

PROSPECTUS SUPPLEMENT
(To Prospectus dated February 3, 2022)

6,900,000 Shares
LUMINAR
LUMINAR TECHNOLOGIES, INC.
Class A Common Stock

We are issuing 6,900,000 shares of our Class A common stock in payment to certain vendors for services rendered or other payment obligations over the next several fiscal quarters under contractual arrangements between us and these vendors, consisting of 3,000,000 shares to Celestica LLC, 2,400,000 shares to P3 USA, Inc., and 1,500,000 shares to Sinergix, LLC. Shares issued to these vendors will vest over time as payments become due and if we elect, in our discretion, to make such payments in shares in lieu of cash. Shares issued pursuant to this prospectus supplement were previously registered pursuant to our existing shelf registration statement on Form S-3 (File No. 333-262250), which was declared effective by the Securities and Exchange Commission on February 3, 2022.

We have two classes of authorized common stock, our Class A common stock and our Class B common stock, par value \$0.0001 per share. Holders of the Class A common stock and Class B common stock have identical rights, except that holders of our Class A common stock are entitled to one vote per share and holders of the Class B common stock are entitled to ten votes per share. Shares of Class B common stock can be converted to shares of Class A common stock at any time at the option of the holder and automatically convert upon sale or transfer, except for certain permitted transfers specified in our amended and restated certificate of incorporation.

Our Class A common stock is listed on the Nasdaq Global Select Market under the symbol "LAZR." On June 2, 2022, the last reported sale price of our Class A common stock was \$10.09 per share.

Investing in our common stock involves significant risks. See the section titled "Risk Factors" on page S-6 of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement concerning factors you should consider before investing in our Class A common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 3, 2022.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of the registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process pursuant to which we may, from time to time, sell Class A common stock in one or more offerings. This document consists of two parts. The first part is this prospectus supplement, including the documents incorporated by reference, which describes the general terms of the offering and issuance of our shares to three of our vendors (the “Vendor Issuances”), and also adds to and updates the information contained in the accompanying prospectus and the documents incorporated by reference therein. The second part, the accompanying prospectus, including the documents incorporated by reference, gives more general information, some of which does not apply to any offerings of shares of our Class A common stock. Generally, when we refer to the “prospectus,” we are referring to both parts combined. You should read both this prospectus together with additional information described under the heading “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” in this prospectus supplement.

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any pricing supplement prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer of these securities or soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the Class A common stock and the distribution of this prospectus outside the United States. You should not assume that the information contained in or incorporated by reference in this prospectus or any pricing supplement is accurate as of any date other than their respective dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties and covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

When we refer to “Luminar,” “we,” “our” and “us” in this prospectus supplement, we mean Luminar Technologies, Inc. or its consolidated subsidiaries, unless otherwise specified. When we refer to “you,” we mean the holders of the applicable series of securities.

Luminar, the Luminar logo and our other registered or common law trademarks, service marks or trade names appearing in this prospectus are the property of Luminar. All other brand names or trademarks appearing in this prospectus supplement, the accompanying prospectus, and the information incorporated by reference herein, are the property of their respective holders. Solely for convenience, the trademarks and trade names in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein, are referred to without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames. Other trademarks, service marks and trade names used in this prospectus are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

The following summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus supplement and accompanying base prospectus, including all documents incorporated by reference herein and therein and the information set forth under the heading “Risk Factors” in this prospectus supplement. References in this summary to Level 0 to Level 5 refer to levels of automation as defined by the Society of Automotive Engineers. For more information, see “Market Outlook” in Part I, Item 1. Business in our Annual Report on Form 10-K for the year ended December 31, 2021.

Luminar Technologies, Inc.

Luminar is a global automotive technology company ushering in a new era of vehicle safety and autonomy. We are enabling solutions for series production passenger cars and commercial trucks as well as other targeted markets. Founded in 2012 by President and Chief Executive Officer Austin Russell, Luminar built a new type of lidar from the chip-level up, with technological breakthroughs across all core components. As a result, we have created what we believe is the lidar sensor that meets the demanding performance, safety, and cost requirements for Level 3 through Level 5 autonomous vehicles in production, bypassing the traditional limitations of legacy lidar technology, while also enabling Level 0 through Level 3 (Advanced Driving Assistance Systems and/or Luminar Proactive Safety) with our Proactive Safety solution. Integrating this advanced hardware with our custom developed software stack enables a turn-key autonomous solution to accelerate widespread adoption across automakers at series production scale.

Our lidar hardware and software products help set the standard for safety in the industry, and are designed to enable accurate and reliable detections of some of the most challenging “edge cases” autonomous vehicles can encounter on a regular basis. This is achieved by advancing existing lidar range and resolution to new levels, ensuring hard-to-see objects like a tire on the road ahead or a child that runs into the street are not missed, as well as by developing our software to interpret the data needed to inform autonomous and assisted driving decisions.

Our full-stack hardware and software autonomy solution for cars and trucks as well as our standalone lidar technology offerings have made us one of the leading technology partners for the world’s top automotive original equipment manufacturers.

We were incorporated in the State of Delaware in August 2018 as a special purpose acquisition company under the name Gores Metropoulos, Inc. On February 5, 2019, we completed our initial public offering. On December 2, 2020, we consummated the business combination (the “Business Combination”) pursuant to the Agreement and Plan of Merger, dated August 24, 2020, with the pre-Business Combination Luminar Technologies, Inc. (“Legacy Luminar”). Legacy Luminar was incorporated in Delaware on March 31, 2015. In connection with the consummation of the Business Combination, we changed our name from Gores Metropoulos, Inc. to Luminar Technologies, Inc.

Our principal executive offices are located at 2603 Discovery Drive, Suite 100, Orlando, Florida 32826. Our telephone number is (407) 900-5259. Our website address is www.luminartech.com. Information contained on our website or connected thereto does not constitute part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

The Vendor Issuances

Shares of Class A common stock to be issued	6,900,000 shares
Common stock to be outstanding after the issuances	356,020,897 shares
Voting rights	We have two classes of authorized common stock, our Class A common stock and our Class B common stock. Holders of the Class A common stock and Class B common stock have identical rights, except with respect to voting and conversion. The holders of the Class A common stock are entitled to one vote per share and holders of the Class B common stock are entitled to ten votes per share. The holders of our Class A common stock and Class B common stock will vote together as a single class on all matters submitted to a vote of our stockholders, unless otherwise required by Delaware law or our amended and restated certificate of incorporation. Shares of Class B common stock can be converted to shares of Class A common stock at any time at the option of the holder and automatically convert upon sale or transfer, except for certain permitted transfers specified in our amended and restated certificate of incorporation. See the section in the accompanying prospectus titled “Description of Our Capital Stock.”
Use of proceeds	The shares of Class A common stock issued hereunder will be issued as payment for services rendered or other payment obligations under contractual arrangements between certain vendors and us. See “Use of Proceeds.”
Risk factors	See “Risk Factors” and other information included in this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider before investing in our securities.
Nasdaq Global Select Stock Market Symbol	LAZR

The number of shares of our common stock to be outstanding immediately after the issuances is based on 252,032,227 shares of our Class A common stock and 97,088,670 shares of our Class B common stock issued and outstanding as of March 31, 2022, and excludes as of that date:

- 10,187,197 shares of our Class A common stock issuable upon the exercise of stock options outstanding with a weighted average exercise price of \$1.73 per share;
- 3,077,021 shares of Class A common stock issuable upon exercise of outstanding warrants with an exercise price of \$11.50 per share;
- 4,089,280 shares of Class A common stock issuable upon exercise of an outstanding warrant with an exercise price of \$3.1769 per share;
- 14,590,828 shares of Class A common stock issuable upon the vesting of outstanding restricted stock units;
- 8,606,717 shares of Class A and Class B common stock issuable upon achievement of certain earn-out provisions;
- 31,279,716 shares of Class A common stock issuable upon conversion of our \$625.0 million aggregate principal amount of outstanding convertible notes, at an assumed conversion price of \$19.981; and

- 51,415,293 shares of our Class A common stock reserved for future issuance under our equity compensation plans, consisting of:
 - 25,818,749 shares of our Class A common stock reserved for future issuance under our Management Longer Term Equity Incentive Plan;
 - 18,278,889 shares of our Class A common stock reserved for future issuance under our 2020 Equity Incentive Plan; and
 - 7,317,655 shares of our Class A common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan.

