

# SECURITIES & EXCHANGE COMMISSION EDGAR FILING

## LIGHTPATH TECHNOLOGIES INC

**Form: 10-K**

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Corporate Issuer CIK: 889971

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended June 30, 2017

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 000-27548

**LIGHTPATH TECHNOLOGIES, INC.**

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation or organization)

86-0708398

(I.R.S. Employer Identification No)

<http://www.lightpath.com>

2603 Challenger Tech Court, Suite 100

Orlando, Florida 32826

(Address of principal executive offices, including zip code)

(407) 382-4003

(Registrant's telephone number, including area code)

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

None

(Title of each class)

None

(Name of each exchange on which registered)

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

Class A Common Stock, \$.01 par value

Series D Participating Preferred Stock Purchase Rights

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

YES  NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

YES  NO

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities and Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

Non-Accelerated Filer

(Do not check if a smaller reporting company)

Accelerated Filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company, (as defined in Rule 12b-2 in the Exchange Act). YES  NO .

The aggregate market value of the registrant's voting stock held by non-affiliates (based on the closing sale price of the registrant's Common Stock on the NASDAQ Capital Market) was approximately \$28,684,094 as of December 31, 2016.

As of September 12, 2017, the number of shares of the registrant's Class A Common Stock outstanding was 24,247,826.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Proxy Statement for the Fiscal 2018 Annual Meeting of Stockholders are incorporated by reference in Part II and Part III.

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**LightPath Technologies, Inc.**  
**Form 10-K**

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## CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

Certain statements and information in this Annual Report on Form 10-K may constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements concerning plans, objectives, goals, projections, strategies, future events or performance, and underlying assumptions and other statements, which are not statements of historical facts. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential” or “continue,” or other comparable terminology. These forward-looking statements are based on our current expectations and beliefs concerning future developments and their potential effect on us. While management believes that these forward-looking statements are reasonable as and when made, there can be no assurance that future developments affecting us will be those that we anticipate. 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. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements represent management’s beliefs and assumptions only as of the date of this Annual Report on Form 10-K. You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

### PART I

#### Item 1. Business.

##### General

LightPath Technologies, Inc. (“LightPath”, the “Company”, “we”, “our”, or “us”) was incorporated under Delaware law in 1992 as the successor to LightPath Technologies Limited Partnership, a New Mexico limited partnership formed in 1989, and its predecessor, Integrated Solar Technologies Corporation, a New Mexico corporation formed in 1985. We manufacture optical components and higher level assemblies including precision molded glass aspheric optics, molded and diamond-turned infrared aspheric lenses, GRADIUM glass lenses and other optical materials used to produce products that manipulate light. We design, develop, manufacture and distribute optical components and assemblies utilizing advanced optical manufacturing processes. Our products are incorporated into a variety of applications by our customers in many industries, including defense products, medical devices, laser aided industrial tools, automotive safety applications, barcode scanners, optical data storage, hybrid fiber coax datacom, telecommunications, machine vision and sensors, among others. All the products we produce enable lasers and imaging devices to function more effectively. For example:

- *Molded glass aspheres and assemblies* are used in various high performance optical applications primarily based on laser technology;
- *Infrared molded lenses, diamond turned, conventional ground and polished and CNC ground lenses and assemblies* using short (SWIR), mid (MWIR) and long (LWIR) wave materials imaging are used in applications for firefighting, predictive maintenance, homeland security, surveillance, automotive, cell phone infrared cameras, pharmaceutical R&D, defense; and
- *GRADIUM* extends the performance of a spherically polished glass lens technology improving optical performance so that it approximates aspheric lens performance.

In November 2005, we formed LightPath Optical Instrumentation (Shanghai) Co., Ltd (“LPOI”), a wholly-owned subsidiary, located in Jiading, People’s Republic of China. The LPOI facility is primarily used for sales and support functions.

In December 2013, we formed LightPath Optical Instrumentation (Zhenjiang) Co., Ltd. (“LPOIZ”), a wholly-owned subsidiary located in the New City district, of the Jiangsu province, of the People’s Republic of China. LPOIZ’s 26,000 square foot manufacturing facility serves as our primary manufacturing facility in China and provides a lower cost structure for production of larger volumes of optical components and assemblies. We are in the process of adding an additional 13,000 square feet of manufacturing within the same facility.

In December 2016, we acquired ISP Optics Corporation, a New York corporation (“ISP”), and its wholly-owned subsidiary, ISP Optics Latvia, SIA, a limited liability company founded in 1998 under the Laws of the Republic of Latvia (“ISP Latvia”). ISP is a vertically integrated manufacturer offering a full range of infrared products from custom infrared optical elements to catalog and high performance lens assemblies. ISP’s Irvington, New York facility functions as its global headquarters for operations, while also providing manufacturing capabilities, optical coatings, and optical and mechanical design, assembly, and testing. ISP Latvia’s manufacturing facility is located in Riga, Latvia. It is a manufacturer of high precision optics and offers a full range of infrared products including catalog and custom infrared optics. See Note 3, Acquisition of ISP Optics Corporation, to the Consolidated Financial Statements, for additional information.

## Product Groups and Markets

In 2015, we organized our business based on five product groups: low volume precision molded optics ("LVPMO"), high volume precision molded optics ("HVPMO"), infrared products, specialty products, and non-recurring engineering ("NRE"). Our LVPMO product group consists of precision molded optics with a sales price greater than \$10 per lens and is usually sold in smaller lot quantities. Our HVPMO product group consists of precision molded optics with a sales price of less than \$10 per lens and is usually sold in larger lot quantities. Our infrared product group is comprised of both molded and turned lens and assemblies and includes all ISP products. Our specialty product group is comprised of value added products such as optical subsystems, assemblies, GRADIUM lenses, and isolators. Our NRE product group consists of those products we develop pursuant to product development agreements we enter into with customers. Typically, customers approach us and request that we develop new products or applications for our existing products to fit their particular needs or specifications. The timing and extent of any such product development is outside of our control.

We currently serve the following major markets: industrial, laser, defense, medical, telecommunications, and instrumentation. Within our product groups, we have various applications that serve these major markets. For example, our HVPMO lenses are typically used in industrial tools, especially in China. Our HVPMO and LVPMO lenses are also used in applications for the telecommunications market, such as data centers, digital video distribution, wireless broadband, and machine to machine interface, and, the laser market, such as laser tools, scientific and bench top lasers, and bar code scanners. Our infrared products can also be used in various applications within our major markets. Currently, sales of our infrared products are primarily for customers in the industrial market that use thermal imaging cameras. Our infrared products can also be used for gas sensing devices, spectrometers, night vision systems, automotive driver systems, thermal weapon gun sights, and infrared counter measure systems, among others.

Within the larger overall markets, which are estimated to be in the multi-billions of dollars, we believe there is a market of approximately \$1.7 billion for our current products and capabilities. We continue to believe our products will provide significant growth opportunities over the next several years and, therefore, we will continue to target specific applications in each of these major markets. In addition to these major markets, a large percentage of our revenues are derived from sales to unaffiliated companies that purchase our products to fulfill their customer's orders, as well as unaffiliated companies that offer our products for sale in their catalogs.

The following further discusses the various products we offer and certain growth opportunities we anticipate for each such product.

***LVPMO and HVPMO Product Groups.*** Aspheric lenses are known for their optimal performance. Aspheric lenses simplify and shrink optical systems by replacing several conventional lenses. However, aspheric lenses are difficult and costly to machine. Our glass molding technology enables the production of both low and high volumes of aspheric optics while still maintaining the highest quality at an affordable price. Molding is the most consistent and economical way to produce aspheres and we have perfected this method to offer the most precise molded aspheric lenses available.

In recent years, sales of both our LVPMOs and HVPMOs have increased. We expect this growth to continue for the next several years with what we believe is the beginning of a multi-year growth cycle of the optical market. This multi-year growth cycle is driven by four major trends: data centers; digital video distribution; wireless broadband; and machine-to-machine interface. Cloud computing has caused a shift in enterprise technology with increased spending for software-as-a-service ("SAAS") and infrastructure-as-a-service ("IAAS") capital investments. Delivery of applications and technology using SAAS or IAAS requires larger and faster network bandwidth. The explosion of mobile devices, which includes smartphones and tablet devices, is also requiring the expansion of network bandwidth as users are receiving and transferring larger amounts of data via their mobile devices. By 2021, it is estimated that there will be 1.5 mobile devices per capita. It is also expected that there will be approximately 11.6 billion mobile-connected devices by 2021, including machine-to-machine ("M2M") modules, exceeding the world's projected population of 7.8 billion. Individuals are also streaming more video on their mobile devices or through their smart TVs. This type of video distribution, which is estimated to be 80% of all network traffic by 2019, is creating a huge demand for larger and faster bandwidth. Finally, machine-to-machine connection technology allows wireless and wired systems to communicate with other devices of the same type. This type of networking often requires bandwidth in order for the machines to communicate with each other. All of these trends require the expansion of bandwidth, and thus, the growth of optical communication networks. Our products, such as our precision molded optical lenses, can be used as a component in optical communication networks. We also anticipate growth in our precision molded aspheres product revenues as we add new product lenses and applications for a variety of markets and industries, including laser tools, telecom transceivers, micro-projectors, scientific and bench top lasers, range finders, medical devices, bar code scanners and laser based spectrometers.

- **LVPMOs.** The growth in our LVPMO business is driven by a variety of market applications such as medical endoscopes, medical flow cytometers, scientific and bench-top lasers, laser based spectrometers, military telecom, and telescopic weapon sights. These products have precision specifications and 100% testing to verify that our lenses conform to a higher level of performance than most of the competition in these markets.

