UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 11, 2024

LUMINAR TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38791**	**83-1804317**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

2603 Discovery Drive, Suite 100
Orlando, Florida 32826
(Address of principal executive offices, including zip code)
Registrant's telephone number, including area code: (800) 532-2417

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of each exchange on which registered
Class A Common Stock, par value of $0.0001 per share	**LAZR**	**The Nasdaq Stock Market LLC**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

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. ☐

Item 2.02 Results of Operations and Financial Condition.

On November 11, 2024, Luminar Technologies, Inc. (the "Company") announced its financial results and other business highlights for the third quarter ended September 30, 2024, by issuing a press release and a business update presentation. The full text of the press release and the business update presentation are furnished as Exhibit 99.1 and Exhibit 99.2, respectively, to this Current Report on Form 8-K.

On November 11, 2024, the Company also held a webcast to discuss its results for the third quarter ended September 30, 2024. A transcript of the webcast is furnished as Exhibit 99.3 to this Current Report on Form 8-K.

The information in Item 2.02 of this Current Report on Form 8-K (including Exhibits 99.1, 99.2 and 99.3 furnished herewith) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) *Exhibits*.

Exhibit Number	Description
99.1	Press release, dated November 11, 2024
99.2	Quarterly business update presentation, dated November 11, 2024.
99.3	Transcript of webcast, dated November 11, 2024.
104	Cover page interactive data file formatted in Inline XBRL.

SIGNATURES

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 hereunto duly authorized.

Luminar Technologies, Inc.

Date: November 12, 2024

By: /s/ Thomas J. Fennimore
Name: Thomas J. Fennimore
Title: Chief Financial Officer

November 11, 2024

Luminar Expands Business with Two Global Automakers and Reports Third Quarter 2024 Business Update

Announces new business, ramps production with Volvo Cars, and generates first Luminar Halo point cloud

ORLANDO, Fla.--(BUSINESS WIRE)-- Today, Luminar (NASDAQ: LAZR), a leading global automotive technology company, provided its quarterly business update and financial results for the third quarter of 2024. These results and related commentary were published in a Presentation that was published on its Investor Relations website at https://investors.luminartech.com.

"Today nearly every major automaker has LiDAR planned into their roadmaps, and our commercial growth this quarter is a testament to both our technical leadership and ability to execute to global automaker standards," said Austin Russell, Founder and CEO of Luminar. "This quarter, we've further restructured Luminar to withstand near-term headwinds facing the industry so we are better positioned to capitalize on the long-term value in this trillion-dollar industry."

Key Q3 2024 Business Highlights:

- **Additional Model Win with Volvo Cars**
  - With the Volvo EX90 now being delivered to customers, Luminar has been selected to be featured as standard equipment on an additional model in the Volvo Cars line-up.
  - This demonstrates Volvo Cars' commitment to safety, endorsing both Luminar's leadership in LiDAR as well as the company's ability to execute and industrialize at scale.
- **New Advanced Development Contract with a Major Japanese Automaker**
  - This contract marks the next phase in the company's collaboration on the OEM's next-generation ADAS system using Luminar's LiDAR, as well as paid development of new software capabilities.
  - This highlights Luminar's role as a key enabler for next-generation ADAS and AD systems, demonstrating the company's global leadership in LiDAR and development of AI software.
- **Ramping Series Production Globally with the Volvo EX90**
  - Luminar continues to meet all key deliverables for the Volvo EX90 production ramp, shipping more product in Q3 than the past three quarters combined.
  - First global deliveries completed in Q3 as Volvo Cars begins to ramp outside the US.
- **Major Milestone for Luminar Halo: First Point Cloud**

- **Major Milestone for Luminar Halo: First Point Cloud**
  - Successfully proves industry-leading long range LiDAR data fidelity for improved safety and autonomous capabilities, at a fraction of the cost and size.
  - While Iris was designed to kick off a new era of safety and autonomy, Luminar Halo is designed to accelerate mass adoption of our technology.
- **Early Results of Cost Actions with Improved Operational and Financial Efficiency**
  - Q3'24 Non-GAAP free cash flow improved substantially (~$20M) compared to the prior quarter, and the company expects to see continued improvement in Q4'24 following recent cost-cutting actions including a headcount reduction in non-technical roles.
  - Similarly, Q3'24 GAAP Operating Cash Flow improved significantly (~$20M) vs. Q2'24.

Webcast Details:

Founder and CEO Austin Russell and CFO Tom Fennimore will host a video webcast, featuring a business update followed by a live Q&A session.

- **What:** Video webcast featuring quarterly business update, Q3 financials and live Q&A
- **Date:** Today, November 11, 2024
- **Time:** 5:00 p.m. EST (2:00 p.m. PST)
- **Where:** https://www.luminartech.com/quarterlyreview

A replay will be available following the conclusion of the webcast. For additional information or to be added to Luminar's investor distribution list, please visit us at https://investors.luminartech.com/ir-resources/email-alerts.

Footnote: [1] Various Luminar software capabilities are still in development and have not achieved "technology feasibility" or "production ready" status.

Notice of Late Filing

The Company expects to file a notification of late filing on Form 12b-25 with the SEC, which will provide an automatic 5-day extension of the filing deadline for its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2024 (the "Quarterly Report"), to November 18, 2024. The Company requires additional time to complete the quarter-end review due to the complexity of the analysis relating to the previously announced convertible notes exchange transaction consummated in August 2024. The Company expects to file the Quarterly Report as soon as practicable within the 5-day extension period.

Non-GAAP Financial Measures

In addition to disclosing financial measures prepared in accordance with U.S. generally accepted accounting principles (GAAP), this press release contains certain non-GAAP financial measures and certain other metrics. Non-GAAP financial measures and these other metrics do not have any standardized meaning and are therefore unlikely to be comparable to similarly titled measures and metrics presented by other companies. Luminar considers

to similarly titled measures and metrics presented by other companies. Luminar considers these non-GAAP financial measures and metrics to be important because they provide useful measures of the operating performance of the company, exclusive of factors that do not directly affect what we consider to be our core operating performance, as well as unusual events. The company's management uses these measures and metrics to (i) illustrate underlying trends in the company's business that could otherwise be masked by the effect of income or expenses that are excluded from non-GAAP measures, and (ii) establish budgets and operational goals for managing the Company's business and evaluating its performance. In addition, investors often use similar measures to evaluate the operating performance of a company. Non-GAAP financial measures and metrics are presented only as supplemental information for purposes of understanding the company's operating results. The non-GAAP financial measures and metrics should not be considered a substitute for financial information presented in accordance with GAAP. This release includes non-GAAP financial measures, including non-GAAP free cash flow. Free cash flow is defined as operating cash flow less capital expenditures.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements generally are accompanied by words such as "aims," "believe," "may," "will," "estimate," "set," "continue," "towards," "anticipate," "intend," "expect," "should," "would," "forward," and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. Forward-looking statements are based on expectations and assumptions by our management and involve a number of risks, uncertainties, and other factors that could cause actual results to differ materially from those stated, including that next-generation sensors and software will be developed successfully or will accelerate automaker adoption, that new automaker agreements will develop successfully into product launches, and that cost reduction efforts will continue to result in improved operational and financial efficiency, including projected free cash flow generation. More information on these risks and other potential factors that could affect the Company's business is included in the Company's periodic filings with the SEC, including in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of the Company's most reports on Form 10-K and Form 10-Q. The Company assumes no obligation to update any forward-looking statements, which speak only as of the date they are made.

About Luminar

Luminar is a global automotive technology company ushering in a new era of vehicle safety and autonomy. For the past decade, Luminar has built an advanced hardware and software/AI platform to enable its various partners, ranging from Volvo Cars and Mercedes-Benz to NVIDIA and Mobileye, to develop and deploy the world's most advanced passenger vehicles. Following the launch of the Volvo EX90 as the first global production vehicle to standardize its technology, Luminar is poised to lead the industry in enabling next-generation safety and autonomous capabilities for global production vehicles. For more information please visit www.luminartech.com

information please visit www.luminartech.com.

View source version on businesswire.com:
https://www.businesswire.com/news/home/20241111752813/en/

Investor Relations:
Aileen Smith
Investors@luminartech.com

Media Relations:

Milin Mehta
Press@luminartech.com

Source: Luminar

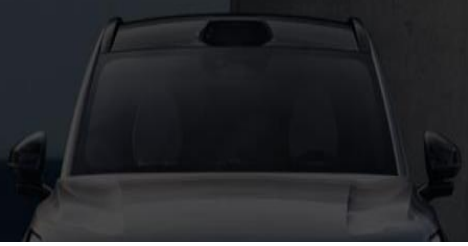
Q3'24 Business Update

November 2024

LUMINAR

Luminar

Creating **advanced LiDAR** and **software**[1] to enable the **world's safest** and **smartest vehicles.**



Please refer to Footnotes on page 37 for more detail.

Disclaimer & Cautionary Note

Forward-looking statements

This presentation of Luminar technologies, inc. ("Luminar" or the "company") includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private securities litigation reform act of 1995. Forward-looking statements may be identified by the use of words such as "future," "growth," "opportunity," "well-positioned," "forecast," "intend," "seek," "target," "anticipate," "believe," "expect," "estimate," "plan," "outlook," and "project" and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding whether next generation sensors and software will be developed successfully or will accelerate automaker adoption, whether new automaker agreements will develop successfully into product launches, whether cost reduction efforts will continue to result in improved operational and financial efficiency, including projected free cash flow generation, expected achievement and timing of manufacturing scale up, OEM production readiness, next-gen LiDAR prototype development, continued software and AI development and performance, program milestones, Order Book growth, expected milestones, market size estimates, product efficacy, near-term priorities, including plans to ramp production and ramp down costs, operating expenses and cost of sales, and the financial guidance for Q4 2024. These statements are based on various assumptions, whether or not identified in this presentation, and on the current expectations of Luminar's management and are not guarantees of actual performance.

You are cautioned not to place undue reliance upon any forward-looking statements, including the projections, which speak only as of the date made. Luminar does not undertake any commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Accordingly, forward-looking statements, including any projections or analysis, should not be viewed as factual and should not be relied upon as an accurate prediction of future results. The forward-looking statements contained in this presentation are based on the company's current expectations and beliefs concerning future developments and their potential effects on Luminar. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control), or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from the forward-looking statements, including the risks discussed in the "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Luminar's most recently filed periodic reports on Form 10-K and Form 10-Q, and other documents Luminar files with the SEC in the future.

Should one or more of these risks or uncertainties materialize, or should any of management's assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Luminar does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. Accordingly, you should not put undue reliance on these statements.

Trademarks and trade names

Luminar owns or has rights to various trademarks, service marks and trade names that it uses in connection with the operation of its business. This presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties' trademarks, service marks, trade names or products in this presentation is not intended to, and does not imply, a relationship with Luminar, or an endorsement or sponsorship by or of Luminar. Solely for convenience, the trademarks, service marks and trade names referred to in this presentation may appear without the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that Luminar will not assert, to the fullest extent under applicable law, its rights or the right of the applicable licensor in these trademarks, service marks and trade names.

Industry and market data

In this presentation, Luminar relies on and refers to information and statistics regarding the sectors in which Luminar competes and other industry data. Luminar obtained this information and statistics from third-party sources, including reports by market research firms. Although Luminar believes these sources are reliable, the company has not independently verified the information and does not guarantee its accuracy and completeness. Luminar has supplemented this information where necessary with information from discussions with Luminar customers and Luminar's own internal estimates, taking into account publicly available information about other industry participants and Luminar's management's best view as to information that is not publicly available.

Notice of late filing

Luminar expects to file a notification of late filing on Form 12b-25 with the SEC, which will provide an automatic 5-day extension of the filing deadline for its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2024 (the "Quarterly Report"), to November 18, 2024. Luminar requires additional time to complete the quarter-end review due to the complexity of the analysis relating to the previously announced convertible notes exchange transaction consummated in August 2024. Luminar expects to file the Quarterly Report as soon as practicable within the 5-day extension period.

Disclaimer & Cautionary Note

Use of non-GAAP financial measures

The financial information and data contained in this presentation is unaudited and does not conform to regulation S-X promulgated under the securities act of 1933, as amended. Accordingly, such information and data may not be included in, may be adjusted in or may be presented differently in, any filing Luminar makes with the SEC. Luminar has not filed its Form 10-Q for the quarter ended September 30, 2024. As a result, all financial results described in this presentation should be considered preliminary, and are subject to change to reflect any necessary adjustments or changes in accounting estimates, that are identified prior to the time that Luminar files its Form 10-Q. In addition to disclosing financial measures prepared in accordance with U.S. generally accepted accounting principles (GAAP), this presentation contains certain non-GAAP financial measures and certain other metrics. Non-GAAP financial measures and these other metrics do not have any standardized

principles (GAAP), this presentation contains certain non-GAAP financial measures and certain other metrics. Non-GAAP financial measures and these other metrics do not have any standardized meaning and are therefore unlikely to be comparable to similarly titled measures and metrics presented by other companies. Luminar considers these non-GAAP financial measures and metrics to be important because they provide useful measures of the operating performance of the Company, exclusive of factors that do not directly affect what we consider to be our core operating performance, as well as unusual events. The Company's management uses these measures and metrics to (i) illustrate underlying trends in the Company's business that could otherwise be masked by the effect of income or expenses that are excluded from non-GAAP measures, and (ii) establish budgets and operational goals for managing the Company's business and evaluating its performance. In addition, investors often use similar measures to evaluate the operating performance of a company. Non-GAAP financial measures and metrics are presented only as supplemental information for purposes of understanding the Company's operating results. The non-GAAP financial measures and metrics should not be considered a substitute for financial information presented in accordance with GAAP. This presentation includes non-GAAP financial measures, including non-GAAP cost of sales, gross loss/gross profit, operating expenses, net loss, EPS and Free Cash Flow. Non-GAAP cost of sales is defined as GAAP cost of sales adjusted for stock-based compensation expense and amortization of intangible assets. Non-GAAP gross loss/gross profit is defined as GAAP gross loss/gross profit adjusted for stock-based compensation expense and amortization of intangible assets. Non-GAAP operating expenses is defined as GAAP operating expenses adjusted for stock-based compensation expense, amortization of intangible assets, impairment of goodwill and intangible assets, and transaction costs relating to acquisition activities. Non-GAAP net loss is defined as GAAP net loss adjusted for stock-based compensation expense, amortization of intangible assets, accelerated depreciation related to certain property, plant, and equipment items, impairment of goodwill and intangible assets, gain on extinguishment of debt, impairment of investments, restructuring costs, gain from certain acquisitions, transaction costs relating to acquisition activities, change in fair value of embedded derivative, and change in fair value of warrant liabilities. Non-GAAP EPS is defined as Non-GAAP net loss divided by weighted average shares outstanding for the period. Free Cash Flow is defined as operating cash flow less capital expenditures.