The foregoing does not give effect to the exercise of any outstanding options or warrants subsequent to March 31, 2022 and does not include 2,176,205 shares of Class A common stock we issued pursuant to the Agreement and Plan of Merger, dated as of March 14, 2022, entered into by us, Freedom Photonics LLC and certain other parties thereto.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying base prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), that are forward-looking and as such are not historical facts. These forward-looking statements include, without limitation, statements regarding future financial performance, business strategies, expansion plans, future results of operations, estimated revenues, sales estimates/Order Book numbers, losses, projected costs, prospects, plans and objectives of management. These forward-looking statements are based on our management’s current expectations, estimates, projections and beliefs, as well as a number of assumptions concerning future events, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this prospectus supplement and the accompanying base prospectus, words such as “outlook,” “believes,” “expects,” “potential,” “continues,” “may,” “will,” “should,” “could,” “seeks,” “approximately,” “predicts,” “intends,” “plans,” “estimates,” “anticipates” or the negative version of these words or other comparable words or phrases, may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. The following factors among others, could cause actual results and future events to differ materially from those set forth or contemplated in the forward-looking statements:

- Our history of losses and our expectation that we will continue to incur significant expenses, including substantial R&D costs, and continuing losses for the foreseeable future as well as our limited operating history which makes it difficult to evaluate our future prospects and the risks and challenges we may encounter; our strategic initiatives which may prove more costly than we currently anticipate and potential failure to increase our revenue to offset these initiatives;
- whether our lidar products are selected for inclusion in autonomous driving or ADAS systems by automotive OEMs or their suppliers, and whether we will be de-selected by any customers;
- the lengthy period of time from a major commercial win to implementation and the risks of cancellation or postponement of the contract or unsuccessful implementation;
- potential inaccuracies in our forward-looking estimates of certain metrics and our future cost of goods sold (COGS) and bill of materials (BOM) and total addressable market;
- the discontinuation, lack of success of our customers in developing and commercializing products using our solutions or loss of business with respect to a particular vehicle model or technology package and whether end automotive consumers will demand and be willing to pay for such features;
- our inability to reduce and control the cost of the inputs on which we rely, which could negatively impact the adoption of our products and our profitability;
- the effect of continued pricing pressures, competition from other lidar manufacturers, automotive original equipment manufacturers (“OEMs”) cost reduction initiatives and the ability of automotive OEMs to re-source or cancel vehicle or technology programs which may result in lower than anticipated margins, or losses, which may adversely affect our business;
- general economic uncertainty and the effect of general economic conditions on our industry in particular, including the level of demand and financial performance of the autonomous vehicle industry and market adoption of lidar as well as developments in alternative technology and the increasingly competitive environment in which we operate;
- our ability to manage our growth and expand our business operations effectively, including into international markets, such as China, which exposes us to operational, financial and regulatory risks;

- adverse impacts due to limited availability and quality of materials, supplies, and capital equipment, or dependency on third-party service providers whether we will be able to successfully transition our engineering designs into high volume manufacturing, including our ability to transition to an outsourced manufacturing business model and whether we and our outsourcing partners and suppliers can successfully operate complex machinery;
- whether we can successfully select, execute or integrate our acquisitions; whether the complexity of our products results in undetected defects and reliability issues which could reduce market adoption of our new products, limit our ability to manufacture, damage our reputation and expose us to product liability, warranty and other claims; our ability to maintain and adequately manage our inventory;
- our ability to remediate the material weakness in our internal controls over financial reporting;
- our ability to protect and enforce our intellectual property rights;
- changes in personnel and availability of qualified personnel and dependence on Austin Russell, our Founder, President and Chief Executive Officer;
- the amount and timing of future sales and whether the average selling prices of our products could decrease rapidly over the life of the product as well as our dependence on a few key customers, who are often large corporations with substantial negotiating power;
- the effects of the ongoing coronavirus (COVID-19) pandemic or other infectious diseases, health epidemics, pandemics and natural disasters on Luminar’s business;
- interruption or failure of our information technology and communications systems and cybersecurity risks to our operational systems, security systems, infrastructure, integrated software in our lidar solutions; and
- those other factors discussed or incorporated by reference in the section titled “Risk Factors” in this prospectus supplement.

The forward-looking statements contained in this prospectus supplement are based on our current expectations and beliefs concerning future developments and their potential effects on our business. There can be no assurance that future developments affecting our business will be those that we have anticipated. 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. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the effect of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Should one or more of these risks or uncertainties materialize, or should any of the assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements.

The forward-looking statements made by us in this prospectus supplement and accompanying base prospectus speak only as of the date of this prospectus supplement and the accompanying base prospectus, respectively. Except to the extent required under the federal securities laws and rules and regulations of the SEC, we disclaim any obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. In light of these risks and uncertainties, there is no assurance that the events or results suggested by the forward-looking statements will in fact occur, and you are cautioned not to place undue reliance on these forward-looking statements.

RISK FACTORS

Investing in the shares of Class A common stock being offered pursuant to this prospectus supplement and the accompanying prospectus involves a high degree of risk. Before deciding whether to invest in our Class A common stock, you should consider carefully the risk factors described below. You should carefully consider the risks and uncertainties discussed under the section titled "Risk Factors" contained in our most recent Annual Report on Form 10-K and any subsequently filed Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto, which are incorporated by reference into this prospectus and any applicable prospectus supplement in their entirety, together with other information in this prospectus and any applicable prospectus supplement, and the documents incorporated by reference herein and therein, before making an investment decision. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. See "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our Class A common stock could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus supplement, the accompanying prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below.

Risks Related to This Offering

The market price and trading volume of Class A common stock may be volatile and could decline significantly, which could result in substantial losses for purchasers of our Class A common stock.

The stock markets, including the Nasdaq Global Select Market on which we list our shares of Class A common stock, have from time to time experienced significant price and volume fluctuations. Even if an active, liquid and orderly trading market is sustained for the Class A common stock, the market price of Class A common stock may be volatile and could decline significantly. In addition, the trading volume in Class A common stock may fluctuate and cause significant price variations to occur. If the market price of Class A common stock declines significantly, you may be unable to resell your shares at a price higher than at which you invested (or at all). We cannot assure you that the market price of Class A common stock will not fluctuate widely or decline significantly in the future in response to a number of factors, including, among others, the following:

- the realization of any of the risk factors presented in this prospectus;
- actual or anticipated differences in our estimates, or in the estimates of analysts, for our revenues, results of operations, level of indebtedness, liquidity or financial condition;
- additions and departures of key personnel;
- failure to comply with the requirements of the Nasdaq Stock Market, Sarbanes-Oxley Act or other laws or regulations;
- future issuances, sales, resales or repurchases or anticipated issuances, sales, resales or repurchases, of our securities;
- publication of research reports about us;
- the performance and market valuations of other similar companies;
- commencement of, or involvement in, litigation involving us;
- broad disruptions in the financial markets, including sudden disruptions in the credit markets;
- speculation in the press or investment community;

- actual, potential or perceived control, accounting or reporting problems;
- changes in accounting principles, policies and guidelines; and
- other events or factors, including those resulting from infectious diseases, health epidemics and pandemics (including the ongoing COVID-19 public health emergency), natural disasters, war, acts of terrorism or responses to these events.

In the past, securities class-action litigation has often been instituted against companies following periods of volatility in the market price of their shares. This type of litigation could result in substantial costs and divert our management's attention and resources, which could have a material adverse effect on us.

If you purchase shares of common stock sold in this offering, you will incur immediate and substantial dilution.

If you purchase shares of our Class A common stock in this offering, you will experience substantial and immediate dilution in the pro forma net tangible book value per share after giving effect to this offering, based on the public offering price of \$10.00 per share, because the price that you pay will be substantially greater than the pro forma net tangible book value per share of the Class A common stock that you acquire. This dilution is due in large part to the fact that certain of our earlier investors paid substantially less than the offering price when they purchased shares of our capital stock. You will experience additional dilution upon exercise of the outstanding stock options and other equity awards that may be granted under our equity incentive plans, and when we otherwise issue additional shares of our common stock. For more information, see "Dilution."