- **HVPMOs.** The continued growth in our HVPMO business is driven by market applications supporting mostly the laser diode applications for high volume markets in laser tools, range finders, laser gun sights, bar code scanners, and micro-projectors. The same basic tooling used for high precision in the LVPMO applications allows us to realize a competitive advantage for high volume production that benefits the end customer while maintaining low price targets. Markets for laser diode applications are expected to grow substantially in the next few years as applications such as Lidar, which uses light and radar for distance tracking and speed detection, headlights for automobiles, and many other related disciplines begin to rely more and more on laser technology.

**Infrared Product Group.** Advances in chalcogenide materials have enabled compression molding for mid-wavelength infrared (“MWIR”) and long-wavelength infrared (“LWIR”) optics in a process similar to precision molded lenses. Our molded infrared optics technology enables high performance, cost-effective infrared aspheric lenses that do not rely on traditional diamond turning or lengthy polishing methods. Utilizing precision molded aspheric optics significantly reduces the number of lenses required for typical thermal imaging systems and the cost to manufacture these lenses. Molding is an excellent alternative to traditional lens processing methods particularly where volume and repeatability is required.

Through our subsidiary ISP we also offer germanium, silicon or zinc selenide aspheres and spherical lenses which are manufactured by diamond turning. This manufacturing technique allows us to offer larger lens sizes and the ability to use other optical materials which cannot be effectively molded. As some complex optical challenges demand more exotic optical substrate materials that are non-moldable, the integration of ISP allows Lightpath the ability to meet these demands.

Overall, we anticipate growth for infrared optics and increased requirements for systems requiring aspheric optics. Infrared systems, which include thermal imaging cameras, gas sensing devices, spectrometers, night vision systems, automotive driver awareness systems such as blind spot detection, thermal weapon sights, and infrared counter measure systems, represent a market that is forecasted to grow from \$6.4 billion in 2015 to \$11.4 billion by 2022, at a compound annual growth rate of 8.32% between 2016 and 2022. As infrared imaging systems become widely available, the cost of optical components needs to decrease before the market demand will increase. Our aspheric molding process is an enabling technology for the cost reduction and commercialization of infrared imaging systems because the aspheric shape of our lenses enables system designers to reduce the lens element in a system and provide similar performance at a lower cost.

**Specialty Product Group.** We have a rapidly growing group of specialty products and assemblies that take advantage of our unique technologies and capabilities. These products include custom optical designs, mounted lenses, optical assemblies, and GRADIUM lenses. We expect growth from defense communications programs and commercial optical sub-assemblies.

Our GRADIUM glass is an optical quality glass material with axially varying refractive index, capable of reducing optical aberrations inherent in conventional lenses and performing with a single lens tasks traditionally performed by multi-element, conventional lens systems. Typical applications include surgical lasers, high power YAG lasers for welding, cutting and marking, defense-market uses, and test and measurement. GRADIUM has a unique capability to handle up to 10 kilowatts of power and is servicing a niche market for laser high-power cutting and laser welding.

We design, build, and sell optical assemblies into markets for test and measurement, medical devices, military, industrial, and communications based on our proprietary technologies. Many of our optical assemblies consist of several products that we manufacture.

Our strategy is to leverage our technology, know-how, established low cost manufacturing capability and partnerships to grow our business. We plan to accomplish this growth through the implementation of the following objectives:

- **Leverage our Leadership to Drive Organic Growth.** We plan to continue to capitalize on our global operations network, distribution infrastructure, and technology to pursue global growth. We will focus our efforts on those geographic areas and end products that we believe offer the most attractive growth and long-term profit prospects.
- **Focus on Cash Flow Generation.** Our goal is to focus on cash flow generation and return on invested capital through the continuing optimization of our cost structure, improvement in working capital and supply chain efficiencies, and a disciplined approach to capital expenditures. We have a proven track record of mitigating fixed cost inflation with cost saving actions and productivity improvements. We intend to continue to identify incremental cost saving opportunities based in large part on benchmarks of industry-leading performance and productivity improvements by utilizing our engineering and manufacturing technology expertise and partnerships with low cost producers. Our goal is to maintain a cost structure that positions us favorably to compete and grow. We intend to continue to upgrade our customer and product mix by adding products that move up the supply chain by offering assemblies that use our lenses, thereby increasing our sales of value-added, differentiated products, and achieving premium pricing to improve margins and enhance cash flow.

- **Increase Customer Base and Continue to Develop New Products.** A key component of our strategy is to produce innovative, high-performance products that offer enhanced value propositions to our customers at competitive prices. Our goal is to continually work closely with our customers to provide solutions and productions that optimize their products. This market-driven product development enables us to offer a high-quality product portfolio to our customers and provide our business with the ability to respond quickly and efficiently to changes in market demands.
- **Deepen Our Presence in Emerging Markets.** Emerging markets are a strategic priority for our business. We are well positioned not only to leverage our strong market positions in mature but highly sophisticated markets in North America and Europe, but also to participate in the expected growth of emerging markets in Asia and Eastern Europe. We believe that improving living standards and growth in GDP across emerging markets are combining to create increased demand for our products. We expect to capitalize on this growth opportunity by expanding our customer base and local capabilities in order to increase our market share across emerging markets, especially in China. To accelerate our penetration of these markets and maintain our competitive cost position, we may develop relationships with leading local partners, especially in businesses where participation in the fast-growing Chinese market is particularly important for long-term sustainable growth. For example, we are well positioned to leverage our strong production technology in the Chinese market as a result of an increasing percentage of aerospace, automotive, semiconductor, electronics, and telecommunications manufacturing transitioning to China.
- **Continue to Drive Operational Excellence and Asset Efficiency.** Operational excellence, which includes a commitment to safety, environmental stewardship, and improved reliability, is key to our future success. We continually evaluate our business to identify opportunities to increase operational efficiency throughout our production facilities with a focus on maintaining operational excellence, reducing costs, and maximizing asset efficiency. We intend to continue focusing on increasing manufacturing efficiencies through selected capital projects, process improvements, and best practices in order to lower unit costs. We will also carefully manage our portfolio and take appropriate actions to address product lines that face challenging market conditions and do not generate returns on invested capital that we believe are sufficient to create long-term shareholder value.
- **Drive Organizational Alignment.** We believe that maintaining alignment of the efforts of our employees with our overall business strategy and operational excellence goals is critical to our success. We have outstanding people and assets and, with the commitment to values of safety, customer appreciation, simplicity, collective entrepreneurship, and integrity, we believe that we can maintain our competitiveness and help achieve our operational excellence and asset efficiency strategic objectives.

## Sales and Marketing

**Marketing.** Extensive product diversity and varying levels of product maturity characterize the optics industry. Product markets range from consumer (e.g., cameras, copiers) to industrial (e.g., lasers, data storage, infrared imaging), from products where the lenses are the central feature (e.g., telescopes, microscopes, lens systems) to products incorporating lens components (e.g., robotics, semiconductor production equipment) and communications (e.g., various optics are required for bandwidth expansion and improved data transfer for the optical network). As a result, we market our products across a wide variety of customer groups including laser systems manufacturers, laser OEMs, infrared-imaging systems vendors, industrial laser tool manufacturers, telecommunications equipment manufacturers, medical and industrial measurement equipment manufacturers, government defense agencies, and research institutions worldwide.

**Technical Sales Model.** To align the organization for specific goals and accountability, we created an executive structure with three direct reporting lines: Operations, Sales and Marketing, and Finance. Our Sales and Marketing organization is led by the Vice President of Corporate Business Development, as well as our Executive Sales Manager and Marketing Manager. We also combined the organizations supporting our aspheric visible lens products and our infrared products.

**Sales Team & Channel.** We have regional sales forces that market and sell our products directly to customers in North America, Europe and China. We also have a master distributor in Europe. We have formalized relationships with 14 industrial, laser, and optoelectronics distributors and channel partners located in the United States and various foreign countries to assist in the distribution of our products in highly specific target markets. We also have reseller arrangements with the top three product catalog companies in the optics and opto-electronics market. In addition, we also maintain our own product catalog and internet website ([www.lightpath.com](http://www.lightpath.com)) as vehicles for broader promotion of our products. We make use of print media advertisements in various trade magazines and participate in appropriate domestic and foreign trade shows.

All of our partners work diligently to expand opportunities in emerging geographic markets and through alternate channels of distribution. We believe that we provide a high level of support in developing and maintaining our long-term relationships with our customers. Customer service and support are provided through our offices and those of our partners that are located throughout the world.



**Trade Shows.** We display our product line additions and enhancements at one or more trade shows each year. For example, we participated in several United States based shows including Society of Photographic Instrumentation Engineers (“SPIE”) Photonics West in January 2017 and SPIE Defense, Security and Sensing in April 2017. We also participate in shows in China such as the China International Optoelectronic Exposition in Shenzhen. In addition, we partner with key distributors to attend exhibitions such as Laser World of Photonics in Munich, Germany. This strategy underscores our strategic directive of broadening our base of innovative optical components and assemblies. These trade shows also provide an opportunity to meet with and enhance existing business relationships, meet and develop potential customers, and to distribute information and samples regarding our products.

## **Competition**

The market for optical components generally is highly competitive and highly fragmented. We compete with manufacturers of conventional spherical lenses and optical components, providers of aspheric lenses and optical components, and producers of optical quality glass. To a lesser extent, we compete with developers of specialty optical components and assemblies. Many of these competitors have greater financial, manufacturing, marketing, and other resources than we do.

