV?$7]OWK7ST]V]?2#5]O#4]A=6PL>8M\;#%H@N>-Y_<5(=XH&
M&K>05S*OH%=,L"/=,[H>]:QY-BAD67O=X]_]:?D%,AM:"2W-KI2>VX-&MM_M M_%.20D5(RBAI5VSZ,>/&Q']ZDS#]=ZWH(0V1+'%2-?*OI8*V@1TI(MF-RJ@ MH/ [44 A%! ?
P0OR#9C]HOZZ,C6D?VF=F +B(GE!OEVSG8?/TWI?[-\] #4* M:$-&I0VO'\M'V@MT#MTW+ !"7|$D13A10" 64B^ !^;9 /Q1>)KG:=/I4D1Q1 MI.'LRA#V&-1//I+_X]MSS;ALYK^T6H_?
%WN^VA2XG[3RV9!;+.TPDMFI]\,6 MZ!VZ;%CY!-U>N%?EDV1-$V".$)C7RYK^0 EUKD"_@)<<80E&";B:P./XC48 M;6H:I]#"&@>RVQ&I?"(;;[C#RL[T(?
+F>&F..9>RG>#KISHP[BYY'*DK,@!M.$F^"-% M@T&Z,.?GT]GBZ^63WZPNS._-_3E7@LW@U_3V?-7|'AS>C"PDY\0Q^B9N/O MYE/AY^C'MT07QDYKER,E:0[C&:Z%?
SO/EOB%Q72QE/B%.SUEB^L7^A+!+|+$ ME-J*IMR|\5U8VXE?Z$.4Z,&:6G@_%3-Q N8&O"?=;.TZ+Y1 M>B"K@BK*@H(_|]M?7Z;>P^@6^K3?V4RS+6,%.D#T\R\#ZC3@_3A%]HC?RGUD
MO@O*%/^)8S(9RR!+&/8IE*ZR8RI3:SA_]8/[!<*Y#K;S^X2+N@+VO M.3[\ 7]ZHH#"DH6W[W?;BS:^/O(=<&<3_/V*+O1E\2/3P,J1XKBA 3IS[I?> MVV_!;Q;ZP58.G]YCM <00$?"0Z:/L!+$2T\
(^=Q(+P0@G6+#85D7(RX89.+Y MH!M,_)_PPKZX_L_4..7!+%%7MLZSI3PIY?-]F>V"6K7.K5*N_HY==UN-KKU M6KO*#U!O59KO5;%>ZM:O3W&W55L&]EL%=QS%"[X<,=\C3<%ZP/C?
_RYO;/$C M4WN$.S\LB'A;CBX,J1 M:":D1/^?)R/WV-)Z)"L6V #M3 M$"YS/2>^=^A*B5C%;C;&)"9SY44V%H]523C>,37QX9(6&^>?52X88L=S.I_MMD)&9)Q-HU\3M3MD<)&14<'?
@QA34%]"+-75]C"134&O$=.:#;YFN?D?H2QM MA1AKV<-AAHV,F38R!:R5);M&ST:),1U]N\H7ORA7RE8HN4(#690/R"R%WEQ1 MAIW^]?3FEMV.O.0]E<@[[3F(C955>]!XA>UXF:;SB)Y;>]M#
F7HRHK\ET. MP:":
F&%FM_^+ CHG(RLTICO:#!9$<7I>*] K_#*4,5<*G258N(]; OP M82S\Z5G>TS.,AS%_VPAM1&V2O+UBDAI_&5C^A5P>
(S;U5HA(G<:>W.G-'_CZ MH_A4ON&KPEYFA%NQ8C[_GQ6Q^:6@"*J(TLP709WB$)AA::;_SXK60MQ_UAYQ MVZ'I?
T(<93L'K"5WL]7R$2I&TZK]NK .^=K 3;ZKZ;]_<7VQ]+CZM2RLT /7 M,S\Z_Q-\OK[V/"'#B6'%:
[PQK@,RV5X)]3H+0'L.T$,.W9]Y0DBF\^F^?+F M$4912+L[GEE]]]N*
DLRN!,2Q)_7FN;9S6/I_U[$KTTL^(@0_Y3KDAD(!M8 M:7Z"I-C0XAB3%L&I#!\1PI:FK9F!QW%I/E](YXI;4F.I'_FT9<*'Z-
A78>32 MQ7(A72KL4.TDE_8DP"3 A)VXS/60B'UO;6R%!'7#F"+I;]ICI=I"N]Q)I&*% M_.Z'H.L"]F&;@]H+TD790%)O?
O/R6$&/K:I:V<]MV(%1@OU]..QZMJ#:"<87 M04!Q(V*HTVHC98&2O48'XN7SR!C_Z2BC1700A(VE4"&T06C7KML?

HFTY7]* M6 >6W:ZBG,^7T]5R4+/ 44AN=*2O%< =HYZ-'3N65%S7,ZXT**O^^
M;O*2%,,AV.Z.]K"W,!SQ+3&9$+#_S=?C<&PIN? I-*[*":YV?SU&I"04M_U4 M__BW9ZR@Z<;A>'\5.7WTBN "OS*]
@_Z"C$.^F]]^4_S:=K],OT]5?]O%;:O MO#O),=U:+A#>A+#7Z7)=9 4NUQ\-UO8;_-\U?SUV[^_BU>;CP9CMN3NX,@P
M8LS);=^ O;+I, 3S'%V']:XFB.XBVQ^5E/P61X_YS2F;A(#;$C!".H*+'7?" M$6:!SZ5SY?3*HU
^72SETF5^AX)ZZF.:=TA/'\$B MG%W[56DISZ7+[)YD;ZG+/A70^^KN? W=$F4MLN^>I*0D_R E^5%]Z'?7H&=5 MXT?
J!W"U\QT1XI,*]2"/ZG@3RKXDPK^M_=V8&*O'#C0>F,%_^^;AM[Z_=A] M*.)15?
#G_*RXSPI^+FP%OQ^].TG3M5Z,7+W_G;^2^2.HX.>CE8_S82/%K=-Q M)U&]O*,(+QH)
(AP9Q4FC_;V(CY#^XF.70D'Z]UC$,L"]$5+L*FT5O8*?CU 2 MM3)MA:U9(9#*OCY+3+W9/YMB*1@4L&?), LX*?F],L*XF
ML3D!T705]\^[^E5K7/\]_&XH.XT7/#7Z&OWL3E"Z\/*O-N^;7> MO&1F;^^>;F5YCHZX3'_I;._09?]%L&7Z>XG]GQK\-
_0PZ(H"=\1E^A'#S?S6 M=T:NOB%*FO\()S<>>V<&E2QR7+N(/,R>FC=[)^_7BNCY :9F('S25>0 MN^_!V,$-
,I>5ER);GGZM_#[!XO0%+OA=7R#SQ?@\G4O/KXI%\ O,E'=V M@4SG9?R]6Y7$TL)!?()-UJA^A62QK0UK9.1).E MI $M:4
[&MM[>]:Q, 8P:4 [@@:T*VN043':%3+7>5&L9]G/E6^E0S>@356T M8(^E],A;S/[%T[KUX+:DU M?
Y,UP6'KIPMKKHY(<.7#55*7OY,IXL7X0^$+VX_CS!6Y-!OBSI>DUCP&,7W4 MVKXS8#_4"DS;Y6.D[6]]>5&[^OKU3XD?
W0W[M[>1[4 MC-O1K_[#$9>71QP=7@P[@"29 O_]E8\125F(W1R=3(%_'0)&R$,68F=FDBGP M1S<%OKB#NXB2*?!
[E5$?P>+?QYE,@4^FP!]?75VD0>P 4_@/.<5S2=5<4C5W M$@522=5<4C675,V=[MN!Z;>B-
5>@&&UL^[U/K>$15,WEHI5LE<(&=EL/9SB)B]%=]?M&(4$QPI%.G*$*?R_B
M(V2KBK%+%Z,,0S@)4NQLB$'D]KGB]H.98(A!*'),;]@]\9S.P''=H)U58"Q>G M?% 7QQPTLK/23]8<%C>Z.$?
BUX15)5O[-;LMPUM2$4?BI)1BCRL)YZ2\$2Q& M\#A*L2_.B.)QO#Y>#^<^E"+<.[T#]V&-SW#WL%PS$(A76*3HOF]$--
'K1UB0SV8]\)GLY=C(FFGN'-%C*>3S\:.WU_#Z?RT@VN MK-8[^**_^()W NT>]@Y"*4$4L=\H]#-
,/^R>FW@!4P/FL][B$=U7 M\0QD%;N(L]#@S]N7\IR?YMX#Z);Z]%^9#',M(T7ZP+2$(9;4#G]<(NP4?V#R
M'QER*3MF;B:3L72')#^%/>C8Q*H% "I:)W*X_N* O:^IA<'P!:W>8>]/:;+>:[4]W=G6;NW6N1DNM
MN1]M*A@CYEK1GHW3W*3K%K?3W$"0/$6],N^RQ[)<;VY^GGVYE+[7AKG2UE?F M+?CB;[LHSTEFE@N]@#NUYX.?]
[]G7;;8RI:W:HT.@V MOV\UQ/M;4^QJV[5]AQESM^O+PL(.+@F"]UK3&;CG$D>PZZZY#/K4IY.=,'$(
M!CP(3_GK52^]];]@ZE]Z]B1C>E_.[K%BK*O-"=(%$R]=P<'KDVS*R*CT#1-B MV9Y\V9NCX;"H_S!%MBB]2ETK3*O "GE
%/) U\;,9D/(" Z('XZP8OBH@_ED MA\K*\F49;\>Q4)U+DR^]>7F"65.I5'\6_NRN.LIF8 #5:U=K([QE45:0!Q%=+;)RS[)8O5?
N M.MFGT4WAYTS8BWKWBCV[%+931+@V"/DUW=XBHUI* 'X*?Q;!-DS!HY?5Q##L MS#"X+X.X0A.,?UD
=]ZH4F6L86Z8D[]BGN$69@+]& GY\E7=&"G[,A/<"GYQ MPT@N8Q=<4.X9Z>NUTQKLQ;0,\2^4*]?SI=?
N_3T0&C>I_/@3%[+I7&GS$4\, MF>-[2,1*3QO#]=SXU3F2;@19;:IW@OZ 2&*D@Y_0B5H#R6OT)+DW-BSID\3+
MYFWG]_ZHL*^@N%<)H@TY,Q1 (:N06;* 9PP'^GVS4KA>()Y;TPMT("E8X>NT M:]?
M#YNY(HXH<+%K1[A"FH_5;;S.S>$64G"OZC'DH/Y3?\H]5?-Y%.?:T]VL MT +@TV#_-7?M'"'[AV&'6 (0OV(_F^;+
<6S!.@$HN5POQUV_18*!VH"CY@![M\A7#0*;;!M9>)I#7]OICU9;Z5;C[^G-\&^- MBS_#+%M,
<]RV3L8I(W>3R,;W@;/E=#;$W11;QDPD[C;PPM>:?]5-^^9@]E1$ M<8&UXAGN0%E,$8U]Z 7>19K=E
MDU/!XP9IXR/<-N'%8AFPN.U4I%5NHB-L=5740==<(?I?5YK+*K-UY;BXR]X\ M?_E5'S6^7(O=P@%S7-61H
X1Y*V(>31(WD*1A;ZL))FKV(R17:N9C MMU86RNE"=HNP\^1PN4D]Q_8S.1S!%W)[B.#72&!+1Q-!E][0 .G8_["30,?
V6@M\NL#&R?#'EV=;A[6$&2@PR,V+HCY%TNW" MDP%Y7D0\ S.K-W]J1K6[PUDKX038!I:94&CI41&%UY']@_KN\1
<3X9SL3._M;!ISZ;$&1['-<&0,;Y#CW/9U!7D.+NG;L4#GUPIT%>\3OO-#-D=5DHE'NHV(
MF5>21]=%+5NNO73Z^RD%"WOV2_4O]I]?D#K=>PXC9'8]ESNZ['I4P5C+"K$D
M8HN[-8K\3@;;^H7A.EPB@20S5XA!I_A]*MZ7:GEMAS=NA^']%2,_':#Q0QA] M)ZB]Z+ M'7V:H>6WORZZQ.?
3I1!GW8GZVI*8&_17?@>S<]-%T&!L]+D]H378MD[0 M\9XY'!4P&P] 5O!B77U"QIH6GU'QVGC\/7_*BX,#M?C(-H1))?
<.V:$ES*R> M@8KX.)5UA!D#JR5SUE($U:RH$@Q+F< CX$)8&?A&M75Y/[^Y+O;F<_Y:%6]E MS\-R' \B5*"SZK"T-
=7%D0 Y=VW #.07["8<0\H]/$9C6N[89SO%$)T_1Y=C MWQ*=FVQG_*JA-%?8]3$9OTXP5Y2Z!LCD]^\-A1O,.EQG/_<-
QQ#/8ZYYS:^Y M*N,X\]6A>"...!1BE_7DTSD^E^9+FR?ZQT],8\D7$9(,V$M'(%GY.\&$[=#9.9C$#901=1B139>L697PZ5
M*QO8$":YLNUK >S>4\P-;B^L]H)T4390<]"<@/@;V"7[(>BZ0/MY6"?DD,Q\ M;]XUAMSEH'5[7]O;((1((0>X$!-K-
Y1GD+4?B$,TNB-2"_=L[>F$C<^:#M((M1(WG3!1C5]25TH5B]*'M?U=XM!,:;O >BK&'[^=*N70^NS/_+U*[87C;9=4&
M6'&/'0L1K?5E<#NJ/'TNMVN':Q?>% --K!TR_5F@W7MS/+_!9PZ@<$S-%;L) M/M%31=B^VI5/%[/Y=)G?
@CZ)"3@*$W"]*Q/@,.F5;$PT0U!N,,DF^ W\=^!1 M69TBR:IWQ!%93^[0HY=7R8^MB""JJU0\(YA,'PUE%:[P@G3(A
CFFW5!7Y/R M@;=N\1F6R_"L5U&5HE0HKSR,S!6QIL]7DF#D-#B!"^2$* 7.*S@!]$4V7=[=
MJ4VD*LO7U:VUV+HUQ&7!P0K5NAIPK4I%,!DAK#(]Y;L&#RY%@6YY:0?%'6RZ MD,.>>7*_[TFQ0V
<4(J0W5O%#GFXAK04O=(GTHWJR?66Q[*3H[KL\MAHNO;J MRT)R]>6R)[&SJR\+R=67QR$#)W/-H._JR_S;OOJR
6HZA=7TBKL.KQTUO;CU
M\#1WZMQ/E\+!'D.O=#O%?;S)>SRID]B8CO$[8NB3!82=SPE8#GV*?!YLXD55$E4"*/6<6JH_@A*OVYE]Y]/3\YZ75$N6S
M"X(7B--;.C(P7UBCV2U">O^S1Y;< ZI>SV#M ?CNR.=[3VT-$<7Y9D;"$V+Z M"*G,!"85ZK1] !;6)0&X=@<8A&\
M"@3+B,%0PWMT8>\7!YIFTK!%1Z1UCM0- >@9"P@DP4'+HP=94LJDUD%18D M'5LJ=N3@U^D4?%9PW5(&Y)"Q
.)OJAAB'H,_(5@1D(L@XD<"3,11EK%Q+> M*%[0F(HCSZJ8:/!A >\8;TR!P\,K!M=S9&. MZ(3##7>
[$MM)/@5XM:''G(NAD[#+;\I/R$:Q_1%S))@8'S.\"S(X$;(9*?O+ M QF2",P,"3I\#X"[PJO2[['T>^<,YO)5[-
P7%,*@Q@C!O1%$1?E7X#$6#8I$ MC'8,HD1*6X%'&)>T;) 1NC;9#3QUSL!]N(.I3H:ZNO@IC7<^P#_"[&I2N-
VTTT703[HO!GQ]C+9#YBK^G4+J"A&#>$73, M&]AX8I%$NL' 37_Z!)0_0!",>$R2):SM*B0_!H7^WN-
E7.S>Z2CYG8X&D3HH M-G62<%ZOH^"NREQZN#!J'!MY6+*D5BL4V]\L*R#+^C*5YK.>JU&=Q/ ,ZQPN#!(X'8X 9
MQX;/(C]CH"$H2^9Y)..E92.%U"$VL(YVE- 34C0R[X'8,=HQ;9W3FT@*\9!E0 ML+E(MFR-
"^W@*A&,*3+V6Z04_:I!W!#B49@0#M%6'.MQ 3> IZDQC/R UTL;69/K^5%9@=>,C!54CA'2O MK&O:@/Z)>9(-3?=^3\?
8S#S)6)F,95TGOZ6N.Q%(+.=(H1]2,1\-J6=KS SL M 1D?4]CG%75A8-K?PQH.$V Z9B39P,B<6>]_9-_,/8._8]$(@
77"3L_]!'[M!>K84O;45$P*^X7S!?8HASB4! Y)8893L0[H(\"SI5&HRY0&(EI=U9A3,.=@ MIU'$-EM0TBZ,
4]BEQO_5\#$A.RZ-3<<:$G<5#=5WY)_=3+ 0\!LF1XB=SA@ M'=,(9FK*]$)&&6(TP1BEE\H5TI8X0?-(G3
M$:BX)RIXCI(%S>M^"S]+K(T\)EU! *MFF"FH0\'4Q*MBA0#ZD.+$[V'@QU3,
M<5B2(2*U="BMPC5LC\2/'QJD81J/Y(E!,QQ .VROZ(0&9['S5)=\;@@Q.?X2 MQ1]"-
L8P$C#;K73C)&FKPM(5R_)8*P3R.SA^GF.WD@8RDCT ' M4F8LI4(@GC(J;!!11),4T5R5]'I"C=
<'PDTI%\C)/&%?"YP*_#$5#8FPI&1, M&TB$,2;Q/+ MW:'I%M@1V;3U\7/F!Z(K8IQ,K2'T=H8&
[M7#G\6^KDA^CR9.8HIF3&Q?%2V$M)EB2 E^E^+??)9?/V*3!;X)B\E#4J1;Q=#83?I 0)"Y,,#>]$_NROGS-->"6(-
\EZ3L@+X$&:Q)7S,J9]XH')Q)$" MA0>[&&&5,1RM4;8;5>L:S8K=4K+HF^BYM5"3X1/9,M\MCWY>
[\QHX[<4DEE;V7ZS1(/4$@U*OL++BNHO MJJJ855"EJYMJ MS.[)EL)A@HY&FB)9V0!LM0CQL/!MEITK%]TZ(-
[60C6R0""1*I6Y/&]_^\FJ M&XFTO&($BH0M0%XO2$%5Z&Z*I'9.$1J4D .>Z7A*;8.$!K(HFR$(4G$1I(U, M
0<\4DW0H2O"J"Q6O*(+]N2&32%)=A,IGQMP\\KCZ.5ZN(E(F[\2@6AAV_:]
M1%LU(9O+GR^W-.];$9XSE^":@6]';!_X$]AH4U_!,J;:($5^9X^ 88R1IIL# M.(RRSP!4C"^&Y:SSGC19RV_;J"MD3"?TV
$_X7+[R*&5G<197G%QRB(;QE18 M>+#&RN..G%Y.!W@ MZRI19'!OF$DS\C@8@*3\5"5"A&,7.Q>$M>4 C!(\2=4O9'Q
=0;=50)1I2Y MK+((&8FCRB9F@JP#EF00/,SY Z531UF,'+CB'6-\!Z>;-+9/LX)'\@H6L?O_
MFB")94>$@RD)O2W7TC8Z=$G*5MP#.:?KC;!*J"D M_-X!@%0O!8#@O.M\AH"#26"2)-4/$'Y,-03:9IDT !/7Y2L+1!(%A?
&EM2=#/!8C%-8OO M:#$:U.\]H8QAH@G-RL-)OHM_5\F+4T6!%W['U"%H7.@,R^&Q!?,CPP4\0I@1
M"R=)E9/,;5^Q*K>,CPS_CKFR0/"L2;C72N%C48!,7.X=]"MHXJ;G0-KR[]P6 M"Z"P-I^U%O>"(WDSOQ+T)XER