We use "Order Book" as a metric to measure performance against anticipated achievement of planned key milestones of our business. Order Book is defined as the forward-looking cumulative billings estimate of Luminar's hardware and software products over the lifetime of given vehicle production programs which Luminar's technology is expected to be integrated into or provided for, based primarily on projected / actual contractual pricing terms and our good faith estimates of "take rate" of Luminar's technology on vehicles. "Take rates" are the anticipated percentage of new vehicles to be equipped with Luminar's technology based on a combination of original equipment manufacturer ("OEM") product offering decisions and predicted end consumer purchasing decisions. We include programs in our Order Book when (a) we have obtained a written agreement (e.g. non-binding expression of interest arrangement or an agreement for non-recurring engineering project) or public announcement with a major industry player, and (b) we expect to ultimately be awarded a significant commercial program. We believe Order Book provides useful information to investors as a supplemental performance metric as our products are currently in a pre-production stage and therefore there are currently no billings or revenues from commercial grade product sales. OEMs customarily place non-cancelable purchase orders with their automotive component suppliers only shortly before or during production. Consequently, we use Order Book to inform investors about the progress of expected adoption of our technologies by OEMs because there is, in our view, no other better metric available at our stage. The Order Book estimate may be impacted by various factors, as described in "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and subsequent filings with the Securities and Exchange Commission, including, but not limited to the following: (i) None of our customers make contractual commitments to use our LiDAR sensors and software until all test and validation activities have been completed, they have finalized plans for integrating our systems, have a positive expectation of the market demand for our features, and unrelated to us, have determined that their vehicle is ready for market and there is appropriate consumer demand. Consequently, there is no assurance or guarantee that any of our customers, including any programs which we included in our Order Book estimates will ever complete such testing and validation or enter into a definitive volume production agreement with us or that we will receive any billings or revenues forecasted in connection with such programs; (ii) The development cycles of our products with new customers vary widely depending on the application, market, customer and the complexity of the product. In the automotive market, for example, this development cycle can be as long as seven or more years. Variability in development cycles make it difficult to reliably estimate the pricing, volume or timing of purchases of our products by our customers; (iii) Customers cancel or postpone implementation of our technology; (iv) We may not be able to integrate our technology successfully into a larger system with other sensing modalities; and (v) The product or vehicle model that is expected to include our LiDAR products may be unsuccessful, including for reasons unrelated to our technology. These risks and uncertainties may cause our future actual sales to be materially different than that implied by the Order Book metric.

Q3’24 Business Update

Q3'24 BUSINESS UPDATE

Luminar Announces Expansions With 2 Global OEMs

Volvo & Japanese automaker announcements prove our ability to execute and expand

A Major Japanese Automaker

Shortly after the quarter, a major Japanese OEM expanded its Advanced Development Contract with Luminar

The new agreement includes continued collaboration on the OEM’s next-generation system using Luminar’s LiDAR, as well as paid development of new software capabilities

This highlights Luminar’s role as a key enabler for

Volvo Cars

With the EX90 now being delivered to customers, Volvo is expanding their business with Luminar

Luminar has been selected to be featured as standard equipment on an additional vehicle model in Volvo Cars line-up

This demonstrates Volvo's commitment to safety, endorsing Luminar’s leadership in LiDAR and ability to execute and industrialize in scale

next-gen automotive systems, demonstrating our leadership in both LiDAR and software. We expect to share additional information in the first half of 2025

We continue to meet all key deliverables for the global EX90 production ramp, shipping more sensors in Q3 than the past three quarters combined

Q3'24 BUSINESS UPDATE

Cost Actions Update

Our cost actions are not expected to adversely impact our technical milestones, customer programs, or product deliverables in any material respect

Cost Actions Summary

In Sept '24, we took additional cost-saving actions under our Restructuring Plan, including reductions to our non-technical workforce. We expect these actions, along with other cost-saving measures to take place over the coming quarters, to generate ~$80M in annual cash savings on a run-rate basis.

These expected savings are incremental to actions announced in conjunction with our expanded partnership with TPK in May '24.

Our Q3 results show early returns from our cost savings measures; we expect to see continued improvement in Q4 as we realize the benefits of actions taken in September.

Quarterly GAAP
Operating Cash Flow ($M)

Quarterly Non-GAAP[2]
Free Cash Flow[3] ($M)

Please refer to Footnotes on page 37 for more detail.

Q3'24 BUSINESS UPDATE

First Point Cloud Generated by Luminar Halo

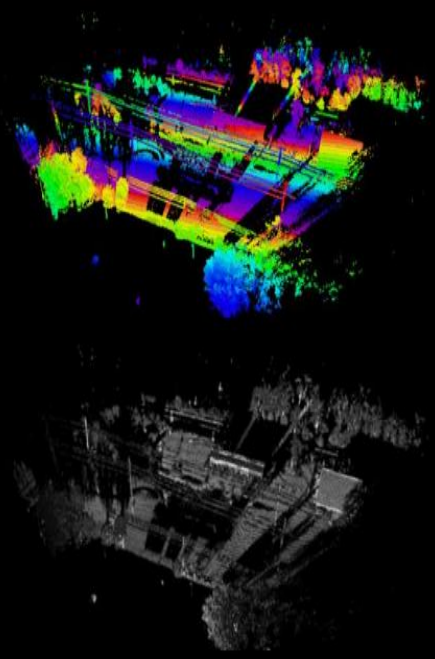
In Q3'24, we generated our first Point Cloud

In Q3'24, we generated our first Point Cloud with Luminar Halo, achieving a critical milestone on the program.

This demonstrates industry-leading long range LiDAR data fidelity for improved safety and autonomous capabilities.

While Iris was designed to kick off a new era of safety and autonomy, Luminar Halo is designed to accelerate it to mass adoption with improved size and cost.

Luminar is leveraging prior R&D investment and learnings from industrializing Iris to develop Luminar Halo at unprecedented cost and efficiency.



Luminar's Technical Campus in Orlando, Florida

2024 Year-End Milestones

1 Pass final Run at Rate production audit ahead of Volvo SOP; Achieve global SOP & ramp with Volvo

Status: Achieved. Luminar passed the final Run at Rate production audit ahead of Volvo SOP

Status: Achieved. Luminar achieved Start of Production with Volvo in Q2, and continues to ramp production while meeting all of Volvo's key deliverables

2 Launch TPK facility for additional capacity and improved cost

Status: Achieved. In April 2024 we launched an expanded partnership with TPK to substantially reduce cost of industrialization. Subsequently, we announced a workforce reduction of roughly 20% as we transitioned to a more asset-light model

3 Unveil next-generation LiDAR; Deliver samples to customers

Status: Achieved. Luminar Halo was unveiled on Luminar Day in April '24

Status: On Track. Luminar is on track for sample deliveries to select customers by year-end

4 Expand ecosystem around LiDAR (e.g. Semiconductors, Software, Insurance).

Status: On track. Luminar continues to build an ecosystem around its LiDAR technology to grow and capture value

In Q3, we finalized the partnership with our primary insurer for Luminar's consumer insurance program. In addition, we finalized the design of the customer experience within our insurance app, which has been well received by distribution partners

Luminar Overview

STATE OF THE INDUSTRY

What's the Problem?

1.2 million
annual fatalities from vehicle collisions globally

1 in 100
of us will tragically lose our life in a car crash

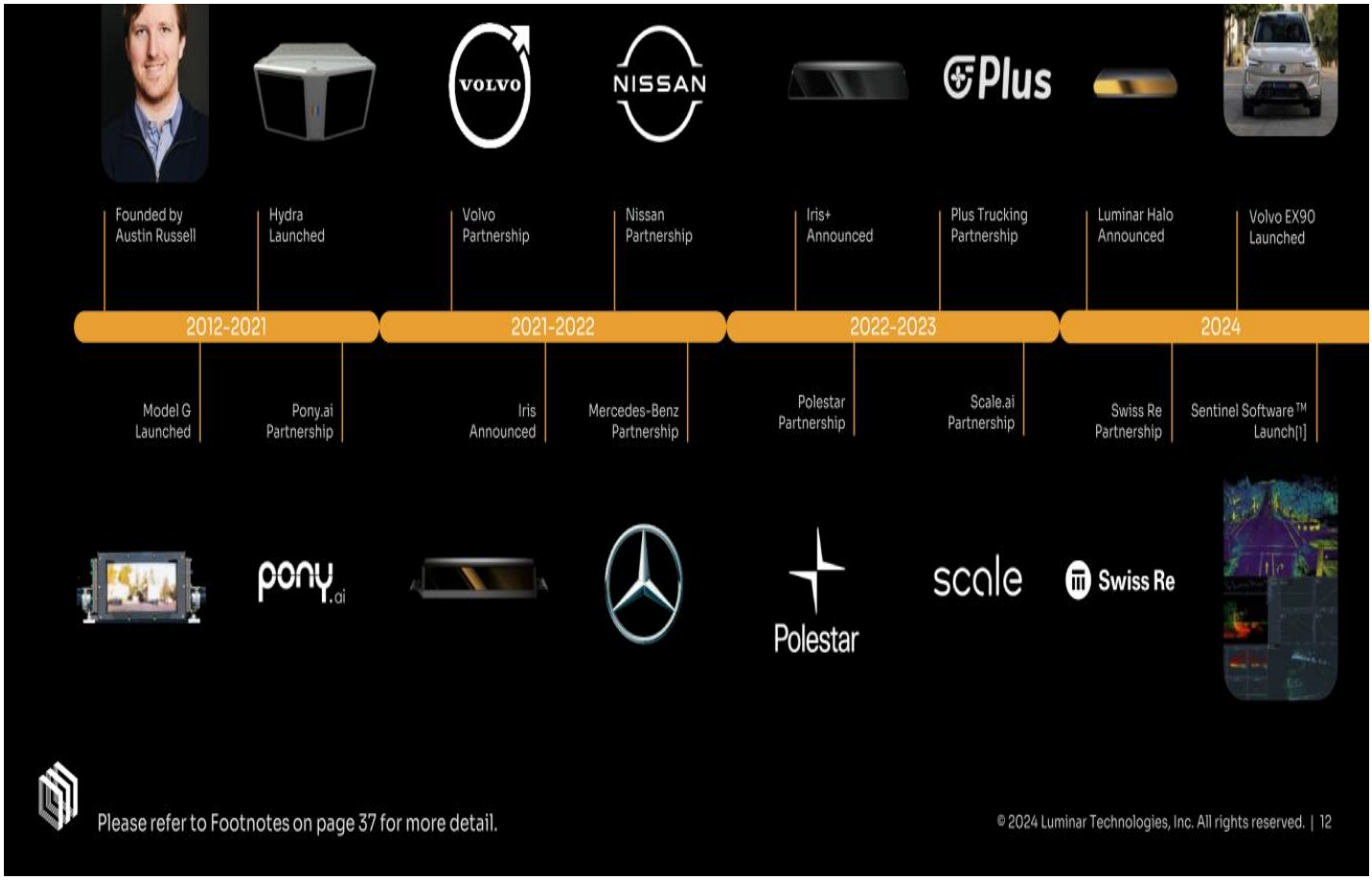
$1 trillion
estimated to be paid annually to global automotive insurance companies by 2027

We need a **step change** in ADAS & AV technology to make a true impact and save lives.

Sources: WHO, NHTSA (Data as of 2019), NSC (US Data), Allied Market Research (Data as of 2020).

OVERVIEW

Luminar is the Established Leader for LiDAR Rapid Growth


Founded by Austin Russell
Hydra Launched
Volvo Partnership
Nissan Partnership
Iris+ Announced
Plus Trucking Partnership
Luminar Halo Announced
Volvo EX90 Launched
2012-2021
2021-2022
2022-2023
2024
Model G Launched
Pony.ai Partnership
Iris Announced
Mercedes-Benz Partnership
Polestar Partnership
Scale.ai Partnership
Swiss Re Partnership
Sentinel Software™ Launch[1]
Please refer to Footnotes on page 37 for more detail.
© 2024 Luminar Technologies, Inc. All rights reserved. | 12

OVERVIEW

Luminar's competitive moat is reinforced by our end-to-end ecosystem

- Insurance — Swiss Re
- OEM Partners — Volvo, Nissan, Polestar, Mercedes-Benz
- Platform Partners — NVIDIA, mobileye, Qualcomm, ecarx

DEVELOPED BY Luminar

Software[1] enables LiDAR's performance & increase stickiness with customers.

- Software Stack — scale

- Series Production — Celestica, fabrinet, TPK

LiDAR systems deliver unparalleled performance with pathway to scale & economics.

- LiDAR Systems

- Transceiver

Semiconductors unlock product architecture & performance.

- Semiconductors

Please refer to Footnotes on page 37 for more detail.

LIDAR'S ADVANTAGE

What's the LiDAR Opportunity?

