



# INVESTOR PRESENTATION NOVEMBER 2021

NASDAQ: LPTH

**GLOBAL LEADER**  
IN OPTICAL TECHNOLOGY



# Safe Harbor Statement

This presentation contains “forward-looking” statements that are based on our beliefs and assumptions and on information currently available to us. Forward-looking statements include information concerning our possible or assumed future results of operations, business strategies, product development plans, competitive position, potential growth opportunities, the effects of competition and the expected effects on the Company’s business from the COVID-19 pandemic. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as “anticipate,” “believe,” “could,” “seek,” “estimate,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements represent our beliefs and assumptions only as of the date of this presentation. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

This presentation includes certain non-GAAP financial measures as defined by the SEC rules. We believe these non-GAAP financial measures are appropriate indicators to assist in the evaluation of our operating performance on a period-to-period basis. We have provided a reconciliation of those measures to the most directly comparable GAAP measures, which is available in this presentation.

# Optics & Photonics Enabling Technologies

***“Although the study of light has been underway for centuries, it is only in the last 40 years that optics and photonics has become a dominant field, with impact in almost every aspect of our lives, from entertainment, to manufacturing, to medicine, to public safety, to communications.***

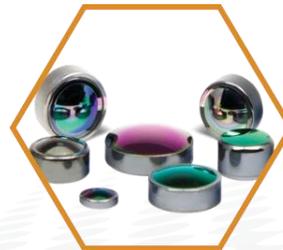
***“In the 20th century, electronics was the dominant influencing technology, enabled by optics. The 21st century is the “Age of Light”, a century that will have optics and photonics as the dominant influencing technology.”***

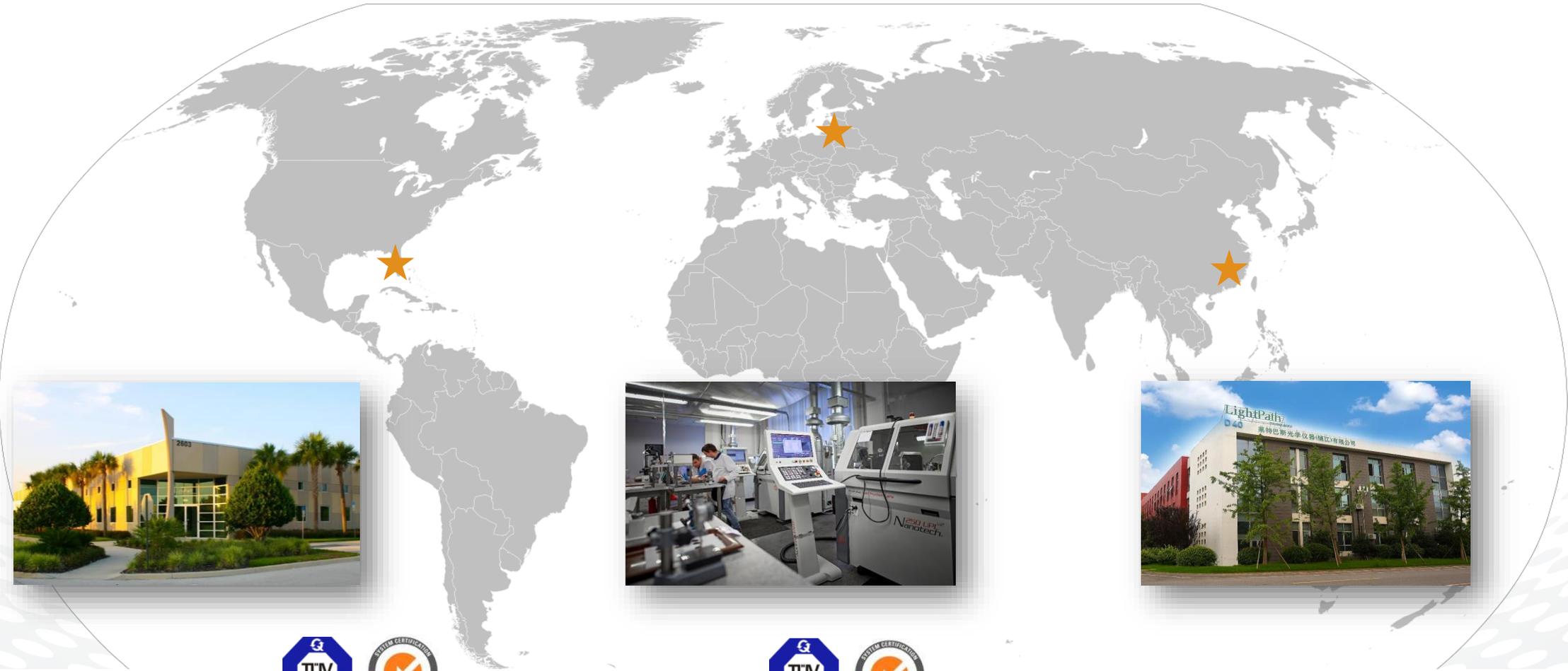
**The science and technology of light: lasers, LEDs,  
LCDs, optical fibers, and imaging systems**

**We are a preferred partner leveraging  
our optical expertise to design and  
deliver innovative OEM solutions that  
enable the success of our customers**

# The Foundation of Our Value Drivers

- ❖ Leading global provider of OEM optical solutions for over 30 years
- ❖ Large and growing portfolio of precision molded visible and infrared optics
- ❖ Proprietary manufacturing techniques and vertical integration
- ❖ Expertise in cost-efficient fabrication for high-volume applications
- ❖ Diversified end markets include industrial, commercial, medical, defense, telecom
- ❖ Typical design win has a lifetime of 5-15 years
- ❖ Approx. 350 employees in US, China and Europe
- ❖ FY21 \$38.5M Revenue; 10% Annual Growth





## Headquarters: Orlando, Florida

- Prototyping
- R&D
- Molded lens manufacturing
- Chalcogenide production
- Diamond turned manuf.
- Coating
- Capacity expansion