USE OF PROCEEDS

We have entered into contractual arrangements with three of our vendors, Celestica LLC, P3 USA, Inc. and Sinergix, LLC, pursuant to which we have incurred or expect to incur payment obligations over the next several fiscal quarters for certain services provided by each vendor. Shares of our Class A common stock issued to these vendors will vest over time as payment for services rendered or other payment obligations under contractual arrangements between us and the respective vendor, if we elect, in our discretion, to make such payments in shares in lieu of cash.

DILUTION

If you invest in our Class A common stock, your ownership interest will be diluted to the extent of the difference between the offering price per share of our Class A common stock and the as adjusted net tangible book value per share of our Class A common stock immediately after this offering.

As of March 31, 2022, our net tangible book value was \$118.6 million, or \$0.34 per share of our Class A common stock (on an as-converted basis). Net tangible book value per share represents the amount of our tangible assets less our liabilities divided by the total number of shares of our common stock outstanding.

Our as adjusted net tangible book value as of March 31, 2022 would be \$187.6 million, or \$0.53 per share of our Class A common stock (on an as-converted basis). As adjusted net tangible book value per share reflects the sale by us of 6,900,000 shares of our Class A common stock in this offering, at an offering price of \$10.00. This represents an immediate increase in as adjusted net tangible book value of \$0.19 per share to existing stockholders and immediate dilution of \$9.47 per share to new investors purchasing shares in the offering.

The following table illustrates this per share dilution to new investors:

Offering price per share		\$	10.00
Net tangible book value per share as of March 31, 2022	\$	0.34	
Increase in net tangible book value per share attributable to this offering	\$	0.19	
As adjusted net tangible book value per share after giving effect to this offering		\$	0.53
Dilution in as adjusted net tangible book value per share to new investors in this offering		\$	9.47

The number of shares of our common stock to be outstanding immediately after this offering is based on 252,032,227 shares of our Class A common stock and 97,088,670 shares of our Class B common stock issued and outstanding as of March 31, 2022, and excludes as of that date:

- 10,187,197 shares of our Class A common stock issuable upon the exercise of stock options outstanding with a weighted average exercise price of \$1.73 per share;
- 3,077,021 shares of Class A common stock issuable upon exercise of outstanding warrants with an exercise price of \$11.50 per share;
- 4,089,280 shares of Class A common stock issuable upon exercise of an outstanding warrant with an exercise price of \$3.1769 per share;
- 14,590,828 shares of Class A common stock issuable upon the vesting of outstanding restricted stock units;
- 8,606,717 shares of Class A and Class B common stock issuable upon achievement of certain earn-out provisions;
- 31,279,716 shares of Class A common stock issuable upon conversion of our \$625.0 million aggregate principal amount of outstanding convertible notes, at an assumed conversion price of \$19.981; and
- 51,415,293 shares of our Class A common stock reserved for future issuance under our equity compensation plans, consisting of:
 - 25,818,749 shares of our Class A common stock reserved for future issuance under our Management Longer Term Equity Incentive Plan;
 - 18,278,889 shares of our Class A common stock reserved for future issuance under our 2020 Equity Incentive Plan; and

- 7,317,655 shares of our Class A common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan.

The foregoing table does not give effect to the exercise of any outstanding options or warrants subsequent to March 31, 2022. To the extent options and warrants are exercised, there may be further dilution to new investors. The foregoing table also does not include 2,176,205 shares of Class A common stock we issued pursuant to the Agreement and Plan of Merger, dated as of March 14, 2022, entered into by us, Freedom Photonics LLC and certain other parties thereto. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent we raise additional capital by issuing equity or convertible debt securities, there may be further dilution to new investors.

PLAN OF DISTRIBUTION

The Class A common stock sold pursuant to this offering will be sold directly by us. Recipients of shares of Class A common stock in this offering (including brokers or dealers) may, in connection with any resales of those shares, be deemed to be underwriters. The shares may be resold in market transactions (including coverage of short positions) on any national security exchange on which shares of our Class A common stock trade or in privately negotiated transactions. Our common stock is currently listed on the Nasdaq Global Select Market.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

This section discusses the material U.S. federal income tax consequences of the ownership and sale, exchange or other taxable disposition of our Class A common stock sold pursuant to this offering to a “non-U.S. holder” (as defined below). This discussion does not apply to the vendors who receive our Class A common stock as part of this offering. This discussion does not provide a complete analysis of all potential tax considerations. The information provided below is based upon provisions of the Internal Revenue Code of 1986, as amended, or Code, Treasury regulations promulgated thereunder, administrative rulings and judicial decisions currently in effect. These authorities may change at any time, possibly on a retroactive basis, or the Internal Revenue Service, or IRS, might interpret the existing authorities differently. In either case, the U.S. federal income tax considerations of owning or disposing of our Class A common stock could differ from those described below. As a result, we cannot assure you that the U.S. federal income tax considerations described in this discussion will not be challenged by the IRS or will be sustained by a court if challenged by the IRS.

This discussion does not address the tax considerations arising under the alternative minimum tax, the net investment income tax, the laws of any state, local or non-U.S. jurisdiction, or under U.S. federal gift and estate tax laws. In addition, this discussion does not address tax considerations applicable to an investor’s particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- partnerships or entities or arrangements treated as partnerships or other pass-through entities for U.S. federal income tax purposes (or investors in such entities);
- corporations that accumulate earnings to avoid U.S. federal income tax;
- tax-exempt or governmental organizations or tax-qualified retirement plans;
- real estate investment trusts or regulated investment companies;
- controlled foreign corporations or passive foreign investment companies;
- persons who acquired our Class A common stock pursuant to the exercise of an employee stock option or otherwise as compensation for services;
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our Class A common stock as a position in a hedging transaction, “straddle,” “conversion transaction” or other risk reduction transaction;
- persons required to accelerate the recognition of any item of gross income with respect to our Class A common stock as a result of such income being recognized on an applicable financial statement;
- persons who do not hold our Class A common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes); or
- persons deemed to sell our Class A common stock under the constructive sale provisions of the Code.

In addition, if a partnership or entity classified as a partnership for U.S. federal income tax purposes is a beneficial owner of our Class A common stock, the tax treatment of a partner in the partnership or an owner of the entity will depend upon the status of the partner or owner and the activities of the partnership or entity.

Accordingly, this discussion does not address U.S. federal income tax considerations applicable to partnerships that hold our Class A common stock, and partners in such partnerships should consult their tax advisors.

Investors considering the purchase of our Class A common stock should consult their own tax advisors regarding the application of the U.S. federal income, gift and estate tax laws to their particular situations and the consequences of non-U.S., state or local laws, and tax treaties.

Non-U.S. holder defined

For purposes of this section, a “non-U.S. holder” is any beneficial owner of our Class A common stock, other than an entity or arrangement treated as a partnership for U.S. federal income tax purposes, that is not:

- an individual who is a citizen or resident of the United States for U.S. federal income tax purposes;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized under the laws of the United States, any state therein or the District of Columbia or otherwise treated as such for U.S. federal income tax purposes;
- a trust that (1) is subject to the primary supervision of a U.S. court and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable Treasury regulations to be treated as a U.S. person; or
- an estate whose income is subject to U.S. federal income tax regardless of source.

Distributions

If we make any distributions on shares of our Class A common stock (other than certain distributions of our Class A common stock or certain rights to acquire our Class A common stock), such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a non-U.S. holder’s adjusted tax basis in shares of our Class A common stock. Any remaining excess will be treated as gain realized on the sale, exchange or other taxable disposition of our Class A common stock. See “—Sale of common stock.”