L2+ ➡ L3 & Beyond

Next-Gen ADAS & AV is Coming

LiDAR useful for L2+

To improve safety performance versus Camera/RADAR

LiDAR **required** for L3 & Beyond

LiDAR required for L3 & Beyond

To provide reliable 3-D context & object detection for safe autonomy, along with upgrade optionality from L2+

~197M Unit TAM

Estimated ADAS & AV LiDAR TAM* in 2030

Note: *Estimated TAM of LiDAR in ADAS Applications by 2030 according to Frost & Sullivan.

LIDAR'S ADVANTAGE

Why LiDAR?

For Safety

Vehicles with current camera/RADAR systems experienced collisions in 70% of pedestrian AEB scenarios*.

Safety regulations are getting increasingly tough. 0% of camera/RADAR systems today appear equipped to meet tougher safety standards.

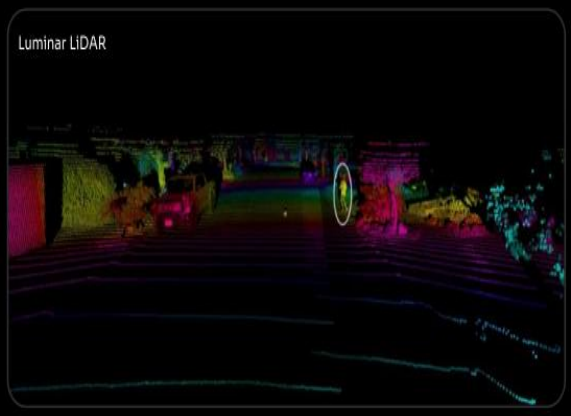
LiDAR introduces reliable object detection & distance measurement to reduce collisions and avoid false positives.

For Autonomy

Camera infers a 3-D model from a 2-D image; RADAR struggles with detection, particularly at distance.

This means camera/RADAR have unreliable object detection & distance measurement to enable autonomy.

LiDAR provides most reliable 3-D context & object detection, broad sensor utility, and functional availability in all driving scenarios & conditions to enable autonomy. LiDAR also introduces redundancy with other sensors.



Sources: *IIHS, AAA.

LIDAR'S ADVANTAGE

Swiss Re: Luminar LiDAR Proven to Improve Safety

"Our results show that the Luminar system-equipped vehicle is expected

to avoid up to 25% more collisions than the same vehicle without the Luminar equipment and it is expected to enhance the mitigation power by up to 29%.

Compared to the two best vehicles in Swiss Re's benchmark the difference in expected frequency is up to 27%, while in mitigation power it is up to 40%.

This means that the Luminar-equipped vehicle is expected to avoid more collisions as well as decrease the impact of collisions when they happen."

Swiss Re

Note: For more detail, see Swiss Re's report HERE, published April 24, 2024.

LUMINAR'S ADVANTAGE

Differentiated Approach to Driving the AV Future

Industry is focused on replacing the driver.

Billions spent in efforts to replace the driver with no near-term reliable solution in sight.

The Vision

The Reality

Photo Credit: The San Francisco Standard (L), ABC 15 Arizona (R).

LUMINAR'S ADVANTAGE

Differentiated Approach to Driving the AV Future

Luminar's strategy is to Enhance the driver.

We are the first and only LiDAR technology made standard on a global production vehicle.

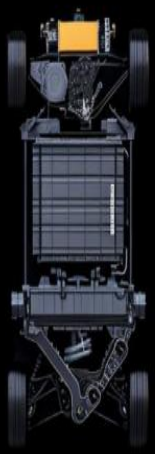



LUMINAR'S ADVANTAGE

Luminar & LiDAR are Powertrain Agnostic

Internal Combustion

Electric Vehicle



Hybrid Vehicle

Luminar is currently planned into

Programs Across All Major Powertrains

LUMINAR'S ADVANTAGE

Why Luminar?

Others

Path of Least Resistance

Product decisions were made to
1. Get to market as fast as possible
2. Use off-the-shelf components

Standard technology is not developed to meet the long-term application of safe autonomy.

Luminar

Path of Most Performance

Product decisions were made to meet the needs of highway speed autonomy and maximum safety.

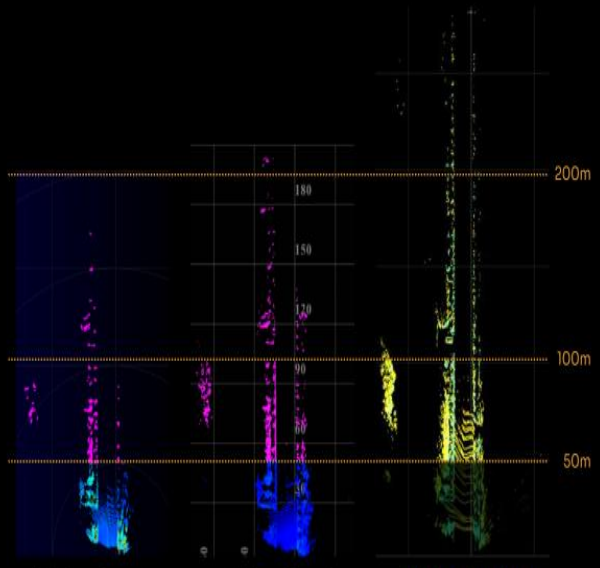
These needs required custom component development from the chip-level up and supply chain development to achieve performance, scale, and economics.

LUMINAR'S ADVANTAGE

Why 1550nm?

To deliver safe highway speed autonomy Range x Resolution is required.

Birds Eye Point Cloud Illustration of Luminar versus 905nm Peers



905nm wavelength operates closer to that visible by human eye & can cause eye damage.

1550nm can output more power than 905nm while remaining eye safe.

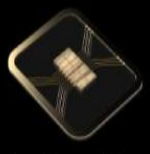
1550nm emits on average 17x more photons into environment than 905nm.
17x photon budget = Better Range x Resolution

1550nm has more robust performance across solar & weather conditions.

LUMINAR'S ADVANTAGE

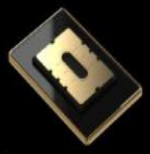
Our Foundational Technology Moat

Custom developed components from Luminar Semiconductor, Inc.

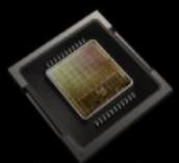


Gen 4 laser chip (InP)

Laser driver chip (Si)



5th gen receiver chip (InGaAs)



5th gen signal processing chip (Si)

Luminar's LiDAR leverages highly

specialized components developed by Luminar Semiconductor Inc to:

Enable performance and lower supply chain cost

Enhance competitive moat

Accelerate pace of innovation

81 Engineers

46 PhDs & M.Engs

LUMINAR'S ADVANTAGE

Technology Roadmap to Mass Adoption

2017 Model G-Series

Built for Proof of Concept

2019 Hydra

Built for Test & Development

2022 Iris Family

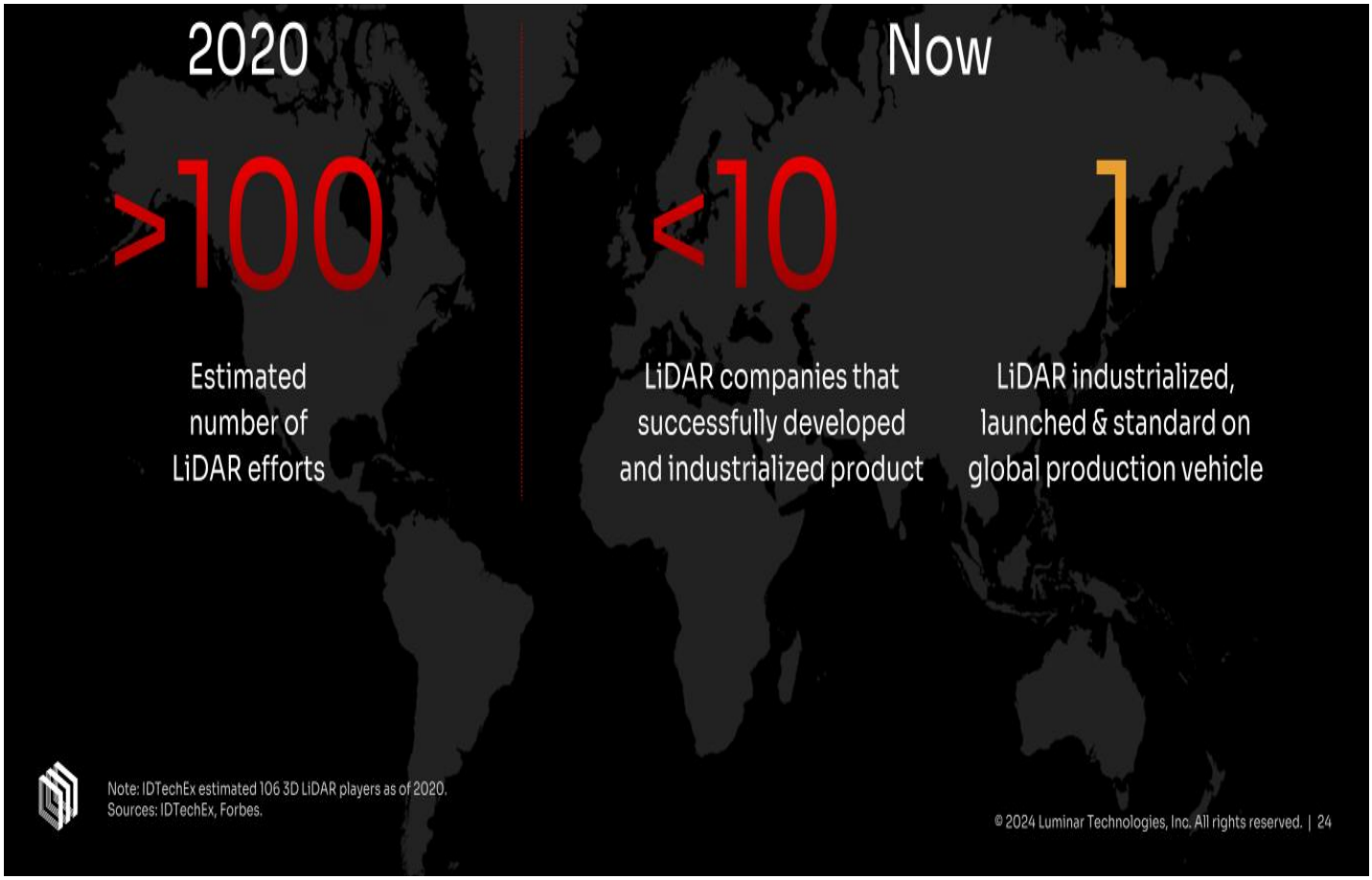
Built for Series Production

2026 Luminar Halo

Built for Scale & Mass Adoption

LOOKING BACK

Luminar has Separated from the Pack



LOOKING AHEAD

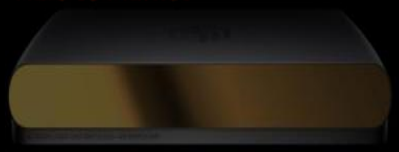
Near-Term Priorities

1 Ramp Production for Volvo & Others Post SOP

2 Ramp Down Costs Post SOP OpEx & COGS

3 Launch Additional Vehicle Programs

4 Accelerate Luminar Halo to Market



5 Sufficiently Capitalize for Future Growth

Q3’24 Financials

Q3'24 BUSINESS UPDATE

Q3'24 Financial Results Highlights

Revenue
$15.5M

Below guidance for Q3 revenue to be flat to slightly higher vs. Q2 ($16.5M)

Comments:

The QoQ decline in revenue was primarily driven by lower revenue from a re-negotiated non-series production contract

Excluding this re-negotiated contract, revenue would have been up QoQ, aided by growth in sensor sales

Gross Loss
GAAP = $(14.0)M
Non-GAAP[2] = $(11.7)M

Prior guidance for Q3 gross loss to increase vs. Q2 (excl. Q2 NRE contract loss of $1.7M)
- In-line on a GAAP basis ($13.7M loss in Q2, incl. Q2 NRE contract loss)
- Better on a non-GAAP basis ($11.9M loss)

Comments:

Q3 Non-GAAP Gross Loss was negatively impacted by ~$8M related to the slower series production ramp, including 1) Inventory build of production units at unfavorable economics, and 2) Contract manufacturing charges associated with slower production ramp

This was partially offset by early returns from our cost savings actions

Cash & Liquidity[4]
$248.6M Cash & Liquidity
$430.6M Incl. Equity Program

$430.6M includes $198.6M of cash & equivalents, $50M of undrawn credit facility and $182M remaining under our equity finance program

Q3 Free Cash Flow[3] of $(58.4)M improved by ~$20M vs. Q2; Q3 Operating Cash Flow of $(55.8)M improved by ~$22M vs. Q2

Comments:

QoQ Change in Cash[5] of $(51.9)M vs. $(57.0)M in Q2, in line with guidance (excl. the $89M cash proceeds from new debt raised in Q3)

$6M raised under equity financing program

$1.4M of cash charges associated with restructuring efforts

Please refer to Footnotes on page 37 for more detail.

Q3'24 BUSINESS UPDATE

Financial Guidance Update

Q4'24 Revenue

Q4'24 Gross Loss

YE'24 Cash & Liquidity[5]

Q4'24 revenue expected to grow moderately relative to Q3'24

Comments:

Driven by growth in sensor sales, including both continued ramp of the Volvo EX90, as well as non-series production revenue

We currently have sufficient inventory on hand to fully service Q4 demand

Q4'24 Gross Loss expected to improve significantly (down) QoQ

Comments:

Improvement driven by:

Production downtime in Q4 to help reduce our inventory levels and better align with Volvo's production rate

Expected growth in non-series production sensor sales in Q4

Continued savings from our cost savings actions

Estimating ~$230M to $240M (down from $240M)

Comments:

Adding lower range due to lower Q3 equity program usage as well as higher restructuring cash charges

Includes undrawn $50M line of credit obtained in Q1'24

We are starting to see early conversions from the convertible debt deal[6] we announced in Q2'24 earnings. Please refer to Footnote 6 on page 37 for more details.

