



**Scott A. Graeff, President and CEO**

*Stifel Cross Sector Insight Conference*

*June 8-10, 2020*

# Safe Harbor

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## Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This presentation includes information that constitutes “forward-looking statements” made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. These statements include the company's expectations regarding the company's future financial performance, including 2020 guidance, and the potential demand for its products, the company's growth potential, its balance sheet and capitalization, its technological advantages, the potential impacts of the COVID-19 pandemic on its business, operations and financial results, and market trends. Management cautions the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of the company may differ materially from the future results, performance, and/or achievements expressed or implied by these forward-looking statements as a result of a number of factors. These factors include, without limitation, failure of demand for the company's products and services to meet expectations, failure of target markets to grow and expand, technological and strategic challenges, uncertainties related to the ultimate impact of the COVID-19 pandemic and those risks and uncertainties set forth in the company's periodic reports and other filings with the Securities and Exchange Commission ("SEC"). Such filings are available on the SEC's website at [www.sec.gov](http://www.sec.gov) and on the company's website at [www.lunainc.com](http://www.lunainc.com). The statements made in this presentation are based on information available to Luna as of the date of this presentation, June 8, 2020, and Luna undertakes no obligation to update any of the forward-looking statements after the date of this presentation, except as required by law.

## Adjusted Financial Measures

In addition to U.S. GAAP financial information, this presentation includes Adjusted EBITDA, a non-GAAP financial measure. This non-GAAP financial measure is in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. A reconciliation of Adjusted EBITDA to Net Income is included in the appendix to this presentation.

# Luna – Enabling the Future with Fiber

- **Proprietary**, measurement technology, offering **unprecedented** combination of resolution, accuracy and speed
- Customers in **attractive markets**: Military and Defense, Communications, Energy & Automotive
- Positioned to **take advantage of trends** such as vehicle light-weighting and increasing demands on data centers and broadband capacity
- **Adequately capitalized** to fund growth
- Long-tenured, **experienced** executive team / board
- Corporate culture of **innovation and integrity**