Any distribution made to a non-U.S. holder on our Class A common stock that is not effectively connected with a non-U.S. holder’s conduct of a trade or business in the United States will generally be subject to U.S. withholding tax at a 30% rate. Subject to the discussion below regarding the Foreign Account Tax Compliance Act, or FATCA, and backup withholding, the 30% withholding tax might not apply, or might apply at a reduced rate, under the terms of an applicable income tax treaty between the United States and the non-U.S. holder’s country of residence. You should consult your tax advisors regarding your entitlement to benefits under a relevant income tax treaty. Generally, in order for us or our paying agent to withhold tax at a lower treaty rate, a non-U.S. holder must certify its entitlement to treaty benefits. A non-U.S. holder generally can meet this certification requirement by providing an IRS Form W-8BEN or W-8BEN-E (or any successor form to the IRS Form W-8BEN or W-8BEN-E) to us or our paying agent. If the non-U.S. holder holds the stock through a financial institution or other intermediary, the non-U.S. holder will be required to provide appropriate documentation to the applicable withholding agent. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, you may obtain a refund or credit from the IRS of any excess amounts withheld by filing an appropriate claim for a refund with the IRS in a timely manner.

Distributions on shares of our Class A common stock received by a non-U.S. holder that are effectively connected with a U.S. trade or business conducted by the non-U.S. holder, and, if required by an applicable income tax treaty between the United States and the non-U.S. holder’s country of residence, are attributable to a permanent establishment maintained by the non-U.S. holder in the United States, are not subject to the 30% withholding tax. To obtain this exemption, a non-U.S. holder must provide us with an IRS Form W-8ECI properly certifying such exemption. Such effectively connected distributions, although not subject to U.S. withholding tax, are generally

taxed at the same regular rates applicable to U.S. persons, net of certain deductions and credits. Distributions on shares of our Class A common stock received by corporate non-U.S. holders that are effectively connected with a U.S. trade or business of the corporate non-U.S. holder may also be subject to a branch profits tax equal to 30% of its effectively connected earnings and profits for the taxable year, as adjusted for certain items, although an applicable income tax treaty between the United States and the non-U.S. holder's country of residence might provide for a lower rate.

Sale of common stock

Subject to the discussion below regarding FATCA and backup withholding, non-U.S. holders will generally not be subject to U.S. federal income or withholding tax on any gains realized on the sale, exchange or other taxable disposition of our Class A common stock unless:

- the gain (1) is effectively connected with the conduct by the non-U.S. holder of a U.S. trade or business and (2) if required by an applicable income tax treaty between the United States and the non-U.S. holder's country of residence, is attributable to a permanent establishment (or, in the case of an individual, a fixed base) maintained by the non-U.S. holder in the United States (in which case the special rules described below apply);
- the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of the sale, exchange or other taxable disposition of our Class A common stock, and certain other requirements are met (in which case the gain would be subject to a flat 30% tax, or such reduced rate as may be specified by an applicable income tax treaty, which may be offset by certain U.S.-source capital losses, even though the individual is not considered a resident of the United States, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses); or
- the rules of the Foreign Investment in Real Property Tax Act, or FIRPTA, treat the gain as effectively connected with a U.S. trade or business.

The FIRPTA rules may apply to a sale, exchange or other taxable disposition of our Class A common stock if we are at the time of the sale, exchange, or other taxable disposition, or were within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period, a "United States real property holding corporation," or USRPHC. In general, we would be a USRPHC if the fair market value of our U.S. real property interests constituted at least half of the fair market value of our business assets and our U.S. and non-U.S. real property interests. If we are or become a USRPHC, as long as our Class A common stock is regularly traded on an established securities market at the time of the disposition, such Class A common stock will be treated as U.S. real property interests subject to the FIRPTA rules only if a non-U.S. holder actually or constructively owns more than 5% of our outstanding stock at any time within the shorter of the five-year period preceding the disposition and the non-U.S. holder's holding period. Currently, we believe we are not, and do not anticipate becoming, a USRPHC, however there can be no assurance in this regard.

If any gain from the sale, exchange or other taxable disposition of our Class A common stock (1) is effectively connected with a U.S. trade or business conducted by a non-U.S. holder and (2) if required by an applicable income tax treaty between the United States and the non-U.S. holder's country of residence, is attributable to a permanent establishment (or, in the case of an individual, a fixed base) maintained by such non-U.S. holder in the United States, then the gain generally will be subject to U.S. federal income tax at the same regular rates applicable to U.S. persons, net of certain deductions and credits. If the non-U.S. holder is a corporation, under certain circumstances, that portion of its earnings and profits that is effectively connected with its U.S. trade or business, subject to certain adjustments, generally would be subject to a "branch profits tax." The branch profits tax rate is equal to 30% of its effectively connected earnings and profits for the taxable year, as adjusted for certain items, although an applicable income tax treaty between the United States and the non-U.S. holder's country of residence might provide for a lower rate.

Backup withholding and information reporting

Payments of dividends on our Class A common stock will not be subject to backup withholding, provided the non-U.S. holder certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI (and we or our paying agent do not have actual knowledge or reason to know the holder is a U.S. person or that the conditions of any other exemption are not, in fact, satisfied), or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our Class A common stock paid to the non-U.S. holder, regardless of whether any tax was actually withheld. Copies of these reports may be made available to tax authorities in the country where the non-U.S. holder resides. In addition, proceeds of the sale or other taxable disposition of our Class A common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above or the non-U.S. holder otherwise establishes an exemption. Proceeds of a disposition of our Class A common stock conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting. The backup withholding rate is currently 24%.

Backup withholding is not an additional tax. Any amounts withheld from a payment to a holder of our Class A common stock under the backup withholding rules can be credited against any U.S. federal income tax liability of the holder and may entitle the holder to a refund from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act, or FATCA

FATCA imposes U.S. federal withholding tax of 30% on certain types of U.S. source “withholdable payments” (including dividends and the gross proceeds from the sale, exchange or other taxable disposition of U.S. stock) to “foreign financial institutions,” which are broadly defined for this purpose, and other non-U.S. entities in connection with the failure to comply with certain certification and information reporting requirements regarding U.S. account holders or owners of such institutions or entities. The obligation to withhold under FATCA applies to any dividends on our Class A common stock. While withholding under FATCA would have applied to gross proceeds from the sale, exchange or other taxable disposition of our common stock and to certain “pass-thru” payments received with respect to instruments held through foreign financial institutions after the date on which applicable final Treasury regulations are issued, proposed Treasury regulations eliminate FATCA withholding on payments of gross proceeds entirely and limit FATCA withholding on these “pass-thru” payments to those payments made two years after the date on which applicable final Treasury regulations are issued. Taxpayers generally may rely on these proposed Treasury regulations until final Treasury regulations are issued. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our Class A common stock.

The preceding discussion of U.S. federal income tax considerations is for general information only. It is not tax advice. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state, local and non-U.S. tax consequences of the sale, exchange or other taxable disposition of our Class A common stock, including the consequences of any proposed change in applicable laws.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 we filed with the Securities and Exchange Commission (“SEC”) under the Securities Act, and do not contain all of the information in the registration statement. Whenever a reference is made in this prospectus supplement or the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document. We file annual, quarterly and special reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>. Our public filings are also available to the public on our website at www.luminartech.com. The information contained on our website, however, is not, and should not be deemed to be, a part of this prospectus supplement, the accompanying prospectus or any other report or filing filed with the SEC.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act, with the SEC with respect to the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus omit certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. Statements in this prospectus supplement and the accompanying prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. We incorporate by reference the documents listed below and any future filings (including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement) we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2021, filed with the SEC on March 1, 2022;
- our Quarterly Report on [Form 10-Q](#) for the three months ended March 31, 2022, filed with the SEC on May 6, 2022;
- the description of our Class A common stock in our registration statement on [Form 8-A](#) filed with the SEC on January 31, 2019, including any amendments thereto or reports filed for the purpose of updating such description; and
- All documents filed by Luminar under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, that are filed (excluding, however, information we furnish to the SEC) (i) by us after the date of the initial registration statement and prior to its effectiveness and (ii) by us after the date of this prospectus and prior to the termination of any offering under the registration statement.

Any statement contained in this prospectus supplement and the accompanying prospectus, or in a document all or a portion of which is incorporated by reference, shall be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement and the accompanying prospectus, any applicable prospectus supplement and any related free writing prospectus or any document incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded shall not, except as so modified or superseded, constitute a part of this prospectus supplement and the accompanying prospectus.

