Luminar Technologies, Inc. 2603 Discovery Drive, Suite 100 Orlando, FL 32826

December 27, 2022

U.S. Securities and Exchange Commission Division of Corporation Finance Office of Manufacturing 100 F Street, N.E. Washington, D.C. 20549 Attn: Stephany Yang Andrew Blume

> Re: Luminar Technologies, Inc. Form 10-K for the Year Ended December 31, 2021 Filed March 1, 2022 File No. 001-38791 Form 8-K Furnished February 28, 2022 File No. 001-38791

Ladies and Gentlemen:

Set forth below are the responses of Luminar Technologies, Inc. (the "*Company*" or "*Luminar*") to comments received from the staff of the Division of Corporation Finance (the "*Staff*") of the Securities and Exchange Commission (the "*Commission*") by letter, dated December 13, 2022 with respect to the Company's above referenced Annual Report on Form 10-K filed on March 1, 2022 (the "*Form 10-K*") and Current Report on Form 8-K furnished on February 28, 2022 (the "*Form 8-K*"). For your convenience, each response is prefaced by the exact text of the Staff's corresponding comment in bold, italicized text.

Form 8-K furnished February 28, 2022

Non-GAAP Financial Measures, page 2

1. We note your disclosure of Order Book as a non-GAAP measure. Please identify for us and disclose the most directly comparable GAAP measure and ensure you present it with greater or equal prominence than the non-GAAP measure and include a quantitative reconciliation. Also describe to us in further detail the nature of the specific adjustments and assumptions used in calculating Order Book. Refer to Items 10(e)(1)(i)(A) and 10(e)(1)(i)(B) of Regulation S-K and Question 102.10 of the Non-GAAP Financial Measures Compliance and Disclosure Interpretations. If all of the information necessary for the reconciliation is not available without unreasonable efforts, identify and disclose the information that is unavailable and its probable significance.

Response:

In light of the Staff's comment, the Company has reconsidered its use of Order Book and concluded that Order Book is appropriately characterized as a metric in that the Company uses it to measure performance against anticipated achievement of planned key milestones of the business and not as a projection of future financial results. As such, the Company believes that Order Book does not represent a non-GAAP financial measure as defined in Item 10(e) of Regulation S-K. The Company respectfully notes that Order Book is defined as the forward-looking cumulative billings estimates 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 good faith estimates of "take rates" of Luminar's technology on vehicles. The Company includes programs in its Order Book when (a) it has 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) the Company expects to ultimately be awarded a significant commercial program.

"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. Customer production vehicle volume estimates, take rates, and projected and actual contractual pricing terms are generally based on inputs from (i) the OEM/customer, (ii) third-party estimates, and/or (iii) Luminar's management's good faith estimates.

As Order Book is based primarily on projected/actual contractual pricing terms and good faith estimates of take rate of Luminar's technology on vehicles, the Company does not believe there is a relevant comparable GAAP measure.

In compliance with the guidelines in Securities and Exchange Commission Release 33-10751, in future earnings releases and investor presentations, the Company will include the following footnote which explains the Order Book metric:

"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, 2021 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.
- (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.

2. Considering you calculate both Free Cash Flow and Cash Spend as operating cash flows less capital expenditures, please remove references to Cash Spend from future filings. Also ensure that you reconcile Free Cash Flow to the most directly comparable GAAP measure within your earnings release Forms 8-K and within your other public

disclosures, such as investor presentations provided on your website. See Item 10(e)(1)(i)(B) of Regulation S-K and Item 100(a)(2) of Regulation G, as applicable.

Response:

The Company will revise future earnings releases or other applicable filings to remove references to "Cash Spend" as requested. In addition, the Company will continue to provide a reconciliation of Free Cash Flow to Net Cash Generated or Used in Operating Activities, which is the most directly comparable GAAP measure in its earnings releases furnished on Form 8-K and will do so within its other public disclosures, including investor presentations provided on the Company's website, as the Company did in its earnings releases attached as Exhibit 99.1 to Current Reports on Form 8-K furnished to the Commission on May 5, 2022, August 8, 2022 and November 2, 2022.