# Luna is a global company



### History

Incorporated 1990  
IPO 2006



### Reporting Segments

Lightwave  
Luna Labs



### Revenue

FY19 \$70.5M  
FY20 Guidance  
\$81M-84M



### AEBITDA

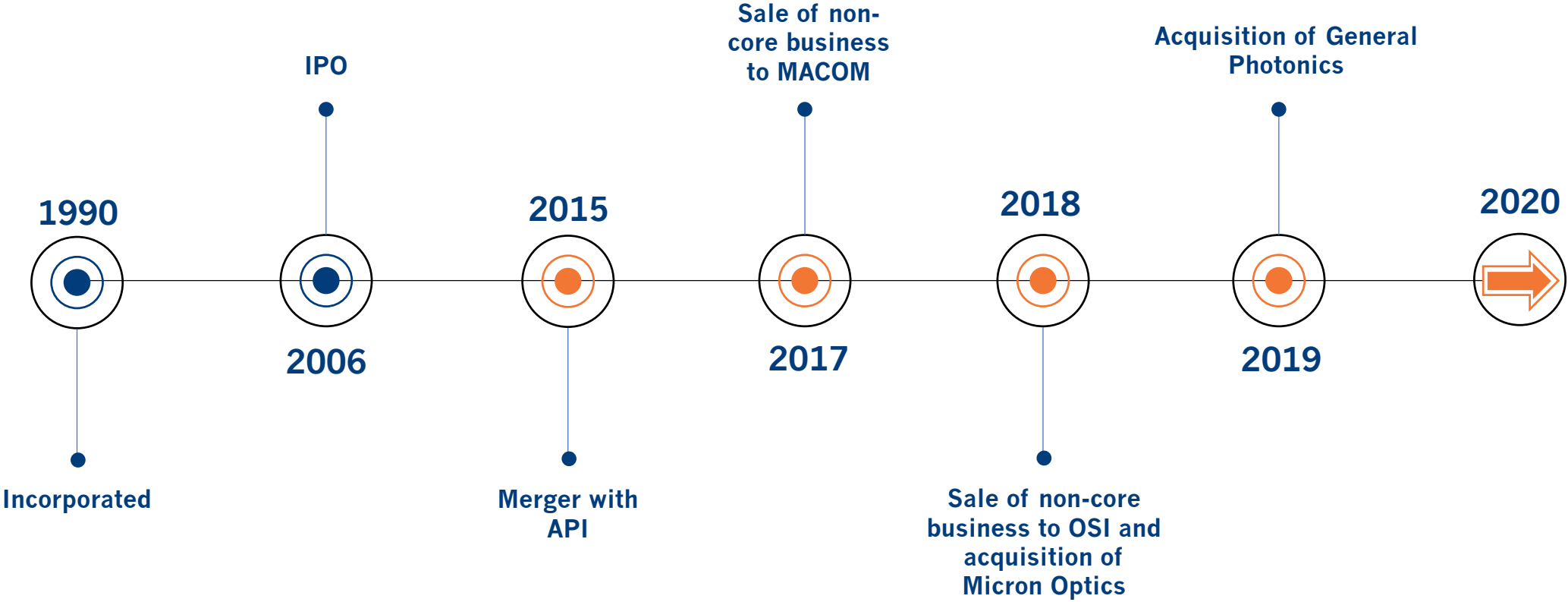
FY19 \$9.5M  
FY20 Guidance  
\$10M-12M



270+ Employees

# Luna has a clear vision and established history

## Vision: Enabling the Future with Fiber



# Compelling business model with strong growth potential

## Revenue Growth



Organic Growth:  
Mid-to High-teens

Lightwave = 18% to 20%  
Luna Labs = 6% to 8%

Strategic M&A

Within core focus and accretive

## Margin Expansion



Gross Margin

Increase 75-100 bps annually

Operating Margin

Increase ~250 bps annually

## Shareholder Return



Cash Generation

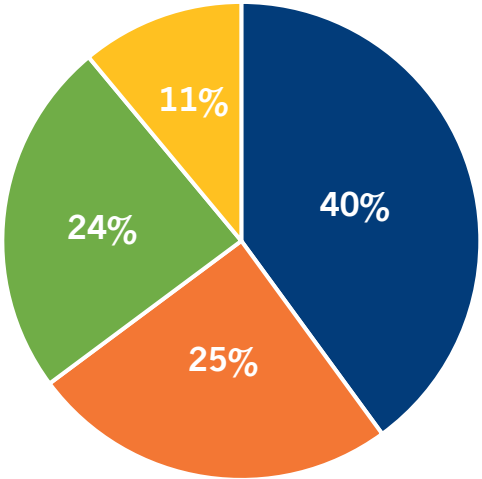
Increasing AEBITDA

Non-GAAP EPS

Double-digit annual growth

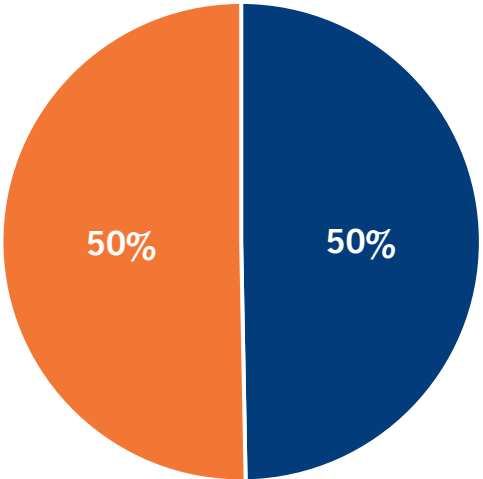
# Lightwave 2019 revenue<sup>1</sup> snapshot

## Four Locations



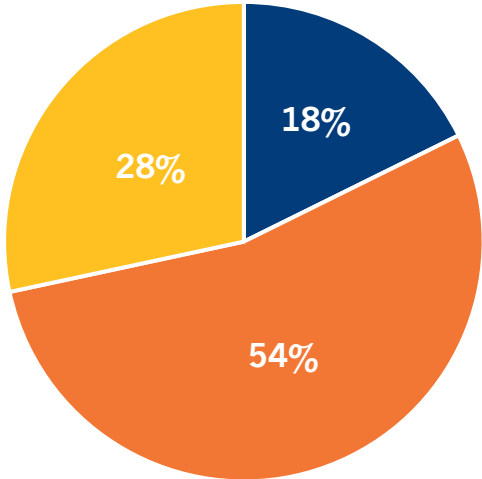
- Blacksburg
- Atlanta
- Chino
- Ann Arbor