We believe our unique capabilities in optical design engineering, our low cost structure and our substantial presence in Europe and Asia, particularly in China, provides us with a competitive edge and assists us in securing business. Additionally, we believe that we offer value to some customers as a second or backup supply source in the United States should they be unwilling to commit to purchase their entire supply of a critical component from a foreign production source. We also have a broad product offering to satisfy a variety of applications and markets.

**LVPMOs and HVPMOs Product Groups.** Our LVPMO products compete with conventional lenses and optical components manufactured by companies such as Asia Optical, Anteryon, RPO, and Sunny Optics.

Aspheric lenses compete with lens systems comprised of multiple conventional lenses. Machined aspheric lenses compete with our molded glass aspheric lenses, which are part of our HVPMO product group. Aspheric lens system manufacturers include Panasonic, ALP’s, Hoya Corporation, as well as newer competitors from China and Taiwan such as E-pin Optical Industry Co. and Kinik Company. The use of aspheric surfaces provides the optical designer with a powerful tool in correcting spherical aberrations and enhancing performance in state-of-the-art optical products. However, we believe that our optical design expertise and our flexibility in providing custom high performance optical components at a low price are key competitive advantages for us over these competitors.

Plastic molded aspheres and hybrid plastic/glass aspheric optics, on the other hand, allow for high volume production, but primarily are limited to low cost consumer products that do not place a high demand on performance (such as plastic lenses in disposable or mobile phone cameras). Molded plastic aspheres appear in products that stress cost or weight as their measure of success over performance and durability. Our low cost structure allows us to compete with these lenses based on higher performance and durability from our glass lenses at only a small premium in price over plastic or plastic/glass hybrid lenses.

**Infrared Product Group.** Our infrared aspheric optics compete with optical products produced by Janos Technologies, Ophir Optics, Elcan Optical Technologies, Clear Align and a variety of Eastern European and Asian manufacturers. These traditional infrared lenses can either be polished spherical or are diamond turned aspherical. Our molded lenses compete with spherical lenses because like all aspheres they can replace doublets or triplets based on the higher performance of an aspheric lens. Diamond turned aspheres from germanium are more expensive to produce in high volumes and time consuming to manufacture. We believe our low cost, high volume lens business technology combined with our newly acquired traditional polishing and diamond turning capabilities enables us to compete with the other manufacturers of traditional infrared lens by offering the best technology fit at the best price for the mission.

Our molded infrared optics competes with products manufactured by Umicore, RPO, Kiro, and Free Form. We believe that our optical design expertise, our diverse manufacturing flexibility and our manufacturing facilities located in Asia, Europe and North America are key advantages over the products manufactured by these competitors. A specific advantage over Umicore, a foreign company, is that the infrared market is highly dependent on the United States defense industry, which prefers to purchase from United States based companies such as LightPath.

**Specialty Product Group.** GRADIUM lenses are often used for products in the niche high power laser optics market. GRADIUM lenses are produced using a unique, well-established technology that no other manufacturer possesses, which provides us with a competitive advantage. However, there are other competing technologies, such as traditional fused silica doublets and triplets, as well as newer large diameter aspheres, such as those manufactured by Asphericon or Edmund Optics.

## **Manufacturing**

**Facilities.** Our manufacturing is largely performed in our 26,000 square foot production facility in Orlando, Florida, in LPOIZ’s 26,000 square foot production facility in Zhenjiang, China and in ISP Latvia’s 23,000 square foot production facility in Riga, Latvia. In October 2015, LPOI moved its sales and support functions to a 1,900 square foot facility in Shanghai. ISP also has an approximately 13,000 square foot facility in Irvington, New York that functions as its operations headquarters, providing manufacturing capabilities, optical coatings, optical and mechanical design, assembly and testing, as well as some engineering, administrative and sales functions.

Our Orlando manufacturing facility and LPOI's Zhenjiang manufacturing facility feature areas for each step of the manufacturing process, including coating work areas, preform manufacturing and a clean room for pressing and integrated assembly. The Orlando and Zhenjiang facilities include new product development laboratories and space that includes development and metrology equipment. The Zhenjiang facility has anti-reflective coating equipment to coat our lenses in-house. ISP's Irvington facility and ISP Latvia's Riga facility include fully vertically integrated manufacturing processes to produce high precision infrared lenses and infrared lens assemblies, including crystal growth, CNC grinding, conventional polishing, diamond turning, multilayer coatings, assemblies and state of the art metrology. ISP's Irvington facility and ISP Latvia's Riga facility include fully vertically integrated manufacturing processes to produce high precision infrared lenses and infrared lens assemblies, including crystal growth, CNC grinding, conventional polishing, diamond turning, multilayer coatings, assemblies and state of the art metrology.

We are in the process of adding additional production equipment at our Orlando, Zhenjiang and Riga facilities. In July 2017, we entered into a lease for an additional 13,000 square feet in the Zhenjiang facility. We also intend to add additional work shifts at the Zhenjiang facility, as needed, to increase capacity and meet forecasted demand. Our Irvington facility is at capacity with limited room for growth; however, additional expansion is not expected for this facility. Our Riga facility recently underwent an expansion of approximately 4,000 square feet, which is expected to handle our short-term growth based on our forecasted demand. We intend to monitor the capacity at our facilities, and will increase such space as needed. We believe our facilities are adequate to accommodate our needs over the next year.

**Production and Equipment.** Our Orlando facility contains a manufacturing area for our molded glass aspheres, a tooling and machine shop to support new product development, commercial production requirements for our machined parts, the fabrication of proprietary press work stations and mold equipment, and a clean room for our molding and assembly workstations. We also have glass coring equipment to meet our current needs of GRADIUM product sales worldwide. LPOI's Zhenjiang facility features a molded glass aspheres manufacturing area, clean room, machine shop, and an area for anti-reflective coating.

ISP's Irvington facility contains a manufacturing area for diamond turning, coating, lens assembly, quality control, as well as an area for research and development. The facility is equipped with numerous diamond turning machines and accompanying metrology equipment, offering full scale diamond turning capabilities. The facility is also equipped with multiple chambers for various multi-layer coatings and a chamber for diamond-like carbon (DLC) coating. A cleaning room and metrology laboratory are also part of the coating area. The lens assembly and research and development areas are equipped with modulation transfer function (MTF) stations, lens assembly stations and the latest lens design software.

ISP Latvia's Riga facility consists of crystal growth, grinding, polishing, diamond turning, quality control departments and a mechanical shop to provide grinding and polishing departments with the necessary tools. The crystal growth department is equipped with multiple furnaces to grow water soluble crystals. The grinding and polishing departments have numerous modern CNC equipment, lens centering and conventional equipment to perform spindle, double sided and continuous polishing operations. The diamond turning department has numerous diamond turning machines accompanied with the latest metrology tools. The quality control department contains numerous inspection stations with various equipment to perform optical testing of finished optics.

The Orlando, Irvington, Zhenjiang and Riga facilities are ISO 9001:2008 certified. The Zhenjiang facility also recently obtained ISO/TS 1649:2009 certification for manufacturing of optical lenses and accessories used in automobiles. The Orlando and Irvington facilities are also International Traffic in Arms and Regulation ("ITAR") compliant. For more information regarding our facilities, please see *Item 2. Properties* in this Annual Report on Form 10-K.

**Subcontractors and Strategic Alliances.** We believe that low-cost manufacturing is crucial to our long-term success. In that regard, we generally use subcontractors in our production process to accomplish certain processing steps requiring specialized capabilities. For example, we presently use a number of qualified subcontractors for fabricating, polishing, and coating certain lenses as necessary. We have taken steps to protect our proprietary methods of repeatable high quality manufacturing by patent disclosures and internal trade secret controls.

**Suppliers.** We utilize a number of glass compositions in manufacturing our molded glass aspheres and lens array products. These glasses or equivalents are available from a large number of suppliers, including CDGM Glass Company Ltd., Ohara Corporation, and Sumita Optical Glass, Inc. Base optical materials, used in both GRADIUM and collimator products, are manufactured and supplied by a number of optical and glass manufacturers. ISP utilizes major infrared material suppliers located around the globe for a broad spectrum of infrared crystal and glass. We believe that a satisfactory supply of such production materials will continue to be available at reasonable prices, although there can be no assurance in this regard.

We also rely on local and regional vendors for component materials and services such as housings, fixtures, magnets, chemicals and inert gases, specialty ceramics, UV and AR coatings, and other specialty coatings. In addition, certain products require external processing such as anodizing and metallization. To date, we are not dependent on any of these manufacturers and have found a suitable number of qualified vendors and suppliers for these materials and services.

We currently purchase a few key materials from single or limited sources. We believe that a satisfactory supply of production materials will continue to be available at competitive prices, although there can be no assurance in this regard.

### Intellectual Property

Our policy is to protect our technology by, among other things, patents, trade secret protection, trademarks, and copyrights. We primarily rely upon trade secrets and unpatented proprietary know-how to protect certain process inventions, lens designs and innovations. For example, a key feature of GRADIUM glass is that, once fabricated, it does not reveal our formula upon inspection and, to our knowledge, cannot be reverse-engineered. We have taken security measures to protect our trade secrets and proprietary know-how, to the extent possible.

In addition to trade secrets and proprietary know-how, we have three remaining patents that relate to the fusing of certain of our lenses that are part of our specialty products group. These patents expire at various times through 2023.

Our means of protecting our proprietary rights may not be adequate and our competitors may independently develop technology or products that are similar to ours or that compete with ours. Patent, trademark, and trade secret laws afford only limited protection for our technology and products. The laws of many countries do not protect our proprietary rights to as great an extent as do the laws of the United States. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to obtain and use information that we regard as proprietary. Third parties may also design around our proprietary rights, which may render our protected technology and products less valuable, if the design around is favorably received in the marketplace. In addition, if any of our products or technology is covered by third-party patents or other intellectual property rights, we could be subject to various legal actions. We cannot assure you that our technology platform and products do not infringe patents held by others or that they will not in the future. Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement, invalidity, misappropriation, or other claims.