We will provide to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, a copy of any or all of the information that has been incorporated by reference in this prospectus supplement but not delivered with this prospectus supplement (other than the exhibits to such documents which are not specifically incorporated by reference herein). We will provide this information at no cost to the requester upon written or oral request to:

Luminar Technologies, Inc.
2603 Discovery Drive, Suite 100
Orlando, Florida 32826
Telephone: (407) 900-5259

You may also access these documents, free of charge on the SEC's website at www.sec.gov or on the "Investors" page of our website at luminartech.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

We have not authorized anyone to provide you with information other than what is incorporated by reference or provided in this prospectus or any prospectus supplement. We are not making an offer of these securities in any state where such offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Orrick, Herrington & Sutcliffe LLP. Orrick, Herrington & Sutcliffe LLP, certain attorneys in the firm and certain funds affiliated with the firm own and/or have an indirect interest in shares of Class A common stock, which represent less than 1% of our Class A common stock.

EXPERTS

The financial statements of Luminar Technologies, Inc. incorporated by reference in this prospectus supplement, and the effectiveness of Luminar Technologies, Inc.'s internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports which express an unqualified opinion on the financial statements and an adverse opinion on the effectiveness of Luminar Technologies, Inc.'s internal control over financial reporting. Such financial statements are incorporated by reference in reliance upon the report of such firm, given their authority as experts in accounting and auditing.

LUMINAR

\$204,000,000
Class A Common Stock
Preferred Stock
Debt Securities
Warrants
Units

From time to time, we may offer, issue and sell up to \$204,000,000 of any combination of the securities described in this prospectus in one or more offerings. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions.

This prospectus provides a general description of the securities we may offer. Each time we offer securities, we will provide specific terms of the securities offered in a supplement to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before you invest in any of the securities being offered.

This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. The prospectus supplement or any related free writing prospectus may also add to, update, supplement or clarify information contained in this prospectus.

Our Class A common stock is traded on The Nasdaq Global Select Market under the symbol "LAZR". The last reported sales price of our Class A common stock on The Nasdaq Global Select Market on January 28, 2022 was \$13.03 per share.

We may offer and sell our securities to or through one or more agents, underwriters, dealers or other third parties or directly to one or more purchasers on a continuous or delayed basis. If agents, underwriters or dealers are used to sell our securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of our securities and the net proceeds we expect to receive from the sale of such securities will also be set forth in a prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "Risk Factors" on page 3 of this prospectus as well as those contained in the applicable prospectus supplement and any related free writing prospectus, and in the other documents that are incorporated by reference into this prospectus or the applicable prospectus supplement.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF

THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is February 3, 2022.

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We are responsible for the information contained and incorporated by reference in this prospectus, in any accompanying prospectus supplement, and in any related free writing prospectus we prepare or authorize. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this documentation are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. The information contained in this document speaks only as of the date of this document, unless the information specifically indicates that another date applies. Neither the delivery of this prospectus or any accompanying prospectus supplement, nor any sale of securities made under these documents, will, under any circumstances, create any implication that there has been no change in our affairs since the date of this prospectus, any accompanying prospectus supplement or any free writing prospectus we may provide you in connection with an offering or that the information contained or incorporated by reference is correct as of any time subsequent to the date of such information. You should assume that the information in this prospectus or any accompanying prospectus supplement, as well as the information incorporated by reference in this prospectus or any accompanying prospectus supplement, is accurate only as of the date of the documents containing the information, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

ABOUT THIS PROSPECTUS

This prospectus provides you with a general description of our securities being offered. You should read this prospectus together with the additional information described under the heading “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference.”

Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, any of the securities described in this prospectus, for total gross proceeds of up to \$204,000,000. This prospectus only provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement. Each such prospectus supplement and any free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings “Where You Can Find Additional Information” and “Incorporation of Certain Information by Reference” before you invest in our securities.

We have not authorized anyone to provide you with information in addition to or different from that contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We take no responsibility for, and can provide no assurances as to the reliability of, any information not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find Additional Information”.

Unless otherwise mentioned or unless the context requires otherwise, throughout this prospectus, any applicable prospectus supplement and any related free writing prospectus, the words “Luminar”, “we”, “us”, “our”, the “company” or similar references refer to Luminar Technologies, Inc. and its subsidiaries; and the term “securities” refers collectively to our Class A common stock, preferred stock, debt securities, warrants or any combination of the foregoing securities.

Luminar, the Luminar logo and our other registered or common law trademarks, service marks or trade names appearing in this prospectus are the property of Luminar. Solely for convenience, our trademarks, tradenames and service marks referred to in this prospectus appear without the ®, TM and SM symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights to these trademarks and tradenames. Other trademarks, service marks and trade names used in this prospectus are the property of their respective owners.

COMPANY OVERVIEW

Our vision is to make autonomous transportation safe and ubiquitous. As a global leader in lidar autonomous driving technology, we are enabling the world's first autonomous solutions for automotive series production in passenger cars and commercial trucks.

Founded in 2012 by President and Chief Executive Officer Austin Russell, we built a new type of lidar from the chip-level up, with technological breakthroughs across all core components. As a result, we have created what we believe is the only lidar sensor that meets the demanding performance, safety, and cost requirements for autonomous vehicles in production bypassing the traditional limitations of legacy lidar technology, while also enabling Advanced Driving Assistance Systems ("ADAS") with our Proactive Safety solution. Integrating this advanced hardware with our custom developed software stack enables a turn-key autonomous solution to accelerate widespread adoption across automakers at series production scale.

Our lidar hardware and software products help set the standard for safety in the industry, and are designed to enable accurate and reliable detection of some of the most challenging "edge cases" that autonomous vehicles can encounter on a regular basis. This is achieved by advancing existing lidar range and resolution to new levels, ensuring hard-to-see objects like a tire on the road ahead or a child that runs into the street are more likely to be detected. Our software is also critical to interpreting the data and informing autonomous and assisted driving decisions.

CORPORATE INFORMATION

We were incorporated in the State of Delaware in August 2018 as a special purpose acquisition company under the name Gores Metropoulos, Inc. On February 5, 2019, we completed our initial public offering. On December 2, 2020, we consummated the business combination (the “Business Combination”) pursuant to the Agreement and Plan of Merger (the “Merger Agreement”), dated August 24, 2020 with the pre-Business Combination Luminar Technologies, Inc. (“Legacy Luminar”). Legacy Luminar was incorporated in Delaware on March 31, 2015. In connection with the consummation of the Business Combination, we changed our name from Gores Metropoulos, Inc. to Luminar Technologies, Inc.

Our principal executive offices are located at 2603 Discovery Drive, Suite 100, Orlando, Florida 32826. Our telephone number is (407) 900-5259. Our website address is www.luminartech.com. Information contained on our website or connected thereto does not constitute part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks and uncertainties described in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described under the headings “Risk Factors” in the documents incorporated herein by reference, including in our Annual Report on Form 10-K for the year ended December 31, 2020, in any applicable prospectus supplement and any risk factors set forth in our other filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K, before making an investment decision.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or the negative of these words or other comparable terminology. Accordingly, these statements involve estimates, assumptions and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus, and in particular those factors referenced in the section “Risk Factors.”