Form 10-K for the Year Ended December 31, 2021

Notes to Consolidated Financial Statements Revenue Recognition, page 61

3. Please tell us in sufficient detail the nature of the pre-production activities you perform as part of your revenue-generating activities and your determination of whether these activities represent promised goods or services under ASC 606. Also tell us how you account for pre-production costs and how your policies comply with applicable accounting guidance, such as ASC 340-10 and ASC 340-40. In doing so, specify the nature of the costs that are capitalized versus those that are expensed as incurred. We note, for example, that your research and development accounting policy on page 63 discusses tooling and prototype material costs that are expensed as incurred while your property and equipment accounting policy on page 60 references capitalized tooling costs. Clarify your disclosures in future filings for the items addressed in this comment.

Response:

As described on page 58 of the Form 10-K, the Company has two reportable segments: "Autonomy Solutions" and "Components". During 2021, revenue from the Autonomy Solutions segment was primarily generated from the sale of prototype lidar sensors and non-recurring engineering ("*NRE*") services; and revenue from the Components segment was primarily generated from the development and production of specialized wafers, dies, and avalanche photodiodes as well as NRE services related to the design of custom products.

Pre-production costs incurred in connection with revenue generating activities related to the Components segment were not material to the Company's consolidated 2021 financial results.

Please see below for a discussion on the Autonomy Solutions segment regarding (i) the nature of pre-production activities performed and costs incurred in connection with revenue-generating activities, (ii) the nature of promised goods or services in contracts with customers

under ASC 606, and (iii) the Company's accounting for pre-production activities and costs incurred during 2021 and compliance with applicable accounting guidance.

Nature of pre-production activities and costs incurred:

During 2021, pre-production activities performed and costs incurred in connection with revenue-generating activities related to the Autonomy Solutions segment were as follows:

(a) Sensor Platform development

The Company primarily performs the following pre-production activities, engineering, design, testing and development of features and functionality of the Company's commercial Laser Imaging, Detection and Ranging (*"lidar"*) product offerings (*"Sensor Platform development"*).

Activities associated with Sensor Platform development include efforts related to development of transmitter, receiver, and other integrated circuits and technologies included in the Company's lidar sensors, along with design of manufacturing processes and methods to enable future commercial scale production of the lidar sensors, and engineering efforts related to firmware and software which will enable functionality like detection and classification of objects, collision avoidance and safety, and other driver assistance capabilities.

Costs incurred in connection with Sensor Platform development include wages and benefits for in-house engineering resources and other personnel, fees paid to third party consultants and contractors, materials, tooling, travel, subscription fees for third party software tools and depreciation & amortization of equipment and other related expenses.

At the end of 2021, the Company neither achieved technological feasibility of its developed software nor achieved a level of certainty to anticipate imminent sales of commercial grade series production lidar sensors and had not commenced sales of commercial grade series production of its lidar sensors.

(b) Prototype lidar sensors

During 2021, the Company had low volume sales of prototype lidar sensors. These prototypes enable customers to evaluate the Company's technology and assess certain key functionalities of the sensors still in-development. Costs incurred in connection with the sale of prototype lidar sensors include direct and allocated costs related to manufacturing the sensors.

(c) NRE services

Certain customers engage the Company to perform engineering services to either modify features and functionalities of the Sensor Platform and prototype lidar sensors

based on customer specification or to integrate the Company's lidar sensors into the customer's vehicle platforms. NRE activities are incremental to the activities on development of the Sensor Platform, and typically result in modification or enhancement of the Sensor Platform. The Company retains intellectual property developed during execution of NRE activities and may use such intellectual property for development of next generation Sensor Platform. Costs incurred to deliver the NRE services include allocated third-party consultants and contractors, wages and benefits for in-house engineering and other personnel, and other related expenses.

Promised goods or services in customer contracts under ASC 606:

During 2021, within the Autonomy Solutions reportable segment, sales of prototype lidar sensors and NRE services represented the promised goods or services in contracts with customers under ASC 606. Revenue from sales of prototype lidar sensors was generally recognized at a point in time upon shipment or delivery. Revenue from NRE services was generally recognized over time using an input method based on contract costs incurred to date compared to total estimated contract costs.

Accounting for pre-production activities costs incurred and compliance with applicable accounting guidance:

During 2021, the accounting treatment for pre-production activities and costs incurred in connection with such pre-production activities was as follows:

(a) Sensor Platform development

Costs incurred in connection Sensor Platform development are primarily expensed as incurred in Operating Expenses in the Company's Consolidated Statements of Operations and Comprehensive Loss.