We own several registered and unregistered service marks and trademarks that are used in the marketing and sale of our products. The following table sets forth our registered and unregistered service marks and trademarks, if registered, the country in which the mark is filed, and the renewal date for such mark.

Mark	Type	Registered	Country	Renewal Date
LightPath®	service mark	Yes	United States	October 22, 2022
GRADIUM™	Trademark	Yes	United States	April 29, 2027
Circulight	Trademark	No	—	—
BLACK DIAMOND	Trademark	No	—	—
GelTech	Trademark	No	—	—
Oasis	Trademark	No	—	—
LightPath®	service mark	Yes	People's Republic of China	September 13, 2025
ISP Optics®	Trademark	Yes	United States	August 12, 2020

### Environmental and Governmental Regulation

Currently, emissions, and waste from our manufacturing processes are at such low levels that no special environmental permits or licenses are required. In the future, we may need to obtain special permits for disposal of increased waste by-products. The glass materials we utilize contain some toxic elements in a stabilized molecular form. However, the high temperature diffusion process results in low-level emissions of such elements in gaseous form. If production reaches a certain level, we believe that we will be able to efficiently recycle certain of our raw material waste, thereby reducing disposal levels. We believe that we are presently in compliance with all material federal, state, and local laws and regulations governing our operations and have obtained all material licenses and permits necessary for the operation of our business.

We also utilize certain chemicals, solvents, and adhesives in our manufacturing process. We believe we maintain all necessary permits and are in full compliance with all applicable regulations.

To our knowledge there are currently no United States federal, state or local regulations that restrict the manufacturing and distribution of our products. Certain end-user applications require government approval of the complete optical system, such as United States Food and Drug Administration approval for use in endoscopy. In these cases, we will generally be involved on a secondary level and our OEM customer will be responsible for the license and approval process.

The Dodd-Frank Wall Street Reform and Consumer Protection Act imposes disclosure requirements regarding the use of "conflict minerals" mined from the Democratic Republic of Congo and adjoining countries in products, whether or not these products are manufactured by third parties. The conflict minerals include tin, tantalum, tungsten, and gold, and their derivatives. Pursuant to these requirements, we are required to report on Form SD the procedures we employ to determine the sourcing of such minerals and metals produced from those minerals. There are costs associated with complying with these disclosure requirements, including for diligence in regards to the sources of any conflict minerals used in our products, in addition to the cost of remediation and other changes to products, processes, or sources of supply as a consequence of such verification activities. In addition, the implementation of these rules could adversely affect the sourcing, supply, and pricing of materials used in our products. We strive to only use suppliers that source from conflict-free smelters and refiners; however, in the future, we may face difficulties in gathering information regarding our suppliers and the source of any such conflict minerals.

### **New Product Development**

For many years, we engaged in basic research and development that resulted in the invention of GRADIUM glass and certain proprietary processes for fabricating GRADIUM glass lenses. Thereafter, our new product development efforts led to the development of our capabilities in molded aspheric lenses and infrared lenses. We incurred expenditures for new product development during fiscal 2017 and 2016 of approximately \$1.2 million and \$669,000, respectively. We concentrated our efforts to support existing and new customers in the design and manufacture of items in three of our product lines: HVPMO lenses, LVPMO lenses and infrared products.

In fiscal 2018, we anticipate focusing our new product development efforts on infrared optics products for imaging and sensing, fiber lasers, spectrophotometry, defense, medical devices, industrial, optical data storage, machine vision, sensors, and environmental monitoring. In addition, we plan on continuing to invest in designing and developing the next generation of our proprietary precision glass molding machines. We currently plan to expend approximately \$1.2 million for new product development during fiscal 2018, which could vary depending upon revenue levels, customer requirements, and perceived market opportunities.

For more difficult or customized products, we bill our customers for engineering services as a non-recurring engineering fee.

### **Concentration of Customer Risk**

In fiscal 2017, we had sales to three customers that comprised an aggregate of approximately 26% of our annual revenue with one customer at 10% of our sales, another customer at 9% of our sales and the third customer at 7% of our sales. In fiscal 2016, we had sales to three customers that comprised an aggregate of approximately 25% of our annual revenue with one customer at 10% of our sales, another customer at 8% of our sales and the third customer at 7% of our sales. The loss of any of these customers, or a significant reduction in sales to any such customer, would adversely affect our revenues. We continue to diversify our business in order to minimize our sales concentration risk.

In fiscal 2017, 61% of our net revenue was derived from sales outside of the United States, with 88% of our foreign sales derived from customers in Europe and Asia.

### **Employees**

As of June 30, 2017, we had 321 employees, of which 308 were full-time equivalent employees, with 75 located in Orlando, Florida, 38 located in Irvington, New York, 73 located in Riga, Latvia, and 122 located in Jiading and Zhenjiang, China. Of our 308 full-time equivalent employees, we have 35 employees engaged in management, administrative, and clerical functions, 35 employees in new product development, 20 employees in sales and marketing, and 218 employees in production and quality control functions. Any employee additions or terminations over the next twelve months will be dependent upon the actual sales levels realized during fiscal 2018. We have used and will continue utilizing part-time help including interns, temporary employment agencies, and outside consultants, where appropriate, to qualify prospective employees and to ramp up production as required from time to time. None of our employees are represented by a labor union.

### **Item 1A. Risk Factors.**

The following is a discussion of the primary factors that may affect the operations and/or financial performance of our business. Refer to the section entitled *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations* of this Annual Report on Form 10-K for an additional discussion of these and other related factors that affect our operations and/or financial performance.

## Risks Related To Our Business and Financial Results

**We have a history of losses.** We achieved net income of \$7.7 million for fiscal 2017 and \$1.4 million for fiscal 2016; however, we incurred net losses of \$715,000 and \$313,000 for fiscal 2015 and 2014, respectively, and have a history of losses preceding such periods. As of June 30, 2017, we had an accumulated deficit of approximately \$196 million. We may incur losses in the future if we do not achieve sufficient revenue to maintain profitability. We expect revenue to grow by seeking to improve gross margins and generating additional sales, but we cannot guarantee such improvement or growth.

Factors which could adversely affect our future profitability, include, but are not limited to, a decline in revenue either due to lower sales unit volumes or decreasing selling prices or both, our ability to order supplies from vendors, which in turn affects our ability to manufacture our products, and slow payments from our customers on accounts receivable.

Any failure to maintain profitability would have a materially adverse effect on our ability to implement our business plan, our results and operations, and our financial condition, and could cause the value of our Class A common stock to decline, resulting in a significant or complete loss of your investment.

**We may need additional capital to sustain our operations in the future, and may need to seek further financing, which we may not be able to obtain on acceptable terms or at all, which could affect our ability to implement our business strategies.** We have limited capital resources. To date, our operations have been largely funded from the proceeds of equity financings with some level of debt financing. We anticipate requiring additional capital in the future to support our operations and further expand our business and product lines. We may not be able to obtain additional financing when we need it on terms acceptable to us, or at all.

Our future capital needs will depend on numerous factors including: (i) profitability; (ii) the release of competitive products by our competition; (iii) the level of our investment in research and development; and (iv) the amount of our capital expenditures, including equipment and acquisitions. We cannot assure you that we will be able to obtain capital in the future to meet our needs. If we are unable to raise capital when needed, our business, financial condition, and results of operations would be materially adversely affected, and we could be forced to reduce or discontinue our operations.

**We are dependent on a few key customers, and the loss of any key customer could cause a significant decline in our revenues.** In fiscal 2017, we had sales to three customers that comprised an aggregate of approximately 26% of our annual revenue with one customer at 10% of our sales, another customer at 9% of our sales and the third customer at 7% of our sales. In fiscal 2016, we had sales to three customers that comprised approximately 25% of our annual revenue, with one customer at 10% of our sales, another customer at 8% of our sales, and the third customer at 7% of our sales. Part of our continuing strategy has been to gain key customer relationships of more significance and impact to generate higher revenues at lower costs. This strategy has met with some success, and, therefore, we believe our operating results will continue to be notably dependent on sales to a relatively small number of significant customers. However, we continue to diversify our business in order to minimize our sales concentration risk. The loss of any of these customers, or a significant reduction in sales to any such customer, would adversely affect our revenues.

**We may be affected by political and other risks as a result of our sales to international customers and/or our sourcing of materials from international suppliers.** In fiscal 2017, 61% of our net revenue was derived from sales outside of the United States, with 88% of our foreign sales derived from customers in Europe and Asia. In fiscal 2016, approximately 59% of our net revenues were from sales to international customers, with 91% of foreign sales derived from customers in Europe and Asia. Our international sales will be limited, and may even decline, if we cannot establish relationships with new international distributors, maintain relationships with our existing international distributions, maintain and expand our foreign operations, expand international sales, and develop relationships with international service providers. Additionally, our international sales may be adversely affected if international economies weaken. We are subject to the following risks, among others:

- greater difficulty in accounts receivable collection and longer collection periods;
- potentially different pricing environments and longer sales cycles;
- the impact of recessions in economies outside the United States;
- unexpected changes in foreign regulatory requirements;
- the burdens of complying with a wide variety of foreign laws and different legal standards;
- certification requirements;
- reduced protection for intellectual property rights in some countries;
- difficulties in managing the staffing of international operations, including labor unrest and current and changing regulatory environments;
- potentially adverse tax consequences, including the complexities of foreign value-added tax systems, restrictions on the repatriation of earnings, and changes in tax rates;

- price controls and exchange controls;
- government embargoes or foreign trade restrictions;
- imposition of duties and tariffs and other trade barriers;
- import and export controls;
- transportation delays and interruptions;
- terrorist attacks and security concerns in general; and
- political, social, economic instability and disruptions.