Please refer to Footnotes on page 37 for more detail.

Appendix

Condensed Consolidated Balance Sheets

In thousands
Unaudited

	Sept 30, 2024	June 30, 2023	Dec 31, 2023
ASSETS			
Current Assets:			
Cash and cash equivalents	$114,209	$52,335	$139,095
Restricted cash	1,937	1,758	1,529
Marketable securities	84,409	108,989	150,727
Accounts receivable	15,246	19,752	14,124
Inventory	17,636	14,026	12,196
Prepaid expenses and other current assets	30,449	33,175	32,950
Total current assets	263,886	230,035	350,621
Property and equipment, net	55,220	58,190	66,300
Operating lease right-of-use assets	41,036	44,408	42,706
Intangible assets, net	16,712	20,994	22,994
Goodwill	3,994	7,390	7,390
Other non-current assets	22,566	20,792	22,356
Total Assets	$403,414	$381,809	$512,367
LIABILITIES AND STOCKHOLDERS' DEFICIT			
Current Liabilities:			
Accounts payable	$28,761	$20,506	$21,113
Accrued and other current liabilities	47,954	37,402	52,605
Operating lease liabilities	10,978	11,370	10,154
Total current liabilities	87,693	69,278	83,872
Warrant liabilities	19	84	1,069
Convertible and senior notes	539,405	617,046	615,428
Operating lease liabilities, non-current	33,016	36,207	35,079
Other non-current liabilities	1,292	1,343	1,667
Total Liabilities	$661,425	$723,958	$737,115
Stockholders' Deficit:			
Class A common stock	42	39	34
Class B common stock	10	10	10

Additional paid-in capital	2,122,786	2,066,404	1,927,378
Accumulated other comprehensive income (loss)	241	(109)	2
Treasury stock	(312,477)	(312,477)	(312,477)
Accumulated deficit	(2,068,613)	(2,096,016)	(1,839,695)
Total Stockholders' Deficit	(258,011)	(342,149)	(224,748)
Total Liabilities and Stockholders' Deficit	$403,414	$381,809	$512,367

Please refer to Footnotes on page 37 for more detail.

Condensed Consolidated Statements of Operations

In thousands, except share and per share data
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	June 30, 2024	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
Revenue:					
Products	$12,681	$15,739	$10,753	$43,721	$28,043
Services	2,812	712	6,206	9,190	19,622
Total revenue	15,493	16,451	16,959	52,911	47,665
Cost of sales:					
Products	24,128	19,969	27,273	68,604	71,535
Services	5,397	10,162	7,846	22,475	27,249
Total cost of sales	29,525	30,131	35,119	91,079	98,784
Gross loss	(14,032)	(13,680)	(18,160)	(38,168)	(51,119)
Operating expenses:					
Research and development	50,591	65,850	62,937	184,191	199,472
Sales and marketing	11,097	12,140	12,397	37,752	41,780
General and administrative	30,206	29,790	35,435	93,045	122,345
Impairment of goodwill & intangible assets	6,647	—	—	6,647	—
Restructuring costs	3,284	6,262	—	9,546	—
Total operating expenses	101,825	114,042	110,769	331,181	363,597
Loss from operations	(115,857)	(127,722)	(128,929)	(369,349)	(414,716)
Other income (expense), net:					
Change in fair value of warrant liabilities	65	163	2,373	1,050	1,345
Interest expense	(8,908)	(2,757)	(2,779)	(14,422)	(5,717)
Interest income	2,407	2,519	1,260	8,356	4,770
Gain on extinguishment of debt	147,346	—	—	147,346	—
Changes in fair value of embedded derivative	2,476	—	—	2,476	—

Gain from acquisition of EM4, LLC	—	—	—	1,752	—
(Losses)/gains related to investments & certain other assets, and other income/(expense)	32	(3,376)	(5,967)	(5,947)	(8,245)
Total other income (expense), net	143,418	(3,451)	(5,113)	140,611	(7,847)
Income/ (Loss) before provision for income taxes	27,561	(131,173)	(134,042)	(228,738)	(422,563)
Provision for income taxes	158	(566)	296	180	305
Net income (loss)	$27,403	$(130,607)	$(134,338)	$(228,918)	$(422,868)
Net income (loss) per share:					
Basic[8]	$0.06	$(0.29)	$(0.34)	$(0.51)	$(1.11)
Shares used in computing net income (loss) per share:					
Basic[8]	480,016,365	453,978,904	394,591,942	453,074,622	382,673,871

Condensed Consolidated Statement of Cash Flows

In thousands
Unaudited

	Nine Months Ended Sept 30,	
	2024	2023
Cash flows from operating activities:		
Net loss	$(228,918)	$(422,868)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	20,169	19,468
Amortization of operating lease right-of-use assets	6,464	5,095
Amortization of premium on marketable securities	(1,819)	(3,952)
Loss on marketable securities	2,201	7,774
Change in fair value of private warrants	(1,050)	(1,345)
Vendor stock-in-lieu of cash program	12,358	31,487
Gain from acquisition of EM4	(1,752)	—
Impairment of goodwill and other intangible assets	6,647	—
Amortization of debt discount and issuance costs	3,065	2,427
Change in fair value of embedded derivatives	(2,476)	—
Inventory write-offs and write-downs	20,737	17,343
Gain on extinguishment of debt and interest forfeiture	(147,217)	—
Share-based compensation, including restructuring costs	115,792	160,031
Losses and impairments on non-marketable securities and certain other assets	4,000	2,141
Change in product warranty and other	(2,367)	4,273
Changes in operating assets and liabilities:		
Accounts receivable	(59)	(7,729)
Inventories	(22,638)	(25,249)
Prepaid expenses and other current assets	(1,987)	10,858
Other non-current assets	(5,108)	(3,458)
Accounts payable	7,327	4,018
Accrued and other current liabilities	9,461	14,379
Other non-current liabilities	(7,522)	(9,219)
Net cash used in operating activities	**(214,692)**	**(194,526)**
Cash flows from investing activities:		
Acquisition of EM4 (net of cash acquired)	(3,831)	—
Acquisition of Seagate's LiDAR business	—	(12,608)
Purchases of marketable securities	(92,400)	(269,164)
Proceeds from maturities of marketable securities	154,837	390,836
Proceeds from sales/redemptions of marketable securities	3,737	51,569
Purchases of property and equipment	(4,244)	(21,129)
Net cash provided by investing activities	**58,099**	**139,504**
Cash flows from financing activities:		
Proceeds from issuance of Senior Notes, net of issuance costs	89,202	—
Net proceeds from issuance of Class A common stock under Equity Financing Program	41,806	38,711
Proceeds from issuance of Class A common stock to a wholly owned subsidiary of TPK	—	20,000
Proceeds from exercise of stock options	547	2,560
Proceeds from sale of Class A common stock under ESPP	800	1,406
Payments of employee taxes related to stock-based awards	(240)	(572)
Net cash provided by financing activities	**132,115**	**62,105**

Net increase (decrease) in cash, cash equivalents and restricted cash	**(24,478)**	**7,083**
Beginning cash, cash equivalents and restricted cash	140,624	71,105
Ending cash, cash equivalents and restricted cash	**$116,146**	**$78,188**

Please refer to Footnotes on page 37 for more detail.

Reconciliation of GAAP Cost of Sales to Non-GAAP Cost of Sales

In thousands
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	June 30, 2024	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
GAAP cost of sales	$29,525	$30,131	$35,119	$91,079	$98,784
Non-GAAP adjustments:					
Stock-based compensation	(1,204)	(298)	(2,255)	(4,897)	(6,842)
Amortization of intangible assets	(197)	(166)	(166)	(529)	(497)
Accelerated depreciation related to certain property, plant & equipment items	(933)	(1,295)	(6,647)	(4,363)	(6,647)
Non-GAAP cost of sales	$27,191	$28,372	$26,051	$81,290	$84,798

Reconciliation of GAAP Gross Loss to Non-GAAP Gross Loss

In thousands
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	June 30, 2024	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
GAAP Gross loss	$(14,032)	$(13,680)	$(18,160)	$(38,168)	$(51,119)
Non-GAAP adjustments:					
Stock-based compensation	1,204	298	2,255	4,897	6,842
Amortization of intangible assets	197	166	166	529	497
Accelerated depreciation related to certain property, plant & equipment items	933	1,295	6,647	4,363	6,647
Non-GAAP Gross loss	$(11,698)	$(11,921)	$(9,092)	$(28,379)	$(37,133)

Reconciliation of GAAP Operating Expenses to Non-GAAP Operating Expenses

In thousands
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	June 30, 2023	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
GAAP operating expenses	$101,825	$114,042	$110,769	$331,181	$363,597
Non-GAAP adjustments:					
Stock-based compensation	(30,564)	(36,781)	(42,627)	(108,415)	(153,189)
Restructuring costs	(3,284)	(6,262)	—	(9,546)	—
Amortization of intangible assets	(834)	(834)	(932)	(2,502)	(2,761)
Impairment of goodwill & intangible assets	(6,647)	—	—	(6,647)	—
Transaction costs relating to acquisition activities	(5)	(1)	(17)	(237)	(53)
Non-GAAP operating expenses	$60,491	$70,164[7]	$67,193	$203,834	$207,594

Please refer to Footnotes on page 37 for more detail.

Reconciliation of GAAP Net Loss to Non-GAAP Net Loss

In thousands, except share and per share data
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	June 30, 2024	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
GAAP Net income (loss)	$27,403	$(130,607)	$(134,338)	$(228,918)	$(422,868)
Non-GAAP adjustments:					
Stock-based compensation	31,768	37,079	44,882	113,312	160,031
Amortization of intangible assets	1,031	1,000	1,098	3,031	3,258
Accelerated depreciation related to certain property, plant & equipment items	933	1,295	6,647	4,363	6,647
Impairment of goodwill and intangible assets	6,647	—	—	6,647	—
Gain on extinguishment of debt	(147,346)	—	—	(147,346)	—
Impairment of investments	—	4,000	—	4,000	—
Restructuring costs, including stock-based compensation	3,284	6,262	—	9,546	—
Gain from acquisition of EM4	—	—	—	(1,752)	—
Transaction costs relating to acquisition activities	5	1	17	237	53
Change in fair value of embedded derivative	(2,476)	—	—	(2,476)	—
Change in fair value of warrant liabilities	(65)	(163)	(2,373)	(1,050)	(1,345)
Non-GAAP Net loss	$(78,816)	$(81,133)	$(84,067)	$(240,406)	$(254,224)
GAAP Net income (loss) per share:					
Basic[8]	$0.06	$(0.29)	$(0.34)	$(0.51)	$(1.11)
Non-GAAP Net loss per share					
Basic[8]	$(0.16)	$(0.18)	$(0.21)	$(0.53)	$(0.66)
Shares used in computing GAAP Net loss per share					
Basic[8]	480,016,365	453,978,904	394,591,942	453,074,622	382,673,871
Shares used in computing Non-GAAP Net loss per share					
Basic[8]	480,016,365	453,978,904	394,591,942	453,074,622	382,673,871

Please refer to Footnotes on page 37 for more detail.

Reconciliation of GAAP Operating Cash Flow to Non-GAAP Free Cash Flow

In thousands
Unaudited

	Three Months Ended			Nine Months Ended	
	Sept 30, 2024	Jun 30, 2024	Sept 30, 2023	Sept 30, 2024	Sept 30, 2023
GAAP Operating cash flow	$(55,754)	$(77,707)	$(56,543)	$(214,692)	$(194,526)
Non-GAAP adjustments:					
Capital expenditures[9]:	(2,658)	(302)	(4,298)	(4,244)	(21,129)
Non-GAAP Free cash flow[3]	$(58,412)	$(78,009)	$(60,841)	$(218,936)	$(215,655)

Summary of Stock-Based Compensation and Intangibles Amortization

In thousands
Unaudited

	Three Months Ended Sept 30,			
	2024		2023	
	Stock-Based Compensation	Intangibles Amortization	Stock-Based Compensation	Intangibles Amortization
Cost of sales	$1,204	$197	$2,255	$166
Research and development	10,862	599	12,886	599
Sales and marketing	4,171	235	6,536	333
General and administrative	15,531	—	23,205	—
Restructuring costs	1,068	—	—	—
Total	$32,836	$1,031	$44,882	$1,098

	Three Months Ended June 30,			
	2024		2023	
	Stock-Based Compensation	Intangibles Amortization	Stock-Based Compensation	Intangibles Amortization
Cost of sales	$298	$166	$1,925	$166
Research and development	16,378	599	20,541	599
Sales and marketing	3,557	235	9,792	333
General and administrative	16,846	—	26,937	—
Restructuring costs	1,412	—	—	—
Total	$38,491	$1,000	$59,195	$1,098

	Nine Months Ended Sept 30,			
	2024		2023	
	Stock-Based Compensation	Intangibles Amortization	Stock-Based Compensation	Intangibles Amortization
Cost of sales	$4,897	$529	$6,842	$497
Research and development	41,724	1,797	50,898	1,762
Sales and marketing	12,951	705	22,156	999
General and administrative	53,740	—	80,135	—
Restructuring costs	2,480	—	—	—
Total	$115,792	$3,031	$160,031	$3,258

Footnotes & Legal Notices

Footnotes

1 Software: Various Luminar software capabilities are still in development and have not achieved "technology feasibility" or "production ready" status.

2 Non-GAAP metrics: Please refer to Reconciliation of GAAP to Non-GAAP financial measures on slides 31-36.

3 Free Cash Flow: Free cash flow is a non-GAAP measure and is defined as Operating cash flow less Capital expenditures.

4 Cash & Liquidity: Includes Cash, cash equivalents, and marketable securities, as well as applicable lines of credit and other facilities.

5 Change in Cash: Refers to change in cash, cash equivalents, and marketable securities, and excludes incremental liquidity from undrawn line of credit.