## Riga, Latvia

- Infrared optics manufacturing
- Diamond turned/CNC polishing
- Crystal growth
- Coating capacity expansion



## Zhenjiang, China

- Molded lens volume manufacturing
- Coating
- Capacity expansion

# Complete Vertical Integration



**Raw Materials**



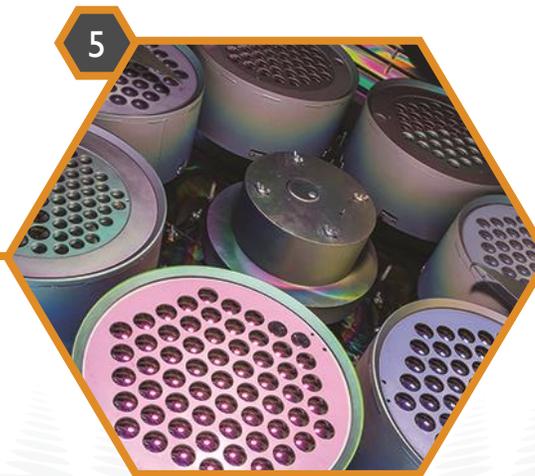
**Glass Boule Production**



**Glass Preform**



**Lens Molding**



**Coating**



**Final Assembly**



Corning sells its PGM business to Geltech

1994



Invests in wholly-owned China facility for high-volume manufacturing demand

2000

Geltech for molding oxide glasses for visible/NIR



Fabrication of BD6™ chalcogenide glass

2016

Acquires ISP Optics to expand manufacturing capabilities in the IR



Precision molding of freeform glass optics

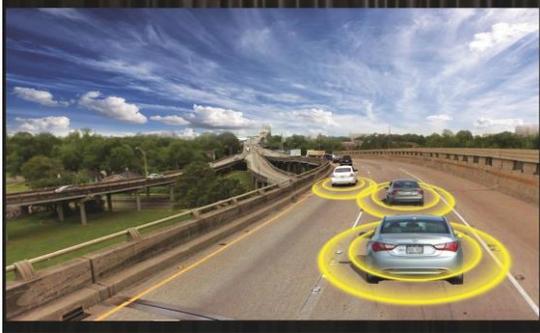
2018

BD6™ Thermal Imaging Lens Assemblies



2021

# Markets We Serve



# Strategic Plan Implemented Beginning in Fiscal 2021

- ❖ Capitalizing on optics as an enabling technology that is increasingly pervasive among various industries and markets
- ❖ Prioritizing our key differentiators, including our deep design and manufacturing expertise, coupled with key optical technologies and low cost, vertically integrated global manufacturing
- ❖ Continuous improvement through operational excellence
- ❖ Engaging in a solutions-oriented approach for high value customers
- ❖ Investing in our people to enable execution of our strategy, as we elevate our design and engineering talent and continue to build a sales force that can focus and prioritize customer opportunities that align with our strategic goals
- ❖ Utilize strategic acquisitions to complement and expand capabilities

***“This strategy is one that is based on our strengths and our core capabilities to address the largest and fastest growing trends in our industry for visible and infrared optical solutions.”***

-- Sam Rubin, Chief Executive Officer

**Sam Rubin**  
President &  
Chief Executive Officer

Appointed President, CEO and to the Board of Directors in 2020, he most recently was General Manager at Thorlabs Inc. where he was responsible for the Imaging Systems Division, a standalone organization with its own sales and marketing. At Thorlabs, Mr. Rubin had global responsibility for all Life Science activities, and was founder of the company's fast-growing operations in China. Prior, he co-founded XLight Photonics, an optical communication startup, which was later sold to a private equity firm. Mr. Rubin holds a Bachelor of Science degree in Electronic Engineering from Ben Gurion University, a Master of Business Administration degree from New York University, Stern School of Business, and is a graduate of the Executive Education, Program for Leadership Development at Harvard Business School.

Joined Company  
in 2020

**Albert Miranda**  
Chief Financial Officer

Appointed VP of Finance and Chief Financial Officer in April 2021, Mr. Miranda is a proven strategic executive leader known for delivering high financial growth across a broad group of products and services. He attained significant professional experience and management expertise through key functional areas encompassing finance, operations, business development, sales, marketing, human resources, and information technology. For the past 12 years, he has been with Jenoptik North America, Inc. and held the positions of President and Chief Financial Officer. Earlier, he held senior level management, finance and operational positions in optical products groups within Carl Zeiss AG and served in the finance department for a division of BASF SE.

Joined Company  
in 2021

**Mark Palvino**  
VP, Global Sales & Marketing

Most recently at MKS Instruments where he was responsible for the global sales of the Newport optical components business, Mr. Palvino brings to LightPath over 25 years of sales leadership. He holds a B.S. in Optics from the Hajim School of Engineering and Applied Sciences at the University of Rochester, and previously held leadership roles at Ambrell Corporation, Optimax Systems, Inc. and Zygo Corporation.

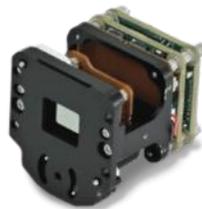
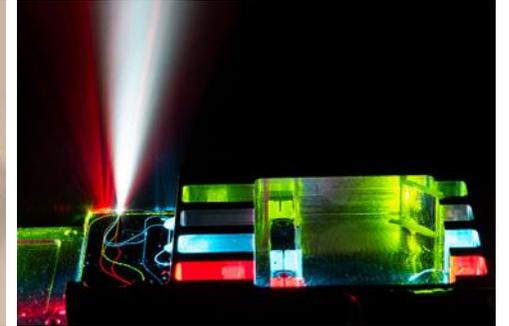
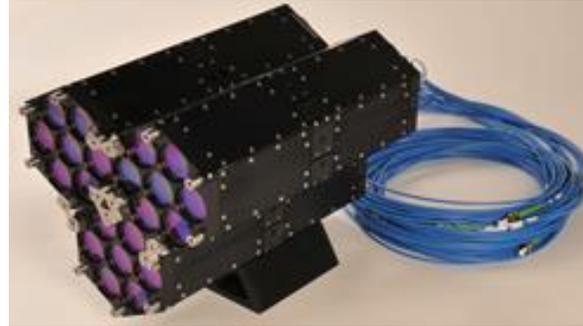
Joined Company  
in 2020