Pre-production activities related to Sensor Platform development are not promised goods or services or activities that transfer a good or service to a customer under ASC 606. In making this determination, the Company considered various factors, including (i) these activities do not result in any right to payment for pre-production activities as related costs are incurred in advance of execution of contracts with customers, (ii) the Company shall own all rights to intellectual property developed in connection with the pre-production activities, (iii) the Company is not obligated to provide any periodic updates on progress of Sensor Platform development to any customer, and (iv) customers do not take ownership of any outputs associated with Sensor Platform development activities.

Per the guidance in ASC 340-10-25, consistent with FASB Revenue Recognition Implementation Issues Q&A 66, in 2021 the Company primarily expensed pre-production costs related to Sensor Platform development as incurred, including related tooling and prototype material costs. This is primarily because the Company is in the design and development stage, certain costs represented start-up costs, certain costs related to new technology, no contractual guarantees around reimbursement for

related pre-production costs existed in customer contracts in 2021, and customers did not have the right to take ownership of any outputs of the associated with pre-production activities.

As noted above, pre-production activities are not within the scope of ASC 606, and the scope of ASC 340-40, excludes costs accounted for under other applicable guidance. Therefore, as pre-production costs associated with Sensor Platform design and development are within the scope of ASC 340-10-25, such costs would not represent fulfillment costs, and therefore not qualify for capitalization under ASC 340-40.

(b) Prototype lidar sensor

Direct and allocated costs related to manufacturing of prototype lidar sensors are either capitalized as inventory under ASC 330 or expensed as incurred with costs recognized in Cost of Sales in the Company's Consolidated Statements of Operations and Comprehensive Loss upon sale of related prototypes.

Sales of prototype lidar sensors are distinct from the Company's other revenue generating activities and represent outputs of the Company's ordinary business activities, within the scope of ASC 606. As previously noted, the Company generally recognizes revenue from the sale of prototype lidar sensors at a point in time upon shipment or delivery.

Direct and indirect manufacturing costs relate to the delivery of prototype lidar sensors to customers, and therefore, qualify for accounting within the scope of ASC 330. These costs do not represent pre-production costs. Pre-production costs associated with the development of lidar sensors is discussed above around Sensor Platform development. Therefore, such costs are not accounted for within the scope of ASC 340-10-25. Furthermore, as these costs do not represent fulfillment costs, the guidance in ASC 340-40 does not apply.

(c) NRE services

Costs incurred in connection with the delivery of NRE services are expensed as incurred in Cost of Sales in the Consolidated Statements of Operations and Comprehensive Loss. NRE services are distinct from the Company's other revenue generating activities and represent outputs of the Company's ordinary business activities, within the scope of ASC 606. Generally, these activities represent inputs to the Company's delivery and transfer of control to the customer of the combined performance obligations under these service arrangements. As previously noted, the Company generally recognizes revenue from the delivery of NRE services overtime on a percentage of completion basis using the cost-to-cost method. As these costs are associated with the delivery of promised services within the scope of ASC 606, these costs do not represent pre-production costs as contemplated in ASC 340-10-25. Further, since costs related to NRE arrangements are costs that relate to partially or

fully satisfied performance obligations, such costs are not capitalized and expensed as incurred per the guidance included in ASC 340-40-25-8(c).

The Company acknowledges that reference to capitalized tooling costs as part of the property and equipment accounting policy on page 60 of the Form 10-K may lead to confusion regarding the Company's accounting for pre-production costs. This policy reference was added in anticipation of any tooling costs that may qualify for capitalization in the future. At the end of 2021, the Company had not capitalized any tooling costs for reasons previously explained.

In future filings, the Company will:

(a) update its accounting policy disclosure related to Research and Development expenses to include the following:

"Design and development costs for products to be sold under long-term supply arrangements are expensed as incurred. Design and development costs for molds, dies, and other tools involved in new technology are expensed as incurred."

(b) update the accounting policy disclosure related to Property and Equipment to include the following: "Design and development costs for molds, dies, and other tools that will be used in producing the products under a long-term supply arrangement are capitalized as part of the molds, dies, and other tools".

(c) will, as part of the footnote disclosures related to Property and Equipment quantify if any pre-production costs, such as tooling, have been capitalized as at the end of any given reporting period.

If you have any questions regarding this letter, please do not hesitate to contact me at (407) 900-5259 with any questions or further comments.

Sincerely,

/s/ Thomas J. Fennimore

Thomas J. Fennimore Chief Financial Officer

cc: Alan Prescott, Luminar Technologies, Inc. Daniel S. Kim, Orrick Herrington & Sutcliffe LLP