6 As of 11/08, ~$23M of our Series 1 2030 convertible bonds have been converted to equity, with ~$59M Series 1 2030 convertible still outstanding. We continue to have ~$203M remaining on our 2026 convertible debt and $192M of our Series 2 2030 convertible debt

7 Non-GAAP operating expenses for June 30, 2024 reflects a correction to the amount reported in the last Earnings Release to not adjust to Impairment of investments.

8 Luminar is in the process of finalizing the appropriate weighted average common shares outstanding for its GAAP dilutive EPS calculation for the three months ended September 30, 2024. Accordingly, it has not reported diluted earnings per share as required by GAAP. Luminar estimates the number of fully-diluted shares to be between 500 million and 640 million shares

9 Capital expenditures: Excludes Vendor stock-in-lieu of cash program - purchases and advances for capital projects and equipment of $3.2M for the Three Months Ended September 30, 2023 and $7.4M for the Nine Months Ended September 30, 2023.

Forward-looking statements

This presentation of Luminar technologies, inc. ("Luminar" or the "company") includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private securities litigation reform act of 1995. Forward-looking statements may be identified by the use of words such as "future," "growth," "opportunity," "well-positioned," "forecast," "intend," "seek," "target," "anticipate," "believe," "expect," "estimate," "plan," "outlook," and "project" and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding whether next generation sensors and software will be developed successfully or will accelerate automaker adoption, whether new automaker agreements will develop successfully into product launches, whether cost reduction efforts will continue to result in improved operational and financial efficiency, including projected free cash flow generation, expected achievement and timing of manufacturing scale up, OEM production readiness, next-gen LiDAR prototype development, continued software and AI development and performance, program milestones, Order Book growth, expected milestones, market size estimates, product efficacy, near-term priorities, including plans to ramp production and ramp down costs, operating expenses and cost of sales, and the financial guidance for Q4 2024. These statements are based on various assumptions, whether or not identified in this presentation, and on the current expectations of Luminar's management and are not guarantees of actual performance.

You are cautioned not to place undue reliance upon any forward-looking statements, including the projections, which speak only as of the date made. Luminar does not undertake any commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. Accordingly, forward-looking statements, including any projections or analysis, should not be viewed as factual and should not be relied upon as an accurate prediction of future results. The forward-looking statements contained in this presentation are based on the company's current expectations and beliefs concerning future developments and their potential effects on Luminar. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control), or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements, including the risks discussed in the "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Luminar's most recently filed periodic reports on Form 10-K and Form 10-Q, and other documents Luminar files with the SEC.

Should one or more of these risks or uncertainties materialize, or should any of management's assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Luminar does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. Accordingly, you should not put undue reliance on these statements.

All statements made in this presentation are made only as of the date set forth at the beginning of this presentation. Luminar undertakes no obligation to update the information made in this presentation in the event facts or circumstances subsequently change after the date of this presentation. Luminar has not filed its Form 10-Q for the quarter ended September30, 2024. As a result, all financial results described in this presentation should be considered preliminary, and are subject to change to reflect any necessary adjustments or changes in accounting estimates, that are identified prior to the time that Luminar files its Form 10-Q.

Notice of late filing

Luminar expects to file a notification of late filing on Form 12b-25 with the SEC, which will provide an automatic 5-day extension of the filing deadline for its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2024 (the "Quarterly Report"), to November 18, 2024. Luminar requires additional time to complete the quarter-end review due to the complexity of the analysis relating to the previously announced convertible notes exchange transaction consummated in August 2024. Luminar expects to file the Quarterly Report as soon as practicable within the 5-day extension period.

Trademarks and trade names

Luminar owns or has rights to various trademarks, service marks and trade names that it uses in connection with the operation of its business. This presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective

This presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties' trademarks, service marks, trade names or products in this presentation is not intended in, and does not imply, a relationship with Luminar, or an endorsement or sponsorship by or of Luminar. Solely for convenience, the trademarks, service marks and trade names referred to in this presentation may appear without the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that Luminar will not assert, to the fullest extent under applicable law, its rights or the right of the applicable licensor in these trademarks, service marks and trade names.

Legal Notices

Industry and market data

In this presentation, Luminar relies on and refers to information and statistics regarding the sectors in which Luminar competes and other industry data. Luminar obtained this information and statistics from third-party sources, including reports by market research firms. Although Luminar believes these sources are reliable, the company has not independently verified the information and does not guarantee its accuracy and completeness. Luminar has supplemented this information where necessary with information from discussions with Luminar customers and Luminar's own internal estimates, taking into account publicly available information about other industry participants and Luminar's management's best view as to information that is not publicly available.

Use of non-GAAP financial measures

In addition to disclosing financial measures prepared in accordance with U.S. generally accepted accounting principles (GAAP), this presentation contains certain non-GAAP financial measures and certain other metrics. Non-GAAP financial measures and these other metrics do not have any standardized meaning and are therefore unlikely to be comparable to similarly titled measures and metrics presented by other companies. Luminar considers these non-GAAP financial measures and metrics to be important because they provide useful measures of the operating performance of the Company, exclusive of factors that do not directly affect what we consider to be our core operating performance, as well as unusual events. The Company's management uses these measures and metrics to (i) illustrate underlying trends in the Company's business that could otherwise be masked by the effect of income or expenses that are excluded from non-GAAP measures, and (ii) establish budgets and operational goals for managing the Company's business and evaluating its performance. In addition, investors often use similar measures to evaluate the operating performance of a company. Non-GAAP financial measures and metrics are presented only as supplemental information for purposes of understanding the Company's operating results. The non-GAAP financial measures and metrics should not be considered a substitute for financial information presented in accordance with GAAP.

This presentation includes non-GAAP financial measures, including non-GAAP cost of sales, gross loss/gross profit, operating expenses, net loss, EPS, and Free Cash Flow. Non-GAAP cost of sales is defined as GAAP cost of sales adjusted for stock-based compensation expense, amortization of intangible assets, and accelerated depreciation related to certain property, plant and equipment items. Non-GAAP gross loss/gross profit is defined as GAAP gross loss/gross profit adjusted for stock-based compensation expense, amortization of intangible assets, and accelerated depreciation related to certain property, plant and equipment items. Non-GAAP operating expenses is degined as GAAP total operating expenses adjusted for stock-based compensation expense, restructuring costs, amortization of intangible assets, impairment of goodwill and intangible assets, and transction costs relating to acquisition activities. Non-GAAP net loss is defined as GAAP net loss adjusted for stock-based compensation expense, amortization of intangible assets, accelerated depreciation related to certain property, plant and equipment items, impairment of goodwill and intangible assets, gain on extinguishment of debt, impairment of investments, restructuring costs, gain from certain acquisitions, transaction costs relating to acquisition activities, change in fair value of embedded derivative, and change in fair value of warrant liabilities. Free Cash Flow is defined as operating cash flow less capital expenditures.

We use "Order Book" as a metric to measure performance against anticipated achievement of planned key milestones of our business. Order Book is defined as the forward-looking cumulative billings estimate of Luminar's hardware and software products over the lifetime of given vehicle production programs which Luminar's technology is expected to be integrated into or provided for, based primarily on projected / actual contractual pricing terms and our good faith estimates of "take rate" of Luminar's technology on vehicles. "Take rates" are the anticipated percentage of new vehicles to be equipped with Luminar's technology based on a combination of original equipment manufacturer ("OEM") product offering decisions and predicted end consumer purchasing decisions. For programs where we are standard, we assume a 100% take rate, while for programs where we are optional we assume a flat 25%. We include programs in our Order Book when (a) we have obtained a written or verbal agreement (e.g., non-binding expression of interest arrangement or an agreement for non-recurring engineering project), other reasonable expression of commitment, or public announcement with a major industry player, and (b) we expect to ultimately be awarded a significant commercial program. We believe Order Book provides useful information to investors as a supplemental performance metric as our products are currently in a pre-production stage and therefore there are currently no billings or revenues from commercial grade product sales. OEMs customarily place non-cancelable purchase orders with their automotive component suppliers only shortly before or during production. Consequently, we use Order Book to inform investors about the progress of expected adoption of our technologies by OEMs because there is, in our view, no other better metric available at our stage. The Order Book estimate may be impacted by various factors, as described in "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the most recent fiscal year and subsequent filings with the Securities and Exchange Commission, including, but not limited to the following: (i) None of our customers make contractual commitments to use our lidar sensors and software until all test and validation activities have been completed, they have finalized plans for integrating our systems, have a positive expectation of the market demand for our features, and unrelated to us, have determined that their vehicle is ready for market and there is appropriate consumer demand. Consequently, there is no assurance or guarantee that any of our customers, including any programs which we included in our Order Book estimates will ever complete such testing and validation or enter into a definitive volume production agreement with us or that we will receive any billings or revenues forecasted in connection with such programs; (ii) The development cycles of our products with new customers vary widely depending on the application, market, customer and the complexity of the product. In the automotive market, for example, this development cycle can be as long as seven or more years.

Variability in development cycles make it difficult to reliably estimate the pricing, volume or timing of purchases of our products by our customers; (iii) Customers cancel or postpone implementation of our technology; (iv) We may not be able to integrate our technology successfully into a larger system with other sensing modalities; and (v) The product or vehicle model that is expected to include our lidar products may be unsuccessful, including for reasons unrelated to our technology. These risks and uncertainties may cause our future actual sales to be materially different than that implied by the Order Book metric.

Please refer to Footnotes on page 37 for more detail.

Transcript of Luminar Technologies, Inc. Q3 2024 Earnings Webcast, November 11, 2024

Yarden Amsalem

Welcome, everyone, to Luminar's Third Quarter of 2024 Business Update call. My name is Yarden Amsalem and I am Luminar's Senior Manager of Investor Relations, covering for Aileen Smith while she is on maternity leave.

With me today are Austin Russell, Luminar's Founder & Chief Executive Officer, and Tom Fennimore, our Chief Financial Officer. As a quick reminder, this call is being recorded. You can find the Press Release and Presentation that accompany this call at investors.luminartech.com.

In a moment, you will hear brief remarks from Austin and Tom, followed by Q&A.

Our Q&A session will primarily consist of questions from the institutional analyst community. To ensure we are addressing as many as possible, we would ask the analysts limit their questions to one with one follow up.

Before we begin the prepared remarks and Q&A, let me remind everyone that during the call, we may refer to GAAP and Non-GAAP financial measures. Today's discussion also contains forward-looking statements based on the environment as we currently see it; and as such, does include risks and uncertainties. Please refer to our Press Release and Presentation for more information on the specific risk factors that could cause actual results to differ materially.

With that, I'd like to introduce Luminar's Founder and CEO, Austin Russell.

Austin Russell

Hey, guys, thanks everyone. Good afternoon, and appreciate you joining us. So I want to be able to jump straight in, but before that I thought I'd be able to just give a quick sort of top 5. You know, the most significant business updates to be able to illustrate our business momentum.

So first and foremost, you know, Volvo is successfully ramping up the EX90. You know we successfully delivered now to a 4 figure number of vehicles that's going to 5 figures very soon over the coming months. And now we've begun the first global deliveries outside of the US with Volvo as they ramp up the EX90 in a host of different countries.

So, seeing our successful execution in the EX90 launch, as well as our ability to ramp, they have now made the decision to start rolling us out on additional vehicle models. And specifically, we're thrilled to announce that Volvo will be featuring Luminar as standard equipment on the next model in their lineup. We expect to be able to share more details on this in the coming months. So that's been an exciting one, and great to be able to have the support. Thank you.

Next up, you know, we're happy to announce that we've signed a new advanced development contract for collaboration for next generation, assisted driving system from a Japanese OEM which includes a paid development for hardware, software, and vehicle integration into different car models.

On the technology front, we have a major update with regards to our next generation product, Luminar Halo, which is at the center of our ecosystem. Whereas many thought it wouldn't be technically possible, we've now successfully generated the first point cloud, so to say, proving its substantially increased performance capabilities at a fraction of the cost and size compared to the Iris family. So, in other words, it's the "it's alive!" moment. So whereas Iris was designed to be able to show the world what was possible, this is the lidar that can be put into in design for mass adoption and mass production across the rest of the industry. With Iris we proved it out, and now Halo is there to take the baton and scale it up with a launch expected in 2026.

So lastly, over the past 6 months we've executed some aggressive cost down measures to be able to reduce our spend that doesn't contribute directly to our core business, while also driving greater operational efficiency through new technology and industrialization partnerships. So it's important to note that we've already largely made the required investments to build our technology infrastructure, and while these decisions that we've taken were not taken lightly, we're beginning to see the financial results of these actions. This quarter alone we saw over $20 million of improvement in free cash flow, the largest ever in Luminar's history. This is largely as a result of the actions taken in Q2. And costs should continue to come down as we ride the wave of our previous investments and actions. This is a critical proof point for our thesis and path profitability, and Tom could provide more context on this in his remarks. This is the start but not the end, and you know we'll ultimately have more to be able to do over the coming 12 months.

Now I'd like to be able to take us through this quarter with a little bit of a macro lens on automotive at large in our industry.

So, our momentum in this quarter demonstrates continued progress on our journey to commercialize lidar across the broader industry, to enhance driver safety, and to enable autonomous driving capabilities. In a broader environment that we all know all too well that can only be described as challenging, we delivered strong sequential growth to our first series production program, in aggregate delivering more lidar product this quarter to Volvo than the prior three quarters combined to all of our customers. This is the start, and as we reach a scale that will hopefully help demonstrate to growing out of the quarter to quarter noise, you know, so to say, that we have today, and we expect this to ultimately be reflected in the financial as well. While this is anything but an easy launch, automakers have now began taking notice of the significance of this launch and feeding that into their roadmaps. We're very encouraged by what the future holds for us in our industry.