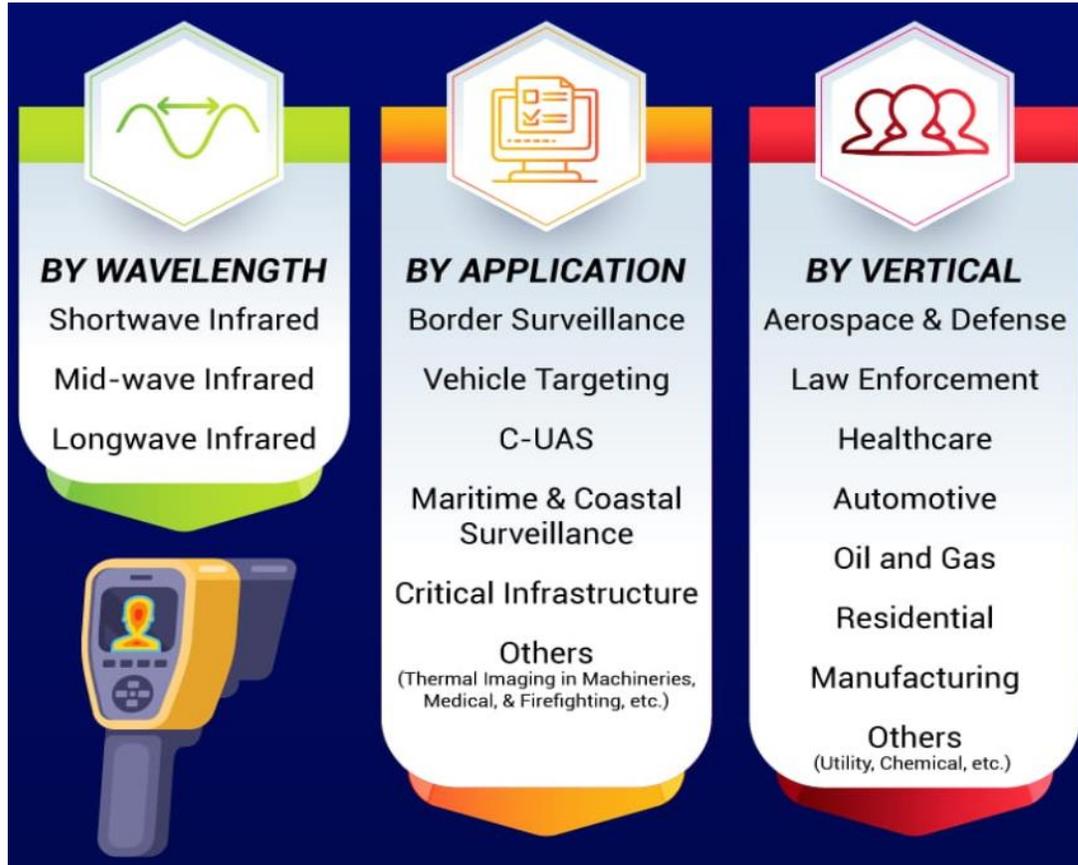
**Peter Greif**  
VP, Operations

Peter Greif was named VP of Operation for LightPath Technologies in 2021 to lead the efforts on aligning operations, sales, manufacturing, and engineering within all global business lines. Prior to joining LightPath, Mr. Greif served as the Business Director for Jabil Inc., managing operations in Europe, Mexico, and Asia, and as the VP of Operations for Steris Healthcare, North American Operations. Mr. Greif holds an MBA in Operations and Finance from Carnegie Mellon University, an MS in Industrial Engineering from Lehigh University, and an undergraduate degree in Industrial Engineering from Clemson University.