## Two Target Verticals



- Sensing
- Comms Test

## Global Footprint



- EMEA
- Americas
- Asia Pac

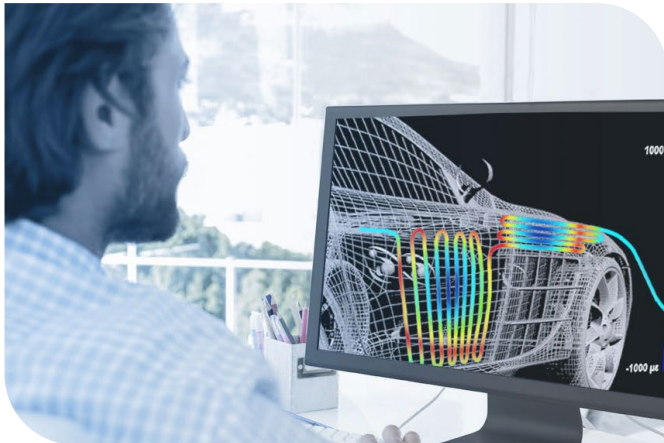
<sup>1</sup>Lightwave product revenues for FY 2019

# Luna Overview

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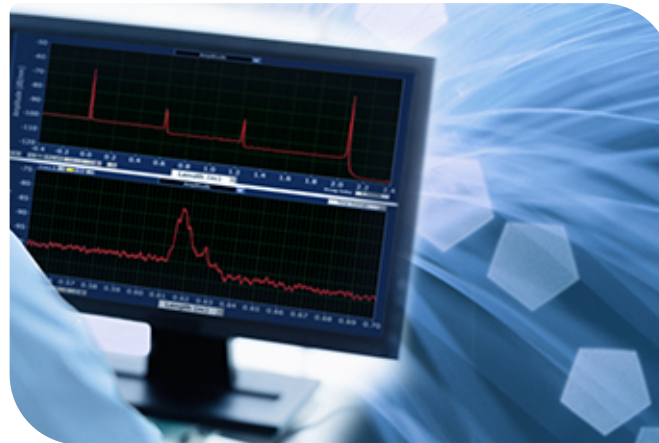
## Lightwave

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### Sensing

- Short-range, high resolution
- Long-range, high speed
- Material thickness



### Comms Test

- Components
- Short-haul network

## Luna Labs

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### Contract Research

- Materials
- Systems & Analytics
- Health Sciences



# Where Does Luna Play?

	Comms Test	Sensing
Market size*	\$900M	\$1.6B
Luna growth	15%-20%	20-25%
Drivers	5G, Silicon Photonics	Lightweighting, Smart Infrastructure, IoT
Key competition	Keysight, Viavi, Exfo	HBM, Vishay, National Instruments



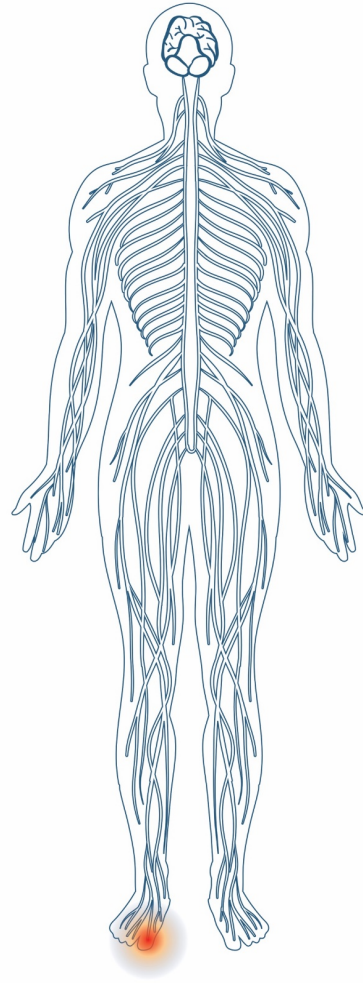
**Comms Test:**  
5G Buildout  
Field Support