At the same time, I've never felt more strongly about Luminar's leadership position in creating these next generation technologies to enable vehicles to become safer and more autonomous. I mentioned in prior quarters the broader automotive industry is coming through a seismic shift as they embark on creating new vehicle platforms to support next generation assisted and autonomous driving tech, including lidar, and represents one of the biggest upheavals in the industry for decades. Building and launching these new platforms are anything but easy, but automakers are all in as they look to be able to replace their aging platforms.

So this architecture shift is also accompanied by a growing penetration of software and advanced compute, which adds incredible complexity to the entire stack on these cars, you know. In fact,

many now in the industry refer to these as software-defined vehicles as a way to describe these new platforms.

And with this monumental undertaking the complexity cannot be overstated. The result has been a significant disruption both up and down the value chain. And the majority of OEMs have also taken longer than some of their initial targets to launch these platforms, as we discussed last probably a couple of quarters, as they collaborate with a different kind of supply base across the board and develop more centralized vehicle software systems.

So this is why today we stand at a crossroads where the majority of major automakers now have lidar embedded into the roadmaps for release this decade, and the long-term opportunity has never been stronger. But we're also powering through the near-term headwinds to ensure that we can realize the long-term success. And critically, we're executing well on the matters that are within our control and taking action to mitigate headwinds faced by an initially slower ramp up timeline than was planned years ago.

Some of those near-term headwinds have been prominent in our competitive landscape, which actually has aided some of our efforts in thinning of the herd, so to say. And at one point, a handful of years back we had as many as 200 different competitors, but today I can count on one hand the number of companies that are alive and theoretically capable of building product to global automotive standards. This is no longer a high tide lifting all boats, and this has worked in our favor.

So in light of the various factors as well as the capital markets, we rapidly matured to a focus, not just on technology, leadership and long term value, but also being pragmatic stewards of the business in the near term, with a focus on economic and operational efficiency. And as I've highlighted before, we're in a position of luxury from our prior investments. We invested nearly $2 billion to date to create, industrialize, and launch this technology platform from the chip level up, and are able to take cost cutting decisions without materially affecting these near-term deliverables or overall deliverables, allowing us to adapt to the current environment.

We're up for this challenge, and as you saw during the quarter, we made another round of decisions to be able to further reduce our cost, this time largely centered around non-technical G&A overhead, which in aggregate can reduce our cost envelope by an additional $80 million per year run rate.

Well, but importantly, while cost is coming down, Luminar is ramping up. We're scaling deliveries to our first production OEM, meeting their key volume and quality requirements and doing so at high yield. We're also setting internal records in terms of manufacturing productivity and quality rates, and we couldn't be happier about our ability to effectively meet our customers' needs in series production, you know, starting with Volvo, and of course the other customers we support as well.

So further to that point, well, Volvo spent some amount of time talking about Luminar lidar on their most recent earnings, call. As they now begin to ship cars from their factory to dealerships across the globe, they shared their plans to collect data from our sensors around the world and train AI models with it to be able to enable the next generation assisted and autonomous driving systems. And as of this quarter, they announced that they've now successfully built out one of the largest AI data centers in Scandinavia to be able to host this process to host and process this data from, you

know, lidar and other sensors on the vehicle. So Volvo is about to have more cars on the road in the US collecting data than all other lidar equipped data collection vehicles from effectively every other company combined. And this is not to be understated in terms of its significance. So with lidar, this is true 3D ground truth data as well. It's not just 2D data, and the importance of this is that it allows you to create that ground truth, understanding of the world around you with incredible amount of precision and accuracy down to the centimeter level.

So on top of this, Volvo is the first global automaker to make lidar standard on vehicles, viewing improved safety as something that should ultimately be fundamental to all drivers. This is similar to them, being the first to introduce everything from the modern three-point seat belt all the way up to the mobile camera systems before they came standard throughout the industry.

And while the EX90 has been making a significant mark, the reality is, it's just a small tip of a large spear, you know, for the automotive industry in terms of volume with it, representing only on the order of just 0.1% of the industry volume as it scales up. And this is the first of many committed programs with Luminar, and it doesn't take a whole lot to actually start making a big difference. For example, you know, even with this whole EV revolution, even today, Tesla is just on the order of 2% of vehicle deliveries globally, but makes a massively disproportionate impact. So it goes to show just how a small percentage difference can make such a huge impact. And importantly, though we don't make vehicles overall, we make the technology and we have the ability to work with everyone in the industry. And as a result, we expect to be able to drive market penetration globally at a rate that will deliver us into the double digit percentage market penetration over the next decade.

So to that end, seeing our successful execution on the EX90, Volvo has decided to expand their business with us, and feature Luminar as standard equipment on the next vehicle model in their lineup as well. It’s a huge step for us, a huge endorsement for us, and really speaks to their commitment for safety, our leadership and lidar, as well as our ability to execute and industrialize scale.

I mentioned as well that we have expanded and signed a new advanced development contract, you know, with the major Japanese automaker. And that includes the continued collaboration on the next generation system, you know, using our lidar and transition to our next generation lidar, as well as paying us for software, a new software development for this specific automaker.

So we're really excited about the next phase of the relationship there, as it demonstrates our leadership in everything from semiconductors to lidar to software, and we expect to be able to share additional information on this in the 1st half of 2025.

share additional information on this in the 1st half of 2023.

So when considering the current industry challenges more broadly alongside the progress that we're making with our customers and the things that we're doing right to adjust and adapt, why is it that you'd say we're more excited about our future than any other point in our history? And I'd like to be able to take a step back and give a little bit of a reminder of what we're building at Luminar and why we know the future is bright for us and the overall Luminar thesis kind of going back to basics. So forgive me if this is something that some of you guys may know all too well, but for those that are new to the Luminar journey, I think this is really important more broadly.

Luminar's thesis and corresponding products and technology have always been focused around enhancing drivers rather than replacing drivers altogether through autonomous and safety features on existing production vehicles.

And as a reminder lidar, which is our core technology, is able to uniquely measure the exact distance to objects in 3D using laser pulses between the sensor and objects on the road. Through the use of our fully integrated stack, you know which, as I mentioned, ranges from chips to lidar systems to software systems on top of it, we're able to do this millions of times and doing so and do so every second. And knowing these exact distances to objects is what makes lidar so special as compared to camera-based technologies, which effectively have to guess where the objects are in 3D by extrapolating information from 2D images.

Sometimes the cameras are right and the software, and sometimes it's wrong. And this is the hard part is that when it comes to a safety critical application, it's all about that last 1%. You know, we heard the notion from one of our customers that you know you can't run over one of every 100 people or so. For example, it's all about that last 1% when it comes to autonomous driving because otherwise you're limited to a level 2 autonomous system. And what that means is that the driver has to be always paying attention, ready to take over the wheel at any given moment. So if you want to be able to get to level 3, level 4 and above, then that means not just hands off, but eyes off, and being able to have the system responsible for all these different kinds of edge case scenarios that last 1% on top of that from an active safety standpoint. It's also part of the reason why, even with these camera systems today and radar systems, we still lose over a million lives every year to vehicle accidents. And this is where lidar can have a very meaningful impact.

So the enhancements of lidar are also not just relevant at day, but very relevant at night. So, whereas camera-based technologies experience significant performance, degradation at night and in other kinds of incremental weather conditions, this is not the case for high performance lidar, which sees effectively just as well in pitch black as it does with bright sunlight shining into it in our case.

As the world begins to shift to adopting more autonomous driving solutions, and higher level autonomous driving solutions, the technology that enables us must be flawless. It can't work some of the time and stop working simply because it's dark outside, for example.

So in support of this, it's now widely understood by virtually all automakers that lidar and not just cameras is a fundamental requirement for operating autonomously because the car is in full control. There's no room for error, and consequently it's the same for industry experts. Nearly all of them agree that there will be a one-to-one correlation between Level 3 and above equipped vehicles as well as lidar shipments. While lidar can very much have a positive impact, you know, for more fundamental and basic assisted driving systems, it's not a requirement, but it can still dramatically enhance the safety of that which you know, we can see even with examples today, like what Volvo is doing.

So our customers, the broader industry, generally agree when it comes to autonomy that the real boom will become to the level 3 and above systems, though, as they're able to perform high speed highway driving without requiring humans to constantly intervene.

And ultimately these level 3 and above systems, you know, by 2030 we expect to be widely available as an optional system by nearly all automakers with the ultimate goal being that level 3 will be standardized, you know, as a feature just a few years later. It's nevertheless important to know that the adoption cycles in the automotive industry take time, you know, there's a high barrier to entry, and also high barrier to exit. Generally speaking, it takes up to 20 years from when a technology is first introduced on vehicles to when it becomes standardized throughout the industry. You know, you have classic examples, everything from, you know, seat belts to airbags, to anti-lock brakes, to even that mobile eye system that I mentioned. And for EVs as a platform, actually, it may take even longer than that 20 year cycle for EVs to ultimately come standardized throughout the broader industry and combustion engines to fade. So lidar is arguably actually on a much quicker pace of adoption than almost any other automotive technology in history. But suffice it to say, this industry does require patience.

So to us it's very clear that lidar adoption is no longer a matter of if, but rather about when. And within that envelope, I think it's also important to be able to talk about, you know, what is it about our technology that we think makes us so special in the first place?

While there are many differentiators, including the fact that we have a uniquely, vertically integrated strategy, you know, starting from the semiconductors, you know, making our own lasers receivers processing electronics, among other things, for our chips, all the way through the lidar and software, we could talk about one thing that makes a lidar very unique and kind of distill it down to it of one aspect.

So as we've talked about in the past, the technology starts with a special wavelength of light that we use at 1550 nanometers versus the current industry prominence, which is 905 nanometers. One of the most fundamental limitations of lasers is related to eye safety which serves to limit how much power can be put out instantaneously from a lidar's laser. Correspondingly, this limit on power also affects the system's performance capabilities. In contrast to the rest of the industry, we operate a much longer wavelength of light than others, which enables us to put 17 times the amount of pulse energy into the environment and more energy equals better performance. You know, more peak power is better results, better ranging, which translates into better safety and the ability to meet these stringent global OEM performance standards and also with fewer components.

Because we use this 1550 nanometer wavelength that's safe for the human eye, the increased pulse energy delivered translates directly in dramatically better performance at longer range for the 3D images point clouds that we generate. This is required for cars to be able to operate safely at higher speed, you know, and for level 3 autonomous modes, as well as enable reliable high speed, active safety features.

Specifically, and because of our technology stack, we're able to see and detect even some of the hardest to see objects at distances past 250 meters in all kinds of ambient light conditions. This stands in stark contrast to competitive technologies which generally can only see objects required for safe driving in distances, and maybe up to a hundred meters.

While these shorter perception distances are suitable for lower speed driving, it's insufficient to be able to safely maneuver at high speed. The performance can also directly translate into lives saved,

and the thing is, is the vast majority of vehicle accidents fatalities actually occur at higher speeds, in the first place, making it all the more important.

Getting to the stage in our technological advantage with anything but easy, but nevertheless begs the question of why hasn't everyone followed in these same footsteps? The reality is that the performance advantages of using this wavelength and of building the technology is well understood. The simple answer is, is that doing anything at 1550 nanometer is very, very hard to do.

905 nanometer components have generally been widely available at low cost, and much of the landscape. lidar historically followed the path of least resistance and lowest initial R&D investment in order to develop the systems. However, that limit has a ceiling associated with it and with Luminar there is no ceiling attached to that. We've uniquely developed our 1550 nanometer technology from the chip level up. And we've had to create multiple fundamental innovations to make 1550 possible from both a technical supply chain and economic perspective.

You know, we have this integrated stack that encompasses a chip level design as well as system level software. So our chip capabilities are unrivaled, you know, as part of a broader Luminar Semiconductor, Inc. entity that we've consolidated there, creating laser chips, receiver chips and processing electronics chips to create a significant moat around our ability to be able to deliver these technologies, while on top of that our software facilitates the integration of our devices into our OEMs and creates a very nice lock-in effect as well.

So wrapping up, the bottom line is this, we feel great about the backers that are within our control -- our technology, our leadership position and our ability to be able to adjust our business to the current times and the broader macro environment. The factors that are outside of our control, you know, can be challenging, but we're more than up for them, and believe that when the industry begins to ramp production of vehicles that have lidar specced in, you know, as with the programs that we won to date and additional programs that we will, we'll be in a position to be able to capitalize on the vast opportunities that lie ahead of us.

So taking a step back, one last point I want to mention is that on the technology front, you know, Luminar Halo development is rapidly progressing and the Luminar Halo is going to be the key enabler to this mass global adoption of long range lidar technology.

In fact, as part of these remarks, you know, I mentioned at the start, you know, in Q3, we actually generated our first point cloud with Luminar Halo. Being able to demonstrate this industry, leading long range lidar data fidelity to dramatically improve the safety of these vehicles, as well as enable those autonomous capabilities, and in a fraction of the cost and form factor.

And as a reminder for everyone on call, whereas Iris was designed to be able to kick off a new era of

safety and autonomy, Luminar Halo is designed to be able to accelerate it to mass adoption with those improved cost, size and performance factors.

Furthermore, we're applying learnings from industrializing our first product, Iris, to Halo, leveraging the factory capabilities, leveraging all that infrastructure investment leveraging the technology platform. And this gives us the confidence as we look towards the launch of Halo in 2026, which is at an even significantly faster pace than what we've done for previous product developments.

And with that I'd like to be able to turn things over to Tom to be able to talk through our annual business milestones and be able to provide a little bit of commentary on quarterly financials as well as our outlook for growth.

Tom Fennimore

Thank you, Austin.

I want to first review the progress towards our four 2024 business milestones.

We already achieved our first business milestone earlier this year, which was to successfully achieve Volvo SOP.

We also have achieved our second milestone, which was to launch the TPK facility for additional capacity and improved cost, which we accomplished in Q2 with our expanded TPK arrangement.

Our third milestone for was to unveil our next-gen LiDAR and deliver samples to key select customers. We unveiled Luminar Halo in April and remain on track for sample deliveries to select customers by year-end.