Joined Company  
in 2021

Optical  
Engineered  
Solutions – The  
Optical Engine



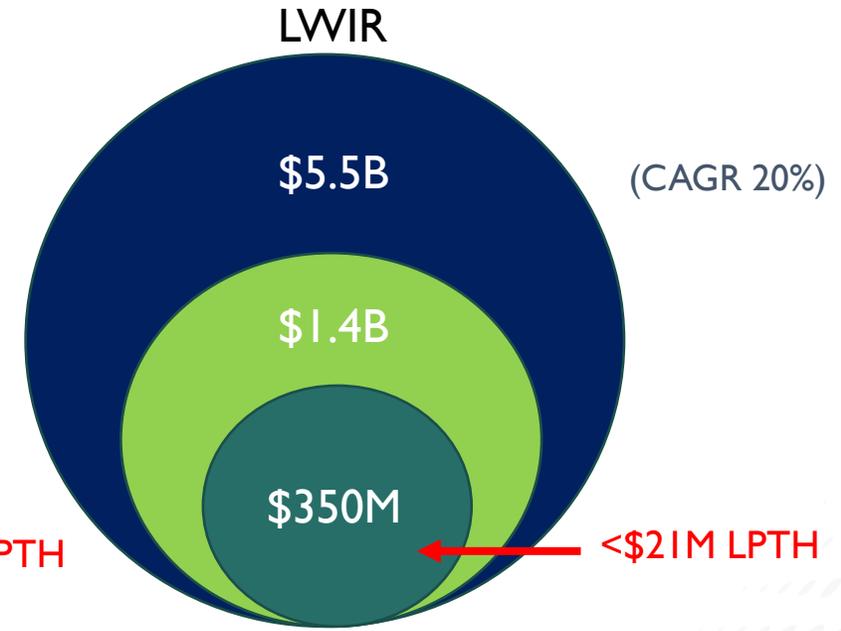
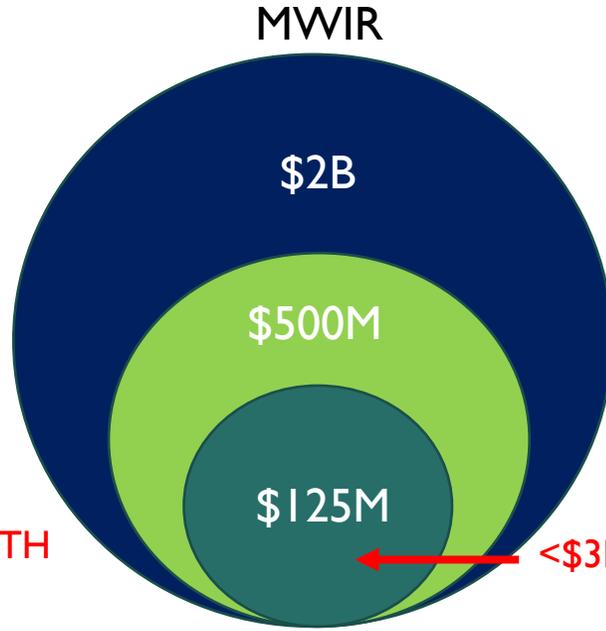
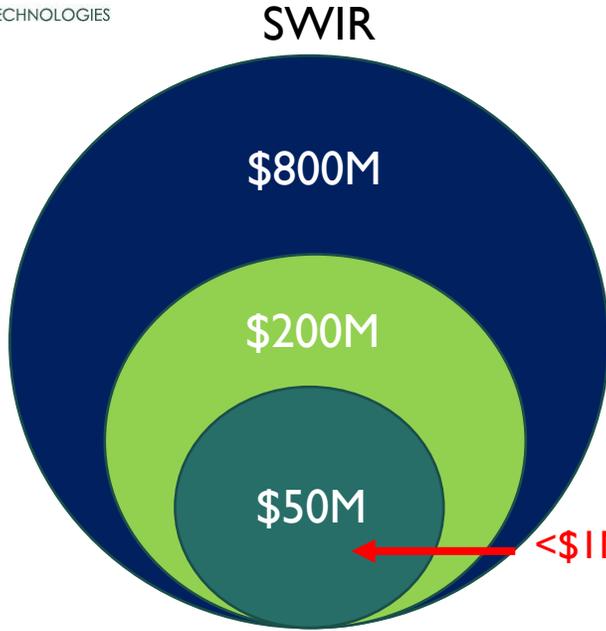


# Infrared Imaging

TAM

SAM

SOM



Key Applications

ADAS  
LiDAR  
Environmental Monitoring

Environmental Monitoring  
Gas Detection  
Surveillance - ISR

Thermal Cameras / Scopes  
ADAS  
Temperature Detection  
Select Military Programs

Market Trends

Rising adoption of LiDAR technology that benefits public safety and security  
Drones / UAV

Rising adoption of technology that benefits public safety and security  
Military reconnaissance  
Satellite / UAV

Rising adoption of thermal imaging that benefits public safety and security  
COVID  
Lower-cost detectors

Key Companies

Luminar, Trimble, Lumibird, Mobileeye, Aeye, Blickfeld, RIEGL, Velodyne, Waymo

Ophir, RP Optical, Stingray, Teledyne FLIR

FLIR, BAE Systems, DRS, Fluke, ATN, Hikvision, Lynred, Teledyne DALSA, Safran Optics I, Seek

# Why Infrared Imaging

Growing market

Changing technology

Less competition. Existing Engineered Solutions are distributed between multiple companies

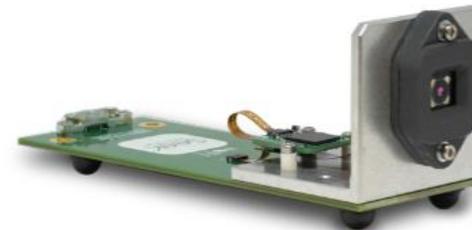
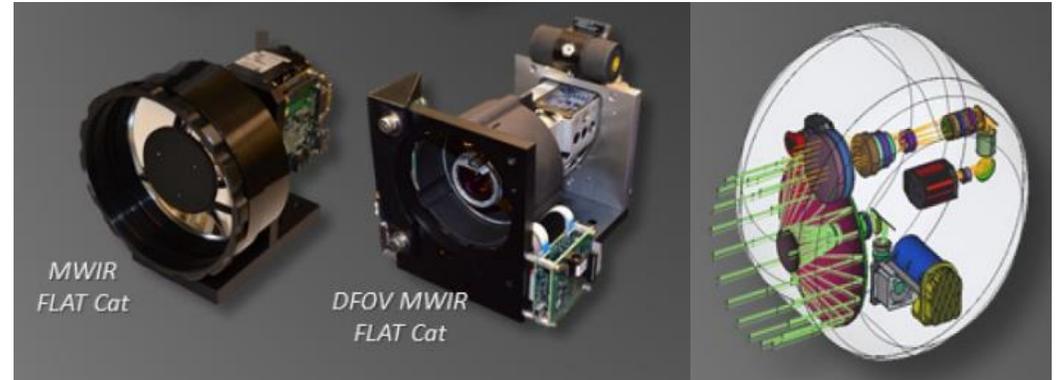
Had been primarily serving the defense industry, supply chain has not consolidated