**Sensing:**  
Smart Infrastructure  
Lightweighting  
Process control & NDE

\*Total SAM based on Luna estimates and published market reports

# Sensing

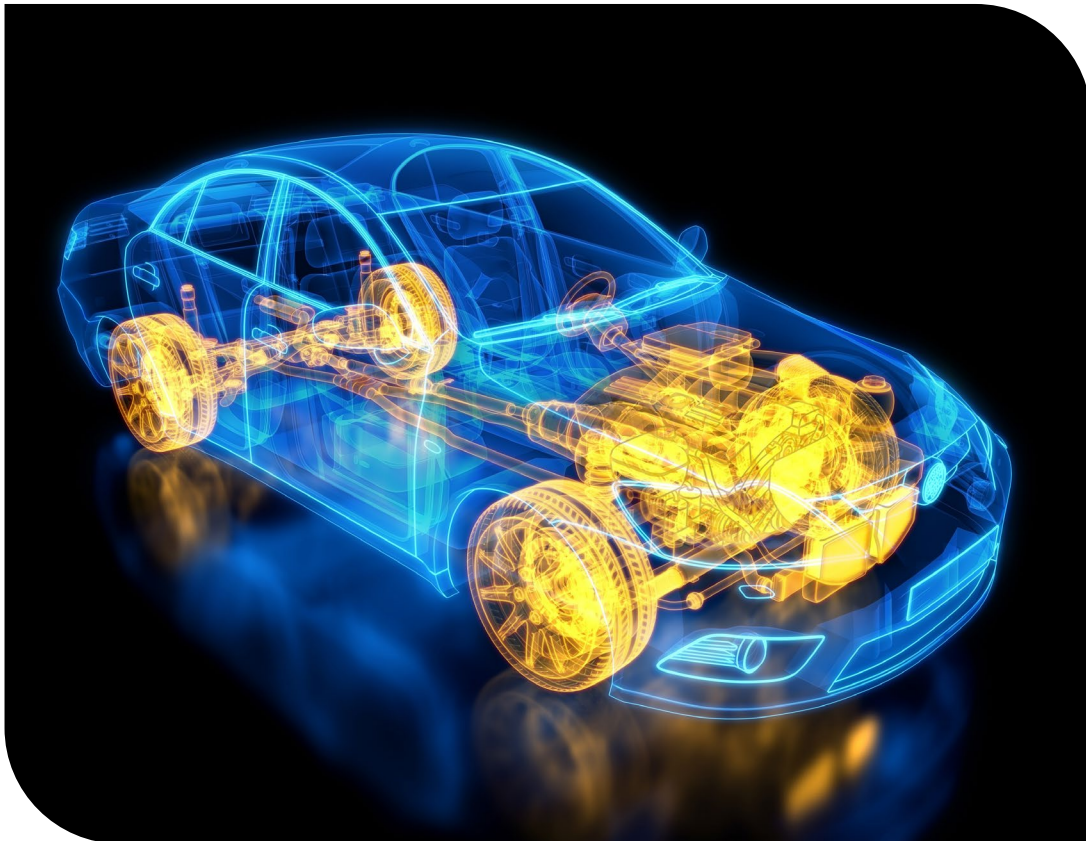
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- Fiber optic sensors are the “nerves” of smart materials
- Luna’s products are the “brain” that collects and aggregates data from fiber sensor “nerves”