This prospectus, including the sections entitled “About this Prospectus” and “Risk Factors,” contains forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- general economic uncertainty and the effect of general economic conditions on the Company’s industry in particular, including the level of demand and financial performance of the autonomous vehicle industry and market adoption of lidar;
- the Company’s history of losses and whether it will continue to incur significant expenses and continuing losses for the foreseeable future; the effect of continued pricing pressures, automotive original equipment manufacturers (“OEMs”) cost reduction initiatives and the ability of automotive OEMs to re-source or cancel vehicle or technology programs which may result in lower than anticipated margins, or losses, which may adversely affect the Company’s business;
- the ability of the Company to protect and enforce its intellectual property rights;
- whether the Company’s lidar products are selected for inclusion in autonomous driving or ADAS systems by automotive OEMs or their suppliers;
- the Company’s inability to reduce and control the cost of the inputs on which Luminar relies, which could negatively impact the adoption of its products and its profitability;
- changes in personnel and availability of qualified personnel;
- the effects of the ongoing coronavirus (COVID-19) pandemic or other infectious diseases, health epidemics, pandemics and natural disasters on Luminar’s business;
- the Company’s ability to remediate the material weakness in its internal controls over financial reporting;
- the Company’s ability to transition to an outsourced manufacturing business model;
- the Company’s anticipated investments in and results from sales and marketing and research and development (“R&D”);
- the success of the Company’s customers in developing and commercializing products using the Company’s solutions;
- the Company’s estimated total addressable market;

- the amount and timing of future sales;
- whether the complexity of the Company's products results in undetected defects and reliability issues which could reduce market adoption of its new products, damage its reputation and expose the Company to product liability and other claims;
- strict government regulation that is subject to amendment, repeal or new interpretation and the Company's ability to comply with modified or new laws and regulations applying to its business;
- the Company's ability to recognize the anticipated benefits of the recently consummated Business Combination, which may be affected by, among other things, competition, and the ability of the Company to manage its growth and expand its business operations effectively;
- whether the concentration of the Company's stock ownership and voting power limits the ability of the Company's stockholders to influence corporate matters;
- the increasingly competitive environment in which the Company operates;
- the Company's ability to recognize the anticipated benefits of its customer partnerships and the volume of sales to such partners; and
- any changes in strategy by the Company's President and Chief Executive Officer and the Company's ability to execute on management's strategies for its future.

You should not rely upon forward-looking statements as predictions of future events. Such statements are based on management's expectations as of the date of this filing and involve many risks and uncertainties that could cause our actual results, events or circumstances to differ materially from those expressed or implied in our forward-looking statements. Such risks and uncertainties include those risks more fully discussed in the "Risk Factors" section in this prospectus, the section of any accompanying prospectus supplement entitled "Risk Factors" and the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under "Item 1A: Risk Factors" and elsewhere in our most recent Annual Report on Form 10-K for the period ended December 31, 2020, and our Current Reports on Form 8-K.

Given these uncertainties, readers should not place undue reliance on our forward-looking statements. These forward-looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake to update any forward-looking statements after the date of this prospectus or the respective dates of documents incorporated by reference herein or therein that include forward-looking statements.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

DESCRIPTION OF OUR CAPITAL STOCK

The following description summarizes the most important terms of our capital stock. Because it is only a summary, it does not contain all of the information that may be important to you, and is qualified by reference to our Second Amended and Restated Certificate of Incorporation and our Amended and Restated Bylaws, which are exhibits to the registration statement of which this prospectus is a part. We urge you to read each of the Second Amended and Restated Certificate of Incorporation and the Amended and Restated Bylaws in their entirety for a complete description of the rights and preferences of our securities.

General

Pursuant to the terms of the Second Amended and Restated Certificate of Incorporation, our authorized capital stock consists of:

- 715,000,000 shares of Class A common stock, \$0.0001 par value per share (“Class A common stock”);
- 121,000,000 shares of Class B common stock, \$0.0001 par value per share (“Class B common stock”);
- 0 shares of Class F common stock, \$0.0001 par value per share (“Class F common stock”); and
- 10,000,000 shares of undesignated Preferred Stock, \$0.0001 par value per share (“Preferred Stock”).

As of September 30, 2021, the Company had 259,808,501 and 101,588,670 shares of Class A and Class B common stock issued and outstanding, respectively.

Common Stock

Voting Power

Holders of Class A common stock are entitled to one vote per share and holders of Class B common stock are entitled to ten votes per share, on all matters submitted to a vote of stockholders. The holders of Class A common stock and Class B common stock will generally vote together as a single class on all matters submitted to a vote of stockholders, unless otherwise required by Delaware law or the Second Amended and Restated Certificate of Incorporation. Delaware law could require either holders of Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend the Second Amended and Restated Certificate of Incorporation to increase or decrease the par value of a class of the capital stock, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to amend the Second Amended and Restated Certificate of Incorporation in a manner that alters or changes the powers, preferences, or special rights of a class of capital stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws established a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. The Second Amended and Restated Certificate of Incorporation does not provide for cumulative voting for the election of directors.

Conversion

Each outstanding share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon any transfer, whether or not for value, except for certain permitted transfers described in the paragraph that immediately follows this paragraph and further described in the Second

Amended and Restated Certificate of Incorporation. Once converted into Class A common stock, the Class B common stock will not be reissued.

A transfer of Class B common stock will not trigger an automatic conversion of such stock to Class A common stock if it is a permitted transfer. A permitted transfer is a transfer by certain holders of Class B common stock to any of the persons or entities listed in clauses “(i)” through “(v)” below, each referred to herein as a “Permitted Transferee”, and from any such Permitted Transferee back to such holder of Class B common stock and/or any other Permitted Transferee established by or for such holder of Class B common stock: (i) to a trust for the benefit of the holder of Class B common stock and over which such holder of Class B common stock retains sole dispositive power and voting control, provided the holder of Class B common stock does not receive consideration in exchange for the transfer (other than as a settlor or beneficiary of such trust); (ii) to a trust for the benefit of persons other than the holder of Class B common stock so long as the holder of Class B common stock retains sole dispositive power and voting control, provided the holder of Class B common stock does not receive consideration in exchange for the transfer (other than as a settlor or beneficiary of such trust); (iii) to a trust under the terms of which such holder of Class B common stock has retained a “qualified interest” within the meaning of Section 2702(b)(1) of the U.S. Tax Code, and/or a reversionary interest so long as the holder of Class B common stock retains sole dispositive power and exclusive voting control with respect to the shares of Class B common stock held by such trust; (iv) to an Individual Retirement Account, as defined in Section 408(a) of the U.S. Tax Code, or a pension, profit sharing, stock bonus, or other type of plan or trust of which such holder of Class B common stock is a participant or beneficiary and which satisfies the requirements for qualification under Section 401 of the U.S. Tax Code, so long as such holder of Class B common stock retains sole dispositive power and exclusive voting control with respect to the shares of Class B common stock held in such account, plan, or trust; or (v) to a corporation, partnership, or limited liability company in which such holder of Class B common stock directly, or indirectly, retains sole dispositive power and exclusive voting control with respect to the shares of Class B common stock held by such corporation, partnership, or limited liability company.

Each share of Class B common stock will convert automatically, without further action by the Company or the holder thereof, into one fully paid and nonassessable share of Class A common stock, upon: (a) the receipt by the Company of a written request for such conversion from the holders of a majority of the Class B common stock then outstanding, or, if later, the effective date for conversion specified in such request or (b) the occurrence of a transfer, other than a permitted transfer, of such share of Class B common stock.

Each outstanding share of Class B common stock held by a natural person or their Permitted Transferee will convert automatically into one share of Class A common stock upon the death or permanent disability of such holder.

Dividend Rights

Subject to preferences that may apply to any shares of Preferred Stock outstanding at the time, the holders of Class A common stock and Class B common stock are entitled to receive dividends out of funds legally available if the Board, in its discretion, determines to issue dividends and then only at the times and in the amounts that the Board may determine.

No Preemptive or Similar Rights

Class A common stock and Class B common stock will not be entitled to preemptive rights, and are not subject to conversion (except as noted above), redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

If the Company becomes subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to the stockholders would be distributable ratably among the holders of Class A common stock and Class B common stock and any participating Preferred Stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of Preferred Stock.

Fully Paid and Non-Assessable

All of the outstanding shares of Class A common stock and Class B common stock will be fully paid and non-assessable.

Preferred Stock

Our board of directors (the "Board") is authorized, subject to limitations prescribed by Delaware law, to issue Preferred Stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, vesting, powers, preferences, and rights of the shares of each series and any of its qualifications, limitations, or restrictions, in each case without further vote or action by the stockholders. The Board can also increase or decrease the number of shares of any series of Preferred Stock, but not below the number of shares of that series then outstanding, without any further vote or action by the stockholders.