Molding technology is a key element in the future of this segment

A current strength of ours

Higher margins

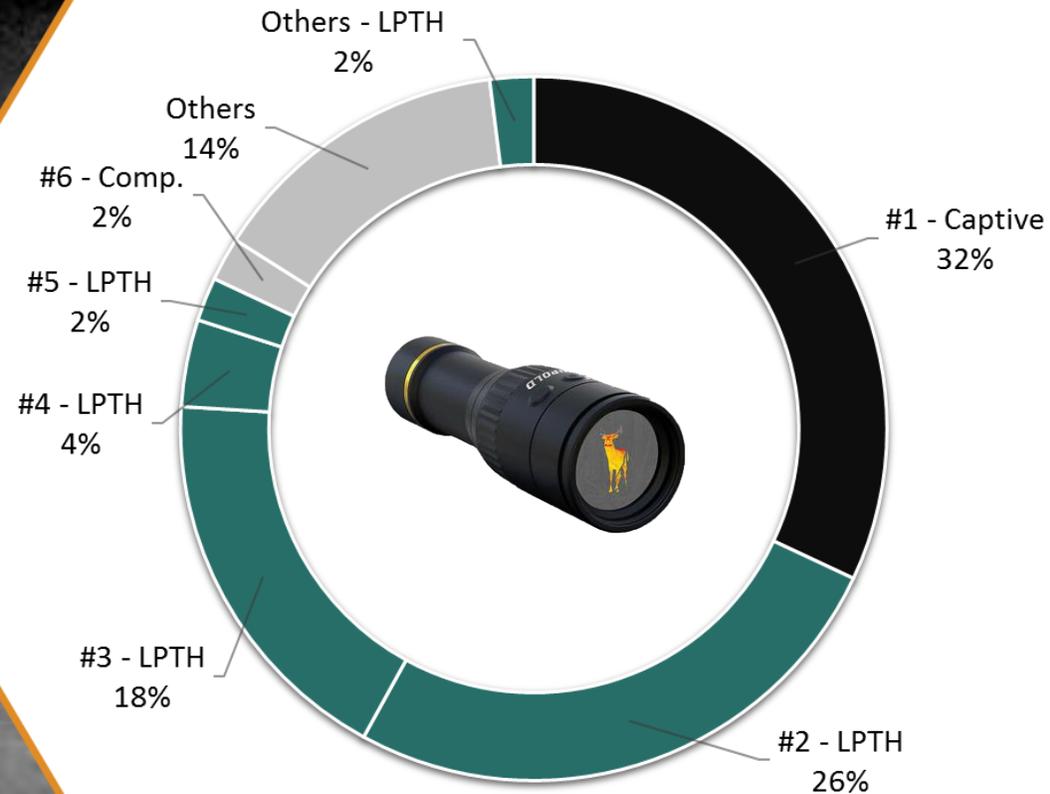
Select Programs



# The Worldwide Market Leader in Infrared Sporting Optics



## Commercial Sporting Optics World Market



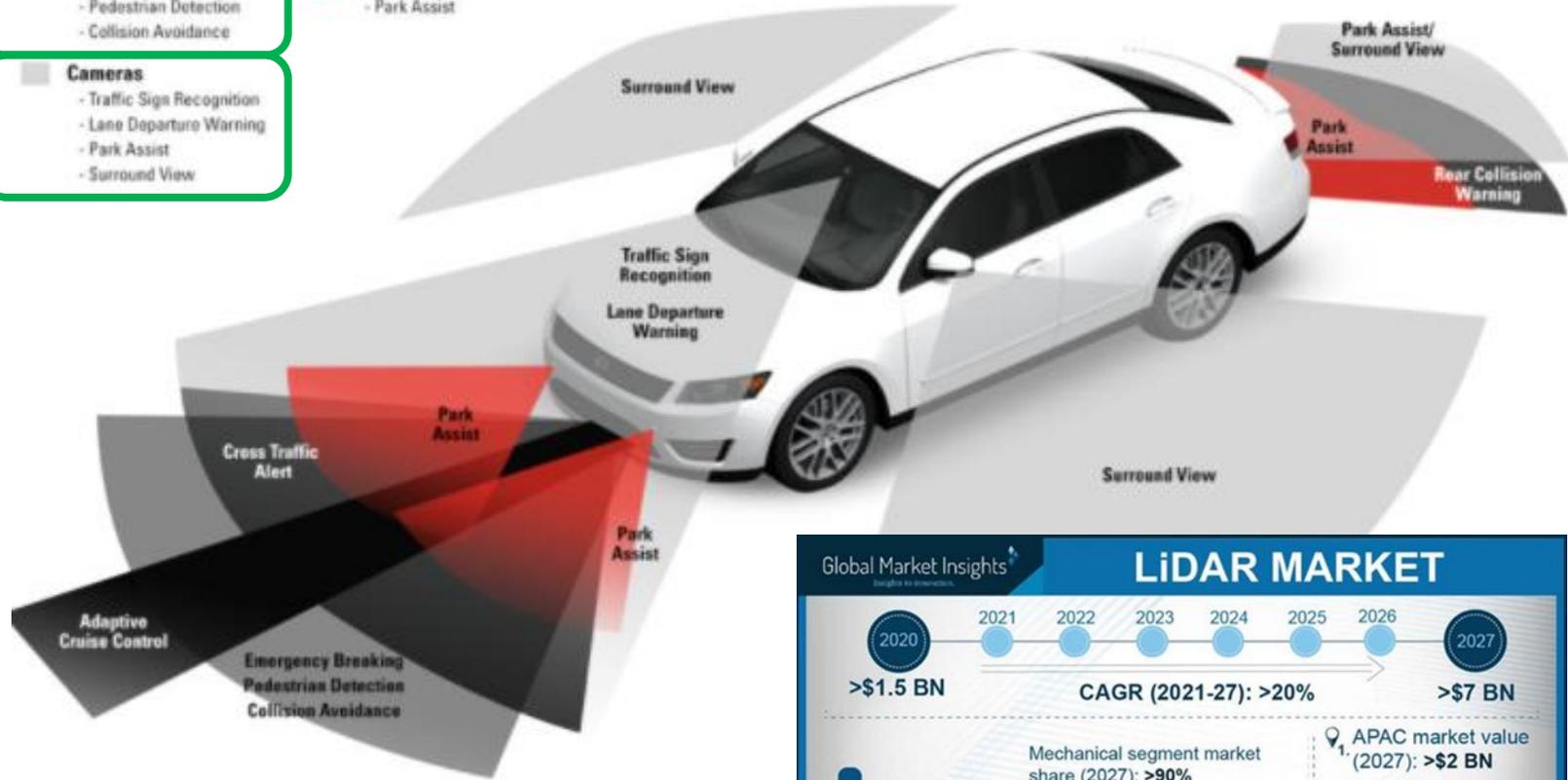
**\$600M Market Size**

\*Data Source: MAXTECH 2018

**LiDAR  
ADAS  
Advanced Driver  
Assistance Systems**

**ADAS: THE CIRCLE OF SAFETY**

- Long-Range Radar
  - Adaptive Cruise Control
- Short/Medium-Range Radar
  - Cross Traffic Alert
  - Rear Collision Warning
- LIDAR
  - Emergency Braking
  - Pedestrian Detection
  - Collision Avoidance
- Cameras
  - Traffic Sign Recognition
  - Lane Departure Warning
  - Park Assist
  - Surround View