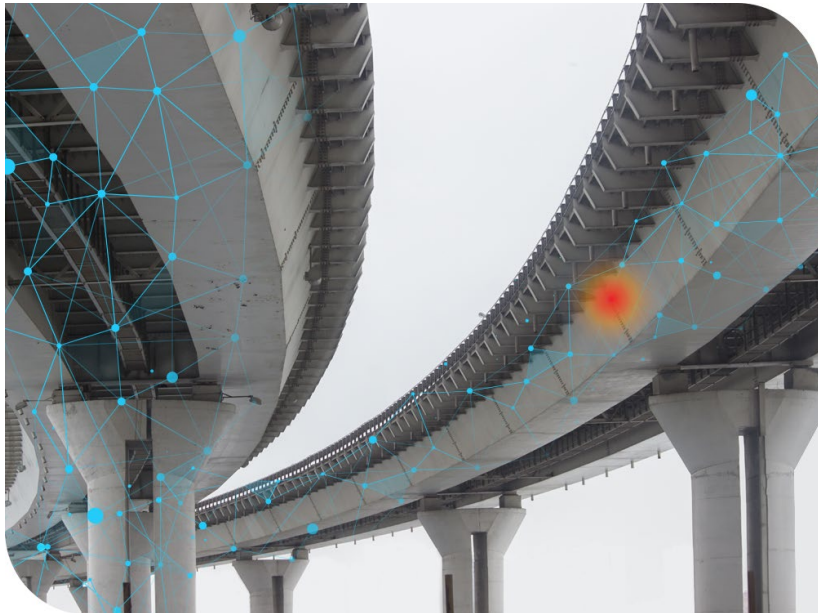
# Sensing: Short-range, high-resolution

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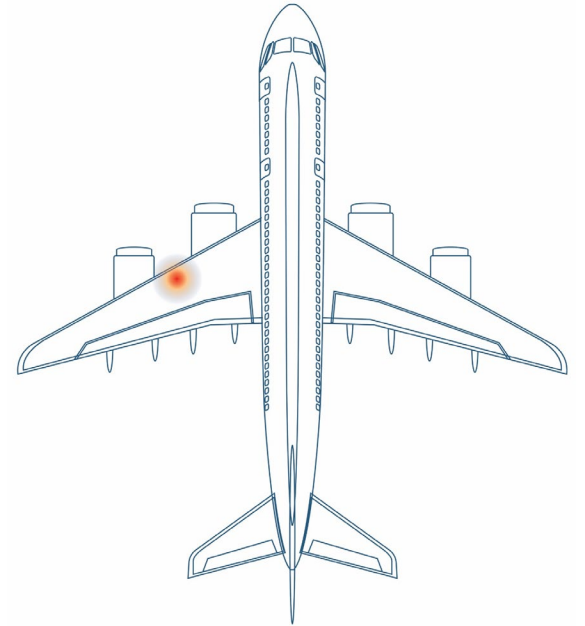


- Product: ODiSI
- High-Definition Fiber Optic Sensing
  - Measuring strain and temperature in composites and other advanced materials
  - Focus on military and commercial aerospace and automotive

# Sensing: long-range, high-speed



- Product: Hyperion
- High-Speed, Long-Range FBG Sensing
  - Measuring strain, temperature, acceleration, displacement and pressure
  - Focus on structural health and security
    - Buildings, tunnels, bridges
    - Perimeter security



# Sensing: Material thickness

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- Product: Terahertz technology
- Layer thickness measurements for process control, inspection and non-destructive testing
  - Advanced technology measures thickness of opaque materials
  - Unique measurement of composites and coatings with easy to use hand-held tools
  - Focus on manufacturing environments and field test for military-aerospace
    - Plastic and industrial packaging
    - Used extensively on F35 and F22 for anti-radar surface treatment

# Comms Test

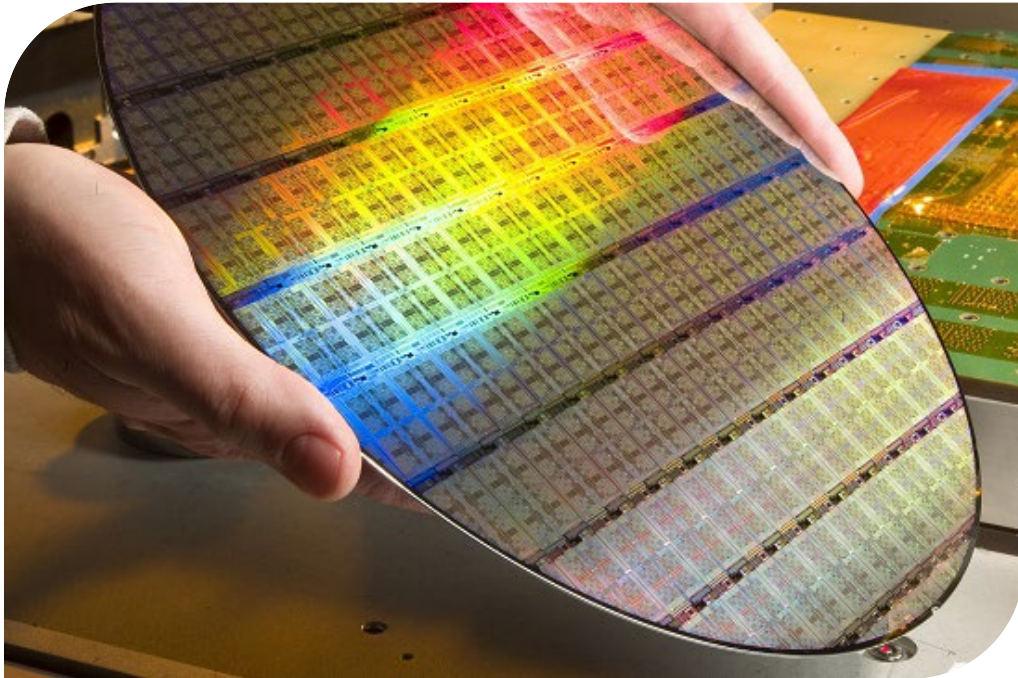
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- Increased data and video consumption
  - Video forecasted to represent 82% of all IP traffic in 2022, 34% CAGR
- Growth in mobile and 4G/5G
  - Mobile data traffic growing at 46% CAGR
- Cloud services and adoption of Internet of Things
  - Data center traffic growing at 26% CAGR
  - 28.5 billion IoT networked devices by 2022