**As a U.S. corporation with international operations, we are subject to the U.S. Foreign Corrupt Practices Act and other similar foreign anti-corruption laws, as well as other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, financial condition, and results of operations.** Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act (“FCPA”), and other foreign anti-corruption laws that apply in countries where we do business. The FCPA and these other laws generally prohibit us and our employees and intermediaries from offering, promising, authorizing or making payments to government officials or other persons to obtain or retain business or gain some other business advantage. In addition, we cannot predict the nature, scope, or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. Operations outside of the U.S. may be affected by changes in trade production laws, policies, and measures, and other regulatory requirements affecting trade and investment.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the U.S. Department of Commerce’s Bureau of Industry and Security, the U.S. Department of Treasury’s Office of Foreign Asset Control, and various non-U.S. government entities, including applicable export control regulations, economic sanctions on countries and persons, customs, requirements, currency exchange regulations, and transfer pricing regulations (collectively, the “Trade Control Laws”).

Despite our compliance programs, there can be no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the FCPA or other legal requirements, or Trade Control Laws. If we are not in compliance with the FCPA and other foreign anti-corruption laws or Trade Control Laws, we may be subject to criminal and civil penalties, disgorgement, and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of the FCPA, other anti-corruption laws, or Trade Control Laws by the U.S. or foreign authorities could also have an adverse impact on our reputation, business, financial condition, and results of operations.

**Our future growth is partially dependent on our market penetration efforts.** Our future growth is partially dependent on our market penetration efforts, which include diversifying our sales to high-volume, low-cost optical applications and other new market and product opportunities in multiple industries. While we believe our existing products are commercially viable, we anticipate the need to educate the optical components markets in order to generate market demand and market feedback may require us to further refine these products. Expansion of our product lines and sales into new markets will require significant investment in equipment, facilities, and materials. There can be no assurance that any proposed products will be successfully developed, demonstrate desirable optical performance, be capable of being produced in commercial quantities at reasonable costs or be successfully marketed.

**We rely, in large part, on key business and sales relationships for the successful commercialization of our products, which if not developed or maintained, will have an adverse impact on achieving market awareness and acceptance and will result in a loss of business opportunities.** To achieve wide market awareness and acceptance of our products and technologies, as part of our business strategy, we will attempt to enter into a variety of business relationships with other companies that will incorporate our technologies into their products and/or market products based on our technologies. The successful commercialization of our products and technologies will depend in part on our ability to meet obligations under contracts with respect to the products and related development requirements. The failure of these business relationships will limit the commercialization of our products and technologies, which will have an adverse impact on our business development and our ability to generate revenues.

**If we do not expand our sales and marketing organization, our revenues may not increase.** The sale of our products requires prolonged sales and marketing efforts targeted at several key departments within our prospective customers’ organizations and often time involves our executives, personnel, and specialized systems and applications engineers working together. Currently, our direct sales and marketing organization is somewhat limited. We believe we will need to increase our sales force in order to increase market awareness and sales of our products. There is significant competition for qualified personnel, and we might not be able to hire the kind and number of sales and marketing personnel and applications engineers we need. If we are unable to expand our sales operations, particularly in China, we may not be able to increase market awareness or sales of our products, which would adversely affect our revenues, results of operations, and financial condition.

***If we are unable to develop and successfully introduce new and enhanced products that meet the needs of our customers, our business may not be successful.*** Our future success depends, in part, on our ability to anticipate our customers' needs and develop products that address those needs. Introduction of new products and product enhancements will require that we effectively transfer production processes from research and development to manufacturing, and coordinate our efforts with the efforts of our suppliers to rapidly achieve efficient volume production. If we fail to effectively transfer production processes, develop product enhancements, or introduce new products that meet the needs of our customers as scheduled, our net revenues may decline, which would adversely affect our results of operations and financial condition.

***If we are unable to effectively compete, our business and operating results could be negatively affected.*** We face substantial competition in the optical markets in which we operate. Many of our competitors are large public and private companies that have longer operating histories and significantly greater financial, technical, marketing, and other resources than we have. As a result, these competitors are able to devote greater resources than we can to the development, promotion, sale, and support of their products. In addition, the market capitalization and cash reserves of several of our competitors are much larger than ours, and, as a result, these competitors are much better positioned than we are to exploit markets, develop new technologies, and acquire other companies in order to gain new technologies or products. We also compete with manufacturers of conventional spherical lens products and aspherical lens products, producers of optical quality glass, and other developers of gradient lens technology, as well as telecommunications product manufacturers. In both the optical lens and communications markets, we are competing against, among others, established international companies, especially in Asia. Many of these companies also are primary customers for optical and communication components, and, therefore, have significant control over certain markets for our products. There can be no assurance that existing or new competitors will not develop technologies that are superior to or more commercially acceptable than our existing and planned technologies and products or that competition in our industry will not lead to reduced prices for our products. If we are unable to successfully compete with existing companies and new entrants to the markets we compete in, our business, results of operations, and financial condition could be adversely affected.

***We anticipate further reductions in the average selling prices of some of our products over time, and, therefore, must increase our sales volumes, reduce our costs, and/or introduce higher margin products to reach and maintain financial stability.*** We have experienced decreases in the average selling prices of some of our products over the last ten years, including most of our passive component products. We anticipate that as products in the optical component and module market become more commodity-like, the average selling prices of our products will decrease in response to competitive pricing pressures, new product introductions by us or our competitors, or other factors. We attempt to offset anticipated decreases in our average selling prices by increasing our sales volumes and/or changing our product mix. If we are unable to offset anticipated future decreases in our average selling prices by increasing our sales volumes or changing our product mix, our net revenues and gross margins will decline, increasing the projected cash needed to fund operations. To address these pricing pressures, we must develop and introduce new products and product enhancements that will generate higher margins or change our product mix in order to generate higher margins. If we cannot maintain or improve our gross margins, our financial position, and results of operations may be harmed.

***Because of our limited product offerings, our ability to generate additional revenues may be limited without additional growth.*** We organized our business based on five product groups: LVPMOs, HVPMOs, infrared products, specialty products, and NREs. In fiscal 2016, sales of our LVPMOs generated approximately 42% of our net revenues, sales of our HVPMOs generated approximately 23% of our net revenues, sales of our infrared products generated approximately 10% of our net revenues, sales of our specialty products generated approximately 22% of our net revenues, and sales of our NRE products generated approximately 3% of our net revenues. Accordingly, in fiscal 2016, approximately 87% of our net revenues were derived from sales of our LVPMOs, HVPMOs, and specialty products. In fiscal 2017, sales of our LVPMOs generated approximately 30% of our net revenues, sales of our HVPMOs generated approximately 27% of our net revenues, sales of our infrared products generated approximately 33% of our net revenues, sales of our specialty products generated approximately 9% of our net revenues, and sales of our NRE products generated approximately 1% of our net revenues. Accordingly, in fiscal 2017, approximately 65% of our net revenues were derived from our LVPMO, HVPMO, and specialty products, and 33% was derived from our infrared products. In the future, we expect a larger percentage of our revenues to be generated from sales of our infrared products, particularly sales of ISP's infrared products. Demand for products in the optical market has declined materially in recent years. Continued and expanding market acceptance of these products is critical to our future success. There can be no assurance that our current or new products will achieve market acceptance at the rate at which we expect, or at all, which could adversely affect our results of operations and financial condition.

***Litigation may adversely affect our business, financial condition, and results of operations.*** From time to time in the normal course of business operations, we may become subject to litigation that may result in liability material to our financial statements as a whole or may negatively affect our operating results if changes to our business operations are required. The cost to defend such litigation may be significant and is subject to inherent uncertainties. Insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. There also may be adverse publicity with litigation that could negatively affect customer perception of our business, regardless of whether the allegations are valid or whether we are ultimately found liable. An adverse result in any such matter could adversely impact our operating results or financial condition. Additionally, any litigation to which we are subject could also require significant involvement of our senior management and may divert management's attention from our business and operations.

**We are exposed to fluctuations in currency exchange rates that could negatively impact our financial results and cash flows.** We execute all foreign sales from our Orlando and Irvington facilities and inter-company transactions in United States dollars in order to mitigate the impact of foreign currency fluctuations. However, in the future, a portion of our international revenues and expenses may be denominated in foreign currencies. Accordingly, we could experience the risks of fluctuating currencies and corresponding exchange rates. In fiscal years 2017 and 2016, we recognized a gain of approximately \$78,000 and a loss of \$370,000 on foreign currency transactions, respectively. Any such fluctuations that result in a less favorable exchange rate could adversely affect our revenues, which could negatively impact our results of operations and financial condition.

We also source certain raw materials from outside the United States. Some of those materials, priced in non-dollar currencies, have lowered in price due to the recent increase of the United States dollar against non-dollar-pegged currencies, especially the Euro and Renminbi. This increases our margins and helps with our ability to reach positive cash flow and profitability. If the strength of the United States dollar decreases, the cost of foreign sourced materials could increase, which would adversely affect our financial condition and results of operations.