- Ultrasound
  - Park Assist



# Aligning Our Development Efforts with our Strategy

## **New Capabilities that attract customers and allow us to engineer better solutions**

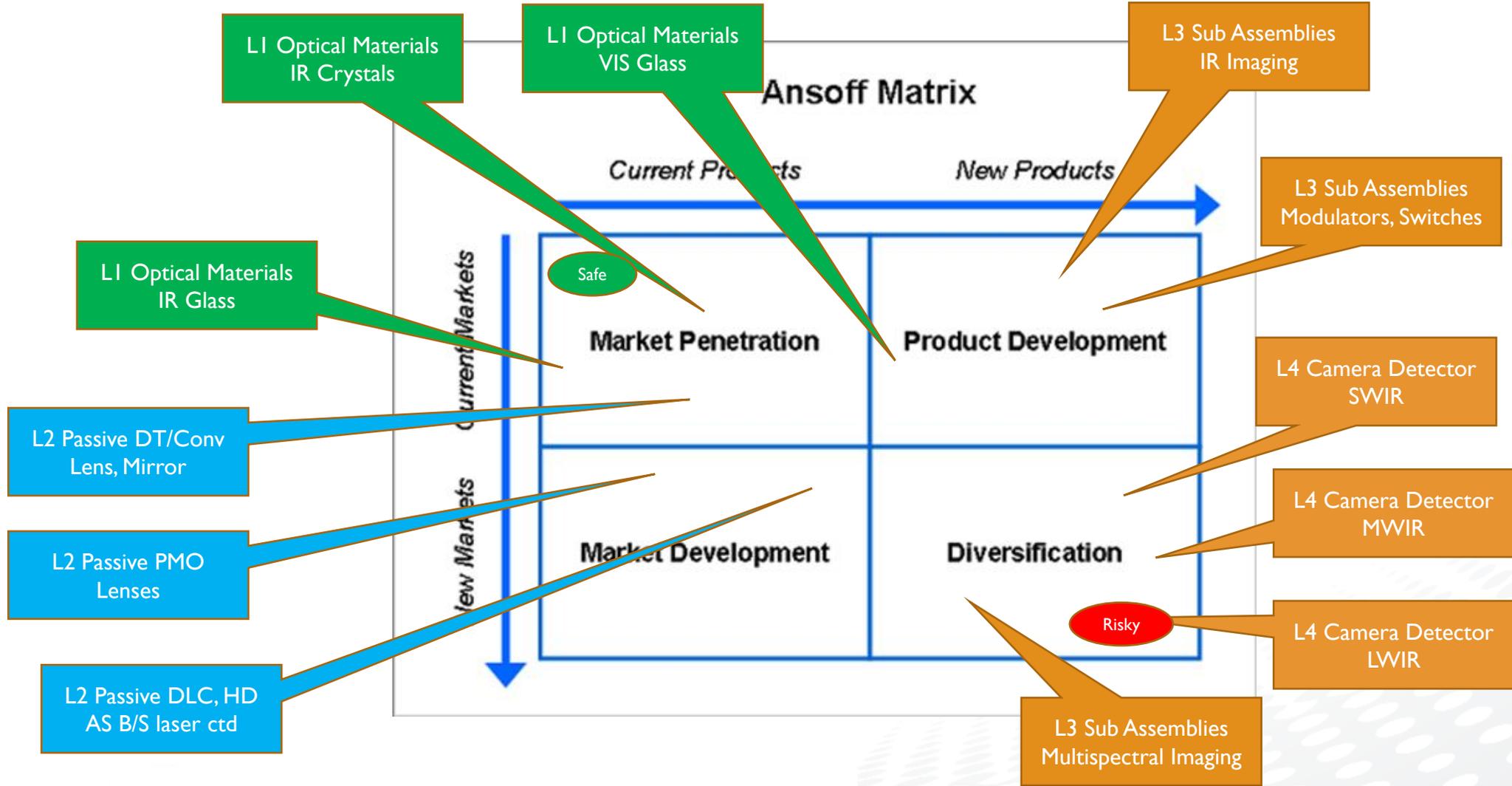
- New, unique types of Chalcogenide glass
- Increase Moldable Diameter\*
- Hydrophobic coatings (DLC, Visible)
- Front window heated coating
- Freeform optics\*
- Slumping BD6 to larger diameter\*
- Space qualification of BD6\*
- High angle AR Coating\*
- Molding new types of Glass\*
- Molded Doublets
- Freeform glass optics

## **Yield/Cost/Safety improvements**

- DLC and AR Coatings redesign
- Beamsplitter coating\*
- Nitrogen reduction in molding
- New mold materials
- BD6 recycling
- Internal witness sample production
- Glass tooling