1B$PK9/U)[Q/1) MJR%-KV$4BE#J0HI4$2WY=7)L@!,G3Y4BYG#&+._.LY]$DQP_^!_8=TH)"U)8 M8F]@5U$'%PS(K*
[2%6E/QE0E-910?T^-"J("JIDTMTP:ZZBIP<^0PK?@55-] M^P15=K(+3[9+J0
T!I8SRZ6C:780T+']Q94/R@/+2X2B,JT/[A3-!U<"WDE9 M[]"G%XQ-BC QVZ_2GK12[!G9'8ZP'.%^2X@=A]&
;DYZCF\5,NK6YYQ:2>SS M 1147@0"NBN+70$G!!!K'9)1:O0Q+ABL248:+1AU^R-KL6-5:WG4O&N3J<4F MJ0--_H"
5;096/A0@B0K,$NK%W%14Y>[%Y-@1;L!5@HP; >6)3#+3]U3NW> MRD7&6$0<;J/'+W
:8154NIPOVZPY1F#1S$&KS*W%)A-M==*>YT2]I/ MNXW*PE#0MC[[H(4>7UC%J %[((" @G5J- D=K3^3C)AL/+S7T3-
$6%2SIVS< MV\LDVO0 P)/:#[NYQL/^+BGQM"KU->A- /U@2SKYD6559YI5XAPH4K0 A%:0
MVNE3QV]*V1X5K+1DWE=H+^\)WT##$:V58,"./X0@T#*"%[4<*-#/Q*C3(F,#
MBZP5"EO>9LH#$K,6)'V0VOV\EH=FV"X$EFB#:%X=; I&Z^)LS<)6 MBF"+.'38?7E#@A&Z9J64U*SLL6:EE-
2L'(<\),"_6O8AI%)?Y26#FR5J&>]: M3@T&SO=HN 5)Y8OL^0:T<$.=K,3A/Q^[W8I>V5U:EFI75=2SAN[8//2<:8=L[-
F#]:'\SR!-QABAKJ\GC*<+$&]E&3$TYK-"!\=BIU.6Z_O.3C7 JK(;>9:# M[ZIVH5:>SDH9H.4@
)$(P4^%4TL9F"3&8!:3JDL34Z:0>'IAG"E59:B(R^(T;55&;45R9]0= LB9<83\?X9V0"B^T=N^GFK4X@
M1T08*.P?.U^UB[CLM 5V%F2L& 6='D@%0NKH*U?)FQ_N$]7N)VV:?J#4\C$> M.1\$UJ)LMTK"9;MPSZ*Q3V"
(Z5GQJI,Z&$R5 68G' 3"#W"L)(-DJ21*2B_. MD]T'E;:86:_:1YVK(76KO'H+%G,? 9!#10'J+T6K,=/2G\N:R9OK\0)E(6,@
MZX:C8OQI:&*K9;L&,]!BPZKX"5+T0[MG/0"$5(T>*ADN0?7I1K].=!*)5/\ M*:EOD+*"UY5A<"SMN%
(K+NE!F@)*60RIZ3(6%2C?=3ZW&TTHNP::W%7:S@&$ M7R>F+)W(A-*)ENX#!E\H/P ST7B'/0KT5PB[MT?
$%NLVZB[%_JRPX5$_+)O7YZZHU[44DN2#H/;;;BYVLJUU8G>K/?,DC'-HB MRZ_'(N#U^EVE/H 'F-XS1K:9H-4;
[@&,F,554E@RFU ')[V1)9ZTJ0W;6&J6)UY;);M]9P>O9ZA MFW@!*!6IO,B&]?<[BLT[TAW=ZRV::C45:$:/7]JR\7 YNT2J.
(*$-GU]T<<) M<%OU20UD+BT%J9#FH +-VG2*(GW?WM(M17S%YCSK_7FMJG_+LOEB>8;.&%+Q
M\N]9VXTXZ!!WGT>L[:]>B;AU]]\M:B0!63TOKJS]]8*W3W?7"]Z7"U*X[*9<-VEV_BJ*!K/PA'_6=Q..G"USE<+@0Y (B:\#^.
[?]?NIX3ZT %4\L0^ 7351X(T%+PZ^8Z53A1)(F*>9SV<*^<5I M*21+; MVQU>5RY'2TX=KB45%/1'Q*E8E W;A;-T>-
F$3(&S^]TD.AD%/F+5'3JGR>^L ME@A($!)1)7MRHE<2+I"]$+]%<76V+8/J$9I04*?"0PT+G3.5@6DM8N=0+"+X
MHVT@@N5/V<71EG0N[35E1R[5/\DMM)"*9E"\953IC L:MN&9XZ-7KF\>1/,ZW M><<]LE\&SK3?MD=4;!KTL?
K#H0=\Y+)A!WPLW5O&%].E/+_*?P'YF2[V9C=M M+*9T.R': OA$" X
?)6V]J7\%IADL4B2013U*1D$2^9Z3@09M)]71DBC^9-K M9HG+I#BIR!D=RTLB=JO9G9Q!P9QY6GYC%[
S_SA@*+)@'Y.]L\8,@\^*3:B= M#+#/9G1@+,%P%O-TIO@.< 1/(Y'5"&^;,OQ+.ZU@]P%!"SPBE8_6=0-NWE[(MK?
TEZR'7P&%J%PS7TVE&1:9M*(/GNZ0\X_H3\3AT67^TH=O,3H=ND[(MW]#M M)IE.:'5WD4(O2-
*AQ=!4RTVROP%!H^]#BTL^C,"Z1^*Q6GEF.T.N6HUNQJ(\ M;2S\T71YT1XNVS8$%@="+(Z4$C!$AF_[0R[7BJ9)2$Z#
(0U\2YQP"&0&2-T'O.8 M#M_U;U56)2PDNE/@;.5E!C#VVM.) <Y.$-)32U% MV6@LB+K&.#-J@_@A&]!-*%#5;
'HBTCQFJ"$!W$D"RO0#+2YL@BC?_3SDSK M&S*UW2T/DPE0#HR#TRL)PU&L&9_DL!)J[RW?'70 YKI?3#*X
M/PVFPRW.8ZPG:,>GQ8@^:&P0[#I^T$1 #%*:3P=^TP_;:]E4I!\DG9=T++CG ML13Y%A3
>+^7QAH%CAF\IZVT/6"QHK6(/6R=XEX@$]L!\=ATZO:H9]OTNTXC M1-@/-8,IL@W:\.JL1?I<_6#YYM#:=;C05F W8Q)-
(9,8NC"T7)2.+K'PM%R M4CAZ'/)P.L"'32,8I&UKN1[#[B.2:7>5G90;0WQ$:PU(-M3I6K1^W\4=,H'
MR)@"UZRI554QUC!S38<^%>JCN-=SW,0%=,0I@HQ7\&UAN14.5\IIJ0]8CA9? MT/-EZ+5:*MMPP[1NQ#0M",&+#TD[
6WN=T;4$,\X13-U[KSJ9$UZTI/9#$0A MS1O* 4?Z0,0-\U\)2&W[&ZW%)YK.%[Q)H]!G/.XV1";6I>0L@_>5N_
E[+*Q4U9L:4T7F!5RLH[+@.N?-D% M0]B7^#%+?!AI/K:>"1.)$->4!!BSELLZ)7*H?(U0G00=FV?$L8LS_'5O
M]>8_^LJON?)RQ=T7WN@0I7S@E;?*"#58O2H\-/MG%QA%#,51,COIT,!C6J2L MT-K)6"X2IE8&UCO*TCK]LA(*"U7F-
#6XDD*>6L5%_+R8F^!=^BUIJY,!_HK, M=$@M#MK==]5BDT+]IX&OF8.FJ:W#43;['U+&JM$A%:[,G3?
+]]&;/EQ:QWO3 M1$"EU.H*II:32F##5DNU:(;JJ7=H\T9@Y1+"OL8^ZZ<"E@+WS;>*/59LZ6G;
M;].526.N3R^K]0?';_,\3+K.70F7C9=LK$%PR*HJ;Y64"Y'KBZOLWV[8L\]V M[ZAPC^=6EEFE@XI!#\"0W6?
M!!CR06]4S7ZGCOXHQ\J0"T3N@2'9'=7]\6P$ MALP>AB%A(-4)L.1$OKKE:QUM\J5TM"SI0N4^F#)L"4?
L\N;_$#]P769C+5_N MC">OL;MR BPY5=G?^=(O]G+VYUA9TH7)?7!DV S-%ASI]4A=:15KFAF9H68W
M:5TM)IRM\H;Y]=YP:B_>\)),Q?>&>4>N^+?J#?]\:61_W:IWC^*!Q(IWQ(H_ M@#?,%G8C55SY5;SA;1CR-
+SAFZKRYY%3:T7XKZ7@ZZ=N*/1"YHSNPM.%9
MVV=F/K4Y%F&WR#L5WWAFOEWCV4E.+*/)8!_!>_%P.7>.WU&*%Y,S);4QZ%:^3-2]N$Z%P^7\>+RNY'K
M7#%"@B&^V[,-JYV&%?HZKGW[7*UGYRWY]5EMOR9D1\E5=G5R=9W;4SH,TYU(M5NOAD1^;W>SPR^?
147H_FUEWSSFOXKZ9]U#^SXF&^X711NB=[\:FS^OKH6GCJ/^3=:!%U8+H+.]^:_;OO5 MSN1[E_]2.+OHF!@7&7+E".-
&75(2?6C@W7W\T(HUA%%5,*F(=/,:[Y\%:*PQ M[99[&$XAD%GF-Y5*BX$QF;+NW).J*!@FH#2==B2Z*.WK\:
MP];MW%:#;"IX MVH/K-B+#Q#^P;F!2K3L$B5:DX]3A:C=Z">MB4K$@Z]XYO@*YB9-= MDSX7 Z7($X9KP-83-+QC[A?
Z]DC9=:5HG9&@(\+J;DYW]2==SA:/M(09:5F" M3Y)_?:<7^+6(FF=[DGD7>Z;FG/\LC>Z4SY^EJT5A)%$9A-
]SL*KX76C*CW6 M-V,@\0,V9210]ZIHGO6KZ%TB$=MO;LG*6--X,%?[:5D^$EIZ)C3.F\.A-'O1 MOMSWBZ]'2S<(H6G)
[Y>6A>PJ6EH9(&=H@D>XG8D 3D?FB$RR(#4NKEIUP$'@M!-6 M<,W>,_P++MJC*;H'5KTQ@D+!$UG'#5MZV^?
NCY1ZW32IM5UMA6=\@Z?2O+R MF7IU%RJ]2;F'S*8TZBH5L!M=,XR>I*U15%U0/LU!797D)UF:"HHWAJZ-)XHV
M0\BHJ-(5]@W(!!);BS6X=E_[77WY]8WW:3&;ERW^7\-OS>PZZC%"ANAP=5"\@[KAT/^8EK6S60NNK[6A)5=SVN
F%N$PP9:. M4L_"\J3]VBZT6PT'8^:LKL(E"21*:H(+T1T):B#G[T_-5X4_7TI_-*4R=\T[MQWX<]M;(_1SA-/[E
7&R>S/P=&D.<_)LQ(X*47"R'TT8$2O[,A/EHS03NT#. M]K8CQ[ZV[?#&D'9NQADAZNYNU_V,.W221
MS0P8VVENTD]@;O.'4DC><&*IC M&]UD!Z7K2I1B"U^#C-=K#B@;5^S;':\UG4A=S"% W6>M.]*F!F:J!F8^$R'5
MEG(X19*?4$L15,=\71;R_'=I_'V\Z%^@\+BNFX1B#VM +F'^O:FC#1@),T$H MRO9]6BA2U=N2$BKETOG5@X488O-
2K>D;T' &9=DR0Z%F'+ 9@#MMC98%OX]4 MWSR141NIH"F7Y(LC3<&KDL%B7Z98%<'2;TG-[/M$+9?
WI_CH@)NN\!)]>I C MM>M>Z\W 5 KZI*C^>H$I#R="CF@G9\7EDS.^-Z]4QG]^2EWYVBB=75 4,1A' MR$A.RPX-/+EP
T8(T03F\ M(/0VA1?; SMG_G][5]J<-K:TO^M7]%)S]Y(*<1 [,_=-%<9XQ08#\?8E)9 MV4+"$L+
KW]/]UFT@L&QKX.'JGMK'$!'9^G]=#^]KUMZW^ 0S2X2Z2XQ,8E M5A6\#1!EG3F#, RV71;
[S"H031ZL%%4TO]3!@.O29WXMK@K%>?KP M29N,S \JI4N)(& -F?G8UV^FUV/STP]BM)'3
@H_,$P/6+0.5$NV"]B$N#HR M;MM.@+ WY/&@)! P*%:(D*$FH] U?EL,E(:V %9LP'T?OFPPGECQ R-!"
ME$L^,R]&]>C%!G&R ;T!R!^L4X##A#]O&(*^N>&ZGB[FB(X[>'*2/M.=GH$- MJO)P)Q&782WB/ZOD\'[-
;Z,Z)8^>L0U@,TCO!'YCC>9XBW!, P@K;P4(QL* MB*'D1=#-
M$O;KV'.26A!D)$R54U,$OEL[.G -7[LI60B9W PX!H,R>]+OU!7 MEOQI\&70%@]V*R9'5^V?<=
(X[#SH7>W$;^CSF<^3+-9P9!T;$6!CZ, ;OSSO M3U<"/V^+8ZY1HM5 -<"I>!,488U^5%Y7$.(P.=K[6N_8GRD9XW3#B-
T%? ?]F& F@I%BG 4^A)'U^USZRA<:,/ GQZ6AHO7H^>\LIO
MT5,VE55R]71V>:0F45ZO3F((RNL/9+&OW8]"2>\:4KQA0PHEO>M(\6=PQ)O[
ML/EX2B&8>BR,2V/"X*D]'WP,HC:M/<:OQ7'^^L08+3K6W4>-1);C/F[NUT+M M6=V,8QT/>Z5//^@>
[5S8]Y[\AFF%X1@E[;.(C7?MG]YKB/(7Z\T13&=OLA\" MZR++,(NDQGW&9[R*-L_9I_0#$[$M\,ZBQ6[HQ.$;N
5W9U2;I5+>_5G-"PN. M3X=&5L-9$*-?W9-:]K\HB@M.O>(_%]W7#?6F*.4*A27&V7$4273M'2Z
M1&P8AOUBV"J"OFH/RA: ;%856.("3B!&H%$BHPD.U$HD!(I?N6]WWIVSN_FD M=N$M+#_'_4*XW2RF@C&,YS-
CUEK**Q_S1M6&\;O2=:Y* R$F&I!AZ>5K2(+L M2R1!;8DD8,X(9QCW&5?P-
XCB]G==&RG5P_)1<8D08#$80??/9@:M6LB:WMFZ M)+&NGQ_C_!Q>G2]W\..\+T5Y7\2F.//'(DS[+V/^-
SEGZ^GNX5:_[P^FZCLR M_XM/NO";'GB^E"]5EZ*?+V7_%Y]HLBH7&:'%UY?N/T\?;]RGH]I9ST*;40U M-
P^3TSA#/">T\BKKBV$#O,;Z,D7[=*ZV%I:MOWQ]KU)(>&&S3,58)N,;G#03 MH&(7K'FF7>U.]0>_PH-'KM;?

AE=)_=U@&WZ?("+;<-BQS;EMEHQI:9-M>+E8 MV\B,+;[(OBEDWS1=]W56%X><6'=U?V;-
RAI$O.$IAR@UL@>_6:_RA^W!_F91^L5;>]6:9V9$\[:2Z3[Q!C D6 8_V#7T#'KZ7G@W??Z"__?9,OF$% M;L"5 AY))NRU8?
2<7\V[7M?M.0;MNQ[H0X=>D2H/'-L;@\DX=HPI]H'M],5]+O*.;D %YHN3$7P5^7;=BZF$Q4US77_B6%\A$A:2KX+WE
M,0-"A2;YMY3L/$2 #0$20\6.\GIB)"!6<^S2K6O"$_R&DZ?GO^:!=T^="[MV
M='A1*D2S\>DYLTF+Y)*U]%#2[!-3Z5]\P"_+G"?.?],_VQ4WLGXNS6>:_A[H M:(G8!::-R 0,NT
<;$)6O!0F"RN@&)0_(AT5*Z2A[E>4TT[$3%&A=#,MD)6Q(A*>@'S],ZG_79V$!E1@9?)9^X M>5VQM!;D9[D-/_O[7)W 9?
W\@$P;:%33$LGTA<;^M=>]NKF^]T_KA:BQ+XO9 M0Z_RE5 <$7I;8]H$20H. ?6ZILZA'S[8)R$2C.7IK[M'GW[$;
(/B$MB-+Z!! MQI[3&ZH0=B(G1P\Z*FU O%A^?&[YH DU##!5EVP+FW;#P4ESHP]Y5WSILF]= M99D0>N'I5DH/M^?
IDI.Y>5CNRM'U/ N@]Y+EK)1*;QBTQ9>%I<."]%A8)HB^ MXW%CCAQ7-&B+,MD,K7 #C(Y%-Z]P2,:FV],=P0D-IH@4L
FGB(N,D#9?Y[8# MU!BWB&D:G\[*B&2XTH!@GCX/T_6%/WD)Q'9DQHU=15%Q2B:\R8 M[0Q7Q;ZSSGOY"@D6@YV!:4-
/]#VI@KHWQE&9)0'YE1P1C%V?L#O*9D5#=3!2&\5%&[0F@A(GM>**A:MV_[] MG7U7'V]_;>\&9KI?
\[C['.^#8\0GO?;T#_,VEK77F*Q1)Z?=]09]_M;[X=>_()X42->*])-5;DZ(.)]4 EQ@25"'-_71Y7S]S_$5"ZD&)&7&I6SI ME\
[]D:!_J\T@B]'MV"T]GUM\A$_.;$S:SHOE]_MF^Z)@#)=(6YT.2XOI<>#(
M_&A7^F4DT:H=MO[>8)HO$<"E%ZW$[/B!07B2% M Z]=59 ?8;#?2QA97Z F-F;+OB*@6F#Y5!]%]C[;K^5:A=L'YTF-
W8UNL/6O M/LT-SNKW*C:45.:9B@T[OAT?22R]=8YP.08A6]==Z,/!ZXCKQ*'3W66)P<$+ MY]4/_EK\=
ZGBVEI6[CG/F@VL)).A/3NMR\,KW,VL.Z)]4]W99<._-Z3#P)X M:SI$&=] 9.\98H&[M.@9*3:-'5,,< A#&2/P+NRKQJ
L$L,E^0#!(G_6&\'[\ 6#=DH$I0>^1#:%O MIF^DY#U']QK?9;ALPA!6"M^"V-
T)L9MID!L7@B8ZA;$*+"1%@T>1%]HB(N"X'<1"!(CX2_AV9XIZ,_"50N&"-4]4QL-@'#Y$] M=7=H.Y-O<&S\4\,-X]R3\
[)P'G:74"]6,.']?A(&F9K)A^%W =_UD>[P&.' MXP;0H[[:,TQP<##=>Z-2;:7NRW[IO0Z4UOG D0H^P2\<9&%$5+]L?
*@35?XZ8=KS%CZ M]#)T<34YB)O;DQKAPW,QU"P]P V+RI%O=O\;<#R3P,#DA$98D3[%&9=-PM]P
MW@;C;@B'!Y@[]#W#(A_]$Z10SX2N:F(LUQW].KC2K653H.\)OM<)-V]8T-L[M?$:4_$/,!:KM4/9CP)M")-
A4V+"+2!\P'>0>?>N86N4N[:- 06UXG6B 4"+. MOZU3F!S$K8%K)!?]^@RR.D3,<7 B]BEW;
<>QGZ#.P<&$!Q>@;*)/@T+K3L)O M\%R=RGQL,:'Y \DX$-5!='H@4LFD5G*4@:"AE.)Q5B+VW&E/^A4)^/];"#
<$C8QV'PWXPQXY:]B MJ;"W'N*#=6-=\6#RZE!R6(X/$["U@YE+5\R&]C=P"0CVHO]HI:OUUO'#\%[L MX57(
J==A^+)ZR$<5")[X;<4QF_IRXZ?)D=Y;UYOY$P_QXD]RB#AGCNHV,I> M>$YKI[_&#NJ9V%UH)UXTN7QZ;4SDV.1>
(<,'.G +=(TX=@EN"4/GU $)&,I MUW\DG?.T7_BU M>'KHY0?:9:L*P]B)#8O,?O):PA/0@Y?C_A'GHD-S7UZ@-
/VC0'D@/#F;(0H ML_X&/H\]4P(L&$F65X#-4!263PQ9917$C'_P ;C_Q*WF'I_,)RI_2.S90][(M%R5(-
N1I\3(R8]BH__N4^20.@U@V 47N94][Y73O8G8UB(+N+,7Y29A1TG+B M'!I=6L(Z$D8/;PR@Y&RVY9%]?
6ZC5OP\^'*QG:%DGI7BFEWPN32@HT$2S*$! M'M2MKN(%Y$BM-^KUY]+<-'XMU)K:VR_32,95"Y.
<8D7K.8GOYY]_M'N?3+\XQR1>6> 7).Y"X7_28G%3 M6CR GM6S2>=)-Z?
Z.7I_,4]\:"KY02<];#5>0HG70P/B&5&Z2)1AZ]!A?@TI MLI(BGQ-Q][?]9>.\'OTF'-@&U/MBIW9-
ZDV4Z"^@X_(+Z/B7T2&$.PD0[D'? M&;87#>?(+;R)"(TOK&-#5#<<.5ZI>):.E$QS;T93&]#0B].<%26S%A&]);W\
MM'B<5==]LQ[Y*4N+-"Y.?FF$9FY/3/UFY+IG]Z77$W;1%2TQX6#F?T/P'1&Y MN:M.X^9;+/4^_P:)+CNO]>E563?
K.T:OA%[S2?E/+Q)Y7U90;W5IR%3L P]W MQ>SBH7CY9&2]^DN(\WF!%EU+9B\/9-6,7H_%G/+G-H4-
M"E]XF.R9D/<:BW[M<<-1UA*A2TYD PI<-P\]+C'3Y52Y4-]8!G'%ZRI>!CF:D/,6"$I52K\6Z6/] M]')H%8X7VMN$E;CGN-
69?7DE5L78HFU0F]HSF7?\TE/W>?S/H%[;8)1?BVM7
M'9ZZSE%^^&%S_I1XSE^%Z&_'4T8'E_6>GOOT@VV9C'NV2_U[[\G7$+0<6A9@ M&[-<".9O]!I$1%]8WU&M-4#-
'*G>8IZ2ZQ-M3_X,N1R9]#_X&?ZM_/,EA?6[MR47B1#WUX,(0)G1O$[K1:--[6W4T]@C/:M]3Q:C!)_V$!
[RFP_9#D,='>R+0 MSD.!RO,B+$T4O*=Y8;8XZ-3\'"TV';B@8O-965\4 MFWVBCLY^2Q>^D34P@(3(7,G4?H5F%A'N&Y5
+$^/4);>#W]+@+1\E^-19\'C MN5B1R;+S[\01G%CF>C:H>5AS/\N25P&H9*\\ED2([) 8EL3^QN!XO
M5#E7,E;NSB.BA]X2FCLR2)6"V8X/L\3>00)RCP[N6^8HQ2K",;D+"]M)%]:
M8184$YZ3I+0T)@R@K1L[0BA;#M*P>,B:NTA U/.Q8+.PP2G%()I_XY0]XY&;KY2&(^7^ M?
W9*2_LAK7]*KV199K)+3RG2DTY:XCA%V95B8@EHQM=F?&D#QB]OQ/C%5V/\ MHVQ:OVX\33IF[G_)^,7?
9/S7LH:7.BO)C+_)*<60C'_CE&YF9_M&IFC8OG0^ M?$N.+_X>QV=?R6S)+(5ACW+\LE!)G.-
#!ORRC#O$HXC>SV>3#7ZUA[9_"L$1>%ZH>WLP0RU6FG4>L]V"4?+YM'&\".+(/M* M]N52D+5DN9!]R:D%+
.%_.^W3]TUKYXXGY4+Z;&B?%@8?]7XHDX@)<7394?7;*V-1+7SZ@7LCT\W970^]
M]^0#C>*HHP$ZY#=:QL5*TP(.*>%30C!8-Z'.JH@RGESIY(V:"]4N9/:/@HJ> M/RQ/U)E,0