**A significant portion of our cash is generated and held outside of the United States. The risks of maintaining significant cash abroad could adversely affect our cash flows and financial results.** During fiscal 2017, approximately 58% of our cash was generated and held abroad. We generally consider unremitted earnings of our subsidiaries operating outside of the United States to be indefinitely reinvested and it is not our current intent to change this position. Cash held outside of the United States is primarily used for the ongoing operations of the business in the locations in which the cash is held. Certain countries, such as China, have monetary laws that limit our ability to utilize cash resources in China for operations in other countries. Before any funds can be repatriated the retained earnings in China must equal at least 150% of the registered capital. As of June 30, 2017, we had retained earnings in China of \$1.4 million and we need to have retained earnings of \$11.3 million before repatriation will be allowed. This limitation may affect our ability to fully utilize our cash resources for needs in the United States or other countries and may adversely affect our liquidity. Further, since repatriation of such cash is subject to limitations and may be subject to significant taxation, we cannot be certain that we will be able to repatriate such cash on favorable terms or in a timely manner. If we incur operating losses and/or require cash that is held in international accounts for use in our operations based in the United States, a failure to repatriate such cash in a timely and cost-effective manner could adversely affect our business and financial results.

Further, our worldwide operations subject us to the jurisdiction of a number of taxing authorities. The income earned in these various jurisdictions is taxed on differing basis, including net income actually earned, net income deemed earned, and revenue-based tax withholding. The final determination of our income tax liabilities involves the interpretation of local tax laws, tax treaties, and related authorities in each jurisdiction, as well as the use of estimates and assumptions regarding the scope of future operations and results achieved and the timing and nature of income earned and expenditures incurred. Changes in or interpretations of tax law and currency/repatriation control could impact the determination of our income tax liabilities for a tax year. Legislative initiatives in the United States to reform the United States' tax laws could also have a material impact on our future tax rate and our repatriation plans.

**Our future success depends on our key executive officers and our ability to attract, retain, and motivate qualified personnel.** Our future success largely depends upon the continued services of our key executive officers, management team, and other engineering, sales, marketing, manufacturing, and support personnel. If one or more of our key employees are unable or unwilling to continue in their present positions, we may not be able to replace them readily, if at all. Additionally, we may incur additional expenses to recruit and retain new key employees. If any of our key employees joins a competitor or forms a competing company, we may lose some or all of our customers. Because of these factors, the loss of the services of any of these key employees could adversely affect our business, financial condition, and results of operations.

Our continuing ability to attract and retain highly qualified personnel will also be critical to our success because we will need to hire and retain additional personnel to support our business strategy. We expect to continue to hire selectively in the manufacturing, engineering, sales and marketing, and administrative functions to the extent consistent with our business levels and to further our business strategy. We face significant competition for skilled personnel in our industry. This competition may make it more difficult and expensive to attract, hire, and retain qualified managers and employees. Because of these factors, we may not be able to effectively manage or grow our business, which could adversely affect our financial condition or business.

**We depend on single or limited source suppliers for some of the key materials or process steps in our products, making us susceptible to supply shortages, poor performance, or price fluctuations.** We currently purchase several key materials, or have outside vendors perform process steps, such as lens coatings, used in or during the manufacture of our products from single or limited source suppliers. We may fail to obtain required materials or services in a timely manner in the future, or could experience delays as a result of evaluating and testing the products or services of these potential alternative suppliers. The decline in demand in the telecommunications equipment industry may have adversely impacted the financial condition of certain of our suppliers, some of whom have limited financial resources. We have in the past, and may in the future, be required to provide advance payments in order to secure key materials from financially limited suppliers. Financial or other difficulties faced by these suppliers could limit the availability of key components or materials. For example, increasing labor costs in China has increased the risk of bankruptcy for suppliers with operations in China, and has led to higher manufacturing costs for us and the need to identify alternate suppliers. Additionally, financial difficulties could impair our ability to recover advances made to these suppliers. Any interruption or delay in the supply of any of these materials or services, or the inability to obtain these materials or services from alternate sources at acceptable prices and within a reasonable amount of time, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders, thereby negatively affecting our business, financial condition, and results of operation.



**We face product liability risks, which could adversely affect our business.** The sale of our optical products involves the inherent risk of product liability claims by others. We do not currently maintain product liability insurance coverage. Product liability insurance is expensive, subject to various coverage exclusions, and may not be obtainable on terms acceptable to us if we decide to procure such insurance in the future. Moreover, the amount and scope of any coverage may be inadequate to protect us in the event that a product liability claim is successfully asserted. If a claim is asserted and successfully litigated by an adverse party, our financial position and results of operations could be adversely affected.

**Business interruptions could adversely affect our business.** We manufacture our products at manufacturing facilities located in Orlando, Florida, Irvington, New York, Riga, Latvia, and Zhenjiang, China. Our revenues are dependent upon the continued operation of these facilities. The Orlando facility is subject to a lease that expires in April 2022, the Irvington facility is subject to a lease that expires in September 2020, the Riga facility is subject to a lease that expires in December 2019, and the Zhenjiang facility is subject to two leases that expire in March 2019 and December 2021. Our operations are vulnerable to interruption by fire, hurricane winds and rain, earthquakes, electric power loss, telecommunications failure, and other events beyond our control. We do not have detailed disaster recovery plans for our facilities and we do not have a backup facility, other than our other facilities, or contractual arrangements with any other manufacturers in the event of a casualty to or destruction of any facility or if any facility ceases to be available to us for any other reason. If we are required to rebuild or relocate either of our manufacturing facilities, a substantial investment in improvements and equipment would be necessary. We carry only a limited amount of business interruption insurance, which may not sufficiently compensate us for losses that may occur.

Our facilities may be subject to electrical blackouts as a consequence of a shortage of available electrical power. We currently do not have backup generators or alternate sources of power in the event of a blackout. If blackouts interrupt our power supply, we would be temporarily unable to continue operations at such facility.

Any losses or damages incurred by us as a result of blackouts, rebuilding, relocation, or other business interruptions, could result in a significant delay or reduction in manufacturing and production capabilities, impair our reputation, harm our ability to retain existing customers and to obtain new customers, and could result in reduced sales, lost revenue, and/or loss of market share, any of which could substantially harm our business and our results of operations.

**Our failure to accurately forecast material requirements could cause us to incur additional costs, have excess inventories, or have insufficient materials to manufacture our products.** Our material requirements forecasts are based on actual or anticipated product orders. It is very important that we accurately predict both the demand for our products and the lead times required to obtain the necessary materials. Lead times for materials that we order vary significantly and depend on factors such as specific supplier requirements, the size of the order, contract terms, and the market demand for the materials at any given time. If we overestimate our material requirements, we may have excess inventory, which would increase our costs. If we underestimate our material requirements, we may have inadequate inventory, which could interrupt our manufacturing and delay delivery of our products to our customers. Any of these occurrences would negatively impact our results of operations. Additionally, in order to avoid excess material inventories we may incur cancellation charges associated with modifying existing purchase orders with our vendors, which, depending on the magnitude of such cancellation charges, may adversely affect our results of operations.

**If we do not achieve acceptable manufacturing yields our operating results could suffer.** The manufacture of our products involves complex and precise processes. Our manufacturing costs for several products are relatively fixed, and, thus, manufacturing yields are critical to the success of our business and our results of operations. Changes in our manufacturing processes or those of our suppliers could significantly reduce our manufacturing yields. In addition, we may experience manufacturing delays and reduced manufacturing yields upon introducing new products to our manufacturing lines. The occurrence of unacceptable manufacturing yields or product yields could adversely affect our financial condition and results of operations.

**If our customers do not qualify our manufacturing lines for volume shipments, our operating results could suffer.** Our manufacturing lines have passed our qualification standards, as well as our technical standards. However, our customers may also require that our manufacturing lines pass their specific qualification standards, and that we be registered under international quality standards, such as ISO 9001:2008 certification. This customer qualification process determines whether our manufacturing lines meet the customers' quality, performance, and reliability standards. Generally, customers do not purchase our products, other than limited numbers of evaluation units, prior to qualification of the manufacturing line for volume production. We may be unable to obtain customer qualification of our manufacturing lines or we may experience delays in obtaining customer qualification of our manufacturing lines. If there are delays in the qualification of our products or manufacturing lines, our customers may drop the product from a long-term supply program, which would result in significant lost revenue opportunity over the term of each such customer's supply program, or our customers may purchase from other manufacturers. The inability to obtain customer qualification of our manufacturing lines, or the delay in obtaining such qualification, could adversely affect our financial condition and results of operations.

## Risks Related To Our Intellectual Property

***If we are unable to protect and enforce our intellectual property rights, we may be unable to compete effectively.*** We believe that our intellectual property rights are important to our success and our competitive position, and we rely on a combination of patent, copyright, trademark, and trade secret laws and restrictions on disclosure to protect our intellectual property rights. Although we have devoted substantial resources to the establishment and protection of our intellectual property rights, the actions taken by us may be inadequate to prevent imitation or improper use of our products by others or to prevent others from claiming violations of their intellectual property rights by us.

In addition, we cannot assure that, in the future, our patent applications will be approved, that any patents that we may be issued will protect our intellectual property, or that third parties will not challenge any issued patents. Other parties may independently develop similar or competing technology or design around any patents that may be issued to us. We also rely on confidentiality procedures and contractual provisions with our employees, consultants, and corporate partners to protect our proprietary rights, but we cannot assure the compliance by such parties with their confidentiality obligations, which could be very time consuming and expensive to enforce.

It may be necessary to litigate to enforce our patents, copyrights, and other intellectual property rights, to protect our trade secrets, to determine the validity of and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation can be time consuming, distracting to management, expensive, and difficult to predict. Our failure to protect or enforce our intellectual property could have an adverse effect on our business, financial condition, prospects, and results of operation.