\* *Customer driven/sponsored projects*

# Product Map Growth Matrix and Risk Assessment



# M&A to Bolster Our Position

- Targeting solutions-oriented companies, including full systems, integrated subsystems, OEM cores and core modules, design projects and components
- Market presence: domestic, international, US defense, commercial
- Up to \$50 million in annual revenues
- Accretive to margins and EBITDA
- Over 70 companies in review
- Focus on companies that enable us to win “very large prizes” with multiple \$1-2 billion programs/segments:
  - Automotive LiDAR
  - Vehicle sensors
  - Soldier sensors
  - Space exploration

# Expanded Manufacturing Capacity

## LightPath Investments

- Diamond Turning Capacity
- Optical Coating Capacity
- Material Polishing Capability
- Glass Melting Capacity
- LCR Precision Glass Molding Capacity
- Engineering Bench Strength
- Expanding Facilities in Orlando and Riga

## Supporting Years of Growth

### **Production:**

- 3.6 million units produced/sold in 2020 vs. 2.6 million in 2019 (38% growth)
- 3.8 million units produced/sold in 2021, up from 3.6 million in 2020

### **Backlog:**

- Double digit growth 3 consecutive years (F2018-2020)
- Largest annual contract typically renews in fiscal 2<sup>nd</sup> quarter; \$5.8M renewal in 2Q21, up 16% from prior year
- Total backlog of \$19.3M at 9/30/21

# Transition & Recent Developments in China

- As the new strategic plan took shape in F21, irregularities were discovered within the Company's subsidiaries in China
  - Termination of several employees of the Company's Chinese subsidiaries after determining that they had engaged in malfeasance and conduct adverse to the interests of the Company, including efforts to misappropriate certain of the Company's proprietary technology, diverting sales to entities owned or controlled by these former employees and other suspected acts of fraud, theft and embezzlement. In connection with such terminations, the Company's Chinese subsidiaries have engaged in certain legal proceedings with the terminated employees.
- LightPath immediately terminated staff and began rebuilding a new management team in China
- China sales were disrupted as certain key members of the sales leadership were terminated
- Significant one-time expenses
  - \$1.2 million of expenses for terminations and related matters, including severance, legal and consulting fees in F21; \$328,000 of additional legal fees and consulting expenses in 1Q22; accrued China employee severance of approximately \$485,000
- Separately, a large customer in China for 5G PMO lenses, among the Company's higher margin product lines, lost a significant network infrastructure contract in the country which resulted in reduced orders for LightPath
- 1Q22 performance begins rebound
  - Revenues improved to greater than \$9 million, a marked improvement over 4Q21, although China sales headwinds may persist for the next 1 or 2 quarters; GM% increased by 10 percentage points from 4Q21; expenses in China significantly declined from 4Q21 to 1Q22

- Strategic Plan provides for visibility into more sustainable growth and higher profitability and cash flow
- IQ22 Performance Begins Rebound Following China Operations Transition
- Core markets are diversified and experiencing solid secular growth
- Catalysts include engagement in exciting, high volume potential market trends
- Record backlog achieved from F2017-2020, with strong order flow in F2021 offset by telecom/China transition
- Adding capacity and vertical integration for cost savings and time-to-market advantages
- High volume manufacturing efficiencies & leading IP/technology portfolio includes molding and diamond turning capabilities
- Multiple cost reduction opportunities being implemented; allows price flexibility which leads to increasing volumes (lower cost materials, in-house coating, diamond turning)
- Balance sheet fortified by debt reductions from F2018-2021; cash increased 26% from 2020 to 2021
- Experienced management; significant insider/affiliate ownership; insider purchases in IQ22

### LPTH Snapshot

Stock Price*	\$2.00
Market Cap	\$54M
Dil. Shares	27.0M
10-D Volume*	406K

\* Source: Yahoo! Finance, 11/5/21

THANK YOU.

For more information on LightPath  
and its businesses, please visit  
[www.lightpath.com](http://www.lightpath.com).

For investor relations questions,  
please contact:

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Darrow Associates

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# Appendix

# Fiscal 2022 First Quarter Financial Results Highlights

(Ended 9/30/21)

- Revenue for the first quarter of fiscal 2022 of \$9.1 million
- Total backlog at September 30, 2021 of \$19.3 million
- Net loss for the first quarter of fiscal 2022 was \$632,000, which includes additional expenses associated with the management changes in Chinese subsidiaries
- EBITDA\* for the first quarter of fiscal 2022 was \$454,000
- Cash and cash equivalents of \$4.0 million as of September 30, 2021
- Total debt, including finance leases, of \$5.0 million as of September 30, 2021
- Capital expenditures of \$1.2 million for the first quarter of fiscal 2022
- Chairman, CEO and CFO execute open market purchases of Class A common shares during quarter ended September 30, 2021

\*Please see the heading reconciliation for “Use of Non-GAAP Financial Measures” below.

**LIGHTPATH TECHNOLOGIES, INC.**  
**Condensed Consolidated Balance Sheets**  
(unaudited)

# Balance Sheet

Assets	September 30, 2021	June 30, 2021
<b>Current assets:</b>		
Cash and cash equivalents	\$ 3,976,981	\$ 6,774,694
Trade accounts receivable, net of allowance of \$33,418 and \$45,643	5,927,938	4,656,354
Inventories, net	8,708,481	8,659,587
Other receivables	2,243	137,103
Prepaid expenses and other assets	455,662	475,364
Total current assets	19,071,305	20,703,102
Property and equipment, net	13,727,842	13,279,867
Operating lease right-of-use assets	9,944,236	9,015,498
Intangible assets, net	5,301,610	5,582,881
Goodwill	5,854,905	5,854,905
Deferred tax assets, net	147,000	147,000
Other assets	27,737	27,737
Total assets	\$ 54,074,635	\$ 54,610,990
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 2,581,594	\$ 2,924,333
Accrued liabilities	883,377	1,067,265
Accrued payroll and benefits	2,536,977	2,810,043
Operating lease liabilities, current	896,481	799,507
Loans payable, current portion	694,305	634,846
Finance lease obligation, current portion	172,382	212,212
Total current liabilities	7,765,116	8,448,206
Finance lease obligation, less current portion	32,739	66,801
Operating lease liabilities, noncurrent	9,240,725	8,461,133
Loans payable, less current portion	4,096,524	4,057,365
Total liabilities	21,135,104	21,033,505
<b>Commitments and Contingencies</b>		
<b>Stockholders' equity:</b>		
Preferred stock: Series D, \$.01 par value, voting; 500,000 shares authorized; none issued and outstanding	—	—
Common stock: Class A, \$.01 par value, voting; 44,500,000 shares authorized; 26,994,534 and 26,985,913 shares issued and outstanding	269,945	269,859
Additional paid-in capital	231,576,882	231,438,651
Accumulated other comprehensive income	1,971,978	2,116,152
Accumulated deficit	(200,879,274)	(200,247,177)
Total stockholders' equity	32,939,531	33,577,485
Total liabilities and stockholders' equity	\$ 54,074,635	\$ 54,610,990