[_[]PC[)0]M>*897+'>WYUZV(M,=?][("INR+D[U>9W9A M!R@\M]R+$WNR^9223PIFK*ZO,BRY-
A];]IR09DM'R#ZR,+H 0M8]H;R$@Y+4 M]6]8^*$_D2.TZMB6.C4Q[Z&9U$%=4P$FE2AX2Q0@$T;L%
("T'*[8WPOE"I:^8N@ M9/[YC-GY4)BCT=AV /@,+"0\6('+C/A5@F%[(89U?(:U!<-R0#//U.2NCE@X
MLNI*#.QF *E9$%3B05T0 ;+;6\,S$R=)O(=^1(V MZ60$+V&8W%MZA%M/?UV_^AKIDZ&MX5ES\@
9@1(76]?HB(Z. HMWUP$)%3ST M)>0!*6"$?&QO "B#/:!!QW#)YTR8,E M2<2H.2@:_2D%1XE3I^]R'U
/&B83 M_]6>O!]$+PN](C 31^_K#AU(4KN$(%,(Y08K104%'R'E=O6Y31N[^%"$P3&?
M4,'0FW/>GB;&!#A2E/[7\=:.*]YA\M>Z)(2QD,6(S0=[W.5 /$GG)1L".Q&E M,5HR@"7N BHM-
026/8K"&'[?]\R^ 8TV)-HXSS8LQ/<#>-]4KQS<")@B;4F$ MCV)N*6.PY-?M$;,_/H%?G#3E
$0O92AB):ED-*M'31:N(&C\5E27P3]",B \ M*=XGR2"F6Q!F-
[A!B$%I6*P)''P5S^E'6%D0"M#RR)\WHB4)P%F:A0\[/7\% MQN-
(FW1HV')SSN68[4TD7ON>L"%KOABNWE++C5\B-HU5'G0&?-R2!GG.BSKN<"DC;0P("F@2/Q&Q"
('1"M(CA'(X1G MVF/>QHSA;Z(+1&@-Z,PV[0'-R2"_17+RT;&12/O$S<)"4,@+WY,;1%%R">(2
MK=E#3:@'L*,I^_%W 'AWY$44@C]<4AY4S8B%ZAID[U0'V=N51*&-NU-J?P!1 M0HU4J-UOPBGV
$67&GRT6$GV7'$-$:F!/H/N0U@SP>4?U&,M*\]*L79]4'3.NAM%-!%K]2<:TKI2(!N0
M,1L3L,PGPDL:6O*U)U=U![''8F80GSU(Y"VV//1P^!;;!6#5 #84O.8'QM2G5
M+_W@BPQ+$DIOCL/1UZ58@ %VFSRL<>N4L>V.>]YA\]P@2@IDT%!%2S&=320\
MB&CA.:/[@I=PLFF[K-V4_W6@G2[QO1">59.)]45+?0SP>(+O\5R/]DKPT*D0 MQ9*_:1@3S+7-
@F1].;15S+,<,X=M-]QQZA:C A&+A@CAHLMG GE]80._9)* M2#C"2!),QV^V0#MTBC[B8
RAR]/F"RZ*5>)SP.[@\B#(YC?%?/149P+]"@!X MVG!92]B(_S.EGAEB"3-ET:7$MH]260PHM%NZ2
75&?^@3AG]1UE9G='^99W ME)G='>5.93R/XFU)=[^GNK%&DR-
U3KMR,E,==#WM^&Q@DIMHU^7X7=:"C;!9 MT])H%^QPPCC(5":N=8UV3Z:A.ZJ-
H#],PFM@:M#6D]'^>V/;%_J^P]K56;-B M\#\AO!:.:?0<]&-V>]&T'+FQ
I<>D@@L5E[1:*R)HXW8KWE60#$;_!LLY9 MT)B!Y\?
0E@D]\CS8IVAXT0;.]RQ<02/@+&"9D@QQS9FFY2#\YAK1QPQ=2IE'S-ZQOZ MB>-1_0Y_X8@?
2*MNS^3!X")&)_3(\210&+!V+<_?$C)^_8X5'8".*I4F9P2P
M.2EE/.C"1*6VF$I8ZDT36]R4N%A]0L:GQOPI!N[!F3R0*T^&W:75T2>[9CCC\\383E]TB1_)Y=?

L@[GY_QHS$%%:D_P07V[B3> M3\V,U'L$4UA6D1@(I$4BR9";/17 *X.5Z9F(-H *3?$-
!FK/-2%#WG$V;&Q M9QMS0/,3](\^SM1LNGP%8U%W8H+Z)7B*&(BU(H+:)CNV3+;(=
MEX5G8!>@(0A\,W&P+R;5KO"%IH] 3]%=D@)+-2R-'+PS%SK587K2@$L B*XR M
\$BQQX(Y9.1&K5S@7H#XM -59/ZN#$CM>?8?+*)1:-2\CXDG0G5F:KIVO&-
M$;X&WQ@T@E4WU!PT(?H<0-R2@K<5XS&<' Q ,QF(80\6#KU0H9>YV"*1;A'<
MT%":].#]8]H/C1YODF9A4V>T:/P\+O8+:@:#^1 AQ039 Q[0=<"2)P(H%5!&=K\/_7M=\G-HP.1?
M^R:$O' 9%Y%M^.+@HCVH67RE2^@V+,B0WMY)G("V$- M^B_>L<@?
<',JR]K\LFKF2*+6$X2QQL5I0%?1PC"=72K]]#'#?!?3M?Q"4&[Z
M>E[O]R&KUQ)IU.#8]AB0"_6O/:IDR&MT4Z=Y:R"V)[2Y:,AD\('RA.(9BQ](
M4]OT1BP>Q^T6HARX.AS8L&SR)=!U2B@V<4^$$V-:T[3)TH5]($PCNQ"/ NZW
M)\LL3W_W)&I4D"'Y6YBQ86,"#M04XC6Q]C%=CPHGQ4(#_/1LBM(7MI$"!@Q6
MS=G6M^!'8VB_RG+UI$[2\FS6[APNK7S389F]9!'._\9RHL)G$7@8+#G8:#Q&
MP^DY:G_"=QU&DFC8E)AWKOR9&.^$:./83]&7MOY2,
MN;0F^T\,2DD8IV0GY\3D8>$8.K\GZ(*'DT^A,G"@/3K^.2*6C3=RA1&"MKL3 M 5,E$[N'+=X)Q7>8/
.N302=2,@FFC5"V.3XKY2;Y*]\@.) MC=79 -E=-L!;9@-D=]D .WVY9DR[W54TG.HC,'"%A^S8?
53V5V8_(_P$)/" MX]A[_+3]0%B\OQ%:)V2D_I7-YU*Y="E2_"7]I11R*257V&C(+,2TL;B">)RT
MA55PWL1^^$LIIU.90D;^K"B%_WS!*1 O#:Q[8H)N3]1GPHWV5! M)RU6S$6G;SB:,.+
(3/ATXQZ67RTI0=2&>7XLM1X=,+&^ON>@L4)>R'THYC;Y
M7LEZ^<[!'@_!B+,#/L^$QT,QN=IW1S^0R;$]DQ=-H23_CE^G](!QN;]*Q52Q M4-
Z0%\FY_I4CK%@]%"B=_Y7/95*%;'ZM<:0(_()T6+) %.QP$@@F9AG*LB? M_RKFH4G?
%T3]?"*&%OR7_MZO$Z&V/]0,V0YK6 (7 [31_.>_,ADV! O_])!* MS_]KR+<*?DNS-__'D';;P[P2XD
0+QSSO=BO^6SP"@5=%A93)9O,9 .'-*)Q
M%T1EE/CC9$O@^1V/O$=ZN^[]$%R16"&1*#I"8B.DYSDQMLFETL4L\H&255*9 M#55/CG&-
DLVGLD]$^YZQD)*XQE=*:HQ[GB?:'=']5:3I4^8N**%GVB(8(#2 M-5Q>^,8;;8]O7V!&9GI_]YS&;FE!]
(9_>:O&2#"G'5 M'Z(22G[6]0I40HAYAE)MY0,MI]&*ZZDH]#D$2A>K,A2:1BH$=R-
M4XR+),\&Y"]:F2@DE4(A55(*1$VF]])IO);C)0=04/ ED16DY=TFPFZ>>!>*
MVV(F15Y'7Z6L^:KE!L*6GN%6$R -<5W M=^F$:XUH(-W :X_0S^^+,"U5AL] M*G.
(SBVFL]5T+,*5+Y//"YE-QEPCP)4O$+]3*$[RF7A'DHL HP76L$^B")+KW#G1)%!YE%^CZ@R;_;*!+
(4Y/N5C\+!H?RST?\H([/7+BZ!H.;;Q4!\AQ_XS$,#NFV9+(5R:=RF9IZ"N7
M+A,+>4.6HDR4(_]6\NG0HR\(?&T6[E*44+S7_RGQ$BA" X\,%Y;%EOTT,DC' M1?Q5QF
[*OZ3[+/?"Z6M;[52ZER.;\BDE8NIW*%[$9FVRZ0MD%^3VZ7W_.6
M^3VY77[/3@*_301Y+2'[;P@@Q]K:;"D5;#4)OT$ N9C.IG*Y#(W]9E9$=0.< M\++XL9+*94]I7#Y'WY5;
[UV[_/*?-/E-#$@Q:K] MV #_A+AX6/*]@W5X=Q4I0IK#4!ZA-R&^YX(#?A+K/D5M?' UIZI)&UOXF4RT
MU()756F1LCN @@\"8Z4@T EPHH'0K3[3G9Y!ZRXXQ!*6%3",)589QJH($.Z3 MX0M2T0-:E@$9+@D?
0-^-Y@%%W07$I"GL#$@@/S!E0%6:"O%C]C[XFE5&V&Q T\Q5($)>1]+ M6]-1!:@_HS&WO@%H7]Y?
1QC9;0ASBVI>*5!SSNN,8\@-/%XX-,;4W]1GS#$6 MX]#]UG0H*&(F+"!0>6XY"SX_DNA_8?
Z3*C[YX]5N .L2)*IV)Y]P;9WL7R) MH6O^(Z+ZVM)-#UZYQ .:V)9 $G<#6 43G-<_]#]#PSY$-Q,Q+'C95]
,4]D M=IQN@V_!DY,"AQ(\ '?9";">"H@IK9)]FM]T)01YF:4/5(] 08Z 6?T<.!I M =%F]1,&+44;
(]*7[Y3[^[:,W;A1K. NU I4O(75 P\'15-[,\54N:@@SD<@ M4QV?]MR +_T<
)KLD0L4\:!@5*%8GI/KN"_8OTU(^UP MAZ]V8H50N @ N#-$%C/A/F>O()/#,-
'VB7$C>7MFK\A_0,4FXH"@.0Q7$;HC M,(09&B-]],0?VC'*>USC>4X BY$5.>N,(!#-WQW:S]1/R#+%
("E!:(/5PQ R M?&*&BG>8HDZ-"R R*&!WP*UW*+4 E?&K*.$A ?B1DN&W$7BG'1HG6L<.>B<(M--
#E"-;L 5;B"I,4M\Z&A6K&QQ-(1=_/9$1*,MPHZ6?2>!^(=S"9//T;/#ZV
M<7ORM8Y]2P<+QH+:>UK4RZ](_37S'B4(#*13[#6EM^A$W?3@QX;GI-T!K(! MZE+7
8[V&T(ZH)]K$0RL![_K])[!;.GS1(\AMHPB;$QFHQ00P0__MC19:4_FQ7 =18TPL)*
U0W0]"2;VZ91W]B8F+H@'RT;V<.@=#DXA=..*' BV M,&L%@1:]Q>#B@CB>#GTX()(8""CQ8R2C+[!]?
90@/QS*X.&!>#]F@ *(RIE F)[8F"(*T$PVD9D1S.]F_2*G M>D#,\)=RQV/BV[9D>QG-@+<+M@>A\
(4_6"B[)Q&G(5"W%NZ/$45R8%Z%#V? MH5H](#-?!=@"Y9FB -A]&,9?!_8?#]-*._I =3 LP!(F
MH;W)3EC\$<*B%!86N3W:QM9F>:I-"-Q](!MVDN#=CJPF\/X!GM&7U[NC^K,F M#W&#@-
CK!4]G+$XG13M']+%M!!&6+0^N392L^DW)?]9I[;>2U]B_F!RO<9S6 M"@ \0>IW\)I?
M_"%U%SVM884[*K1U<.*8B+@]5V.? @1?K2I7:\[,B:!7(7@ MZWE?-\BO8#<[<"6=(D]!PW.*_1D_)
<85E@$7!.,$]],SU=]V*
MT02Q8H@#/+_/D8U)5]>OO3'$^/9&'@W]TSN4T)\PU_W._O0*%"8/NIS9MQ86;"TW*R*YBD\>
WA7K];=M M3X)&E-6AH??)*OC;&G14!D_)W%S0[R/V4W'KRW^:HO<&Q)4T .&YQ[P&Z@>/
MT'P0EX+!E5,<3X"7AW1%*8HT#;Q/)BKMN8Q]_'(+HM?DQ\&XG.0M]L+24HG
M0,;$KFRTX8NTYAL1(U1,]P,9,JNS'/.[+,>WS'+,[[(<=S;&.N9@U4=R/P'B M@X@;LP1E:-D1D-
$MWC]G9Q*^FQ_OZ!(]#.(]!Z[>0=48_/28H]&]+WP5[W<_M^KS"9.R'3,9^HLGXA>5Z2AO
*X'I@WF#L0>0577O5M2TBD^:R M:3R
^3&QXP^D0LN5GEON!]*HVS/YC5+_**+XM[IM8]I36[3ZVB7XO;>X"?DY
MD#!!_D7LUS1ZX#@8Q(^C=[5:T(V$9&-O$@PG!OT6 MFN3C.#28#*RM@I@"[<1RU<^%U2_"D
AED>A-B5=#G@]IF+]N[03R>PCD=:5Q.**K*"*BVZRT M.M+)R9[\6\
M8;WFEF>5/45L^$2+35&\6('W\@-*^.'Z:WEKIE)EXM3T_^^3/LL]WY2]X63T
MZ0=X2=1)RGU6OWQ'!PG^D]'C%O2X$YD:I[:KCX?R^9Y\3%2>,Y2 MS:=W[+ECSZT^)B6M[)UC?
[K;I\8K&+O0.[YX$_^?&/<,=I M6W%,P&GMZO'6GE.4TSK]#& ?
YL2UFP"2(U%_[=Y0'ZD[UMN6(_TWL5ZU4M_: M>T!@LVH7+9FNR,TNT\X7\/ M)^:V]HR]D):
(L\/D9DRQ17 GPF?]1,6K!_DS9$M]D#H9R""B_$MY5V,L^27Q ML%D:]W9?
TZ^N%BCL]@7>LE]@\&^M%EA.$?A9?+>W,_/H]><>]_U5TB*E]'UR M=%'I_&S5VO^KS-