***We do not have patent protection for our formulas and processes, and a loss of ownership of any of our formulas and processes would negatively impact our business.*** We believe that we own our formulas and processes. However, we have not sought, and do not intend to seek, patent protection for all of our formulas and processes. Instead, we rely on the complexity of our formulas and processes, trade secrecy laws, and employee confidentiality agreements. However, we cannot assure you that other companies will not acquire our confidential information or trade secrets or will not independently develop equivalent or superior products or technology and obtain patent or similar rights. Although we believe that our formulas and processes have been independently developed and do not infringe the patents or rights of others, a variety of components of our processes could infringe existing or future patents, in which event we may be required to modify our processes or obtain a license. We cannot assure you that we will be able to do so in a timely manner or upon acceptable terms and conditions and the failure to do either of the foregoing would negatively affect our business, results of operations, financial condition, and cash flows.

***We may become involved in intellectual property disputes and litigation, which could adversely affect our business.*** We anticipate, based on the size and sophistication of our competitors and the history of rapid technological advances in our industry that several competitors may have patent applications in progress in the United States or in foreign countries that, if issued, could relate to products similar to ours. If such patents were to be issued, the patent holders or licensees may assert infringement claims against us or claim that we have violated other intellectual property rights. These claims and any resulting lawsuits, if successful, could subject us to significant liability for damages and invalidate our proprietary rights. The lawsuits, regardless of their merits, could be time-consuming and expensive to resolve and would divert management time and attention. Any potential intellectual property litigation could also force us to do one or more of the following, any of which could harm our business and adversely affect our financial condition and results of operations:

- stop selling, incorporating or using our products that use the disputed intellectual property;
- obtain from third parties a license to sell or use the disputed technology, which license may not be available on reasonable terms, or at all; or
- redesign our products that use the disputed intellectual property.

## Item 2. Properties.

We occupy a 26,000 square foot facility in Orlando, Florida, which includes a 6,000 square foot clean room and houses our corporate headquarters, engineering, marketing, internal sales, manufacturing management and some manufacturing operations. At our Orlando facility, our molded glass aspheres manufacturing area includes lens pressing equipment, high precision mold production equipment, advanced metrology and inspection equipment, and coating facilities. It also features a tooling and machine shop, which can support new product development, commercial production requirements for our machined parts, and the fabrication of propriety press workstations and mold equipment. Our Orlando facility has glass coring equipment for our current needs of GRADIUM product sales and also includes a clean room for our molding and assembly workstations, which include our proprietary laser fusion and housing equipment, automated testing processes, and laser polishing stations. Our Orlando facility is ITAR compliant.

The monthly rental payments for our Orlando facility will average approximately \$27,000 through April 2022, which excludes all charges, common area maintenance, escalation, and certain pass-through of taxes and other operating costs. In July 2014, we negotiated a new lease that increased our space from approximately 22,000 square feet to approximately 26,000 square feet, or by 20%, and extended the lease term through April 2022. The additional space allowed us to relocate our administration functions to new office space and reclaim needed manufacturing space for our business. We were also able to take advantage of local market conditions and decrease our overall rent expense by approximately 25%. Minimum rental rates for the extension term were established based on annual increases of two and one half percent and start in the third year of the extension period. Additionally, there is one five-year extension option exercisable by us. The minimum rental rates for such additional extension options will be determined at the time an option is exercised and will be based on a "fair market value rate" as determined in accordance with the lease agreement, as amended.

LPOI leases an approximately 1,900 square foot facility located in Jiading, People's Republic of China. LPOI's Shanghai facility is primarily used for sales and support functions, housing 5 employees. The lease expires in October 2018, and the base rent is approximately \$1,700 per month, which excludes all charges, common area maintenance, and other operating costs.

LPOIZ leases an approximately 26,000 square foot facility located in Zhenjiang, Jiangsu Province, People's Republic of China. LPOIZ's Zhenjiang facility features a molded glass aspheres manufacturing area, which includes lens pressing equipment, advanced metrology and inspection equipment. The clean room in LPOIZ's Zhenjiang facility features assembly manufacturing equipment and automated dispensing systems. The Zhenjiang facility also houses our precision dicing equipment and anti-reflective coating equipment.

The LPOIZ lease is for a five-year term that will expire in March 2019. The Zhenjiang facility houses 117 employees. The rent is approximately \$1,700 per month, which excludes all charges, common area maintenance, and other operating costs. In July 2017, we entered into a lease for an additional 13,000 square feet within the same facility. This lease is for a 54-month term, expiring in December 2021. The rent is approximately \$400 per month, which excludes all charges, common area maintenance, and other operating costs, with an initial deferral period of 30 months.

ISP leases an approximately 13,000 square foot facility located in Irvington, New York. This facility features a diamond turning manufacturing area, coating area and assembly operations, as well as some engineering, administrative and sales functions. The lease expires in September 2020. The base rent is approximately \$23,000 per month, which excludes all charges, common area maintenance, and other operating costs. Our Irvington facility is ITAR compliant.

ISP Latvia leases an approximately 23,000 square foot facility located in Riga, Latvia. This facility houses diamond turning, conventional grind and polish, CNC and crystal growth operations, as well as some administrative and sales functions. The lease expires in December 2019. The base rent is approximately \$9,000 per month, which excludes all charges, common area maintenance, and other operating costs.

We are ISO 9001:2008 certified at our manufacturing facilities located in: Orlando, Florida; Irvington, New York; Zhenjiang, China; and Riga, Latvia. Our Zhenjiang facility also recently obtained ISO/TS 16949:2009 certification for manufacturing of optical lenses and accessories used in automobiles. Much of our product qualification is performed in-house at our facilities. Our test and evaluation capabilities include damp heat, high/low temp storage, and a thermal shock oven, which are representative of the equipment required to meet Telecordia requirements for telecommunications customers as well as other customer required product specifications. Our new product development department has computer aided design (CAD) tools and technical support. The continuing implementation of various statistical process controls (SPCs) is being pursued to improve product yields and allows us to reduce costly manual testing operations. Quality control in manufacturing to ensure a quality end product is critical to our ability to bring our products to market, as our customers may demand rigorous testing prior to their purchase of our products.

We are in the process of adding additional production equipment at our Orlando, Zhenjiang and Riga facilities. We will also add additional work shifts at the Zhenjiang facility, as needed, to increase capacity and meet forecasted demand. Our Irvington facility is at capacity with limited room for growth; however, additional expansion is not expected for this facility. Our Riga facility recently underwent an expansion of approximately of 4,000 square feet, which is expected to handle our short-term growth for that facility based on our forecasted demand. We intend to monitor the capacity at our facilities, and will increase such space as needed.

Our territorial sales personnel maintain an office from their homes to serve their geographical territories.

### Item 3. Legal Proceedings.

From time to time, we are involved in various legal actions arising in the normal course of business. We currently have no legal proceeding to which we are a party to or to which our property is subject to and, to the best of our knowledge, no adverse legal activity is anticipated or threatened.

## PART II

### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities .

#### Market Information

Our Class A common stock is traded on the NASDAQ Capital Market ("NCM") under the symbol "LPTH".

The following table sets forth the range of high and low bid prices for our Class A common stock for the periods indicated, as reported by the NCM. The quotation information below reflects inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions. The closing ask price on June 30, 2017 was \$2.71 per share.

	Class A Common Stock	
	High	Low
<b>Fiscal Year Ended June 30, 2017</b>		
Quarter ended June 30, 2017	\$ 3.31	\$ 2.35
Quarter ended March 31, 2017	\$ 3.22	\$ 1.42
Quarter ended December 31, 2016	\$ 1.81	\$ 1.21
Quarter ended September 30, 2016	\$ 2.50	\$ 1.47
<b>Fiscal Year Ended June 30, 2016</b>		
Quarter ended June 30, 2016	\$ 2.06	\$ 1.71
Quarter ended March 31, 2016	\$ 3.43	\$ 1.80
Quarter ended December 31, 2015	\$ 2.82	\$ 1.43
Quarter ended September 30, 2015	\$ 2.03	\$ 1.45

#### Holders

As of June 05, 2017, we estimate there were approximately 201 holders of record and approximately 6,290 street name holders of our Class A common stock.

#### Dividends

We have never declared or paid any cash dividends on our Class A common stock and do not intend to pay any cash dividends in the foreseeable future. We currently intend to retain all future earnings in order to finance the operation and expansion of our business. In addition, the payment of dividends, if any, in the future, will depend on our earnings, capital requirements, financial conditions and other relevant factors.

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

*You should read the following discussion and analysis by our management of our financial condition and results of operations in conjunction with our consolidated financial statements and the accompanying notes.*

*The following discussion contains forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in the forward-looking statements. Please also see the cautionary language at the beginning of this Annual Report on Form 10-K regarding forward-looking statements.*

## Results of Operations

Operating Results for Fiscal Year Ended June 30, 2017 compared to the Fiscal Year Ended June 30, 2016:

### Revenues:

Revenue for fiscal 2017 totaled approximately \$28.4 million compared to approximately \$17.3 million for fiscal 2016, an increase of 64%. The increase in revenue is primarily attributable to: (i) an approximately \$7.7 million increase, or 437%, in revenues generated by sales of our infrared products, which primarily consisted of revenues generated by sales of ISP's infrared products; (ii) an approximately \$3.7 million increase, or 93%, in revenues generated by sales of our HVPMO lenses; and (iii) an approximately \$1.2 million increase, or 17%, in revenues generated by sales of our LVPMO lenses. These increases were partially offset by an approximately \$1.3 million decrease, or 35%, in revenues generated from sales of our specialty products. The decrease in revenues generated by our specialty product group was due to the absence of approximately \$1 million in revenues generated in fiscal 2016 in connection with the final sale of custom fiber collimator assemblies to a customer pursuant to a license agreement. We transferred the specific product technology to the customer pursuant to a license agreement entered into in fiscal 2015. Thus, the customer is no longer purchasing fiber collimator assemblies from us.