The Board may authorize the issuance of Preferred Stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of Class A common stock and Class B common stock. The issuance of Preferred Stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control of the Company and may adversely affect the market price of Class A common stock and the voting and other rights of the holders of Class A common stock and Class B common stock.

The particular terms of any series of Preferred Stock to be offered by this prospectus will be set forth in the prospectus supplement relating to the offering. The description of the terms of a particular series of Preferred Stock that will be set forth in the applicable prospectus supplement does not purport to be complete and will be qualified in its entirety by reference to the certificate of designation relating to the series. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the Preferred Stock that we may offer under this prospectus, as well as the complete certificate of designation that contains the terms of the particular series of Preferred Stock.

Anti-Takeover Provisions

Some provisions of Delaware law, the Second Amended and Restated Certificate of Incorporation, and Amended and Restated Bylaws contain provisions that could make the following transactions more difficult: an acquisition of the Company by means of a tender offer; an acquisition of the Company by means of a proxy contest or otherwise; or the removal of incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in the Company's best interests, including transactions that provide for payment of a premium over the market price for the Company's shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of the Company to first negotiate with the Board. We believe that the benefits of the increased protection of the Company's potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure the Company outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Law

The Company is subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date on which the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (i) shares owned by persons who are directors and also officers and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction or series of transactions together resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions the Board does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of Class A common stock held by stockholders.

Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws provisions

The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of the Company's management team, including the following:

- *Dual Class Common Stock.* The Second Amended and Restated Certificate of Incorporation provides for a dual class common stock structure pursuant to which holders of Class B common stock will have the ability to control the outcome of matters requiring stockholder approval (even if they own significantly less than a majority of the shares of outstanding Class A common stock), including the election of directors and significant corporate transactions, such as a merger or other sale of the Company or its assets. Directors, executive officers, and employees, and their respective affiliates, may have the ability to exercise significant influence over those matters.
- *Board of Directors Vacancies.* The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws authorize only the Board to fill vacant directorships, including newly created seats. In addition, the number of directors constituting the Board is permitted to be set only by a resolution adopted by a majority vote of the Whole Board (as defined in the Second Amended and Restated Certificate of Incorporation). These provisions prevent a stockholder from increasing the size of the Board and then gaining control of the Board by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of the Board but promotes continuity of management.
- *Classified Board.* The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws provide that the Board is divided into three classes of directors. The existence of a classified board of directors could discourage a third-party from making a tender offer or otherwise attempting to obtain control of the Company as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.
- *Directors Removed Only for Cause.* The Second Amended and Restated Certificate of Incorporation provides that stockholders may remove directors only for cause.
- *Supermajority Requirements for Amendments of The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws* The Second Amended and Restated Certificate of Incorporation further provides that the affirmative vote of holders of at least two-thirds of the voting power of all of the then-outstanding shares of voting stock will be required to amend certain provisions of the Second Amended and Restated Certificate of Incorporation, including provisions relating to the classified

Board, the size of the Board, removal of directors, special meetings, actions by written consent, and designation of Preferred Stock. In addition, the affirmative vote of holders of 75% of the voting power of each of the then-outstanding Class A common stock and Class B common stock, voting separately by class, is required to amend the provisions of the Second Amended and Restated Certificate of Incorporation relating to the terms of the Class B common stock. The affirmative vote of holders of at least two-thirds of the voting power of all of the then-outstanding shares of voting stock is required to amend or repeal the Amended and Restated Bylaws, although the Amended and Restated Bylaws may be amended by a simple majority vote of the Board.

- *Stockholder Action; Special Meeting of Stockholders.* The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws provide that special meetings of stockholders may be called only by a majority of the Whole Board, the chairman of the Board, or the chief executive officer, thus prohibiting a stockholder from calling a special meeting. The Second Amended and Restated Certificate of Incorporation provides that the stockholders may not take action by written consent, but may only take action at annual or special meetings of stockholders. As a result, holders of capital stock are not able to amend the Amended and Restated Bylaws or remove directors without holding a meeting of stockholders called in accordance with the Amended and Restated Bylaws. These provisions might delay the ability of stockholders to force consideration of a proposal or for stockholders to take any action, including the removal of directors.
- *Notice Requirements for Stockholder Proposals and Director Nominations.* The Amended and Restated Bylaws provide advance notice procedures for stockholders seeking to bring business before the annual meeting of stockholders or to nominate candidates for election as directors at the annual meeting of stockholders. The Amended and Restated Bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude stockholders from bringing matters before the annual meeting of stockholders or from making nominations for directors at the annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions might also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of the Company.
- *No Cumulative Voting.* The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. The Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws do not provide for cumulative voting.
- *Issuance of Undesignated Preferred Stock* The Board will have the authority, without further action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the Board. The existence of authorized but unissued shares of Preferred Stock will enable the Board to render more difficult or to discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest, or other means.
- *Choice of Forum.* The Second Amended and Restated Certificate of Incorporation provides that the Chancery Court (or, if and only if the Chancery Court lacks subject matter jurisdiction, any state court located within the State of Delaware or, if and only if all such state courts lack subject matter jurisdiction, the federal district court for the District of Delaware) will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (1) any derivative action or proceeding brought on behalf of the Company; (2) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any current or former director, officer, or other employee of the Company or any stockholder to the Company or the Company's stockholders; (3) any action or proceeding asserting a claim against the Company or any current or former director, officer or other employee of the Company or any stockholder in such stockholder's capacity as such arising out of or pursuant to any provision of the DGCL, the Second Amended and Restated Certificate of Incorporation or the Amended and Restated Bylaws; (4) any action or proceeding to interpret, apply, enforce or determine the validity of the Second Amended and Restated Certificate of Incorporation or the Amended and Restated Bylaws (including any right, obligation or

remedy thereunder); (5) any action or proceeding as to which the DGCL confers jurisdiction to the Chancery Court; and (6) any action asserting a claim against the Company or any director, officer or other employee of the Company or any stockholder, governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants. The provisions would not apply to suits brought to enforce a duty or liability created by the Securities Act, the Exchange Act, or any other claim for which the U.S. federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, the Second Amended and Restated Certificate of Incorporation provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of the Second Amended and Restated Certificate of Incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

Limitation of Liability and Indemnification

The Amended and Restated Bylaws provide that the Company will indemnify its directors and officers, and may indemnify its employees and other agents, to the fullest extent permitted by Delaware law.

Delaware law prohibits the Second Amended and Restated Certificate of Incorporation from limiting the liability of the Company's directors for the following:

- any breach of the director's duty of loyalty to the Company or to its stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or unlawful stock repurchases or redemptions; and
- any transaction from which the director derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director, then the liability of the Company's directors will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. The Second Amended and Restated Certificate of Incorporation does not eliminate a director's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. This provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under the Amended and Restated Bylaws, the Company can purchase insurance on behalf of any person whom it is required or permitted to indemnify.

In addition to the indemnification required in the Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, the Company has entered into an indemnification agreement with each member of the Board and each of its officers. These agreements provide for the indemnification of the Company's directors and officers for certain expenses and liabilities incurred in connection with any action, suit, proceeding or alternative dispute resolution mechanism, or hearing, inquiry or investigation that may lead to the foregoing, to which they are a party or other participant, or are threatened to be made a party or other participant, by reason of the fact that they are or were a director, officer, employee, agent or fiduciary of the Company, by reason of any action or inaction by them while serving as an officer, director, agent or fiduciary, or by reason of the fact that they were serving at the Company's request as a director, officer, employee, agent or fiduciary of another entity. In the case of an action or proceeding by or in the right of the Company, no indemnification will be provided for any claim where a court

determines that the indemnified party is prohibited from receiving indemnification. We believe that these charter and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in the Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit the Company and its stockholders. Moreover, a stockholder's investment may be harmed to the extent the Company pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Listing of Securities

Our Class A common stock is listed on the Nasdaq Global Select Market under the symbol "LAZR." The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the Nasdaq Global Select Market or any securities market or other exchange of the preferred stock covered by such prospectus supplement.

Transfer Agent and Registrar

The transfer agent and registrar for our Class A common stock is American Stock Transfer & Trust Company, LLC.