Our final milestone was to expand the ecosystem around our LiDAR. We discussed in prior quarters, the progress we've made on our semiconductor and software businesses and this quarter I'd like to give an update on our insurance business. We continue to make progress on industrializing our insurance product as we finalized the partnership with our primary insurer partner and also finalized the design of the customer experience within our insurance app. We should be in a position to start writing our initial insurance policies early next year.

Ultimately, we remain on track to meet all of our business milestones this year.

Let's now review our Q3 financial results.

Revenue for the quarter was $15.5M, down 7% quarter-over-quarter, and 9% year-over-year. This was below the guidance we gave on our Q2 call that Q3 revenue would be in-line to modestly higher.

The primary reason for the decline in sequential revenue was the renegotiation of a large non-automotive, non-series production contract we mentioned last quarter. Excluding this adjustment, revenue would have been up meaningfully QoQ. In particular, we saw strong growth in sensor sales this quarter as we continue to meet Volvo's weekly shipment requests while improving our

this quarter as we continue to meet Volvo's weekly shipment requests while improving our manufacturing yield and quality rates.

Let's move on now to Gross Loss.

For the quarter, we reported gross loss of negative $(14.0) million on a GAAP basis and a loss of $(11.7) million on a non-GAAP basis. On a non-GAAP basis, this was in-line with our guidance for Gross Loss to increase this quarter relative to Q2 levels excluding our contract loss.

On a non-GAAP basis, Q3 Gross Loss was negatively impacted by roughly $8 million related to the slower series production ramp—about half from supplier charges due to the lower volume and about half from inventory write-downs due to higher inventory levels at quarter end.

This was partially offset by early returns from our efforts to reduce COGS, process improvements and higher sales to non-automotive markets which typically command higher ASPs and margins.

Let's move on now to OpEx, Restructuring and cash spend.

In September we also announced additional steps under our restructuring plan that are incremental to the actions we announced in May. We expect these actions we started in September to generate approximately $80 million in annual cash savings on a run-rate basis once they are completed by the end of next year.

Since the beginning of the year, we made the tough decision to reduce our workforce by approximately 30%, among other actions taken to streamline our cost structure such as contractor reduction, reduced travel and a reduction in our real estate footprint. In total, since the beginning of the year, we have undertaken cost actions which we target to generate up to $145 million in annual run-rate savings.

In Q3, we started to see the early results of our cost reduction actions. Specifically, a $10 million improvement in Q3 non-GAAP operating expenses relative to Q2 and a $20 million reduction in our free cash flow loss.

Importantly, the impact of actions taken in September are not reflected in our Q3 results and we expect them to start showing in Q4. We are also continuously looking at taking additional actions to reduce our costs, particularly as we continue to make execution progress on Iris.

Our change in cash, which excludes the net impact of the approximately $90 million in debt we raised in August, was $52 million during the third quarter, an improvement from $57 million change we saw in Q2. We ended the quarter with roughly $249 million in Cash & Liquidity, which includes marketable securities and our $50 million undrawn line of credit.

As of September 30, we had $182 million remaining on our equity finance program. During Q3, we raised $6 million through our equity capital finance program. This was below the $19 million we raised in Q2, although I would expect this number to be higher in Q4.

When you look at what's available on our equity finance program and combine it with our existing liquidity of $249 million, that gives us access to $431 million of capital, which we expect to provide us ample runway to reach at least the end of 2026.

From a liquidity standpoint, we discussed last quarter we would need approximately $100 million of additional capital to reach profitability. I'm increasingly optimistic that our September cost-cutting actions could reduce this $100 million additional capital need, but likely won't completely eliminate it. While we are in no rush to raise additional capital given our liquidity runway, this is something we would like to address sooner rather than later and have multiple avenues available to us today to do so.

This brings me to the final part of my prepared remarks, which is our guidance for Q4.

I would like to remind everyone that our guidance is meant to be more directional versus specific in nature. As we are still in the early days of scaling series production, our series revenue remains fluid and heavily dependent on the pace of our customer's production ramp.

The slower series production ramp in Q3 resulted in higher levels of sensor inventory, and we currently have sufficient inventory on hand to fully serve most of not all of expected Q4 demand. As a result, we decided to adjust our manufacturing rate for several weeks to better align with our customer's production rate. As a result, we expect Q4 non-GAAP Gross Loss to improve relative to Q3.

In addition, we expect OpEx and Change in Cash to continue and improve in Q4, reflecting the benefit of our cost reduction actions, though offset by the expected higher interest expense from our recent convertible debt transaction.

In terms of revenue, we expect Q4 to grow modestly versus Q3, reflecting continued growth in sensor sales.

In addition, we are adjusting our year-end Cash & Liquidity target from over $240 million to a range of approximately $230 to $240 million. Where we end up is ultimately going to depend upon the higher cash restructuring expenses we incur, as well as what we ultimately draw down on our equity line of credit.

On October 30th our shareholders also passed an authorization allowing our board of directors to enact a reverse stock split at their discretion. We're planning to share more information on a potential reverse split and its terms in the near-term after our board decides what they're going to do.

As of November 8th, roughly $23 million of our Series 1 2030 convertible bonds have been converted to equity, with approximately $59 million remaining. We continue to have approximately $203 million of our unsecured convertible debt maturing in 2026, as well as $192 million of our Series 2 2030 convertible debt. The cooling-off period from our August transaction has now expired and we're actively looking at ways to continue to reduce the $200 million or so balance on our 2026 unsecured convertible bonds.

Finally, given the accounting complexity of the convertible debt transaction we completed in August, we will likely need a couple days, plus or minus, extension to file our 10-Q this quarter. There's some additional reviews that we're doing around the final accounting for the convertible transaction. We are confident that we'll be able to file the 10-Q within the 5-day extension period.

This concludes my prepared remarks. I'd like to thank the Luminar team again for another strong quarter, and I would like to hand it back over to Yarden for Q&A.

Yarden Amsalem

Great. Thank you, Tom. We are now going to hand it over to our analyst community. Our first question is going to come from Winnie Dong at Deutsche Bank.

Tom Fennimore

Hey, Winnie

Hey, Winnie.

Winnie Dong

Hi, thanks so much for taking my questions. I'm just curious, you know, post the election. Any implications do you think it would have on Luminar on a go forward basis, you know, specifically as it pertains to, you know, EV policies. And then my second question is on cost reduction. You know, curious if there's any further low hanging fruits that you know, you can potentially take action on, or if, like the recent actions you've already taken off pretty much is close to you know what you can do for now. Thank you.

Tom Fennimore

Yeah, I'll start with the second part first. I think we've plucked most of the low hanging fruit. But we're continuing to look at our cost structure, the progress we're making on executing and, you know, continue to look at ways to continue to cut our costs, I would say a lot of the easy actions have already been taken, but we're constantly looking at stuff to do. With regards to the election, look, I think it's too early for us to tell. You know we continually monitor the geopolitical events, and how that can impact our business. At the end of the day, what we're really focused on is executing on our business plan and developing and producing the best lidar in the industry. We do that, we're going to be fine, no matter what happens in the geopolitical realm.

Austin Russell

I'll also say that, you know, when it comes to safety and saving lives and improving, you know, roads in the US, that's probably one of the maybe few bipartisan, you know, issues that people are very supportive of. Nobody likes people being injured or losing their lives out on roads. And this is a problem that we're solving at global scale, and great to be able to have that support. And of course, yeah, great to be able to have some tailwinds along with it.

Winnie Dong

Perfect. Thank you guys so much.

Yarden Amsalem

Thank you, Winnie. Our next question is going to come from Tristan Guerra at Baird.

Tom Fennimore

Hey, Tristan, you on the line? I think you're on mute.

Yarden Amsalem

Okay, we'll move into the next analyst. Our next question is going to come from John Babcock at Bank of America.

Tom Fennimore

Hey! John!

John Babcock

Hey, guys, how are you doing.

Tom Fennimore

Doing? Great. How about you?

John Babcock

Good. Yeah. I guess one of my questions. You talked about this new advanced development contract with an OEM partner. I was just curious, is that an existing partner that you had? Or is this is this one that you've announced in the past?

Tom Fennimore

I think, as we said in there, this is like the next phase of this development contract. So it's, you know, a customer that we've talked about in the past, and it's, you know, taking that next step there. And you know, getting us ultimately closer to the series production phase.

John Babcock

Okay, that's helpful. And then, as it pertains to the new Volvo car that you're going to become standard on, any sense in terms of timeline on when that might launch. And also, if you can just talk about whether that vehicle is going to use Halo, for it's going to be using the existing Iris technology.

Austin Russell

We will say, you know, when it when it comes to the previous contract we're talking about. That's where we're doing the design integration studies that I mentioned for Halo and so that planning. But, as it relates to Volvo you know, currently, it's with the generation of the Iris family. And then, you know, ultimately, as you figure a lot of automakers are very excited to be able to, you know, adopt, and transition to Halo so because it can enable so that mass scale and adoption. Whereas Iris, you know, is great for kind of starting off, you know, with these different platforms getting the data out there, as we mentioned with Volvo. But but yeah, there will, I think we mentioned, there will be more to share. Ultimately, this is in, you know, OEM's hands to share in the first half of 2025.

John Babcock

Okay, have you talked about you know any sort of timeline on when you might be able to commercialize the Halo lidar. Can't remember if you included that as part of the investor Day.

Austin Russell

Yeah, it's coming up, in automotive years, it's right around the corner you know, which is in 2026 so

that's our launch timeline for it. And we're excited to already get some great positive feedback from customers we mentioned. You know, as part of our one of our business milestones that we'd be showcasing it already and getting in the hands of some customers initially. And you know people are very excited to see the results of the point cloud and showing what's possible with such a simplified bill of materials, the next generation semiconductors that we have, our integrated software, and of course, the cost and form factor that we're able to deliver with Halo.

John Babcock

Okay, and then just last question before I turn it over. If you could just, I don't know if it's possible to maybe provide some early expectations on 25 at least. Like how we should think about volumes generally. You know, I mean, I don't know if you might be able to kind of talk about, you know which

which or how many vehicle models you'll be in next year, I mean, I think, in the Polestar you also have the EX90 if there are any that I'm leaving out there that'd be helpful. And also I don't know if there's any sort of volume or cost expectations or additional detail you can provide. Anything on that front would be useful.

Tom Fennimore

John, I look forward to sharing that with you in a few months, when we do our year end call.

John Babcock

Okay. Fair. Enough. Thanks.

Yarden Amsalem

Thank you, John. Our next question is going to come from Jash Patwa at JP Morgan.

Tom Fennimore

Hey, Jash.

Jash Patwa

Hi, thanks for taking my question and congratulations on the two wins and encouraging to see the rapid progress on Halo development. I wanted to start with a high level question around the market share capture window. You know what innings of the market share capture window do you see the industry in today, and how soon can we expect the slew of next gen platform announcements and contract wins being announced? You know curious if it's early 2025, second half of 25, or 26, when we see those additional wins flowing through and relatedly, could you also just touch on the nature of your relationship with platform partners like Mobileye and Nvidia. How are these relationships structured today? What are the key focus points for them when evaluating lidar partners, and whether you expect these relationships to evolve into exclusive partnerships over time? Thanks, and have a follow up.

Austin Russell

Yeah, no, that's great. I think when it comes to the lidar adoption cycle, you know, things have definitely been taking off. I think we need to make sure again to put it into perspective, though you know, overall. Obviously, you know like some of the OEM timelines for their new platforms, you know, specifically, have you know we mentioned this is no surprise, has been very like widely publicized, for, you know, past year or 2, or whatever that you know a year or 2 later. So that's kind of the near term stuff to deal with, but in terms of the broader kind of zooming macro adoption cycle, you know, we mentioned that for traditional kinds of technologies as long as 20 years from the first introduction to standardization across the industry. And I think again, we're seeing a much more compressed cycle. We're going to continue to see a lot of acceleration over the course of the next few years. I don't know if there's any kind of specific month or quarter or anything that's you know, magical that's necessarily happening. But I'll say this is that in addition to kind of advancing with the development with this kind of slew of additional automakers, a big focus is making sure that we can successfully execute on the automakers that and the partners that we have there today. And you know, the reality is that there's tens of billions of dollars of business, you know, even with just the

know, the reality is that there's tens of billions of dollars of business, you know, even with just the

OEMs that we're working with today as you start to get more and more penetration across their lineups and fleets. So you know, there's already opportunities to substantially multiply the value. The key is that we have to show that successful execution. And that's really where you know, when folks like Volvo start to see, hey you can launch a EX90, okay, you know, give the green light for more vehicles, and you know, hey, when certain other automakers see, hey, we're meeting the milestones here, then you can keep progressing with the platform. And then, you know, eventually transition to Halo and do all of those things there, too. So I think that's definitely happening. And at a rapid pace there, you know. And obviously over the course of the next 24 months, you know. I'm sure it'll be exciting to share more. And I'm sure it's you know, also public, that different OEMs, I would say, have for the next major platform have different launch timings, but a lot of them are kind of converging around that, yeah, I would say 2027, 2028, 2029, you know, timeframe as ramps up. Obviously, we have some much earlier wins that'll allow us to ride that revenue curve earlier. But you know they're just taking off now, getting off the ground.

Jash Patwa

Understood that that's super helpful. Just as a follow up the additional win with Volvo. Surely, you know, showcases that Volvo and its consumers are appreciating the value add provided by the Luminar's lidar sensors. Curious, if you have any early feedback from consumers, as it relates to the lidar technology, and more specifically, any insights from a safety standpoint that you might be seeing in the data. Also, just wondering if you could share any color around the insurance business with regard to the go to market strategy, the ramp up trajectory, and any implications from a profitability or cash flow standpoint?