# Comms Test: Components

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- Product: Optical Vector Analyzer (OVA)
- Ensuring speed at the chip level
- Unprecedented visibility inside devices - you can't fix what you can't see
- Reduces time and cost associated with the development of high-speed optical components
- Focus on enabling the carriers to move to 5G networks

# Comms Test: Short-haul network

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- Product: Optical Backscatter Reflectometer (OBR)
- Bandwidth demands continue to drive double-digit connectivity growth
- Delivers unprecedented visibility into short-haul networks
- Emerging market for on-board aircraft communications
- Ensuring network “up time” on Lockheed Martin’s F-35





# Luna Labs

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- Work with universities and government research labs to explore technological feasibility with a goal toward proof of concept
- Collaborate with prime contractors, government offices and federally-funded R&D centers
- Work with contract manufacturers, suppliers, licensees and distributors to develop everything from small-scale prototypes up to and including market-ready products
- Based in Charlottesville, VA

# 1Q FY20 Results



# First-quarter 2020: Key Financial Results

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- Total revenues of \$17.1M; up 16% year-over-year:
  - Products and licensing: \$10.3M; up 26% year-over-year
  - Technology development: \$6.8M; up 3% year-over-year
- Operating income improved to \$0.4 million in Q1 2020 from a loss of (\$0.9) in Q1 2019
- Net income from continuing operations of \$0.3M, or \$0.01 per fully diluted share, for the three months ended March 31, 2020, compared to \$1.1M, or \$0.03 per fully diluted share, for the three months ended March 31, 2019
  - Q1 2019 included a \$1.9 million income tax benefit
- Adjusted EBITDA increased to \$1.6M in Q1 2020, versus \$1.0M in Q1 2019
- Reaffirmed 2020 Outlook\*