UM/ALF7MF'!J*"0+K,*Z?I-#W'!> &B>6/AH$,UTQ+I0\. M#'<"N9Q8]*9Y)F"H4?2U(59S8DXPK87D-
986@GMT]:%]]N7N'"L',#N-EYW" MY3LMA,0!56\RM+'Z\R-EB^XRT0+3S:.V^A_8\G_*#(D\K%5:U6.
<:32KCG;W_!//\N-S$CT+G(DXCQ0&^PP- MT1*]M48]!LAPV,!ZG0X487].[NQ.
[YUT49/C<^!LDM$TQ&_B$!H?.$:T/9,__M4"?ZW]*%/:5UT$5:!KVEB]DX6E?\1VY0G-
R_Y;KJ3G8AN]'7GUVGG>'Q;NB77XVRK MTA[W]:)7_JH5E:]6J6 NZFHY9PS&7V_L^?'Y^4^WDS?
WCQKGYX>W]FU5._K^_M]2;7*!_KY[U"X>+6/7+2N?]57*15VKS:?3]N+XOGKI'%Q?CL]/CZO3N[-
<[NBQ>YUUSWXZ:OLR MHSWF]8>]Z;5:#\YPDBNUOIX,[JO5QG?
KR#3/RNIPT/B:SW0Z7XO6^+@QN3NM M=52G,C\[>QH='-;/YZ?93&8RZ<_FM]
[D]/CN:Z]S\K5Y=51X.NO,TZ>S\V[Y
M>'9],W^Z.*E:^KQUUO+*QV[ZZ$QIS^[O]NG!W#A[,BJY\6VIL:_E:OK^='!_M6UU4AOG+S*"6'Y3&
[7*^?-)IW9W;[=S%5#WO-_[&UF$KZQ7:;;WC%M"O'
MCQ7G\&3_1A^E&_7)P>7WGYH7EUDGG(CGKYB_E,:5^:=7WH
MWOV\Z50GGF'^/+@[F(^MEE&]/8[G]:/K1Z/VU5SL]R^]N'R\FWG-7KVR_S2\/>W,BL7^?
MLH3MVSTL]N[=R] M]#O>Q<_"0WUX>-@?G3S>U*[*Q>)D_'1:;>7.KN=/I>O.9>YKLS&S#QZ/#Z[/
M'\H/RM#,G#VE]4PM/;TKC[Y;XY_#W-/!O.6YA\7OWN0F-W!.R^GZT^'%P:-= M+8][-
^=F];@W;^YW+D>/U8*MS^XO]^-#IT5.T,P_G2GI^ZOKD]I5NGEE[&L9 MI7_9?BB.\^WF8?;D'-
SWG;-0NGIX6GKY[/XW;<=-K7!U< M?
QUT]>KLYVW]P+ZY^7YL]]5";_1=O>C4;HN].9$ZQZ[F71Z7G,SAS^+"OCX^
MLJYNKI[22M.M.'IY.IH6;M,=[6O?FUGE9KV@/O2^*K7RS)YE]K>9A36>#HK? MM8M'_?
ZX<3.^.J^?]4J98OJQ7*_>#GHON[=U0ZJV=9EIC]Y*-P=34OV M^*Q_?#?MW9>R]V>'IU=-:
[]X_9"]SHP.KC-GXNMY MY\1I'9U.JUV[_?7)[MP\>D?UR\KY=?K8/2$C?S_;GWS-?,TNKKKWTT*AVVF/
MS@OMISOC9(_GMS>9]OE@,FFZ+?LX=H/%7LB_W\UZ=I?] '-D[5Q;4^,X%GZ?]OT/ MVKQ,ST-(
@W=,#!3-!"&&BZI!)]N>9E2[)-$A2-E)!F2_O5[9-E)'-M!3L-N MJM8\4+;._7R2+!U;.?
Y].@[(,TC%!#^IM7::-0+<$S[CPY/:0Z]^VCN[N]J1 MWW_[UT\$_X[_7:^3-H/ /R+GPJM?
\8'XE=S2,1R12^ @J1;R5_*5!]%I$6T6 M@"1G8CP)0
,2K*4CLK^S^[%/ZG4'O5^!^T(^=*_F>D=:3]11H_'R\K+#Q3-] M$?))[7AB[*:PIZD.U5Q;
<]]_]S$;YCRYL*'!S<3]6G:9=^&P#^'YY2_J$?Z MYQ_C?N?P^_Y?GWOP-'I^_-+L_S_X-
#M]UL%CNWEV^5?G(1@_?'MI6Y/'RAO! MF!($@ZN3FHDO#N]E;T?
(86.WV6PUOMU<]R*^FF4\F@:,/^6QMPX/#QL1-6'- M<$[[,DA4[S4,N4\5S#4CE:WA9UQIRKT4OZ_G
LO,^PU+3+&R7-8#R\H25A]6 M^!1X.T/QW$
"\N]^3!A#51]2.IDS#ZCJ1TIC0HI929UEQ,95IKJ>34#ELEI2 M2L#7O"[O]2?4\X%#@<0,VF?YQ)$4
]Q@#,15\%Q-MID28)YW[P-%Q":V\3N,B'E*5?*OB*X)NG5MT-[B9F M08/6X\%50'."[:,;; L31
S(P@CY\,!IZ#/DJ;@&ALD,A(!9W; MTU QA*:S%'#R&,P2G&#[9):(N 4+A
HEX$VDR6"SK*M"I!"14#$.*EDO)G=. MN?^>@8?0!4\, MK6F;_YQV%QA:S5488D5D25.%1A$:;8
KCG=@05C<.N6^M9I[E"=6097RXE63 M\)[JI]KGFP(L+FV6'K]%1">S]%^+&PW._$
MPMX]"%8#B514B5^W(/5.N7_.@A"7[M="]0Y([+1CP:,=VF)YNI[-":2/>8M5
MCU#NDU@S,:I)Q[XE0>5VFUCA5X3?\E:^Q):]M;^*A!6N$EV4Z&O Z3R>G.)K MIT0?
K";:"E>)+EZH!J;0T$'*+%FB+K4X)3VS*8Y5D$A'E?NBW-_I$ER
M@U/F,UOB2$.U.'6:7>YI/TC/,7&+4^HS&V.K@GRP2]]JW*LUH'/0E 7]EDKS
MFN$9TC6A#-4%E=W,/CE11S[$"LE<8P51B?)%/E@.?$ZP9;;8.>6-"L&-2A[Y MP!63G?#*
[,$7)9$*ICB/PPP#N!C=4AQ*-P^(#&CZ,5NUQ/N-9MH2
M$XR9FD1BP;PV7MA8^N2&#^UN8HYTA>\K>[G\P5= &U8DK_'BSSSZSONS @T0F*(_/9 M_DE-
,7.&I1:WC20,3FKX3]:33^K_QK!WIN,@83$6UIR@B,!>S51L.%%!I9?1
MDCGA@4H$/K/,\ZN1.)\HT$P;\>4/HXBQ@_9QAM&'M!^V.KK)QIP?D.X5]/C>2C?]XD3[*@O>KQUV.,7
A_M->&9DS/K#CW9XUK7PHM4K1$Q=_5$KFZ:Z]W=^EYK9ZK\A:=EG%BDH9P3B=P& M3A0YN:W:
79(T7=H'X MA)]=DU^TNW]?,\]\CWXZE!!1;F#<-V?]C)/XA"NBLB P[[].:E]&9K8T1SF/ M2D9M4Q
M9%GG^AV'5?]4VOVU'-L00NP=H*.YB4\1MLGA^Q>1[_R8:L]SBK(-+E_@VD[, %14W9;@:2%71N-
ZEFT(COO_4B$BG+_EG'0 -S6 M8G'?BHRX3^T$E*>C*BFS#6'>38R(@>'1[+^STV8Q?
1O<[Z&@)UGD9,%S:SW+ M-@1Q2-W(@7-B):TM7O!A=3D!Y3YA;KI)-"U+#2^2@+;>'1]_3?
(*#%ITESM^]AJK\$.,LD M$;W"\P//%9VH>8-('H5\PIR]M24_=\>4ETQHX&>=:G& MW68/@L!,
[9*9$F0\.ZYA^ $(D,LLD-\@@O3PGN#&0MV++GB B^\NF 4$>GPZ M-O6@)*9R(EL['<;0=&PJZ7
5LQ3!O0.^'U3S$9UU.9^T%1VL"X.0^\:/>SH] MBR%-E@YYI*WM,+<"%P#XH)?1U*1&IN]SM5@?
K*'_[Y^,QPU;#\7+_P!02P,$ M%_@_+X!G61.U)\7$"@ 6GL !4 !R969R+3(P,C0P.3,P7V-A;"YX
M;6SM76UOXS82_GY_X/.!QRV'QS'27;;9#=7>/-2!,@FAI.TO4\%(XUC8F4R M):G$Z:_4I84!\&F#R<-
R[N^F/;DXN+GH>%X@$**0$CGN$]G[YSP__\.2_+__L]][US#&%P
MY)U2OW]!IO2S=X7F<.3]"@08$I1]]GY#8:0^H>WX $E-U-+E9Z9T(\]/!X/GY>8?
0)_1,V7>^X].YF<(;@43$ M5]IV%[O)OZ7XEQ"3[T?]RSWBX$E_$7ZTX/BXIZZ;7/9Y?X>RA\'>[NYP\,>W
MRQM_!G/4QT3YS8=>*]6TE,D-#P\/!_%?TZ:%EHM[%]:7V!^D<%::Y5^QIOT: M$HZ/>
SODOI(Q+377L:K;*%^ZZ?-^NJC_G"OOS_<6?"@ESH_]B"C(4Q@ZJGO MDKW55?D<,?$0(AY3-
E!_'IQ0&9(2:RPX8S_][LDO3.K?.]@]W-]5VO^5:21> M'F5H! MN=3/KZ?7CZJ[RWB]=9M>J@UL-
S/IA1D- YEOSOZ*L'BQP5@MW0;6$\1GYR%]
MMG)C0:BY*.18ZA\SX/)*,5/UX5DD:9.]VA^1X!2'D8#@DG(^!B;MGE,29SN3/FZDH"G$
M9EF[G>Q\"3(J:NG*MF]NCX?4Q (A_P*,36(>:KO-C5R[54&6Z3F&A]O'+90:P5;KBRV>"W5;"WG M6P?
SI@];K0FVL/52C<6*G&('40C7TV](1$SV('B=[9"'.#DE&&KCQ5Y5L_G6 MUL-
Z]38]HWUV]Y=MH7+:PC00U:&4$WX_"N/D(DF+U&50$Y!A]3/ W5BAG-+4RE]X_QNM@4\?
MX<2SB_0>$'@>*SP&$@]>? MQ S'["8?_#GB7%[[)&)]H2;5':)[".,K_IFTRS4;=()5K3/(E*^^]3SZA$*U
M_C 2)S(N7V0RBM=0]VTP%,_;MA8\(^9[E 7 CGO#]#J(^9F0*:Y2)BT&/)K/

```
M8S5]+",CE9\R.M>Y.G$KW<24=4HDBI[W#/AA)F+TW5 X\GT:2:AR: <2MAP>
M7X&HCSZME!EA>YT29F*W2SR-&3PB')PMU @19*C%U< P61@)F[&VWREK%EYP
MB;PEP+ID[DJF]^HQKGMYS*@XN,3H'H?Q#+^VQ)>U=:&7I[A>:BVHD^NZ.%:SH>WS50YP*=#2P?
8 MO:B1L/'P/]^^ZVII3)'>8,>H81$$-JE (])UK;0A2&^V2QRMH31*T$[EL@H" MWH?
G*U*MTUL1WO$HW4!59*FO;T5KG\DZ6PE.WK%EHV75W MK_9X?AFSPDB7PF<4!/$=:!2.$0XNR EZQ
*%:] UI=% MNM>;TR6N2-7U MDEVG25/;JH=*=HQU.)ZPL4_34&OFET'>RDOY^Y;N Y=O=,_<%-[?
Y*:P]R&C M^<=6[VS7;(W/6'-@9LVK2H].O5>EWH<[@B)94"#XL9L;WZNQ;')W1S.7*FG: M\?
PCWM&MEN#-L1=%NLY_E0Q4S3]JK':I8$V @T2B[LZ?PA.$-+Y#DB#6#36T
M8EVG0(NX@%;-1$5S;ON%B:$:"UU MB9*2YU@];H>GC;I>B3#]#U5/Y[@RJ3-||C8S%?]XR51H7?
F_T2/EG[WE-3(S MHVW-]HI/\&8L_+2)A4]G%ROM?K*G-EM*.&-&G[#TT=>7.PG^@JS2||@7^*GF
MCIJ-CO_74:N\8E>N6]R]5)FQ'YREU@3I[A$HAQ[L>53P,OO M%Z3XL%,UF6;29]3^Y"ZI-
DYR*D<7@2C;/@VTV<6 3^_IPBP M<:3C,9';X*Q&](4=M9OD +T^LY@X?$\Q8>-(MXM
V:V6U8Y1FUBH462X?+'[ MG]+ R'=NTU^Q5=B&^$H5AI0[O&1E[2^7R*ZP?GE#Y6V+]:4Z.I];H)=X*?
N6 MCOR_(LR@\O%7S4S%0H>CR[ :5O/S%FN'.36H*< W7&6]LOXM*TU;7[A] \OO M9K5)VNP#!%SM
[E!\=@]>:75BW]YE179]]H<70ZV('Y3][V#TG6."2+^VTI7 MJ8XF5\'E==>[E3A/93QGV!03)RY^R'ZRU'
/#-"@.,9-M;F<+?X;( TR0@+/I%'S- M &;;.+H.NF[\7KR?;3N[<'*;HLO.U-6]-SBSO?KMLC-
U.=FIW5VZPP$R&YY^ M4B^5Q-P/*8\8R%]B2;6K*2O;YFLF\Z<'9 #^7 "X:MXBIK+C!#*P#O.PEA)>
M(M(B-,WA NL(A[MYA(F@EY%L$6CQZ($,OF$>GVSOY;=XMK(;4'\"00;D7A[D
M4OHK6FX)7!=O$7+9$049F/MYF$L)+Q%I]1VQIB<49 ?E*4=WT,D\!)-GE+E MC9?
G6$EE7J*M15LT6U^'' . ||_6MH G=]1!!L^G/)ZT<:N9I^3@@PRJ0C5)
M1+Q$ID5P91NN,]@*A226V$;&*3TB(8.M4$V6(MZ'I5"[VZ-K3TM8A[I7*"NI MN/"M-
+2+V^+LA(P%A<)34ABW;DS]Z0H9&PIUZ;5X;AVZ[4$+&4,*E:N] MP&
[=K,W/7<@8N&FEV[]]-0AQ]9[@A(J;J>F]BU/=ZY3,-73T1A03?!.8(RQCAEU/SR6/*/PO
M(/9&FRMT=KUD9\MX_FT];W:G2^O&ILZXDCGE]AG")_A&B9CIWB.XL<:NEQ^W
M$1@:5[JU\E5S*DXF^Q>F*^FP>^LC68-S)T'SC/$Q$?AYYV]]
[L[#@Q=Y/GA]//.M[O!R=W9U=6.0R(0>B! (?R\$Z*= M/_[]][\Y]-_O_Q@,G$L?!MZQR_!W[XXYC]>
0$.E1?(3E^ M)?[G'?;<]+$O!^\1G@[W=W?WAO_Y>GWGSN <#/R0Z\;!,
(.S;)E^ZT5+ACSQT3#Y,D_J*YK.@2;^,>&27",71-Q# MM(@<*07[-,C(!NQ/@[W]P<'>^U?B[61VXLK&*
("W<.*P_ZFAET\E:JFQPM2<%Q*? MMC_&D- G<4OIW4_*TABJF/@A)/H.6J)KZOECJODP.D-$/T8(2)M"
<0N?81A3 M_ *M9XC(&VR5[LGH7?N!W$$O6M$R!AB*O<#2*ZZ47T3:%8T2G$-
BL9PM(F[7$/7@,3.U1I&TZ_IS# M"/@!N0&836*>]=U&P]=>9*B+U+R%QB-
'7:A:QI8C2UV\-9OI;,RO[!%>KG7#*!Z<4@]9?ZC?5['A;5\-]KC8B M8_W13<_;0N2L"]. 58428#
<#*B+./UNROY-M,[&-G2,.:4:;P&[\" >>3]>> MA$^1TP?E-
;%LQ0^C(24=IC1#80/MXUX^;."A.?!K@]YR=X"8/VDPA_-'MLU5 M"VZ1M7VL( CJ(>0,
[>,*4712%UK&TZE/P@F(@VAMI\S8BYCIG_UD[G9-/Q9P MP]
<(AA[T,N2L0?,=V\RVHNBO*65[4,2[K@5(^Q3'E20/P" /^V(>46$0][!?
1,/$[,U:C[AO%1GKJ(5)*92R2RP7%\V*L$\ M3R>Z,MM(R!NU277:K3.(4M?(1 "97?9W-
]DP#WL"^$W9)IM]OG7P>ZOQN) R M^QWT9K]T1XSM^GU-
5V0RVU5('QHW6W%I*#&)NF\@/6;K1K<3S^,J \$8^-Y5 M> :>_ @$.H,HV5KH5(U;1R^
U%2]V>]6[76%T+L ./3#*=$924S_(!]Q+;.. M KDT#O5F%M[%A6LBT)@U\1$D/O/,;TX6.(?
>3Q$E+^W9]L]YWO#UR\TL6" M3U:["SGEL[;6:X[Q](NF$K!/C)0Z585O3;))&-
M)@*EEDICKL:ZR[@5&2 M_F+)9?DX5R"SURI2M#*]' 4:ZE6=??3$MV95_2D?5NLT9;W]UI-
(9N,/EMDX M&1^:,;*BK4VULDXDF9D_YC(7PY*P%,J/3K(:U2KQ0C+CPSK)#-:FPQOM*D^C
MJB\OR/.1)29]PC; 8PSI!\[)0!=Y6X1:KC\OX/NU@F])WAXD43UZ =6G,]J$ MPTE9VD.F*$[/ ]S;+0-
,&9T"9WLX]Y7K!7A[97B4WLD8VLQ>]NO7"QCWRQ@3 M[E.0=/8\>WN(1?
7M!90'990)AY.RM#O"F%6W%_ >BL8;UZ$+62=MR6%-.>/D MN"1MS$E::T\41?)Z[ZB,-R-N#TZI2+X
YT,93D;Y7@DG&[KQ+&W"6 M+;0*NT;!?4& 2K@11$.A+-OZDFU]B=7U)01'.>/03RO#T \/MR"
<0DG]"/T^ M][6E=2)%D-WD&4QT*DVW98"_EN]*.ZKU$.H+B:%),P;-5@$T]$XK*S3,5=YE
M[85&ZU^IRN;Q7*7W DG7-1827T5R=%:,#5_!JU:M>9+.JR/T>JW DRJVM^SN
M&0I=VA63TN=;G_PX79S"T)W1&>,/=;&DGM/2.&B,7S]HVV.L#+"N2$_/V4\A
MI;$1=+83*\*FLLKVC&=E*&_7P):67MZ! ))T07P#(UTAF9"\IQ),XRZ%S$2P
M;O"\IVV/)B>L#F'*G5<=WB3D=LV"WJ;2/:%NK[,:W,@;-$%V@F&DKJW:]]E.?
J3*88[+$8XR\V(W8^[RI$5(]Z=+% M2J:>MA^6;^Z]@M.EDO6LUF27#<4\PC?0?Q,XZX\"2VF[&_/
MPECM2"."%1FI%!];M:;@B'3K=B6)B+S[3+92K17MRT7L.\7=E VLW"IHP$Y] M[_7098&|ZB"W;%[1]9
"UWMV=9U?!-ST&*11ZOT+,E+]DJZ/!/A:6BTBEJ]U M+;U2*C-WS5%V?
KA_;=V6,$M'[9:T>XEB;*3<%6'G&U'KZK8$N?%MIFTQ1R.3 MR&U]Q[:^XZ,2\BUKXM4,]H2V02]
M"=65P_[1B%.:Z'O<-^#%8_?Z,70V:OG(1=OP>EW]U+A:QI MY4T$LOM\??1\#%&H-%
M5A(T1B3",/(QYZ3S5&J6B%1\I.KM76+H.\/;NJPT\#&?'$U6S5#:)!R*'V^<
M8K87NS4Y[NZ[DS1E;J^U+,[9;\)I\|=Z[>L$ MNT:SU6@BC;02TFW4K1-UE?
IN.P=0UQ>8XOA;T]@ADIG_=(\NPHA=P:NH$ZO= M2/>17&T#A:W,]-%WY._#C+;.(%HR=:>U@1?SIP
M("3\O988NI11?51-P=%' M^=6Z_0B92R3M>;U5$&WZ(?F-"Z[;@_O;@_OV9'JW!_=_WH/[]R_H?H9B
B@N M/X01A&'R_N4KGEOSG^$X *$R0M=IX]&GY&(#Q\MKBRDSX6&_EW:=EI./.=V<
M+BJQ[N0%8(__^ Y)M+R!0I%=;O(I#Q_Z\9?^$RU-*]$@%;XASIC>>/(%LZNC
MKL)$R"]8>3=3"P_;NF;#NNQF=[8+#\WB M5NS'7-WXE_/P.A4 4MN&U-!%M? M[D+!W6R,=N'@-
S$SZVB2W$-U\@S]@"UC+Q'F8K?@T)HG;AVX#84:;#1T6SZG
MO1+'K)!NW2MR[*FK.Z$+#H]!I1#NH!MCJF!($@>#WB5U4^8.<7*WV&B2W>Q, M!>*"5+Q*L%9O[
E]U\2]41+C^K5FGF--K5G3+B:M)&O2/OU4?777<4\7X@;4 M&_*M/M2";?
```