Austin Russell

Maybe I can do the first one, and you can do the second one. Yeah, yeah, I'd say that when it when it comes to Volvo more broadly, there's definitely that conviction. You know, the consumer interest is extremely significant, and I think this is one of the driving factors behind. You know the marketing, you know of the EX90 I mean, the campaign is just starting right in terms of as they're kicking it off as Volvo is able to ramp up their production capacity. I think you know, we'll see a lot of that marketing, you know, drastically increase. You know. I mean, they have what? Over 2,000 dealerships globally you know, that are going to be supporting and making the case, for you know. for Luminar, you know, around the world, and that's something that is, I think, really special and unique for us to be able to be a critical part of that journey and story. But Volvo's known historically as being kind of the introductory, you know, path for new kinds of technologies, you know, to the broader industry. So as it gets more and more awareness there from a consumer standpoint, I think that's where you'll start to see more and more demand push from a consumer side, not just from an OEM standpoint which it's basically been all OEM driven, you know, up to this point. I think ultimately beyond the consumer side, you know, there will also be a regulatory push, you know, as the safety standards and requirements increase significantly. We see the new 2029 mandate for regulations there that the only system that we've seen demonstrated to meet those capabilities, you know, has been, you know, with our lidar and software. And this is kind of what we've what

you know, has been, you know, with our lidar and software. And this is kind of what we've what we've published and what our insurance partner, Swiss Re, you know, has published as well with it up to 40% improvement in terms of, you know, reduction in accidents and accident severity. So those are huge stats, and obviously one that that Volvo was very excited about. But have big

implications for savings around the ecosystem created by the product which you know is insurance is one example of that.

Tom Fennimore

Yeah, so on the insurance side, we're planning to register in the top 10 states in the US, which comprise about half the vehicle sales in the US. We're targeting, you know, I would say annual insurance savings for the EX90 and other vehicles that are equipped with our lidar of about 20%. Given the safety improvements, we believe that that's, you know, a meaningful discount to give to the consumer to hopefully attract adoption, while at the same time making sure that we still get decent profitability on the insurance side. We're partnering with a couple of people in the insurance space that, quite frankly, are smarter at insurance than we are to make sure that we're doing this in a responsible way. You know, look, the ultimate adoption rate, you know, I think, is a little still TBD at this moment. We're going to be targeting people who buy the EX90 in a variety of ways. We're hoping that the savings is, you know, meaningful enough, you know it could be a few hundred dollars of a premium per year, which, in my opinion is very meaningful given how much insurance costs have been increasing, but time will tell. I don't expect it to be a material contributor to our P&L over the next few quarters, but I hope after that, if it's successful, you know that will change.

Jash Patwa

Got it. Thanks for taking my questions and good luck.

Yarden Amsalem

Thank you Jash. Our next question is going to come from Mark Delaney at Goldman Sachs.

Tom Fennimore

Hey Mark.

Austin Russell

Hey.

Mark Delaney

Good afternoon. Thank you very much for taking my questions. First I was hoping for an update on Iris Plus development, and in particular with the news from the last update call that you were going to make more use of the Iris platform. Maybe you could help us better understand how that is going and when we should expect to see Iris Plus shipping for vehicles and series production?

Tom Fennimore

Yup. I think it's way just to remind everyone what we talked about. What we did last quarter is we were borrowing more of the Iris architecture which we successfully industrialized and reached SOP with Volvo. We're borrowing more of that architecture to Iris Plus for a lead customer there. We recently prepared the first set of samples and they're going through the testing process. And so we hope to have a, you know, an update on exactly what that timeline is going to be here in the near term. But you know, I think we're off to testing. And you know, I think the initial results are encouraging from that.

Mark Delaney

Got it. My other question was around Volvo, and recognizing that you aren't going to say any specifics on the vehicle, that that's up to them. But maybe you can just help us from a Luminar perspective is the win that you've secured is that how does that compare relative to the EX90. And can you give us a better sense as to when this new model win would be in series production?

Tom Fennimore

It's going to be smaller than the EX90, and we're hoping that it is going to launch here over the next several quarters.

Mark Delaney

Thank you. I'll turn it over.

Yarden Amsalem

Great. Thank you, Mark.

Austin Russell

Ultimately our goal is that as we prove the successful launch and ramp capabilities with each model, then you know, the goal's obviously to expand, you know, across the vehicle mix, you know, with a given OEM. You know Volvo delivers the better part of a million vehicles per year, you know. So you know ultimately, that's the goal of where we can do the math of what we want to get to. And if we can prove that out, I think there's a path over the longer term.

Yarden Amsalem

Right. Thank you, Mark. Our next question is going to come from Kevin Cassidy at Rosenblatt.

Kevin Cassidy

Yeah, thanks for taking my question and congratulations on the progress. But I just wanna understand a little better of the roadmap of how you go from Iris and then cross over to Halo. Is Iris going to ship in the EX90 forever? Or does that get an upgrade to Halo, or you know, just kind of how do you get that pipeline? It took a while to get Iris into production and then Halo to me in 2 years, it seems very fast.

Austin Russell

Yes, and it is a much more accelerated pace of development, because it took the better part of a decade to be able to build out that core technology platform, to be able to, you know, develop the different semiconductor technologies, to be able to really pioneer all these different aspects of the platform. And now we get to ride that investment curve, to be able to have much more rapid pace of adoption, acceleration, and I think, for even what's beyond Halo, you know you'll ultimately see the same kind of rapid pace there as that comes into play, and same thing when it comes to costs, you know, like the factory build outs that we're doing, for you know, scaling beyond what we have from Mexico, you know, a fraction of the cost, same with the product cost, same with bill of materials, same with the supply chain, same with the engineering that goes into it. Now, significantly, we are

building Halo to actually be backwards compatible, you know, with Iris. So this gives us an opportunity to be able to, you know, should we want to an OEM desire to which, I think is ultimately aligned, to be able to slot that in accordingly. And this is something that it's important from a data standpoint, to be able to have that compatibility because, you know, you have automakers investing, you know, billions of dollars into these technology platforms and data collection platforms and getting out there with these vehicles to be able to do that. And you want to make sure that continues to carry forward. So that's something that I think is super meaningful and part of the stickiness as well, and that's something that you know we're excited to be able to do with Halo, to be able to give them a smooth transition. And these are the kinds of conversations that we're having today with automakers across the industry.

Kevin Cassidy

Okay, and you touched on something that was going to be my follow up question was the fraction of the cost. So that leaves a lot of open discussion. But I would imagine volumes go up more than the cost comes down would be one way to think of it. But is it, you know, are you saying 50% lower costs or 25%, you know? Can you give us some ballpark of what the cost might be the difference?

Austin Russell

We expect better than 50%. You know, it's a little hard to give a exact percentage, you know, to this point. But we're able to deliver greater performance, you know, in the in the point cloud and the sensor at about a 3rd of the size. And yeah, we expect it to be less than half the cost. Now, of course, part of the cost problem is also solved for with scale, you know. For example, the stuff that we have to do today, is a lot more expensive when it's at the initial front end of the ramp curve versus, you know, when you start to reach you know more substantive run rate volumes, for example, with the EX90. That's something that you know you have to be able to have. Of course, you know, when you're talking 2026, we're already well into the ramp curves of even the initial programs, much less the additional programs that we want and we'll be launching with. So that's something where it allows us to be able to leverage the economies of scale with simplified materials. And we're talking you know in addition to cost of down components, it just also has significantly less components and simplified design in the 1st place. And part of this is because we're also designing this hand in hand, you know, with some of our industrialization partners as well, including TPK, that that we described as part of our new partnership efforts to be able to save on cost both on OpEx as well as on a product standpoint, you know, individually. So this is all kind of coming to a head and allowing us to be able to be in a position of where automakers have a very clear business case to put this across all cars.

Kevin Cassidy

Okay, and if I can get one more question, and you, you had mentioned about Volvo building a data center because of all the data they can collect with a lidar, you know, compared to camera. Imagine there's but you had an initiative for a while of mapping. Is that still active?

Austin Russell

Yes, actually. And you know, we've been we've been working on, you know the mapping side for some time. I think that the meaningful part now is, it's all about data and scaling up. We've actually

had some development contracts you know, and including one with a major automaker, you know, on the mapping side, to be able to, you know, help cover some of the cost of development and build some specific features there. But you know where you start to see just the insane value building up is when you get this mass level of data and scale. You know, you look at other autonomous vehicle test companies today. You know, like even the Waymos of this world, you know, they spend on the order of a billion a year to be able to collect data from 500 cars, you know, out driving around the US, you know, measuring what's going on. You know, we're about to have tens of thousands of EX90s going around collecting data, you know, with our lidar. Ultimately, you know, hundreds of thousands, you know, shortly thereafter, here you know, over the over the coming quarters. And that's something where you know it's just unprecedented scale, you know, across the globe, and you know the level of detail and understanding we're going to have around the world is really second to none when you have this level of precision. So that's something that, you know a lot of the seeds that we planted and bets that we made years ago, you know, sometimes it's hard to see. But we're, you know, we're trying to think years ahead, you know, as this intersects our ultimate roadmap. And that's something that I think is a perfect example of that of building and capturing the ecosystem value that's created around the lidar. The lidar is just ultimately going to be a small fraction of the total value created that we capture out of this. And that's where a perfect example of the rest of the ecosystem, even if you know, between things like mapping and insurance and everything. These are not huge costs. I mean, it's you know what maybe each of them is like on the order of 1% of Luminar spend. So you know, it's very, very high leverage.

Kevin Cassidy

Great. Okay. Thank you.

Austin Russell

Okay.

Yarden Amsalem

Thank you, Kevin. Our next and final question is going to come from Tristan Guerra at Baird.

Tristan Gerra

Hi guys, great progress given the challenging environment. At what point do we get to a model where software is actually the primary contributor of revenue and margin, and where it subsidizes, or maybe even that becomes the revenue contributor. And then, the actual lidar becomes part of the whole software offering. You know, and obviously with the implications on gross margin. Is there an outlook for that? And how many years away is that?

Austin Russell

So I would say more broadly, from a software standpoint, you know, in terms of the value add from a software perspective, there's already a lot of that that's happening today. Some of it's us, some of

it's I realize I didn't totally into the platform partner question earlier, with folks like Nvidia and Mobileye as well as the automakers that are creating these AI systems, you know, and in some cases in conjunction with us that are going to be extremely powerful, and are already a significant part of that revenue mix. You know, I would say, if you take a look today, you know, funnily enough,

because it's we're still in the early phases of the ramp, you know. The majority of our even, you know. but small revenue, you know, today, is from, you know, things outside of series production lidar, you know, semiconductor, software, you know, AI systems like and obviously some adjacent market sales. But I think the software side is definitely going to be a huge part of the story when it comes to you know, the later on, in the second half of this decade, I'd say it's about like 3 years behind, you know where we are on the lidar front, and more and more automakers have also realized just how meaningful it can be to have the right software partners at play. The reality is that the majority of automakers don't have a software solution today, to be able to scale with. And as they're planning to be able to launch the next generation platforms, that's going to be something that's needed. And I think, it's clear that Luminar has a hand to play, including from this, you know, announcement that we just had today.

Tristan Gerra

Thanks, and then for my follow up question. If the shift from EVs to hybrid is still ongoing next year, does that impact your revenue, pipeline or design win pipeline at all? Is there, you know, do you see over the next couple of years still a higher attach rate, with EVs versus hybrid? And then, finally, if you could remind us of some of the engagements that you had, you know, with some auto OEMs, you know, outside of Volvo. I think you had mentioned Nissan a few years ago, and also some traction in China. Have those been delayed, or but do you still have ongoing relationship? Are those still opportunities?

Tom Fennimore

We have ongoing relationships, great dialogue, great progress, I think. You know, Tristan, as you mentioned, there's this whole, I would say, shift going on in the industry about how much more we want to devote to EVs versus hybrids versus traditional gas engines. We're agnostic to that. We work on any platform. We just need the automakers to make a decision on which direction they're going to go. And then we're going to be ready there to serve them and put our lidar on that vehicle. But I would say there's been an industry wide pause, and that's in almost every major region that you just mentioned in lidar decision making, because they need to decide which direction they're going to go. And then, as soon as they decide, then they'll, you know, come back and decide how they're going to deploy lidar in that vehicle, in what quantity we don't think there's ultimately, in a longer term going to be a difference in our business based upon which direction they're going to go. There may be some near term headwinds, because I would say we're overweighted to EVs in the near term because of decisions the industry made a few years ago to invest in EVs. But ultimately we're agnostic. The longer term potential for lidar is there. And as soon as these decisions are made, we think it's going to unlock these next rounds of lidar RFQs.

Austin Russell

You know, it's really all just a question of the platform timing. Right? You know, because you know, it's public that and been public for some time, as we've talked about some of the automakers there, and I think it's actually very much the right decision for the next generation platform. Some of them were going all EVs and only EVs. And we don't think that's right, because ultimately that won't be helpful to us in the in the longer term, either. And I know that it's funny a lot of people think of Luminar as just like an EV company, which is, which is kind of weird, since actually, the majority of

our wins are not on, you know, not just EV only platforms. It's also including combustion engine and hybrid. But of course, from a planning standpoint, as Tom mentioned just it just happens to be the things like the EX90 are EVs that are just the near term ones. These are decided earlier on, I think as this scales up you know, the reality is that for some of the larger OEMs, you know that are there, there's going to be a nice mix of multiple different kinds of powertrains and ones that we're integrated into. And you know that said, you know, folks like Volvo, they're having their strides and success when it comes to EVs. And I think they can do that as a smaller OEM as well, you know, pretty successfully. But when it comes to some of the big mainstream ones that we're starting to work with, I think I think that's where it's going to be, you know, leaning more towards combustion and hybrid.

Tristan Gerra

Thank you very much.

Yarden Amsalem

Thank you, Tristan. This marks the end of our Q and A session. I'd like to thank everybody for sticking around and participating in the call, and for the analysts that asked the questions, and investors and other folks that have joined us. We look forward to talking to you guys next quarter. Thank you.

Austin Russell and Tom Fennimore

Thanks everyone.