**LIGHTPATH TECHNOLOGIES, INC.**  
**Consolidated Statements of Comprehensive Income (Loss)**  
**(unaudited)**

	Three Months Ended June 30,		Year Ended June 30,	
	2021	2020	2021	2020
Revenue, net	\$ 8,332,316	\$ 9,107,140	\$ 38,464,821	\$ 34,967,963
Cost of sales	6,268,831	5,596,915	25,017,051	21,125,464
Gross margin	2,063,485	3,510,225	13,447,770	13,842,499
Operating expenses:				
Selling, general and administrative	3,980,113	2,164,614	11,989,597	8,961,150
New product development	545,024	404,694	2,165,951	1,714,077
Amortization of intangibles	281,271	281,270	1,125,083	1,129,341
Loss (gain) on disposal of property and equipment	—	21,802	8,951	(107,280)
Total operating expenses	4,806,408	2,872,380	15,289,582	11,697,288
Operating income (loss)	(2,742,923)	637,845	(1,841,812)	2,145,211
Other income (expense):				
Interest expense, net	(48,863)	(66,184)	(215,354)	(339,446)
Other income (expense), net	(171,095)	175,733	(194,170)	(174,838)
Total other income (expense), net	(219,958)	109,549	(409,524)	(514,284)
Income (loss) before income taxes	(2,962,881)	747,394	(2,251,336)	1,630,927
Income tax provision	(49,671)	90,442	933,915	763,998
Net income (loss)	\$ (2,913,210)	\$ 656,952	\$ (3,185,251)	\$ 866,929
Foreign currency translation adjustment	300,670	(24,928)	1,380,260	(72,626)
Comprehensive income (loss)	\$ (2,612,540)	\$ 632,024	\$ (1,804,991)	\$ 794,303
Earnings (loss) per common share (basic)	\$ (0.11)	\$ 0.03	\$ (0.12)	\$ 0.03
Number of shares used in per share calculation (basic)	26,796,326	25,875,127	26,314,025	25,853,419
Earnings (loss) per common share (diluted)	\$ (0.11)	\$ 0.02	\$ (0.12)	\$ 0.03
Number of shares used in per share calculation (diluted)	26,796,326	28,182,614	26,314,025	27,469,845

**LIGHTPATH TECHNOLOGIES, INC.**  
**Condensed Consolidated Statements of Comprehensive Income (Loss)**  
**(unaudited)**

	Three Months Ended September 30,	
	2021	2020
Revenue, net	\$ 9,103,343	\$ 9,508,972
Cost of sales	5,931,408	5,658,780
Gross margin	3,171,935	3,850,192
Operating expenses:		
Selling, general and administrative	2,869,046	2,440,477
New product development	427,011	450,497
Amortization of intangibles	281,271	281,271
Loss (gain) on disposal of property and equipment	—	(45)
Total operating expenses	3,577,328	3,172,200
Operating income (loss)	(405,393)	677,992
Other income (expense):		
Interest expense, net	(45,749)	(58,549)
Other income (expense), net	(51,082)	(87,735)
Total other income (expense), net	(96,831)	(146,284)
Income (loss) before income taxes	(502,224)	531,708
Income tax provision	129,873	434,640
Net income (loss)	\$ (632,097)	\$ 97,068
Foreign currency translation adjustment	(144,174)	729,308
Comprehensive income (loss)	\$ (776,271)	\$ 826,376
Earnings (loss) per common share (basic)	\$ (0.02)	\$ 0.00
Number of shares used in per share calculation (basic)	26,993,971	25,982,260
Earnings (loss) per common share (diluted)	\$ (0.02)	\$ 0.00
Number of shares used in per share calculation (diluted)	26,993,971	28,432,275

**LIGHTPATH TECHNOLOGIES, INC.**

**Reconciliation of Non-GAAP Financial Measures and Regulation G Disclosure**

(unaudited)

	Quarter Ended June 30,		Year Ended June 30,	
	2021	2020	2021	2020
Net income (loss)	\$ (2,913,210)	\$ 656,952	\$ (3,185,251)	\$ 866,929
Depreciation and amortization	900,964	837,123	3,509,436	3,424,438
Income tax provision	(49,671)	90,442	933,915	763,998
Interest expense	48,863	66,184	215,354	339,446
EBITDA	<u>\$ (2,013,054)</u>	<u>\$ 1,650,701</u>	<u>\$ 1,473,454</u>	<u>\$ 5,394,811</u>
% of revenue	-24%	18%	4%	15%

**LIGHTPATH TECHNOLOGIES, INC.**

**Reconciliation of Non-GAAP Financial Measures and Regulation G Disclosure**

(unaudited)

	Quarter Ended September 30,	
	2021	2020
Net income (loss)	\$ (632,097)	\$ 97,068
Depreciation and amortization	910,962	826,308
Income tax provision	129,873	434,640
Interest expense	45,749	58,549
EBITDA	<u>\$ 454,487</u>	<u>\$ 1,416,565</u>
% of revenue	5%	15%

# Company History