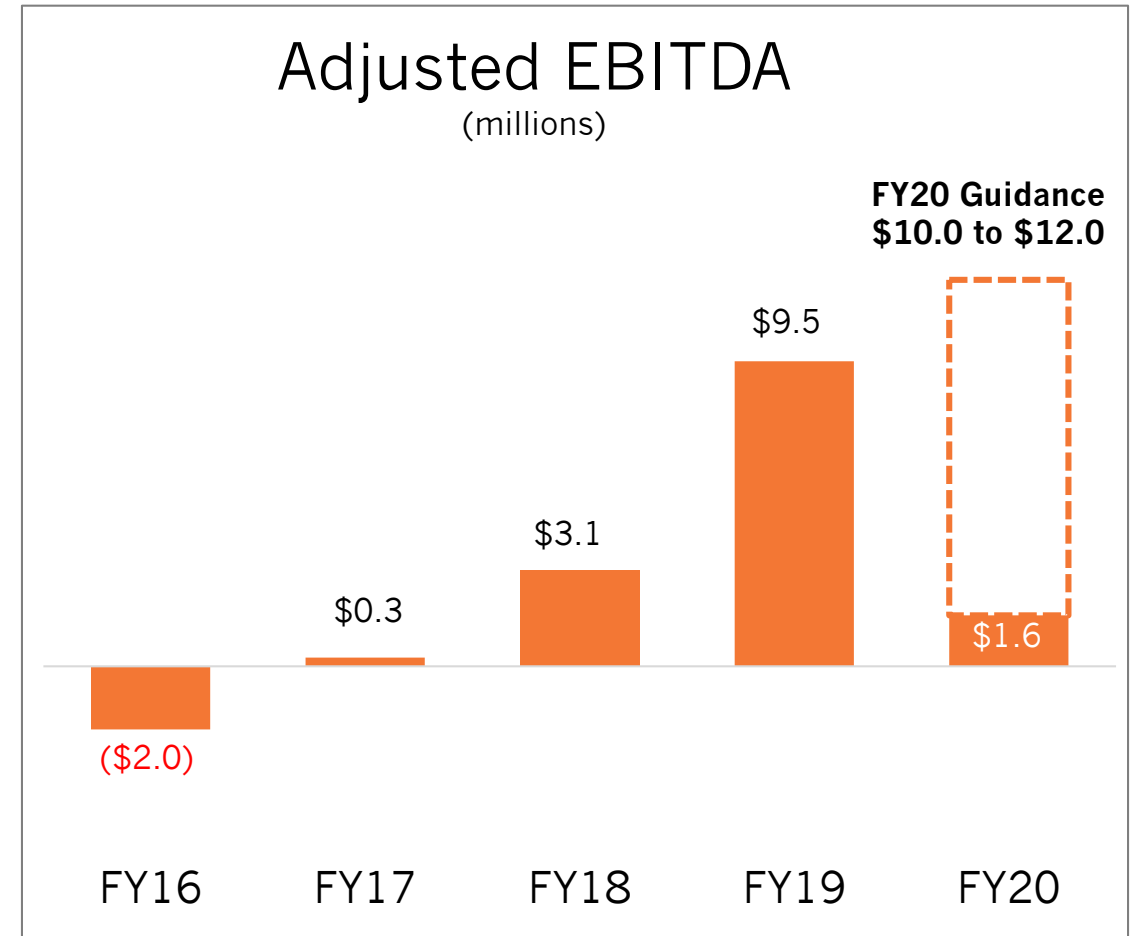
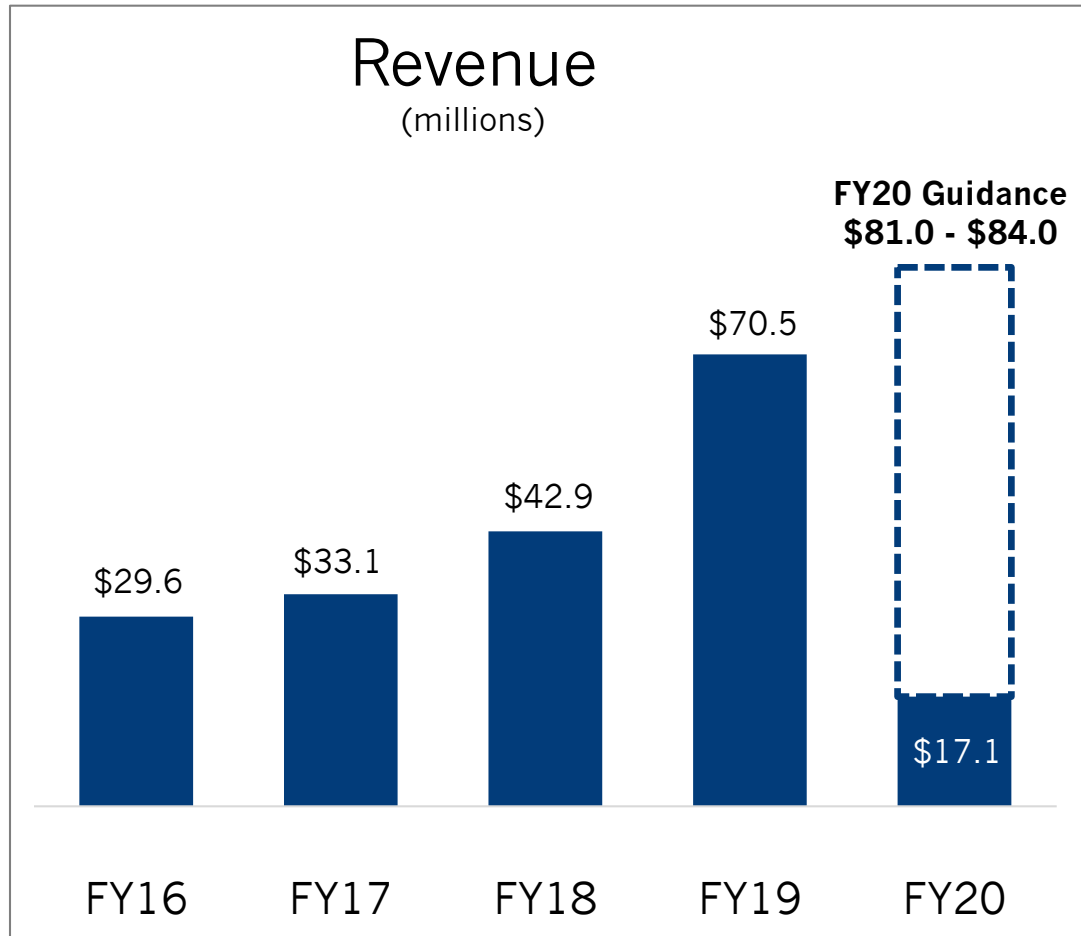
\*Outlook as of May 7, 2020