DESCRIPTION OF OUR DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. Such convertible debt may be exchangeable for and/or convertible into shares of Class A common stock or any of the other securities that may be sold under this prospectus. The debt securities will be issued under one or more separate indentures between us and a designated trustee. We will include in a prospectus supplement the specific terms of each series of senior or subordinated debt securities being offered, including the terms, if any, on which a series of senior or subordinated debt securities may be convertible into or exchangeable for other securities. In addition, the material terms of any indenture, which will govern the rights of the holders of our senior or subordinated debt securities will be set forth in the applicable prospectus supplement.

We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

DESCRIPTION OF OUR WARRANTS

We may issue warrants to purchase our debt or equity securities or securities of third parties or other rights, including rights to receive payment in cash or securities based on the value, rate or price of one or more specified commodities, currencies, securities or indices, or any combination of the foregoing. Warrants may be issued independently or together with any other securities and may be attached to, or separate from, such securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent. The terms of any warrants to be issued and a description of the material provisions of the applicable warrant agreement will be set forth in the applicable prospectus supplement.

We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the warrants that we may offer under this prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

DESCRIPTION OF OUR UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete unit certificate that contains the terms of the units.

PLAN OF DISTRIBUTION

We may sell our securities from time to time in one or more transactions. We may sell our securities to or through agents, underwriters, dealers, remarketing firms or other third parties or directly to one or more purchasers or through a combination of any of these methods. In some cases, we or dealers acting with us or on behalf of us may also purchase our securities and reoffer them to the public. We may also offer and sell, or agree to deliver, our securities pursuant to, or in connection with, any option agreement or other contractual arrangement.

Agents whom we designate may solicit offers to purchase our securities.

- We will name any agent involved in offering or selling our securities, and disclose any commissions that we will pay to the agent, in the applicable prospectus supplement.
- Unless we indicate otherwise in the applicable prospectus supplement, agents will act on a best efforts basis for the period of their appointment.
- Agents may be deemed to be underwriters under the Securities Act, of any of our securities that they offer or sell.

We may use an underwriter or underwriters in the offer or sale of our securities.

- If we use an underwriter or underwriters, we will execute an underwriting agreement with the underwriter or underwriters at the time that we reach an agreement for the sale of our securities.
- We will include the names of the specific managing underwriter or underwriters, as well as the names of any other underwriters, and the terms of the transactions, including the compensation the underwriters and dealers will receive, in the applicable prospectus supplement.
- The underwriters will use the applicable prospectus supplement, together with the prospectus, to sell our securities.

We may use a dealer to sell our securities.

- If we use a dealer, we will sell our securities to the dealer, as principal.
- The dealer will then sell our securities to the public at varying prices that the dealer will determine at the time it sells our securities.
- We will include the name of the dealer and the terms of the transactions with the dealer in the applicable prospectus supplement.

We may solicit directly offers to purchase our securities, and we may directly sell our securities to institutional or other investors, as well as to certain persons pursuant to, or in connection with, any commercial agreement or other contractual arrangement. We will describe the terms of direct sales in the applicable prospectus supplement.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) of the Securities Act.

We may indemnify agents, underwriters and dealers against certain liabilities, including liabilities under the Securities Act. Agents, underwriters and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us or our respective affiliates, in the ordinary course of business.

We may authorize agents and underwriters to solicit offers by certain institutions to purchase our securities at the public offering price under delayed delivery contracts.

- If we use delayed delivery contracts, we will disclose that we are using them in the prospectus supplement and will tell you when we will demand payment and when delivery of our securities will be made under the delayed delivery contracts.

- These delayed delivery contracts will be subject only to the conditions that we describe in the prospectus supplement.
- We will describe in the applicable prospectus supplement the commission that underwriters and agents soliciting purchases of our securities under delayed delivery contracts will be entitled to receive.

Unless otherwise specified in connection with a particular underwritten offering of our securities, the underwriters will not be obligated to purchase offered securities unless specified conditions are satisfied, and if the underwriters do purchase any offered securities, they will purchase all offered securities.

In connection with underwritten offerings of the offered securities and in accordance with applicable law and industry practice, the underwriters in certain circumstances are permitted to engage in certain transactions that stabilize the price of our securities. Such transactions consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of our securities. If the underwriters create a short position in our securities in connection with the offering (i.e., if they sell more securities than are set forth on the cover page of the applicable prospectus supplement), the underwriters may reduce that short position by purchasing our securities in the open market or as otherwise provided in the applicable prospectus supplement. The underwriters may also impose a penalty bid, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. In general, purchases of a security for the purpose of stabilization or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases. The imposition of a penalty bid might also have an effect on the price of our securities to the extent that it were to discourage resales of our securities. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We may effect sales of securities in connection with forward sale, option or other types of agreements with third parties. Any distribution of securities pursuant to any forward sale agreement may be effected from time to time in one or more transactions that may take place through a stock exchange, including block trades or ordinary broker's transactions, or through broker-dealers acting either as principal or agent, or through privately-negotiated transactions, or through an underwritten public offering, or through a combination of any such methods of sale, at market prices prevailing at the time of sale, prices relating to such prevailing market prices or at negotiated or fixed prices.

The specific terms of the lock-up provisions, if any, in respect of any given offering will be described in the applicable prospectus supplement.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Orrick, Herrington & Sutcliffe LLP. Certain attorneys with Orrick, Herrington & Sutcliffe LLP and certain funds affiliated with the firm own and/or have an indirect interest in shares of Class A common stock, which represent less than 1% of our Class A common stock. Any underwriters or agents will be advised about other issues relating to the offering by counsel to be named in the applicable prospectus supplement.

EXPERTS

The financial statements of Luminar Technologies, Inc. as of and for the years ended December 31, 2020 and 2019 incorporated by reference in this prospectus by reference to Luminar Technologies, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2020 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to the Company and its securities, reference is made to the registration statement and the exhibits and any schedules filed therewith. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov.

We are subject to the information reporting requirements of the Exchange Act and we are required to file reports, proxy statements and other information with the SEC. These reports, proxy statements, and other information are available for inspection and copying at the SEC's website referred to above. We also maintain a website at www.luminartech.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information from other documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to the effectiveness of such registration statement) we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on [Form 10-K](#) for the year ended December 31, 2020, filed with the SEC on April 14, 2021;
- our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2021](#), [June 30, 2021](#), and [September 30, 2021](#), filed with the SEC on May 14, 2021, August 13, 2021 and November 15, 2021, respectively;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2020, from [our definitive proxy statement](#) filed with the SEC on April 30, 2021;
- our Current Reports on Form 8-K filed with the SEC on [February 3, 2021](#), [February 12, 2021](#), [March 11, 2021](#), [June 10, 2021](#), [December 14, 2021](#), [December 15, 2021](#), [December 17, 2021](#) and [December 23, 2021](#) (in each case, except for information contained therein which is furnished rather than filed); and
- the description of our Class A common stock in our registration statement on [Form 8-A](#) filed with the SEC on January 31, 2019, including any amendments thereto or reports filed for the purpose of updating such description.
- All documents filed by Luminar under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, that are filed (excluding, however, information we furnish to the SEC) (i) by us after the date of the initial registration statement and prior to its effectiveness and (ii) by us after the date of this prospectus and prior to the termination of any offering under this registration statement.

Any statement contained in this prospectus, or in a document all or a portion of which is incorporated by reference, shall be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus or any document incorporated by reference modifies or supersedes such statement. Any such statement so modified or superseded shall not, except as so modified or superseded, constitute a part of this prospectus.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered a copy of the documents incorporated by reference into this prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following:

Luminar Technologies, Inc.
2603 Discovery Drive, Suite 100
Orlando, Florida 32826
Telephone: (407) 900-5259

You may also access these documents, free of charge on the SEC’s website at www.sec.gov or on the “Investors” page of our website at luminartech.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

We have not authorized anyone to provide you with information other than what is incorporated by reference or provided in this prospectus or any prospectus supplement. We are not making an offer of these securities in any state where such offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

6,900,000 Shares

LUMINAR

LUMINAR TECHNOLOGIES, INC.

Class A Common Stock

PROSPECTUS SUPPLEMENT

June 3, 2022