U&/0AUISKK5CQBL#=@KCW8H^?L9ZN^" N9>$Q5AU;M\+=F=YOW
M\.WSC4ZW_M.%*IU.9_>PJ]\9*R'OZ[V]IMT,F8FP(6.QL7>>S%&L6HDWTGQO
M;PMN=V[:G&X,=MV[74$G^U9FRV3)S:P6K8)=-Y['_"94OOW&K(+AC(6'Y_1] MI&P=;
[+:K=U23X."&4[-FK5>*_:L2-5RY<,)WV4R81"OK.H M7!E]V'I;VZUE(\DEHB]-6!3O2S!U$V\)>3^K+#-=
(Q,![%L<-6$8FY=!C1G/ MUA=;).D!=E9>^RJ+,FE/BQMUWRB_!4& V;K1+5UPZ0Q0(.NK6*R.]]N [2O[
MVO#R[0;F C4+]7M+R&\+];>%U-M"ZHTLI+Z+'XF+?;[#:'8-FH*CKW*6!L]D M=5+)]/&AM_
XQLB%T"-L7X]/H])MXHM7&J)\ A7U>5K6WMZFU=!>B:& !MN<
M76^'4*Q7A,30.X_QLA0Z*7:Z@2_*^6^B G_IENWCI36K2CRKIG.PC.O5-_/ M).7:='/J9;-NP]OTP)]#
-0LO\X:,-JP V7/'+0F].P><.;;OI&Q)?N MSS2\SYT?4BY>GZ
;D7N47#._NKE<6GS*F]C1PL9:=BTYI2;L[^I D6?F)HPU MNW2.?ZAR+_FSL(J^1!I$PYOPYY3
,OZQ4K_4]0[M7_==R;]$HCM?7]*SIAI?KG99(79_%?4$NN^GZ'GH03^Q#?UE91+ZX>$:3D%P
MP=_<*]F.HU05HO[./HMUBN106\W?ZO5[H7Y+,R4I4G1+RYP2]0 V/1*HU'<2>M]]YB1W
M"\)"A%Z78H[.2\%--:N *TUP=G\5D>573BF#F=GU3IU>+G&[O=ZI+W5:&<>V MUSNU<]F"R%?7N-
ZIT['A_^IZITXU.WH)(697;,BC68G$WH@FE*7M@CQ3_:KN MT]D0=1_=Q+H3Z-:N]XS64:^MT:ZF":Q?
MO5PD9#,2^5+MU;N!I(H\18M0! M M5A>]2_18H:.F[B='H]^.5."5];6W\RMT;H,P+Y^-
((9DY2TKY*>+,EHF^,2IAE ;5\14%]L=B7B;F;:-?I+/KN5.Z=X]RSY53!9;!A3 M\
9SRFZSPCQUGOB360+R4SD!R5MPDB;D^=-4*O;C$1!(__(_4$L#!!0 (_M "^ 9UFE3C1@G#)BD @ 5
&ULY7W[M<]PXDN;O%W'_\Z[<=$=(;5E>WIG[9G9C;(>#L7*+]TDNV_/<=%!D2B)9Q99 M [(D5?
UAP??>+)4!:3F.F:Z[6(F^ 'XD$R\,O Z[T+##U@4]9%_K=7;WXY M>H5P'A=)FM_]
[=77Z\/9]?'Y^2M45E&>1%F1X[^]RHM7__YO__V_(?K/7__' MX2$Z2W&6?$ G17QXGB^*OZ
OT1)_0)]PCDE4%>0OZ%N4K=DOQ5F:88*.B^4] MPQ6F#\2+/Z!??WG[IUMT>.A0[C>
<)P7Y>G7>EGM?5:ORP^O7CX^/O^3%0_18 MD!_E+W&Q="OPNH]]==F6=O1T5/\CU/^:I?F/#^Q?
MU&)$6VOO/SP5*9_>\7> M6[_V\=TO!;E[_?;HZ,WK__7YXC]^Q\OH,,U9N\7X5:/%2E'IO7G__OUK_K01
ME22?;DG6O./=ZP9.6S)]FAKD>TC*]$/)X5T4T<53Q;K>^!FDEV-\.&[%#]M/A MF[>'[]
[\]E0FKYK&YRU(B@Q?X07BU?Q0;5:42F7*F/"]_NV>X(4:3$;(:Z;_
M.L=W4843]]+W[$5O_H6]Z)_]GR^B6YR]0DR2\D-;K_>#LF]EU[[!7F*2%LEI
MOAW]L78@^'3LD.H9%>CK>Z_"35%%V5;@^YK>87_!V[5XI^>_I:F:F=Q]NU=$]S M+[_K&?
+DYE6W:\9^O*!_&D#$3Q7]@.&D @+WO[I-G M?U^GU89]N:D/D%?E["DMFW?QBO[ME:/.ZW%%F/:,-
+6)2&QIDEKB=5S0#]]J M.LQ$XPOU!2F6SE#]]BL<%7[/;MOWB$:G4#05&H@17!9K$N-)?
=ZOU906KE$N M,ZK%G#B<'WZ]?O5O0A1ULN@[D_X_?WW=O2$(Q2BB99%?5T7\XS->WF*B];1"
MSB>5M##[])&$P%!&AVQ,$R&'N"#Z+D3#71IKI MA'WRRPRX3RRU)!A&&>&-
J=0(HT9ZSPP]2=5C#_U;QQSZE]^O*#:L<(M&SWSP
M0@F'T6#P('BOJ]",.YFY.FE9I3U)]Q5*X)=WSVZKQ8.OISF]?+]5)I%13/ M?
76X$E;3Z8.'(#I>A6C<^;4,G"_#,>N"O")\W>PJ+7]\W'S$>7R_C,@/PXS(MKN;7DW6KQ-"Q-
>L$I]1$H++;VU-#3 ^U:E F2M=1ALLK_(#S-?Z"*Z-7HI'U M.O#HKR9/#W>76/":KN(SIW&BCMQE#1?
Q%.H*/W M[XXXB:Y.SZY^OTBIA2SQ[(Y@#D-I?XR2/@CD)71QR 6G#QV;&/JU,*HE0X[M$_H #I'D(
N9G76W9NC/ \L0 ;$Z06Y8Y%+>W%=\"4F5:WH2_DVV.0 8Z=A4XB>*<;86EWMV@QL;>O-
8V+]B/2'O7S$)H/05:R6" ML\$(2S?1I7+>.IM*.3@M S'_'2Z#E+N\DP'6Z1(P;;B<#]=
F7UF%EDF'GKC=IE>'YXCQ/TH99O*]D?,U>S7";*:O M2]'@U+ A&Y.#R_+IZV51\O-
$^YV_GBY76;'!N)SER4E*<$P5#2M@1G%O5L(! M=&LN#++!R>$(4#KPVFAPGK0Z^_Y\4-?
DYKY8E_2E7](<5QCGXNCM.7=7TP=\ M26'JN3--WQN9MJE6RZXIRC#HM@7B,?
>'KUYC^I3UZT68FIPUE]F%%229FL& M[1K':T)M*2Y/G^)LG>#DC'8.R^^KO@<:[YH#MI=8G)]'Q'\
<:,NP+!^L]CW3N_^F&YP(WM_K@H\X?W643B/W%%"GL5]G8KYB^-F'[+>([>H;]]*TLOYV
MTBQPNWTTC6!P?KF@D_;0A#CW'1H%.':[1F1!\< 0H'57O:>S[*$Z)XU_N MBH?
7"4Z%O:!_Z,P$_G@QZ3M&;% MI)
0VZ\/\2E:_[&Y]!*]21A+>+,":FCMP!\^#MZY>DSCSN5"B$J%78R!C*U"W]EK)0.->;LL)+PXS
M*.YWD)M!#T>\6C8X%QP!]FT!FQL('50KA?K8'Q^_K0
M*V$UG_G!P^!$T"&23[Q0&6H0:BG?'7U2Q&OF5;)3-HH:#!_[ZF85]*:7^\] M=+
("T+B/&Q%^ELES!_HBQ/V\K,LNE/ 'SWWU<5*6$T?#QZ"Z&05(FGMKY%! M3"A4-Y_@=LYH]L=
S'NG*T!*?=^3@44!&9B>"3W90(;]"M^E97VHK0WS8S!C M&GG?IM\(>_PM4_]#((T+0NW7H]^$6JU
/)KE^3K*KO"]("; Z#,5\LT8%(\E94DLJCWZ88&K#3U&,F!XHD&G'Y*TL]'9";>)/*PR60F.$
MCBSB:HCI!6)2+WZTA4.2I&_V:*".>3,2 \48-38M5X0XXO+A27*:)TX4:>7" M$&0$4TV/6@@@.8;
(;-0X96>RPQ'C+"WC*!-8SNAQ]O,1!EG?!-'"'9-$$@1% M%!TZ+5F$0L,9KA*4,/^%(^)&EYYD&+)(4-54:
<4 $F6,S483)A^$),=K0@:H M]5\$8)">;W8)\HIEG])69RSFEP%]D$,6#&4 ,4$) M3,.&3I8G
PO"B&,>Q2([SQ/\]!]XHZV7).>7$Q]80U*,A "Q0HU,0XM:&'%I M1,6#$..2I,N(;*[3V/*ID 7]4D,'=,B-
L10@+UDLL(>L<=CHLU M-8";XR+1>R@6+;^D2L!*D@PDX5%%!<]&&*&#]%*(B75-5[:A MH;Q*-
GKN[P]P E9W!;CW$ 0)5(CD*\!B]40(^>YFQE&"(XU%&#[VULD*4&T? M]Y[!Z&(9D-3#?%Q3F1
#^:)@9Z3NBUQ_0$ 6\1:Z1P.NC=TS>@ZBQS6@I.@] M!3]KQN0"K<8_53@OU>:[]\S;EWT,I_V0-P]
].X8C?29;IY[[LW?2%K1-Q\7 MR^4ZKW=Y5.<&-7*^>MD(L^EQI1"(WC8S!<+ MY=?>).R+%';
#3GTDB!(8H4GY\K#AW%/ PD5Q'7"TN:\+->83"*/0B40A;3@ M-422Y"'220?22B]A&));=?
3KS9NWMSR[ALK 2B+>ODD:<.T7:?0O/VI]N?
FRCDOM<=OQ0W)$KH)_%ZL[PM,DWT*:64+Q(8(#8\4(B H((>
MUY@-7PI4BR(A&R(ZU0"LHCJCY[X(H(35=/W@(8A.5R&2!O^@KP.9_-.G^)Z"
MPIH+"6HQWZ9?!7)L_OLR("A@ "9-2FI1U,B&N)#0?;+N[$[_73 GX,[B!-Q! M=_+N7)V NV!.0/-
:$2*$V]7Y;9;>19K@A$9IWZ0P0![S0R$*BBIZ?%];T:]@
M3L=W1$L>XNP\7Q1DR=]_1O^@]*5&SEM,2Q/,-]BE2@@$1TS(Y.1&/.A<3Q@Q M:=^\6"=IA1,!YBS-
HSQ.HZP-CZA:$;>K>&.+(_B6.!9Y&!QR RG12:@UL0Q; MQ2[4I>^E='$ XS><9?^1%X_Y-8[*

(L>)6$M1[129Y?V>F+' 'AZ:T0B#H),+ M0LW1&:9T^(-
IH4:M7@D+PJ1O1;;.JXCPN^1$99DT[COG1^<9" M*] 5RPJS?!'I SZ)]JC&I]VO3MSWI4H3Z/%M2I4L(
H9 6KO3[8Z+%1,U' J M6,@84$(=<&(@ XH(*EX8+7!0ULD&X<+K$Y(Y^WCZ1XK&ZK^.S:NNF
MD?;+#2/D(4>4HH"X8L*GX4RC@H1.$U(W#'F>NH#B(LJBOJ8*4<^TT8(=<4:2
M@T08'3B)+1F.V7K+EZ)"-P7Z6F)4W6/$C[,F]/=>)'A13JA,(W',+D0(KSQ/ M(J*BD$G8>]81+6
I]X@D"8)(5GCZ/"2M!FI4/+-F3CE,^O,X#N*\PDOM;0>[MBB\&N8)O>&23!\$F1Y!2=E2F-IQ<[>
,ASYZQ N#(,>Y) M@."(%I;.+>[G"@@3.V]]FZ7Q659$^E66@8SGB'DRO%&PO$X $ -D5+H0>5P0
M<DB#%FIZS*UEK9UM\=Y><*C :)/! MH &(>@XP=1L.7!-QU0,DE%%/.]#\K.RB
.+DX^8*+S!A]PYN\%/UD;[HAV&& MX:#K>_;F7)WQ9,Z]"(*$4]'JIGHEZA>
;MD9L;H(])T5@G@IOO.7BZ%RD9;, M E]&Y%N4K?$E)GRT;,>D5MZOS;/ 'IH[C3 (DKD@U!BY6ND
437$]=CJD[!V M.^72(BIO>776Y>%=%*T$H7!6EXT6J.-OC?ZN[5QV !R5I:X*BT, M'
OYY)H:8)]50PDP_%'"DDXN7A*\BM+D]&F%\Q+3<<.08K-GFE)EL[5$PJ?NV2'?S0 M(.GE 5DB*\@QL\
[2)YS4C.)?S>"TFM,J1&P][@)');Y*[^ZK^>(K-:P,HZ;B M%AV?Q'*"WV>640$,M5Q02L=I&AV4,25T-?
*Q7;U/M%?:)\:OVL:6:^D,L$= MD$DE"(=$!G32I@]>L57/OD\$A#NB
L:O>0CO1^_V0/1WC(X.D(Z^2*/;-$O9 MW))^3/D>^'V1)9B4[,-:;2SKG>[J/LDRM5)].KGJ@CXP%+T;,
[=6Z&^(Y@ M7<#__*=_??OFSW]!HB!(7'5;C3=8OAE^J&_U]1I M8UX!L"F%\|-U%= [XF,-
,/QR@JGC&#\G6.1L.;08>><-_<+;LF81^#+:L,5< MMP7YL7"(I7@U8-4B_% 2#+>,*0MZ%H8K80T!-
Z0-4YD ZROK4[>,WO,L$<$ M4@M#XI 1H8)&3+Y=!].(V?^A":.&V,"4\4Z'W0FRG 1O.,YI-L7UFR
MZP%PF2PK3C8E,(;)%:EM&;-UE-I=YGCH707G8V](V0==,)ME,59@K931/$$R M2Y-
7K*"L44U;E7H!ZU"35YY4*TV8*X9?&NC=)C(>UI/$O)[+TX <',$;R8"A MBP:8G+237\XJQ>6L5430
[^|\,]'OQP=';U!]+N%2D:DOZ!H7=T7)/V#^MEO MCHX.CL3_Q=/R
*4L0&4BME]ZRUWHW;N#7]_\^>#/__KGP8DI]O/1^X.W[<_O M@G-
REB3\A'R4749I0^IF*PZ*7B>#SA49S JM6F"X[0Q5FB>V
MBH@=FCJDU(N%;G#V7>$]2G.=#>Z@C.W)[7>AF1.>'W=Q-3 (!)
MFH$FS+:J:.;0.C4PC'3'ZCC3AL0_$9MEUL[S[6T@:P3BFPZZAF=C<8C\TF T
M\TJLQO36:N#QBV96(QV45T/(1DX)4;A\&N!SXI)8V(/'(WUH,#>5H(S2 MA 5SD8?++7M(,"7!BCW%
MN&92PZU!*W,50LFUU::9 _^"[]95':X
3RX&#&^WQR[=I<08I9S7P2GC87!4,N&4'_2",QAR"M<8MIZ+/C+"1TH6<'O$]?UT(XH MHXY?^^8 ?
VC)# I@B.6"4EI+JW7X:G#2:06G6,MZ5QL5V#8YV:0@MLBZHZ"# MI]Y" &.$6MC":[PHI
1A1LD@+)&A*GG2B0%EB@30<#RVV'&ZL&VX\BE*,4A#,!\F$;DR8+[BB;G(C!<9C9B$&!-EU0Z(O
MX3WZPQ":%/-!/ ;#!QF3.M<.D,ZGE+1^6D8R/@F@A->GP$ UH=$!4UE$4!\ M/)IC8H3&--Q32R/GEAA-
OGAU(0C+$PH1M3A3_C]VX88?@1Y[A>EP81 MKGU%2+@F72$)\48D@\!^P MR$ W7T@[-B8[-
;$,G\S;JGI]/DXJ Q+MT$]YFY3!HI$(2CGI?#;B#T&#S;H MT"'B14*E=3T>77>()Y<"@-JV*CJ06U<$='I;
<.^(X/5;@E.\W=B\86<6-2TU M%@]2BF4 4)ETA4N H9<2ECZ1RG:8Y9/5S3-5@D&((0%5DJ.5
M@D>0,30#29@HS_);&IFRUV;?\H[,6Z\-O^)IV6G+D/WK\[X@RX.CV[$HP5!RQ/ MUH3ED..UX*?#^;/?
(D*BO"KGB],G3.*TE&;USRC'!X.>74W&L*T+"?YY>"YR M*7E@_9QYI(^UEE]NB@'4(-
Z&E=H20O/14C4;$S7JH#EHQNS"/A<+"6>7PJ_? M8G(8U;C ;E)8;=A\Q>(D: W",\KQ?
FE\FVI*_O*40L"0@<>#/W=83]G3)QNOYN^^DZO-EO MB#426Y-K0>YY_KN[E:+-*H SD6O":S..2/"
K:P5IS#3. M,[1R+4C7L%CF3PKLDA0/:8*3CYNO]/-PGK?G36(CF)FWS8%>3[>M65% M1[.KB:6
X>_6T)6IAA>SD.HK:(\ $T9\G_7=='9&^**\P8DO)$M]TL M]*;8#?7W\RJ_1'WUUC#$(J[?P^8
;;'RLEA&MM7H:I@<7O$R[I35O17]F>> M#7Q-W*"B,(ZLY6U- MWKT*
[3]\7<4/C=X+&N7XCH5V4LV_IL&5+U$*1707,:N5HV6KB\I6>4_4^I]3 MK-7E.JT1+,10D4Q28
'I.L4]TOS7:<]V24%+AOG\WWQ:<7 R:ALZ&2 MSCF>%66_^>9N"5PRFTWFYYU^@9_-7^[MEA2)
(D2EID',*IXSV%O!CS+8:^7! M\,T!I#3G)SA)ZZE%?6,].+'HM(JP 7."Q7][$ZDZWKT].)5S 9[C54VLV"B$
ME:,V&$).ABS1\Y[^C<4%]K-:\WD(J%2O],,J ^3A)
<$LU<<)7F!"K7SM8]"Y/[\\/DQ[;VT;M\+"TI+IRE57!%MNDG,X-9RDE++V=JFCFM;$(P(1VP2TO
MUPLS3[T2'I(3(&DU.62G3Q[&^D F<>I].<[AAL] R6E&[)S_-S@_W<]-//O@ M!=03,<\["0,N5-
(TW*HK"M9M=:BL%8'C=G"NRU@0 !8[5-2!S892P%C>K:';
MSG6E30F@CHM0Y[T^8C.+_[Y.":85IP.PVES2RE0L_#/]E*Z"C+,8X*5E*ANN(KX9\CBJ&;C-?
3.'I]'(\;^!N5\W1 MKNZT0L X!]LBEVXR4%W 9';W@9[M1$'U;I GU;Z(.9H>MW6.IO)EH;+V+,VC M/-
[!',U8$ 6.U34@C ME7WVX(5J59]G35^$;Z#'K?4-5G41Z':CM*/!F] /.SQS1ST,: MTZDK>T#'Z_"'GJ2(
2%OR]2)]DZ?8GYF[HI.@T\7"ZSU+7R#\)IT-D@##]+8 M>D4 :R0'J;O*&B2U-ILH<,O OE_\#
[A[X/38;P8BS!EHV[,SLP\?T0PY0&]+]R:J4:^2B]T"V^ M2W.6]8*YN:).@8+S_' %5(AA8+4?
Q)7,3N#Z\)2/]<7R5V4UW?1CFF=BBQ- MFMOEE[27*&K^U_FB=N&CK V;8UOWVE'97B\Z[K(Y!KB2!
[3+*.F]9SR-;]+V>4(?H*&N2594=(*6;[$$\OPFOQWF^H-D@)/*0 , M#
[=!/:9H4P;_+':E(%$,ZLJ!]#G4U_8&/U4?Z4M_:)K,2=/O'0+GJ@QO#UC5 MP-#4':MTQHKZ8GE%_;
<2P.+9>G M>PS3UQGS,XQ%%$R-);2+>SL1X@"Z/0%BD W.%D> 8W90.20$]T2*%HC=,7.0
M]T8+%]@M+TS"7HGQ@,EM46+5@K8KT/T1Y/E;HL62W;SGT^PKG+$3_=P=M+A;
M=C6O6X^.E1ALPEAT@AN?B4"E_8V>&JKUA*X3SC&),ILGY:X.@8ZZ M2KG04<-SW 0;]%&D!)TX
M&);9,8Z))30050&[R"95R;ZZ9E()3#'+>II>'C+);.:K8QF PZZG$6'G:]C! M/IZUR6*O].
(^F60#W6>13A8,@RP I61QM3BB\H@K0#)0X\K8K)-!/B2AC'9)
M*PR64C:+Q#;/8[[;=))F:^;TLZPIG&'4OUK2R0 O)CR[>/H^FXD:"7GED1+@ M@#P#"3B,4<&23
\7@F1NY-R.7XK*885K"WWOJ56G5,N1F< MC#S@FFT1;"SDDU9J@'WN#"7 $$0):\P"
(03).EW@LL1X&)"OM)DDFY)?PKA4 M8$@@DP8@0CG 5!,L.*OJ!;/+B%2;&Q+E);LZR6X1VPX[V-
3\;AR[56*X86S6 M <,N1Z#R!K%8<.=ZJ*\(R:CI*N?N=$TJ 0(I'1VO">K@]>KN? U8&YR=/'9^ MO>&>-
S'UK?=9+$I>+ZHX56!P \6H 89I3C"E.R,\IT&]8,K6)QH]2!;Q/*\P M;:VJ2=U0+PG;3[V:M3R?
>'6IPNBTJTD%#._<<)J(%YQ@*F^U#>S=Q)6[8<'A MMIE<6$L*/>-PK*IM&F(I!@QAM\CIS] M5I ?