# First-quarter 2020 and Other Recent Accomplishments

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- Reported strong first-quarter 2020 financial results
- Featured in *Engineering360*, for Luna's HYPERION and ODiSI systems designed into the DEFIANT racing yacht, competing in the 36th America's Cup as American Magic
- Participated in important Photonics West and OFC trade shows in person
- Released industry's highest resolution portable reflectometer: OBR 6225
- Collaborated with Museo del Cenacolo Vinciano (Milan, IT) to leverage TeraMetrix THz equipment to examine Leonardo Da Vinci's famous *Last Supper* painting
- Collaborated with OESH to design / produce flexible 3D printed respirator masks for use during N95 respirator mask shortage

# Strong Financial Results\*



\*Outlook as of May 7, 2020

# A Flexible Balance Sheet and Strong Cash Position

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- Strong balance sheet on March 31, 2020:
  - \$85.0M in total assets
    - \$26.3M in cash and cash equivalents
    - \$41.9M in working capital
- Access to \$10 million revolving credit facility, if needed
- Continued focus on working capital and reinvestment in business in order to generate long-term sustainable growth

## 2020 Financial Outlook\*

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- Maintaining FY2020 outlook; guiding towards the low end of the ranges:
  - Total revenues of \$81M to \$84M
  - Adjusted EBITDA of \$10M to \$12M
- Anticipating results will be weighted to the second half, with the percentage split in H1 2020 expected to be slightly below historical trends

\*Outlook as of May 7, 2020

# Luna – Enabling the Future with Fiber

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- Positioned to **take advantage of trends** such as vehicle light-weighting and increasing demands on data centers and broadband capacity
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# Appendix



# Reconciliation of Net Income to Adjusted EBITDA: Full Year

	Year Ended December 31,			
	(unaudited)			
	2016	2017	2018	2019
<b>Reconciliation of EBITDA and Adjusted EBITDA</b>				
Net (loss)/income	\$ (2,370)	\$ 14,615	\$ 11,004	\$ 5,343
Less: income from discontinued operations, net of income taxes	300	15,866	9,766	-
<b>Net income from continuing operations</b>	<b>(2,670)</b>	<b>(1,251)</b>	<b>1,238</b>	<b>5,343</b>
Interest expense	319	217	124	16
Investment income	-	-	(549)	(394)
Income tax (benefit)/expense	(135)	(1,148)	48	(1,654)
Depreciation and amortization	1,466	1,137	908	2,503
<b>EBITDA</b>	<b>(1,020)</b>	<b>(1,045)</b>	<b>1,769</b>	<b>5,814</b>
Share-based compensation	860	715	628	1,544
Non-Recurring Charges (1)	-	596	751	1,390
Amortization of Inventory Step-up	-	-	-	725
<b>Adjusted EBITDA</b>	<b>\$ (160)</b>	<b>\$ 266</b>	<b>\$ 3,148</b>	<b>\$ 9,473</b>

(1) Non-recurring charges include the following: 2017) CEO separation costs and other share-based compensation; 2018) Transaction-related expenses associated with the acquisition of Micron Optics, Inc.; 2019) Transaction related expenses and inventory step-up amortization relate to General Photonics acquisition and CFO transition expenses

# Reconciliation of Net Income to Adjusted EBITDA

	Three Months Ended	
	March 31,	
	2020	2019
	(Unaudited)	
<b>Reconciliation of EBITDA and Adjusted EBITDA</b>		
Net (loss)/income	\$ (1,116)	\$ 1,126
Loss from discontinued operations, net of income tax benefit of \$464	1,436	-
<b>Net income from continuing operations</b>	<b>320</b>	<b>1,126</b>
Interest expense	-	11
Investment income	(59)	(171)
Income tax expense/(benefit)	138	(1,865)
Depreciation and amortization	679	513
<b>EBITDA</b>	<b>1,078</b>	<b>(386)</b>
Share-based compensation	502	343
Non-Recurring Charges (1)	-	898
Amortization of Inventory Step-up	-	104
<b>Adjusted EBITDA</b>	<b>\$ 1,580</b>	<b>\$ 959</b>

(1) Non-recurring charges consist of transaction-related expenses related to the acquisition of General Photonics.