72XQU3FHL82W8V5]:.U!LN'CX-308QIW^?>8GT;],!0^/#)^)?=YK$7< MS!
[=QYY5QQ$A&PKP6Y2ME3G+G!0]7U0WG.K;#K;V?CG_0Z^ W;!O"D#\4("
M=:B\5NNV!OW[GX*/(@=PZI7E S2K*I+>KD4 UJI@DQW:+8&ZX I749KCI-GE MF\7Q>KGFL[
3O$CC5+-Z8M/R-9K<8T%/P"Q/2X4]:O?+?^IIHUK]YSU]^>H4 MA"P,TCR_QAG5N+LD:== ?<-
N$/;V/;0";C^-6LG@X]L)GC99)%5@RXY_\UIVY?AI,NYV5YO"9$GV7!I.#3C[<#
[]LFO71P4CE#E!/="X5^&E(4 M"Y7@O*KO(EWA)362;(1@LBC(,J+].K -TCM^G%9KE)UT
UQ#@U=T^(XTR"U34:*.B50^_O]7,6N>+2U(DZ[@ZSSE.AN[&D*_90<_K&0[7
M:@S\9IL2&"ZZ(I4"/_(X';TU"!8,J"X"]'0B8-AHQVCG$)9HASZSI00UPI/L '] M&?6IM6<_1'?
XC6[QP:CB]S:3'?SP!I->'@S)'$#*%^KZ-HPP [9]E8)3K+/A M37;:_FV]&0LD?\?
CKK%K[N=YDCZDR3K*3I_J:(K\4#"_AM4D;6)AXHJR(KA* M"=?
\B',ZTZ[*CYN;M&)OZHJALO176CWUZ]T^]7"!A_$UX+:'R=F!BA],Z7DQ M3:5->SVX6MP#+
*V=.\Z0"UH<>F@ON=9XQ:1(@? 48T9H^ ?@T M<_X;MF^N_+T=C-
GQ7N5]FX_28#]*6/Y_UX]:UO^XD1IZ]AB1A/_KFTB[)M(U
MZ.8+NWV%5X=G#XTS<$UV6#Z8T;R'2BDC,Z!:/N3B_I"]92N//.[5'SA||FC39R^.,_IUWK-O][\5.;-?
90K6V;7S3_Y]2]B7&[9]#L9K!/?_?)'\'85 MEO?NFKPFJ/S'&N%?
ULM;3.8+_K2PX)]^Z!;+V^\PFL:WL[]YXGT-MUXW2'V2[*AO,\-IQA5P& M%KL4U(ZL.IQ^^PIV\D85A!
(DB#%.2O91XHO\]?+AZ1,F<5IBW=JW@Y[GD\=NU1B= M/S8K@>&I*U+%662N)WSOX1(O;G2#(+?
16S3@S MW, PJ(0RA#KP.ALXE@=#,P>09LOW*)1:FV>\BQ;*,#A_MZ:7
B^'";9$;I4P+&8:$&JVRX7G*$)K,$()
MCS(XIQK2S_+D*KV[K\KYNBJK*&>'R)MX:R=1I:.8N[I/QDVM5)^ KKI@^#@1 ML,;J4:.W2KFQJS!9!J?
E<1:5Y7Q1@YL37K/&@/-1USXLZZ>E]F;P=F5YO3+\ MG.H.[A)O4Q 8*C\'O?5K#B2J47^BR#XB/(
)N8[8F9)A3#G##%.G&&H:;ZZ(M;C*OU@+#1F>HYHE]6]NB@G[S(Q&0%,-
(VM)W91R\G7!NH\U3!+=T(&-[*4N+ M2AO<'A1M]_*/(Q;?Z^-F;(ZG6/8II0;_&D]O NMWV;U(,#9Q-
_70CX7'Y]N] MF]&@B5#9M^PL]'Y%"&[7!1A3'HR:KNXMBN46E6KC6D[0#4[%+0&;/])8
ME,'"VX]0A1A5]_V <1$O"Z9U[DWXI@S;@5IP^Z]HA-6]G2"TW(B4.UTI>A$ M@[/MN9]46)G[7B[WZ]
[R(#0!;,^WRDK#T$C C9E\UTVW"01IAQGP73=P.
M\4%+F(MUEI9QE/T7CG1#Z3D%@LEUXE1QYY0GQM+ C()G5V%,][."#/15[=Z^:9VQ<'COR&2D^F
MOJ*LET5\?06VH?VO+X;VSVPSF+1^#HV]TK8JJB@SK?--1#WFZ@TK'V5,"ZUJ
M:=C4_$H'5!FS]3!.3I]B*F]\/[9E66!(:ZNN,X-U!4%+.O.<2L@IH\OR TK9 M+3*;T.ERQ@X0/+_\66
MB@6ALEHM!9"M>M2O*'-Y@L=><5IA<3CH7NE=33TUX& M&%]U2^#28E^MB"*AV5MG%]P&
<0;'6-F3^DO "W:3-E,6#H;*BD,YT5 M9;P,.NN!Z^A\V-"Y<1-
X8C%@/#XN2C>F"L%P7.P#U;.-20'E4P^:O!3;I. 5 M]@Z+S.;!]?(M(BF[V&UCBD+.)U&T,/L\D83
T$2';,R21]XF24PEPSMYU^M; M#D=A,1C'/V]:_QF74\)O,
MU@I]F,)6*QZ<2NX8Y9#7(D[/B]GLWZ!^&1_T>T8-U/DI1%E(%(9$:8@7AX1 =Q!T@=HB?P%$ 7&W
MI8$YN?,UZB^BV\W8U1U>W_L>1!)HKOP\CN\HANGH*QQE+#71IRC-Y GGB/S M%3-
!W7T.A:FU]<#]4&>\LD$6BNB.:](B1\M6MQ?9-$BW?<'5\!]$X-!\41]T MG>5)0U6I_R;HPNK(Z<"E0S?
W&,51>4\=]T56/**H+(LXY0X7SZ?'#H^)VQ[- M59 Z+O1]D25TDM<,5GY7_AZG9!2TCB79:P9V$%[\5I
?%-QQM$]K*).Z?O@8 M5N\]L4G;34*(=B*7,K;Q,]SB+T5.V G'%!Y?RKV*,8G3RVRWAQD&]QNZ&L$
M83'!@E*Z05CDAZV\&-[UGE*8,3C/\44:L_?/[@CFMQC*SWA\M\,B"]M'K#BE M3;X0]&:"-+@'4-CN3!-
'P9[0Y+.W>BW!?K MDB+ZDN:XPKB-F]^?;HS7LDE%"KA9A:T Z5 MET!T4PZ-(*R.L]#47>]F ZQ=1
_9'>Q\0$Q2#]N=_VAZQ" +JU/L0%7')!]- M;AX8M&=\A\D9$Z8'8TMCL>!ZBP=//LQN2#M_2E:_[&Y]!*-
=1L^ MAM722FSC9N9"B$K!6+V:>*@*5'OK 3H=K@I';^]'?$M+6]OK3,
MM]?,]Y2@IXE&C+HUXN"3P^;([]PL<54>KXGNPL- P'/F]@'NNLW-N*1Z=?
M=?),*P2H&_38].$+&M'0;=XE C>V>B<&L=T5Z/0M/TA8'BI7*C_&;XE<+@G]
M_@Y,T^NQ];/8':"Y6_#D_:WV[..]0O@.F8I4=TU!K_J/M40$I,Y[/8A[1]10;A@RDRM:YZ
'Z\DR".^Z^1AG]U*C_C-(< M-26@K@@PG7A)\"I*$SI/Q72FE-3."_4YY]4])OH)^78E@>[H215P[/]ZS,8I
MY"XY+PZ)\@+QX NNV V*2U(\I G+RO2UQ,EYWKI2L[A*'[3S5G=M0/V]!6CI
M1@FN$"L#-86@VPWZB95#N_IGU#FB75F!^K>),WU3S&(Z 228(J;H]@T[D%91 M2K-
IX6JI60ERUP;4OUN E@ZSU$6P\RMU(:@IY8"?Y:L.VDDU+PI*]]]\]$F* MD#O5B-
>E/[L"4'"72F.2SO,'7&YMA17:@#IT"] 3K7!;5'@KK*GL69I'>;QM M_R]TX?>O"?3$_FV+"M^_#"6_B$I-
RT.4B6P\9472N,()>\#RKP]^Z$F*\!&R M%QIGZX0O.,;W+-D5V[L^72QPK/Q2^T4
B&>!*C[F*BOX0+"U5_X!ZEZ-A CS M&D8_#C7]L"^*:<0!:I&A!AIBV)
]Q+)W];H)"U711EEGTBQ7O&K,R5]-S7? M:YS4_G21]]/G>GP_@+6EH-
7>'^T[:C>0$,=4WXGJ4*$.ULN^)1Z>2NX8P=\0 M'VY:.":&A_,54\+2;;.<6]-?[W.
[W4<>+S@=,QFR*M$1Q@>]-2%>Q@%]2SE@ ML]);C"ZC%&2G[C_/U0OI;BO^;?]^7R@2I:*9-
9^XCV,#VV>2@M.?-H3Z(P3C MGE+T1O^G"_HG^G/S$_W7+=6GO_P_4$L#!!0 ("^ 9UG34%V:"B$)
<" M @ 5 &UL[5UM<]LXDOY^5?U^F:!*2>:$(+4C:TOSZ T!*X@M>FA2IIKS> MNLLD=C>(?KH;0#>
QI]_7__LN__^_7?SLZ&ESY)/ ^#2ZH>W0=3NE? M!K?.G'P:?"8A84Y,V5\&OSM!(GY"K_R
L,$YG2\"$A/^B_3#GP8?WI[^^# X M.@*T^SL)/B.]FGWU^_Y:RV?'INW;>?
21SY\@/!6XN>;/F$]VH^$X^?OQX+'^[)]U0+A]8L/[&^^-U=S8M\]_Z M!OI<3R+_4R2[=T-
=)Y9]MWYFH*40_SI:DQV)'QV=G!Z]/WF[C+PW:__E@HP&
MY(Y,!^*_7'N;KT9SA\6SP(FDRH[%KX_/*3=)WE?)^,C(]+((I7"VZ:D2\LZ\W@N/&7SYQ
X'3_2$@NXN^GCO1XU5 GVO!6&%]SPHCG[<_9B3B7Y*:LIN?E]6U7B61'Y+([] E MNK:^/^;
(A_$YC>QCA(*TK5[;KASFQ=:5" MV)XO4??[D9B./+'0(&$$LEH+6UN]2V6>.$MBM1P%:9M>[0Y#[\
(/DIAX-S2* MQH1QN>UD78S-7%S%A_=+/S=C!SUNTF@-74RT4N KOA M/RBPD"6/2SSBK1L2?87G9&
(_%N19HNQD<"2R:HD(1OE?4\]L*^O.!-0M?#\0 MV2=:2O*L,WDRQQ01]^V,/AU[Q#\6L(B_2'PD-OP??
\@/#1^BF#ENO&XIHKI318IRG_)]&S)W0)E'&,=ZW9;#W(*R]DFYC.)X

M(7,_1^ZC'VST/&5TKD,G0X)].IH'BG]B/V@.^?<]T8>KP)FIX2R1 /$\P0!4 M*0T6HAY&F
+E$!\3U'Q5[(@C(+\$5*(-X_8N*MD@T)YO].^**!L& %0;I"# 3[M R;8&@F1\)XP)XQD: X!O$H-
1/PGU(6'1D8DR.\?21"(H-T)05:NH@?"_C,F M['HY>P#\Y9.8W_G4
L<^QP*$_Y>^P%^1%DD#8\)\ZO$IG0&PKQ #4?^(B;I& M0E2\+T,/BO:&%!S_X(-
=$@\)ZBL_:TBHD*^]^) MP\"@YXBAD*.$H181]PSX><)8H3/&445/#84<)0"U";EGS"_#V(]7XKSC;3)_
MV"9.BUA7]: 8HP2=.]%0L%UG&L)8'.,TX5NFA&*,$FN:A$/!^9S+PYS@.O3(M\F]D90*Z0@I%&B7&-(J'
O68^7.'K>Y]USYH5&FA8*-$EF8!4=">.,MKCTOE M3_WT(+0=="T+%'N4L!(D+HH*Q-XF6]!)2B10?
%%B5:4X^X94:)@11V^^10HHH"@!]$]8/>-Y0\7> MQR,-C?G8*A445Y1(4B?4O@=><90XTKI^[M?
@$VPHPVI9C#W#^(WY,>^!N$"1
MA%F.1K,KIB&%PHL2_AG%VS/4]S3P75_O_(@*=FPN^W'%_Z*&74,*!1SGB]1)O'U#G7A^3+RT2U=^Z(
W).6*C4AKN. H^XB6@6%NE\ M6DQ$G_TGO_-B+R"&ER= !%VK9!893=<5QRD2&?
RT'.8!G43/11WU(N5 M>D'WC+RL%Y9?/\G.7/.XS73HP8AJ&GOB/J#7_Y 1B_AO&YPYC*S[LRC%7
MKQ@@.UH57I .:!.1>]*_+)W#E_8NX7U]",@MB?61SAH/(Q=:Z=X&VH+(CZZD M,2,+Q_?
1#R/>32]UMH>R>S&-G4!2XOD:71 6K\9\'1USXQ)C^$*LG?BX8'(R$Q=: M\>$ZZPR(X.C^5'P(YLZ?/?
(U[5<^"@@)]>JQL*%5*:ZC'Y#H^ K:CL6W-'1M M Y^&'*UN<2V%F$1%5T3:,=N4@UBLN'X,])FEQO?
>? #^:H5'V)E#K?PU]X] ME(6W@%<:>?>T0UVP !6N[4E&U/LD*)5V$;CB^UR- 3-0P]
M3\;_3C!V?.\Z/'<6/O?F7'\-:T8 +UXM[]:J@B."KKP[\2YW2+Q+AX7B/"A? M]R;S1+XN?
D&FHA:77GD07KR*WDV5!T<$77E5V>K,59AUOYLJ1R_Q 2\];#-U
M\|PQ9IWQUA>91FQ:53_R:=&QQ/61Q+Z;JW]8.#KZOLG1T<$/A9; | 4H:AC)GD>KU\P!'T1M@A?
ZI)M;Q7%W&C$)@&<[=U]= MQ.N9L<^P[J#2&N#T29'II9MA$C]2YO^Y';>-
"]PR89]I;4=Q.C#ZIS!93*B. MLM8,V,=9VU14$83^^*KV]> M6'W^"%M];IL*R*]_\^/$\B6+>37:Y=(-
$6)@X9,7_SYLX2U,:IT%CR*M.BP(K*9W&<*&/ MIYL=L',:Q2(&S@[)&W:9#"S82\MZ>K/*CJZ=.PX?
[RX'73!C2R@\GAUUDV3 MRQG9L->1=;T+@ &ZIC:V5,-:OM-9PO&AGYC\)=#2Y)N9$JAN*'*6F]E /+$
MV*O(AC]LRGO 6OSL^*$0911>AT\DBG55B#-Z#3GV9:IZFC3*C#\NBBL/J4 & M?\H385]]JNE'5?
G0,;\E,604*Y%A7VFJA[M2Q@,>N=;;P>LTYID3^:Y>=QIR M[%M0]71HE!G=B\]]N_"#)#:E [4,V!>F=M-
*26YTO7PCXB(C\89/? 4SRYYV M'$TKZ2^+!]5L!OU]5#TE-@*IKZK-
++!&OK=V0^B7IUI1KPVHWF6"94_5!RX* M&>$/33+"^<;_PUG0Z"^#]!OX">)<\48C*V\FI?+5 N
M68F^S_^%:(JS5_? UZ38^U!--*&5&'U9KKEO8-.+A0U[%ZJ)CD!(H.NK?,7 MIB@=/?:N5!,-
F65'5\V>KE1T/[!5%I3=WZ18R%=;>]8C'N5$YZ':)YIZ'[8 MLVH0D$5 42#_@TFMO/OX_IW4S-
WEU5WJ6NEIQ8N$B?K=\G/R<+#\W3>',4>F M'2Z7A+E^I$SFBK::-=6;X5*KV>:RM3-\UM-
<:H#K[C34F;81[.WZG;1E@09] MFNMT![*S?7?PT&C;?$1<6Y@\>[20YV--GI2?
O>LUA;UM7V]ET@2FOBHX'0S: MT;"Q+>P3 KN]& !4/W3<.$#XXQ3_#,_.(8+H?
BMKS,O0.]@0H88..ZP>TC1(MZ%"%N%N5XG6&]X ^:^ZL_-1DAU*T.9"-
]FI+T#OBTM#UY3,IV]Y.:&L^VLW7L/-TK9E(E\I M[0+PO7B^]E6 M0F\X%Z^-_BG_J3<8(Q-
V%]]3=5$X#IUF_.Z($XB[_^+NPBC\XK#O)!:'".Z) MR^,U39%+P0EAQ,
[L[4.#4"R:+L4_I@O@D,S$LK6#;/W7D#6U 1@K=C)Q7U90 M!TA,.VBYDG'I-
9O\V&6]'EN_)>SDYAXGA:8PHR\%I.@1[YBBW)/>%LQH= A^ZCKG83)CE!4G_FQ,T.XH#]K4!;@,
[E[I'_=>'MH?64"WO5L<.5-S8 MF=@&:K'I50_20:\/]H)FSWY>9)(HG_^L8Q^P]OIP4ZQMDZF#Y
LSHM)#.B). MKKS=TF20,;?7A_MH78T[$"1[.+>H2CMM7@RI8P&6AM ? ^M]2#L>JASS?LP
MC1:7Y2;0WQ3K0,\6O- U#$^]M[$EV(.'R=K<:*])W $7X] (F];7:6<'V=@6 M^MMI[>TA
S!#'Q7X@B0+L8?N/Q*?$>W#YH8\4HTVT%]-VT%7M+'4+R ZJ(@+ MW+70H;73SD5W#
[=U9QXO=G."8^42XD6B!NR](X.;+TXL)%R-IC6MI'Y3Z(_! MM6OW;6UM 1@UM'Q
M%=ZA_$"UOD4@*MO+:P5\U%K?S=*<8:C5 OHC=SLH@#:4N=^CND+R-MRT!T_F M[:[J!E(?
_*@N)!7_+*=)[YLD;MK'![?Y0M3\0MNV\4?Y"C3RTG59%KV:L#E
MTGUTPAFYX^/FY71*3#/"OON!_OQ?@]D$1U?_K,:]@>;"CQ8TQ]O NW%L!O["]L6Q*MQU^Y%C?
N%IWU*,.\; MHU8,O ^W&$6-WV@T'><:W4A7N,/X\^!H(/ (:)0PPO\A.<5%Q0(OSNE?-G/"
M[.3I]D9E>G$AW[O<$VK;NY;V4+]EYG'&L$S!V?D*XVUC!2GR=<56%5L:,K3 M]*
(0\ED2^2')7=LK..,O%6=^.$PGCV!N>VKWN)K- M8)W(TO5LPG5]QC_ZW706"\",['N-
E%DYA@4&]1=.ESV7*:XSS$)?NQP]>5?V MO8QQD.=$*K!]?/#3[GS@!GKY_BO]^
M(#M@3576>_FUG_YW14CIP;*"VYV4 MW8[3#S*&%O?0MI_8],?@-X+%R-
'F]MZF>=AT(WC,+%@V;D6MNDD'D;UQ3N2) ML <:$?2,B*P\=O3@1,031:5)&.FS(B>G97](N<^A
MTN>,K9.0G1.M]+^R7Y])R(.(##[P%M GGV@RJL^%5 +H5Y,.^FP,G&61!UK
MG;PO.UK*,4A9L&Z$I'VN$UD9F=!NMI2[!]@3%S(K@-03?6ZBA6$7GB*?)1/
M[DW(Y]S$+>\Q8=G[(*+@HMI_?E2E[]V!$W]#K*6!:&K VQ]DC:5/I.&X5OF9 M2;M?Z3GZ\4
HP*,+,CN9%.'Y9'0?C]2X4G!DP]E;\F($5^A KA 3U[X*Q?N MO:4Q,%C:[/^"F\!V#-C+?
S41Z85[R$N:FL783V7WR(A1#"[]MMT]RG0X[G%# MHHB0XE78". 3-CYD1U KH>0(,-E[8?
U9X#3FO]%,$97S$!G+(.5!2LUN>SUA M#@\"W?3P-"#G;./$2C:K^U5K/JG5"'K*&:;"2]ZY-
DZ]\#-9(L:4<*Z<=) < MNZ2<=S_ML.VSN,2:EKN!'&.P*'MHA*NTGA=KR<+A$$[]&9&[),+(#55MTLA
M:/3"=[+Y4UQYU*S3*@<44I;!#RD3TF,"A[]@V]0N65_E7@V7,59&SO4I1T0
MI5[XTOK\W(5X(32(;L55L]A_4D]*IY7#!VOVP0]9 X--"TA.]H*/Y&DV9K]1
M]GU;G4BS%5LFPIZCNCA=IY)3ZVK[OU#!12N=OQ_&Y]Q;5KR_\ITUP]8=C!W[M
8\NSTS60K#EO7CL1&*=C"'^&QU=6@'H >5^O"\^=-UDGLCH](),?=TRG
M4:YME^.=99GRI9N1M7%3?IC1H)$<;3^THK8I'?BY[N>KT[2H@(C%.?#YO[; M\W_\<2>N]
^7O@IK_OOW ML>3^P/SBA_X\F9O@+)&@!4]EN"I@*F7I9KUK0]596E$MD] %(W945;*@1Q%\
M/G:)F)+E*58_^GZV.B.A^\A7DM\U@^WF^*N-\Q#&8; P.=@$39(OB6Q-KA;&VQ:G+L;!O4 ,LK2)/P
MZ./?A+<]F@Y%P;N9'"7,@YZ&O!_^ QKI-!+DLCE(KQ5O>R1]$-[2T-G^)'_2
MPN8]M1OJA_*,AEA^3+BNB#L.@)]-H!O?E0\0S1B17]9]1E#KB+%'M89VE]\# M,N/04?

7344C*W]6[AN P,:_UKN[$NQX=*2(.[IR@G@EB@V.PGL2<([9F/&N M:/1@H$?
>)-6GM0H/'MOD19_3OX8/?A 0;_NT7G2>, & ?M8P\6 /47:] (3H MB6XVVQ%BQ2@LA[
I97.'+RU'#X$_*UP!U];I;>S86Y)@C=6"HQ<'>+97TT'; M2)5[V]LZ![WM'O6XML'NH:/[2+PD(*)R(/42-
[X.I8$(9=KV@NRLR$O?FI41 MX'+A;Q%5NU89"I2/CNB9^A&F@.VQ^]2(7C2<#:6L2R-
V3]@37[_H]Y;4E >J M$*T*)M065?$]C_K3*1-9VY[KB+'WZ R&505?94,G<;<I?+FNW^[+Q;%Y.LQ-
M*]MI*&+P]HP=17WK[TV>*0C3'!WF%E4C3"LR=HTIIX)9:H$2[?
X)MUH8+P]>=UQXH[W7G]77G%=^K5F(/K/9H MN&7]AR^U.!!N14/?G]WT3O2M]O"79^]'M@!6:-
-37BCL\6Y]I+K22=O(9V7L MW1A8-<"RHF!8]&\@'!,F?N#,R$D-WRIP(>\D K*?-]]2@-"+_0]-U5K8;DBE
MN*:NBFU_;M:\O,]VVPGZ(KO0E>]I[BB"N*-R'7K^D^\E3G"YS!ZOD]7VI,K6
M+ZN+&VE<,D9BGTE.OCXC4S^.^&0B]#^:;IOAM.D4H_X\>$^GOWWOR\3>J*CO
M(0",O[O5.3:5Z:+]"OOL0S],^A!L4^E4^U35Z^6TEVE*KQ?F7B_,O5Z8>[TP
MAX%]=0#3CO0:TM=1O_&HKT&TFUVANH8@@)+1A3B<_N@O)O0RY"'_RG2&I78C
M^#.)T0%,NK*)ULV!E\OY(J K0B+Y? ,C+F+&AHK@9]&^F%0!W@U!1Z;QX2$:?FT:YGF]Y_(.'!"
MXY!V]HQGPV>'>?*/WTD4I[=>?.H9-KO: M_0KRYMC^DZ?
E''<'.CM<0QPMI%]^YH1Q=!VFKB8]@[[(=KEW85 M'JYYK]< #F@BX97E\B>/3]B4N@.;K=T#[-
N7AVO(#95]N-9]FXC5S&@]?QL- MGQP_$_'*%652T@ZLV?I%
[+]WAVN]0&7VXAB/]75/V(&>I]]]]N=\S^&_+K-
MMPQYE.0)V#F<]\05;V'X)$I]A'AI^=GY(EG7C:X\GPD]>]/.=_]17*CYY&C; M(."?9=E1CLIHJD@[M?:%?
IA,-PY73F2U!EI')T+V9V)G*W4#YAQYIQ]]-<1V M<.SF',O.IGGKS*V7.^R<_3"2/3@?
R&+RR'23=,]B1+Z]_2:3S[:"<%IR[$P4 MU"@+]=\LP]/'R#O:X7!.$U-
W%+SR+GQMA=C[8[E11WT(HY-,T;P8/5#.5A- MF7L4BRI?>5=$H"4Z)(?
>/AHDTW3"=!AY)&'$$4PK68G8WQ)5UFNE'U,J6D]E M7ZLE6_B0%A_(?%>
[9;ZH=8F!MU,Z;V*SC;%&E.S%EVFH^'ND"F6-*/1B#TF^AI*EW<;[7>/:^28D<@1].J7%W62(H> M0
#G4_]_C4* 1]/%PS*A+B!>)!(N<)[-DW>62,->/B.'4$H 5.V75
M,&ZL%DB&882N3=F[ZRA*B'>1L,U1T/34QRUYEK\R!DXP?NPU8$N*K0<7NG;S
M=IBMKM8F:*Y<;N#"/A#8@8O]H$'7G]'<:@Z^3=K"/CZW#Z^%CL_%^/?IZG\ M)\(>:$1*+\8?
RD%.FAU1K1QAA=A9IU]%?]R])8O<@VKP1R I7ZG?R4>EUEMO M%N-1LV!G,MK4O
D4=+6MM]QY#'/GSQ[C:)3$4>R$XF3R%R<6^ZRK"PZ#-0<% M:
&HU)]ZKM2ZD*'K^%QL/(^F6;]'3/9Z/8)(L]S\,LI^&YG]5S9K#CUB;T?[M.X&);@KYA; 8EN1S94R4FQY-
TTD&%BGH>(%*_J7G2H;#A*[1_!0#FVK!6OK8 MCIWQ%.19ZOR,%-SR*[3,#BCTW.3:0GA7;U>DR//
M#SN7RP5QXVA"TR=!MP]-:H\3BB9]M0!5:F_S=+4E[LF8K;3"W"]RIB,7.*%* M[7O*#HH1NC)WO?
N>DRD=B#K(MN@_!367WF?]NM)"+\X*;Z_+9 $FGZ-&T]&" MB$._X>R&<*FRH\";?A<.$/]4*5^?
M3B@T\&V3?&O3:L#V>SFC#'2R6+9"4#- M^C(=SF!P0R+QE&%!,3>^\^
'/&98W^].IR5/+#FNN$ZOO_U=PH![*[>S^6E=LKY'7/3[521&%CN4.@ZT4^]07,VB=K/V?
FGOMQI'4N5;J?M] M*>_UK=06P7Q]*[435%_?2NT U=%S2)AXF%_FI9(#F1$+?6ZFU?QH.":WA>M
M$.&/KDJC4&';NV7]'Z>X[W]]-*Y?]XH.=[I:O:,K)XA7V7:!,U-E7@2A@@YY M)TR?
JF'#DMK:Q[>O9:BR1T*=@:C6"O<-EUU@3]3IU MCRN2Y;6M#]*DQ-ZU@OF(04AT+]$D5N^,UX^-3-
A[66 O (C>BUT6>40_-2#8 M)LO'\B:+;&&0-M&?/9:<7,/0$_>(0M 9&1M?]],WF2:A)]:X$V=YSHCGZVZ!
M*2F1IW 8PH7I7"]O+5_(?B/^>' BPG_R_U!+ 0(4 Q0 ("^ 9UD=:X=> MZ0< &8[* " 0
!E>#,Q+3$N:'1M4$L! A0#% M @ +X!G60O"](RH! "2 H (!$0@ &5X,S(M,2YH M=&U02P$"% ,4 "
O@&=9[>+B.XN9]Y@4 # @ 'A M# 9F]R;3$P+7$N:'1M4$L! A0#% @ +X!G6<[/1G32" 5% !$ M (!EJ8
')E9G(M,C R-# Y,S N>'-D4$L! A0#% @ M+X!G61.U)\7$"@ 6GL !4 (!EZ\ ')E9G(M,C R-# Y M,S!?
8V%L+GAM;%!+ 0(4 Q0 ("^ 9UE$E\%-'A$ (O\ 5 M " 8ZZ !R969R+3(P,C0P.3,P7V1E9BYX;6Q02P$"%
,4 " O M@&=9I4XT8)PP "8I (%0 @ '?RP &UL4$L! A0#% @ +X!G6=-079H*(0 EP(" !4 M (!KOP
')E9G(M,C R-# Y,S!?<')E+GAM;%!+!08 " (/4! (#K'0$! end XML 48 form10-q_htm.xml IDEA: XBRL DOCUMENT 0000793524 2024-01-012024-09-30 0000793524 2024-11-07 0000793524 2024-09-30 0000793524 2023-12-31 0000793524 2023-01-012023-09-30 0000793524 2024-07-012024-09-30 0000793524 2023-07-012023-09-30 0000793524 us-gaap:CommonStockMember 2022-12-31 0000793524 us-gaap:AdditionalPaidInCapitalMember 2022-12-31 0000793524 us-gaap:RetainedEarningsMember 2022-12-31 0000793524 2022-12-31 0000793524 us-gaap:CommonStockMember 2023-12-31 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-12-31 0000793524 us-gaap:RetainedEarningsMember 2023-12-31 0000793524 us-gaap:CommonStockMember 2023-06-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-06-30 0000793524 us-gaap:RetainedEarningsMember 2023-06-30 0000793524 2023-06-30 0000793524 us-gaap:CommonStockMember 2024-06-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-06-30 0000793524 us-gaap:RetainedEarningsMember 2024-06-30 0000793524 2024-06-30 0000793524 us-gaap:CommonStockMember 2023-01-012023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-01-012023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-01-012023-09-30 0000793524 us-gaap:CommonStockMember 2024-01-012024-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-01-012024-09-30 0000793524 us-gaap:RetainedEarningsMember 2024-01-012024-09-30 0000793524 us-gaap:CommonStockMember 2023-07-012023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2023-07-012023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-07-012023-09-30 0000793524 us-gaap:CommonStockMember 2024-07-012024-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember 2024-07-012024-09-30 0000793524 us-gaap:RetainedEarningsMember 2024-07-012024-09-30 0000793524 us-gaap:CommonStockMember 2023-09-30 0000793524 us-gaap:AdditionalPaidInCapitalMember

2023-09-30 0000793524 us-gaap:RetainedEarningsMember 2023-09-30 0000793524 2023-09-30
0000793524 us-gaap:CommonStockMember 2024-09-30 0000793524 us-
gaap:AdditionalPaidInCapitalMember 2024-09-30 0000793524 us-gaap:RetainedEarningsMember
2024-09-30 0000793524 srt:MinimumMemberus-
gaap:SalesRevenueNetMemberREFR:LicenseAgreementMember 2024-01-012024-09-30
0000793524 srt:MaximumMemberus-
gaap:SalesRevenueNetMemberREFR:LicenseAgreementMember 2024-01-012024-09-30
0000793524 REFR:OneLicenseAgreementsMember 2024-09-30 0000793524
REFR:LicenseeOneMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-01-012024-09-30 0000793524
REFR:LicenseeTwoMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-01-012024-09-30 0000793524
REFR:LicenseeThreeMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-01-012024-09-30 0000793524
REFR:LicenseeFourMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-01-012024-09-30 0000793524
REFR:LicenseeOneMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-01-012023-09-30 0000793524
REFR:LicenseeTwoMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-01-012023-09-30 0000793524
REFR:LicenseeThreeMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-01-012023-09-30 0000793524
REFR:LicenseeFourMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-01-012023-09-30 0000793524
REFR:LicenseeOneMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-07-012024-09-30 0000793524
REFR:LicenseeTwoMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2024-07-012024-09-30 0000793524
REFR:LicenseeOneMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-07-012023-09-30 0000793524
REFR:LicenseeTwoMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-07-012023-09-30 0000793524
REFR:LicenseeThreeMemberus-gaap:SalesRevenueNetMemberus-
gaap:CustomerConcentrationRiskMember 2023-07-012023-09-30 0000793524
srt:MinimumMember 2024-01-012024-09-30 0000793524 srt:MaximumMember 2024-01-012024-
09-30 0000793524 REFR:EmployeesAndDirectorsMember 2024-01-012024-09-30 0000793524
REFR:EmployeesAndDirectorsMember 2023-01-012023-09-30 0000793524
REFR:TwoThousandNineteenEquityIncentivePlanMember 2024-09-30 0000793524
REFR:OptionsAndWarrantsMember 2024-01-012024-09-30 0000793524
REFR:OptionsAndWarrantsMember 2023-01-012023-09-30 0000793524 us-gaap:WarrantMember
2024-07-012024-09-30 0000793524 us-gaap:WarrantMember 2023-07-012023-09-30 0000793524
REFR:SubscriptionAgreementMember 2022-09-142022-09-16 0000793524
REFR:SubscriptionAgreementMember 2022-09-16 0000793524 us-gaap:WarrantMember 2022-09-
16 0000793524 2022-09-282022-09-30 0000793524 us-gaap:CommonStockMember 2022-09-30
0000793524 us-gaap:WarrantMember 2022-09-30 0000793524
srt:MinimumMemberREFR:GauzyLtdMember 2023-06-04 0000793524
srt:MaximumMemberREFR:GauzyLtdMember 2023-06-04 0000793524 REFR:GauzyLtdMember
2024-09-30 0000793524 REFR:GauzyLtdMember 2023-09-30 0000793524
REFR:GauzyAndVisionSystemsMember 2024-01-012024-09-30 0000793524
REFR:GauzyAndVisionSystemsMember 2023-01-012023-09-30 0000793524
REFR:GauzyAndVisionSystemsMember 2024-07-012024-09-30 0000793524
REFR:GauzyAndVisionSystemsMember 2023-07-012023-09-30 0000793524
REFR:GauzyAndVisionSystemsMember 2023-01-012023-12-31 iso4217:USD shares iso4217:USD
shares purefalseQ3--12-31false0000793524 10-Qtrue2024-09-302024000-14893RESEARCH
FRONTIERS INCORPORATEDDE11-2103466240 CROSSWAYS PARK DRIVEWOODBURYNY11797-
2033(516)364-1902YesYesNon-accelerated FilertruefalsefalseCommon Stock, par value $0.0001 per
shareREFRNASDAQ335177870.0001164798724759581253450125345010480081003404154727967
124968283-
12426484128229593517731299903238505251157380597362354408164146156515216951294548
817589-1527917-231704-51380878995994632973641642351523515-703442-1428454-166816-
472166-0.02-0.02-0.04-0.04-0.00-0.00-0.01-
0.01335153273351532733435074334350743351778733517787335092873350928733150396331512
122356477479686535889136484466484502-1428454-142845433509287335112763449 3-
123784931385291333509287335112777922 1-124264841351773185001866986 70-703442-
703442335177873352127787890-124968283282295933509287335112763449 3-
12331276543250 79-472166-472166335092873351127634493-
123784931385291333517787335212778789 0-1248014672989775335177873352127787890-

1248014672989775-166816-166816335177873352127787890-
1249682832822959335177873352127787890-1249682832822959-703442-
14284541958220489263753039910722910905125001950006960522664557943636121033-
527843735-157754-146323-835899-1746317742126554343862991535-742-
244411686704845028670484502-827971-3705931247595842309161647987524985<p id="xdx_80E_eus-gaap--BasisOfAccounting_ztJR2JQxCbS4" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 1. Basis of Presentation</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and with the instructions to Rule 8-03 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. All such adjustments are of a normal recurring nature. Operating results for the three and nine months ended September 30, 2024 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2024. The condensed consolidated balance sheet as of December 31, 2023 has been derived from the audited consolidated financial statements as of that date. For further information, refer to the consolidated financial statements and footnotes thereto included in the Annual Report on Form 10-K relating to Research Frontiers Incorporated for the fiscal year ended December 31, 2023.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_806_eus-gaap--NatureOfOperations_z9kpEDPsierj" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 2. Business</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Research Frontiers Incorporated ("Research Frontiers" or the "Company") operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Such devices, often referred to as "light valves" or suspended particle devices ("SPDs"), use colloidal particles that are either incorporated within a liquid suspension or a film, which is usually enclosed between two sheets of glass or plastic having transparent, electrically conductive coatings on the facing surfaces thereof. At least one of the two sheets is transparent. SPD technology, made possible by a flexible light-control film invented by Research Frontiers, allows the user to instantly and precisely control the shading of glass/plastic manually or automatically. SPD technology has numerous product applications, including SPD-Smart™ windows, sunshades, skylights and interior partitions for homes and buildings; automotive windows, sunroofs, sun visors, sunshades, rear-view mirrors, instrument panels and navigation systems; aircraft windows; museum display panels; eyewear products; and flat panel displays for electronic products. SPD-Smart light control film is now being developed for, or used in, architectural, automotive, marine, aerospace and appliance applications. </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company has primarily utilized its cash, cash equivalents, and investments generated from sales of our common stock, proceeds from the exercise of options and warrants, and royalty fees collected to fund its research and development of SPD light valves, for marketing initiatives, and for other working capital purposes. The Company's working capital and capital requirements depend upon numerous factors, including the results of research and development activities, competitive and technological developments, the timing and cost of patent filings, and the development of new licensees and changes in the Company's relationships with its existing licensees. The degree of dependence of the Company's working capital requirements on each of the foregoing factors cannot be quantified; increased research and development activities and related costs would increase such requirements; the addition of new licensees may provide additional working capital or working capital requirements; and changes in relationships with existing licensees would have a favorable or negative impact depending upon the nature of such changes. We have incurred recurring losses since inception and expect to continue to incur losses as a result of costs and expenses related to our research and continued development of our SPD technology and our corporate general and administrative expenses. Our capital requirements and operations to date have been substantially funded through sales of our common stock, exercise of options and warrants and royalty fees

collected. As of September 30, 2024, we had working capital of approximately $2.7 million, cash and cash equivalents of approximately $1.6 million, shareholders’ equity of approximately $2.8 million and an accumulated deficit of approximately $125.0 million. Based on our current expectations of our cash flow shortfall for the next 12 months, our working capital would support our activities for at least the next 12 months from the issuance of these condensed consolidated financial statements.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">In the event that we are unable to generate sufficient cash from our operating activities or raise additional funds, we may be required to delay, reduce or severely curtail our operations or otherwise impede our on-going business efforts, which could have a material adverse effect on our business, operating results, financial condition and long-term prospects. The Company may seek to obtain additional funding through future equity issuances. There can be no assurance as to the availability or terms upon which such financing and capital might be available. The eventual success of the Company and generation of positive cash flow will be dependent upon the commercialization of products using the Company’s technology by the Company’s licensees and payments of continuing royalties on account thereof.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> 270000016000002800000-125000000.0<p id="xdx_809_eus-gaap--IntangibleAssetsDisclosureTextBlock_z9ff9MHPCwo2" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 3. Patent Costs</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company expenses costs relating to the development, acquisition or enforcement of patents due to the uncertainty of the recoverability of these items.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_80D_eus-gaap--RevenueFromContractWithCustomerTextBlock_zN790Kfui7Ef" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 4. Revenue Recognition</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company recognizes revenue in accordance with Accounting Standards Codification (“ASC”) 606, <i>Revenue from Contracts with Customers (Topic 606</i>). The standard provides a single comprehensive revenue recognition model for all contracts with customers and supersedes existing revenue recognition guidance. The revenue standard contains principles that an entity will apply to determine the measurement of revenue and timing of when it is recognized. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">ASC 606 follows a five-step approach to determining revenue recognition including: 1) Identification of the contract; 2) Identification of the performance obligations; 3) Determination of the transaction price; 4) Allocation of the transaction price; and 5) Recognition of revenue.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt

0; text-align: justify">The Company determined that its license agreements provide for three performance obligations which include: (i) the Grant of Use to its Patent Portfolio (“Grant of Use”), (ii) Stand-Ready Technical Support (“Technical Support”) including the transfer of trade secrets and other know-how, production of materials, scale-up support, analytical testing, etc., and (iii) access to new Intellectual Property (“IP”) that may be developed sometime during the course of the contract period (“New Improvements”). Given the nature of IP development, such New Improvements are on an unspecified basis and can occur and be made available to licensees at any time during the contract period.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">When a contract includes more than one performance obligation, the Company needs to allocate the total consideration to each performance obligation based on its relative standalone selling price or estimate the standalone selling price if it is not observable. A standalone selling price is not available for our performance obligations since we do not sell any of the services separately and there is no competitor pricing that is available. As a consequence, the best method for determining the standalone selling price of our Grant of Use performance obligation is through a comparison of the average royalty rate for comparable license agreements as compared to our license agreements. Comparable license agreements must consider several factors including: (i) the materials that are being licensed, (ii) the market application for the licensed materials, and (iii) the financial terms in the license agreements that can increase or decrease the risk/reward nature of the agreement.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Based on the royalty rate comparison referred to above, any pricing above and beyond the average royalty rate would relate to the Technical Support and New Improvements performance obligations. The Company focuses a significant portion of its time and resources to provide the Technical Support and New Improvements services to its licensees which further supports the conclusions reached using the royalty rate analysis.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Technical Support and New Improvements performance obligations are co-terminus over the term of the license agreement. For purposes of determining the transaction price, and recognizing revenue, the Company combined the Technical Support and New Improvements performance obligations because they have the same pattern of transfer and the same term. We maintain a staff of scientists and other professionals whose primary job responsibilities throughout the year are: (i) being available to respond to Technical Support needs of our licensees, and (ii) developing improvements to our technology which are offered to our licensees as New Improvements. Since the costs incurred to satisfy the Technical Support and New Improvements performance obligations are incurred evenly throughout the year, the value of the Technical Support and New Improvements services are recognized throughout the initial contract period as these performance obligations are satisfied. If the agreement is not terminated at the end of the initial contract period, it will automatically renew on the same terms as the initial contract for a one-year period. Consequently, any fees or minimum annual royalty obligations relating to this renewal contract will be allocated similarly to the initial contract over the additional one-year period.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">We recognize revenue when or as the performance obligations in the contract are satisfied. For performance obligations that are fulfilled at a point in time, revenue is recognized at the fulfillment of the performance obligation. Since the IP is determined to be a functional license, the value of the Grant of Use is recognized in the first period of the contract term in which the license agreement is in force. The value of the Technical Support and New Improvements obligations is allocated throughout the contract period based on the satisfaction of its performance obligations. If the agreement is not terminated at the end of the contract period, it will renew on the same terms as the original agreement for a one-year period. Consequently, any fees or minimum annual royalties (“MAR”) relating to this renewal contract will be allocated similarly over that additional year.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">

</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company’s license agreements have a variable royalty fee structure (meaning that royalties are a fixed percentage of sales that vary from period to period) and frequently include a minimum annual royalty commitment. In instances when sales of licensed products by its licensees exceed the MAR, the Company recognizes fee income as the amounts have been earned. Typically, the royalty rate for such sales is 10-15% of the selling price. While this is variable consideration, it is subject to the sales/usage royalty exception to recognition of variable consideration in ASC 606 10-55-65 and therefore is not recognized until the subsequent sales or usage occurs or the MAR period commences.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Because of the immediate recognition of the Grant of Use performance obligation: (i) the first period of the contract term will generally have a higher percent allocation of the transaction price under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606, and (ii) the remaining periods in the year will have less of the transaction price recognized under ASC 606 than under the accounting guidance used prior to the adoption of ASC 606. After the initial period in the contract term, the revenue for the remaining periods will be based on the satisfaction of the Technical Support and New Improvements obligations. Since most of our license agreements start as of January 1st, the revenue recognized for the contract under ASC 606 in our first quarter will tend to be higher than the accounting guidance used prior to the adoption of ASC 606.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">As of September 30, 2024, the Company had $37,853 in unbilled revenue included in royalty receivables.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Certain of the contract fees are accrued by, or paid to, the Company in advance of the period in which they are earned resulting in deferred revenue (contract liabilities). Such excess amounts are recorded as deferred revenue and are recognized as revenue in future periods as earned. Contract assets represent unbilled receivables and are presented within accounts receivable, net on the condensed consolidated balance sheets.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company operates in a single business segment which is engaged in the development and marketing of technology and devices to control the flow of light. Our revenue source comes from the licensing of this technology and all of these license agreements have similar terms and provisions. The majority of the Company’s licensing fee income comes from the activities of several licensees participating in the automotive market. The Company currently believes that the automotive market will be the largest source of its royalty income over the next several years. The Company’s royalty income from this market may be influenced by numerous factors including various trends affecting demand in the automotive industry and the rate of introduction of new technology in OEM product lines. In addition to these macro factors, the Company’s royalty income from the automotive market could also be influenced by specific factors such as whether the Company’s SPD-SmartGlass technology appears as standard equipment or as an option on a particular vehicle, the number of additional vehicle models that SPD-SmartGlass appears on, the size of each window on a vehicle and the number of windows on a vehicle that use SPD-SmartGlass, fluctuations in the total number of vehicles produced by a manufacturer, and in the percentage of cars within each model produced with SPD-SmartGlass, and changes in pricing or exchange rates.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0;

text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">As of September 30, 2024, the Company has one license agreement that is in its initial multi-year term (“Initial Term”) with continuing performance obligations going forward. The Initial Term of this agreement will end as of December 31, 2024. The Company currently expects this agreement will renew annually at the end of the Initial Term. As of September 30, 2024, the aggregate amount of the revenue to be recognized upon the satisfaction of the remaining performance obligations for this license agreement is $18,000. The revenue for the remaining performance obligations for this license agreement is expected to be recognized evenly throughout the remaining period of the Initial Term.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> 0.100.153785318000<p id="xdx_801_ecustom--FeeIncomeDisclosureTextBlock_zWblYzlxD2U6" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 5. Fee Income</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Fee income represents amounts earned by the Company under various license and other agreements relating to technology developed by the Company. </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">During the first nine months of 2024, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 32%, 31%, 10% and 10% of fee income recognized during such period. During the first nine months of 2023, four licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 29%, 20%, <span id="xdx_907_eus-gaap--ConcentrationRiskPercentage1_pid_dp_uPure_c20230101__20230930__srt--ProductOrServiceAxis__custom--LicenseeThreeMember__us-gaap--ConcentrationRiskByBenchmarkAxis__us-gaap--SalesRevenueNetMember__us-gaap--ConcentrationRiskByTypeAxis__us-gaap--CustomerConcentrationRiskMember_zaHLU10UYqyb"

title="Concentration risk percentage">20% and 18% of fee income recognized during such period. </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">During the three months ended September 30, 2024, two licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 35% and 33% of fee income recognized during such period. During the three months ended September 30, 2023, three licensees accounted for 10% or more of fee income of the Company; these licensees accounted for approximately 47%, 19% and 19% of fee income recognized during such period.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> 0.320.310.100.100.290.200.200.180.350.330.470.190.19<p id="xdx_808_eus-gaap--CompensationRelatedCostsGeneralTextBlock_zDmtZDFavSq5" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 6. Stock-Based Compensation</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company has granted options/warrants to consultants. GAAP requires that all stock-based compensation be recognized as an expense in the condensed consolidated financial statements and that such costs be measured at the fair value of the award at the date of grant. These awards generally vest ratably over <span id="xdx_900_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardVestingPeriod1_dtM_c202
-RangeAxis__srt--MinimumMember_z3HdhMlHHdDc" title="Stock based compensation be recognized">12 to <span id="xdx_909_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardAwardVestingPeriod1_dtM_c202
-RangeAxis__srt--MaximumMember_zOggdyxoJUb7" title="Stock based compensation be recognized">60 months from the date of grant and the Company charges to operations quarterly the current market value of the options using the Black-Scholes method. During the nine months ended September 30, 2024 and 2023, there were no charges related to options or warrants granted to consultants.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-family: Times New Roman, Times, Serif; font-

size: 10pt"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">During the nine months ended September 30, 2024 and 2023, the Company did <span id="xdx_90C_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross_do
-TitleOfIndividualAxis__custom--EmployeesAndDirectorsMember_zN2RboZCxYQ3" title="Stock options granted"><span id="xdx_909_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross_do
-TitleOfIndividualAxis__custom--EmployeesAndDirectorsMember_z41ls6RrKHmb" title="Stock options granted">not grant options to employees or directors.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">There was <span id="xdx_90E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOp
-TitleOfIndividualAxis__custom--EmployeesAndDirectorsMember_zCajJ8jolAz1" title="Restricted stock options granted"><span id="xdx_90B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOp
-TitleOfIndividualAxis__custom--EmployeesAndDirectorsMember_zvBtg4iyh1h6" title="Restricted stock options granted">no compensation expense recorded relating to restricted stock grants to employees and directors during the nine months ended September 30, 2024 and 2023.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">As of September 30, 2024, there were <span id="xdx_906_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNumberOfSharesAvailableForGr
gaap--TypeOfArrangementAxis__custom--TwoThousandNineteenEquityIncentivePlanMember_zCB653VdmVmd" title="Shares available for future grant">84,500 shares available for future grant under our 2019 Equity Incentive Plan, which was approved by the Company’s shareholders in June 2019.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p>
P12MP60M000084500<p id="xdx_801_eus-gaap--IncomeTaxDisclosureTextBlock_zjA6rp7nYxIk" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 7. Income Taxes</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Since inception, the Company has incurred losses from operations and as a result has not recorded income tax expense. Benefits related to net operating loss carryforwards and other deferred tax items have been fully reserved since it was more likely than not that the Company would not achieve profitable operations and be able to utilize the benefit of the net operating loss carryforwards.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_809_eus-gaap--EarningsPerShareTextBlock_zV67y0Fwdtml" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 8. Basic and Diluted Loss Per Common Share </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> Basic net loss per share excludes any dilution. It is based upon the weighted average number of common shares outstanding during the period. Dilutive net loss per share reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock. The Company’s dilutive loss per share equals basic loss per share for the periods ended September 30, 2024 and 2023, respectively, because all common stock equivalents (i.e<i>., </i>options and warrants) were antidilutive in those periods. The number of options and warrants that were not included (because their effect is antidilutive) were <span id="xdx_906_eus-gaap--AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount_c20240101__20240930
gaap--AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareByAntidilutiveSecuritiesAxis__c
-OptionsAndWarrantsMember_zKvxmmaFYIL2" title="Anti-dilutive securities effect">2,706,872 and <span id="xdx_903_eus-gaap--

AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount_c20230101__20230930
gaap--
AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareByAntidilutiveSecuritiesAxis__c
-OptionsAndWarrantsMember_zepVSKnhiXeg" title="Anti-dilutive securities
effect">3,314,030 for the periods ended September 30, 2024 and 2023, respectively.
</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">
</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align:
justify"> </p>
27068723314030<p id="xdx_805_eus-gaap--
StockholdersEquityNoteDisclosureTextBlock_zH5WIimzTnZk" style="font: 10pt Times New Roman,
Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-family: Times New
Roman, Times, Serif; font-size: 10pt">Note 9. Equity</p> <p style="font: 10pt Times New
Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-family: Times
New Roman, Times, Serif; font-size: 10pt"> </p> <p style="font: 10pt Times New Roman,
Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-family: Times New
Roman, Times, Serif; font-size: 10pt">During the nine months ended September 30, 2024, the
Company received proceeds of $<span id="xdx_900_eus-gaap--
ProceedsFromStockOptionsExercised_c20240101__20240930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_zZiCP885sUC5" title="Proceeds
from stock options exercised">8,670 in connection with the exercise of options covering
<span id="xdx_908_eus-gaap--
StockIssuedDuringPeriodSharesNewIssues_c20240101__20240930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_zTKZytENuzn7" title="Number
of shares issued">8,500 shares of common stock. During nine months ended September 30,
2023, the Company received proceeds of $<span id="xdx_90E_eus-gaap--
ProceedsFromWarrantExercises_c20230101__20230930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_zVcWEm1CF9G7"
title="Proceeds from warrant exercises">484,502 in connection with the exercise of
warrants covering <span id="xdx_90B_eus-gaap--
StockIssuedDuringPeriodSharesNewIssues_c20230101__20230930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_znwZkYejfgva" title="Number
of shares issued">358,891 shares of common stock. <span id="xdx_90B_eus-gaap--
StockIssuedDuringPeriodSharesStockOptionsExercised_do_c20240701__20240930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_zUJqXswGEKc1" title="Options
exercised during period"><span id="xdx_90A_eus-gaap--
StockIssuedDuringPeriodSharesStockOptionsExercised_do_c20230701__20230930__us-gaap--
StatementEquityComponentsAxis__us-gaap--CommonStockMember_z27oJyaRznoe" title="Options
exercised during period"><span id="xdx_900_eus-gaap--
ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsEx
gaap--StatementEquityComponentsAxis__us-gaap--WarrantMember_z2ny2SCbvek3" title="Warrants
exercised during period"><span id="xdx_90B_eus-gaap--
ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsEx
gaap--StatementEquityComponentsAxis__us-gaap--WarrantMember_zFTolyol8iv8" title="Warrants
exercised during period">No options or warrants were exercised
during the three-month periods ended September 30, 2024 and 2023.</p> <p style="font:
10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-
family: Times New Roman, Times, Serif; font-size: 10pt"> </p> <p style="font: 10pt Times
New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"><span style="font-family:
Times New Roman, Times, Serif; font-size: 10pt">On September 16, 2022, the Company entered
into subscription agreements from a group of private accredited investors to sell them <span
id="xdx_905_eus-gaap--
StockIssuedDuringPeriodSharesNewIssues_pn5n6_c20220914__20220916__us-gaap--
TypeOfArrangementAxis__custom--SubscriptionAgreementMember_z0LKYAuKXqI" title="Number
of shares issued">2.0 million shares of common stock of the Company at a price of $<span
id="xdx_90C_eus-gaap--SharesIssuedPricePerShare_iI_c20220916__us-gaap--
TypeOfArrangementAxis__custom--SubscriptionAgreementMember_zbJrNoEGFN86" title="Shares
issued price per share">2.30 per share (which represents the closing market price of the
Company’s common stock on September 14, 2022, which was the date that the transaction was
agreed to). For each share received, the investor also received one warrant (expiring on <span
id="xdx_905_eus-gaap--WarrantsAndRightsOutstandingMaturityDate_iI_dd_c20220916__us-gaap--
StatementEquityComponentsAxis__us-gaap--WarrantMember_zWubVXWZLvL6" title="Warrant
expiring term">September 30, 2027) to purchase one share of common stock at an exercise
price of $<span id="xdx_902_eus-gaap--
ClassOfWarrantOrRightExercisePriceOfWarrantsOrRights1_iI_c20220916__us-gaap--
StatementEquityComponentsAxis__us-gaap--WarrantMember_zA8kYM08r2Xk" title="Warrants

exercise price">2.76/share. The shares were issued to the investors in a private placement and, along with the shares issued in connection with the exercise of any warrants in the future, are not registered and therefore subject to at least a six-month holding period by the investor from the date of issuance. As of September 30, 2022, the Company received $3,450,000 under these subscription agreements and issued 1,500,000 common shares and issued 1,500,000 warrants. In addition, the Company has an outstanding commitment from a potential investor for the remaining $1,150,000 under these subscription agreements. The Company did not sell any other equity securities during the periods ended September 30, 2024 and 2023.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">As of September 30, 2024, there were 1,500,000 warrants and <span id="xdx_903_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber_iI_c
title="Options outstanding">1,206,872 options outstanding.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p>
86708500484502358891000020000000.02.302027-09-302.7634500001500000150000011500001500001206872<p id="xdx_80B_eus-gaap--LesseeOperatingLeasesTextBlock_zUrFvzv8v6L4" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 10. Leases</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company determines if an arrangement is a lease at its inception. This determination generally depends on whether the arrangement conveys the right to control the use of an identified fixed asset explicitly or implicitly for a period of time in exchange for consideration. Control of an underlying asset is conveyed if the Company obtains the rights to direct the use of, and to obtain substantially all of the economic benefits from the use of, the underlying asset. Lease expense for variable leases and short-term leases is recognized when the obligation is incurred.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company has an operating lease for our facility with a weighted average remaining lease term of six months as of September 30, 2024. Operating leases are included in right-of-use lease assets, other current liabilities and long-term lease liabilities on the condensed consolidated balance sheets. Right-of-use lease assets and liabilities are recognized at each lease’s commencement date based on the present value of its lease payments over its respective lease term. The Company does not have an established incremental borrowing rate as it does not have any debt. The Company uses the stated borrowing rate for a lease when readily determinable. When the interest rates implicit in its lease agreements are not readily determinable, the Company used an interest rate based on the marketplace for public debt. The weighted average discount rate associated with operating leases as of September 30, 2024 is 5.5%.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Operating lease expense for the nine months ended September 30, 2024 was approximately $<span id="xdx_90A_eus-gaap--OperatingLeaseCost_c20240101__20240930_zYpAfqTCtpB3" title="Operating lease

expense">150,000. The Company has no material variable lease costs or sublease income for the period ended September 30, 2024.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_890_eus-gaap--LesseeOperatingLeaseLiabilityMaturityTableTextBlock_zviDMqEPCGRa" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Maturities of operating lease liabilities as of September 30, 2024 were as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Schedule of Maturities of Operating Lease</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_497_20240930_zu3Jc90cNxVg" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td> <td> </td> <td colspan="2"> </td><td> </td></tr> <tr id="xdx_404_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_maLOLLPz9Pi_zaEacB9wt9Ui" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">For the year ending December 31, 2024</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">56,000</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths_iI_maLOLLPz9Pi_zNP15gT0hROi" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">For the year ending December 31, 2025</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">56,000</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDue_iTI_mtLOLLPz9Pi_zDfrhSzOrGs6" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">112,000</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityUndiscountedExcessAmount_iNI_di_zYIleXmssKj8" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less: imputed lease interest</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(2,032</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40C_eus-gaap--OperatingLeaseLiability_iTI_zxNk7Qwi2Ce8" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 2.5pt">Present value of lease liabilities</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">109,968</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> </table> <p id="xdx_8A8_z0HeJQhn6Hzd" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: center"> </p> P6M0.05515000000<p id="xdx_890_eus-gaap--LesseeOperatingLeaseLiabilityMaturityTableTextBlock_zviDMqEPCGRa" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Maturities of operating lease liabilities as of September 30, 2024 were as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Schedule of Maturities of Operating Lease</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_497_20240930_zu3Jc90cNxVg" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td> <td> </td> <td colspan="2"> </td><td> </td></tr> <tr id="xdx_404_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_maLOLLPz9Pi_zaEacB9wt9Ui" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">For

the year ending December 31, 2024</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">56,000</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths_iI_maLOLLPz9Pi_zNP15gT0hROi" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">For the year ending December 31, 2025</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">56,000</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDue_iTI_mtLOLLPz9Pi_zDfrhSzOrGs6" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">112,000</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityUndiscountedExcessAmount_iNI_di_zYIleXmssKj8" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less: imputed lease interest</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(2,032</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40C_eus-gaap--OperatingLeaseLiability_iTI_zxNk7Qwi2Ce8" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 2.5pt">Present value of lease liabilities</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">109,968</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> </table> 56000560001120002032109968<p id="xdx_809_eus-gaap--RelatedPartyTransactionsDisclosureTextBlock_zWsahJsrG5h4" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 11. Related Party</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Effective June 4, 2023, the Chairman and CEO of Gauzy, Ltd. (“Gauzy”), one of the Company’s licensees, joined the Board of the Company. Gauzy’s license agreement has been in effect since September 17, 2017 and provides for minimum annual royalties and earned royalties relating to sales of SPD-SmartGlass architectural window products. Because the Company collects a 10-15% percentage royalty from the higher-priced end product sales by Gauzy’s customers purchasing their SPD-Smart light control film, under its license agreement with Gauzy, the Company does not collect a royalty on sales by Gauzy of SPD-Smart light control film to these licensee customers. In addition, the Company’s licensee Vision Systems, Inc. (“Vision Systems”) is a 100% owned subsidiary of Gauzy. For the nine months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 12% and 23%, respectively, of the Company’s total fee income. For the three months ended September 30, 2024 and 2023, total fee income related to Gauzy and Vision Systems represented 10% and 21%, respectively, of the Company’s total fee income. In addition, as of September 30, 2024 and December 31, 2023, the Company’s accounts receivable from Gauzy and Vision Systems represented <span id="xdx_909_eus-gaap--

RelatedPartyTransactionRate_dp_uPure_c20240101__20240930__dei--LegalEntityAxis__custom--GauzyAndVisionSystemsMember_z2CvTOEcko88" title="Related party percentage">6% and 8%, respectively, of the Company's total royalty receivables, before reserves. </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> 0.100.15110.120.230.100.210.060.08<p id="xdx_805_eus-gaap--InterestAndOtherIncomeTextBlock_zjt960KhoJ6g" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Note 12. Other Income</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">During the three and nine months ended September 30, 2024, the Company received $35,152 in Employee Retention Credits, a refundable tax credit available under the Coronavirus Aid, Relief, and Economic Securities Act ("CARES Act") that was designed to keep employees on the payroll during the COVID-19 pandemic. There were no such credits received during the three and nine months ended September 30, 2023.</p> 3515235152

"