### Cost of Sales and Gross Margin:

Gross margin for fiscal 2017 was approximately \$14.7 million, compared to approximately \$9.3 million in the prior year period, an increase of 58%, driven primarily by the increase in sales. Gross margin as a percentage of revenue for fiscal 2017 was 52% compared to 54% in fiscal 2016. The change in gross margin as a percentage of revenue is primarily attributable to the inclusion of ISP's business for the second half of fiscal 2017, as gross margin as a percentage of revenue with respect to ISP's products has historically been lower than our existing products.

### Selling, General and Administrative Expenses:

Selling, general and administrative expenses increased by approximately \$2.1 million to approximately \$8.7 million in fiscal 2017 as compared to approximately \$6.6 million in fiscal 2016. The increase was primarily due to: (i) an approximately \$445,000 increase in expenses related to the acquisition of ISP, (ii) an approximately \$786,000 increase in wages, primarily related to the acquisition of ISP, (iii) an approximately \$210,000 increase in travel expenses due to the additional facilities locations as well as the larger combined sales force as a result of the acquisition of ISP, (iv) \$394,000 for professional services primarily related to the integration of ISP, (v) \$104,000 for trade shows, and (vi) \$145,000 for other expenses. We project that our selling, general and administrative expenses will increase in fiscal 2018, due to an increase in commissions earned by our sales force and other sales related expenses driven by the increase in forecasted sales.

### New Product Development:

New product development costs in fiscal 2017 increased by approximately \$567,000 to approximately \$1.2 million, compared to approximately \$669,000 in fiscal 2016. This increase primarily consists of an approximately \$400,000 increase in wages, and an approximately \$140,000 increase in materials and outside services for engineering projects, to expand and enhance our existing products. Currently, we are forecasting a similar level of new product development spending for fiscal 2018 as compared to fiscal 2017.

### Interest Expense:

Interest expense was approximately \$413,400 for fiscal 2017 as compared to approximately \$37,600 for fiscal 2016. Interest expense resulted from (i) amortization of debt costs related to our prior invoiced-based working capital revolving line of credit with Avidbank Corporate Finance, a division of AvidBank ("AvidBank") pursuant to that certain Amended and Restated Loan and Security Agreement dated December 23, 2014, as further amended by that First Amendment to Amended and Restated Loan Security Agreement dated December 23, 2015 (collectively, the "Prior Line of Credit"), (ii) interest on an acquisition term loan (the "Term Loan") in the aggregate principal amount of \$5 million, issued pursuant to the Second Amended and Restated Loan and Security Agreement (the "Amended LSA") with Avidbank, (iii) interest on a five-year note in the aggregate principal amount of \$6 million issued by us to the ISP stockholders (the "Sellers Note"), and (iv) interest on capital leases.

### Other Income (Expense):

In fiscal 2017 and 2016, we recognized approximately \$467,500 and \$52,400 in expense, respectively, related to the change in the fair value of derivative warrants issued in connection with our June 2012 private placement. This fair value will be re-measured each reporting period throughout the five year life of the warrants, or until exercised. The warrants expire on December 11, 2017.

Other income increased by approximately \$411,000 to income of \$106,000 in fiscal 2017, from a loss of \$305,000 in fiscal 2016, primarily from the impact of foreign exchange rates reflecting the change in foreign exchange rates during the period of time between when we received invoices and paid those invoices and the book value change on our fixed assets and inventory in China and Latvia.

We execute all foreign sales from our U.S.-based facilities and inter-company transactions in United States dollars, mitigating the impact of foreign currency fluctuations. Assets and liabilities denominated in non-United States currencies, primarily the Chinese Renminbi and Euro, are translated at rates of exchange prevailing on the balance sheet date, and revenues and expenses are translated at average rates of exchange for the year. During the years ended June 30, 2017 and 2016, we recognized a gain of \$78,000 and a loss of \$370,000 on foreign currency translation, respectively.

**Income taxes:**

Income taxes for fiscal 2017 was a benefit of approximately \$4.3 million, compared to an expense of approximately \$200,000 in fiscal 2016. The benefit in fiscal 2017 is attributable to a decrease in the valuation allowance recorded against our deferred tax assets, primarily driven by the \$5.4 million in deferred tax liabilities recorded in conjunction with the acquisition of ISP. This benefit was offset by income tax expense associated with our Chinese subsidiaries and, to a much lesser extent, income taxes attributable to ISP Latvia.

We extinguished all net operating loss ("NOL") carryforwards in China during fiscal 2016. Accordingly, we are now accruing income taxes in China related to such operations. Our Chinese subsidiaries are governed by the Income Tax Law of the People's Republic of China, which is applicable to privately run and foreign invested enterprises, and which generally subjects such enterprises to a statutory rate of 25% on income reported in the statutory financial statements after appropriate tax adjustments. ISP Latvia is governed by the Law of Corporate Income Tax of Latvia, which is applicable to privately run and foreign invested enterprises, and which generally subjects such enterprises to a statutory rate of 15% on income reported in the statutory financial statements after appropriate tax adjustments.

Our effective tax rate reflects the applicable tax rate in effect in the various tax jurisdictions where our income is earned. Excluding the impact of the valuation allowance change, as well as the impact of the change in the fair value of the warrant liability and the impact of foreign currency translation, both of which are excluded when computing taxable income, our effective tax rate was 30% for fiscal 2017.

**Net Income:**

Net income for fiscal 2017 was approximately \$7.7 million, or \$0.39 basic and \$0.36 diluted earnings per share, respectively, compared to approximately \$1.4 million, or \$0.09 basic and \$0.08 diluted earnings per share in fiscal 2016. The approximately \$6.3 million increase is primarily due to the \$4.3 million net tax benefit for fiscal 2017, compared to tax expense of approximately \$200,000 for fiscal 2016. The remaining increase in net income from fiscal 2016 to fiscal 2017 was primarily driven by higher sales resulting from the acquisition of ISP coupled with the sales growth within our other product lines, partially offset by the negative impact of accounting entries for the change in the fair value of our warrant liability.

Weighted average common shares outstanding increased as a result of the issuance of Class A common stock in connection with the acquisition of ISP.

**Liquidity and Capital Resources**

At June 30, 2017, we had working capital of approximately \$14.0 million and total cash and cash equivalents of approximately \$8.1 million. Approximately \$4.7 million of our total cash and cash equivalents was held by our foreign subsidiaries in China and Latvia.

Cash and cash equivalents held by our foreign subsidiaries in China were generated in China as a result of foreign earnings. Before any funds can be repatriated the retained earnings in China must equal at least 150% of the registered capital. As of June 30, 2017, we had retained earnings of \$1.4 million and we need to have retained earnings of \$11.3 million before repatriation will be allowed. We currently intend to permanently invest earnings generated from our foreign operations, and, therefore, we have not previously provided for United States taxes on the related earnings. However, if in the future we change such intention, we would provide for and pay additional United States taxes at that time.

On December 21, 2016, we executed the Amended LSA with AvidBank for the Term Loan in the aggregate principal amount of \$5 million and a working capital revolving line of credit (the "Revolving Line"). The Amended LSA amends and restates the Prior Line of Credit. For additional information, see Note 18, Loan Payable, to the Notes to the Financial Statements to this Annual Report on Form 10-K.

The Term Loan is for a five-year term. Pursuant to the Amended LSA, interest on the Term Loan began accruing on December 21, 2016 and is paid monthly for the first six months of the term of the Term Loan. Thereafter, both principal and interest is due and payable in fifty-four (54) monthly installments. The Term Loan bears interest at a per annum rate equal to two percent (2.0%) above the Prime Rate; provided, however, that at no time shall the applicable rate be less than five and one-half percent (5.50%) per annum. Prepayment is permitted; however, we must pay a prepayment fee in an amount equal to (i) 1% of the principal amount of the Term Loan if prepayment occurs on or prior to December 21, 2018, or (ii) 0.75% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2017 but on or prior to December 21, 2018, or (iii) 0.50% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2018 but on or prior to December 21, 2019, or (iv) 0.25% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2019 but on or prior to December 21, 2020.

Pursuant to the Amended LSA, Avidbank will, in its discretion, make loan advances under the Revolving Line to us up to a maximum aggregate principal amount outstanding not to exceed the lesser of (i) One Million Dollars (\$1,000,000) or (ii) eighty percent (80%) (the "Maximum Advance Rate") of the aggregate balance of our eligible accounts receivable, as determined by AvidBank in accordance with the Amended LSA. AvidBank may, in its discretion, elect to not make a requested advance, determine that certain accounts are not eligible accounts, change the Maximum Advance Rate or apply a lower advance rate to particular accounts and terminate the Amended LSA.

Amounts borrowed under the Revolving Line may be repaid and re-borrowed at any time prior to December 21, 2017, at which time all amounts shall be immediately due and payable. The advances under the Revolving Line bear interest, on the outstanding daily balance, at a per annum rate equal to one percent (1%) above the Prime Rate; provided, however, that at no time shall the applicable rate be less than four and one-half percent (4.5%) per annum. Interest payments are due and payable on the last business day of each month. Payments received with respect to accounts upon which advances are made will be applied to the amounts outstanding under the Amended LSA.

Our obligations under the Amended LSA are secured by a first priority security interest (subject to permitted liens) in cash, U.S. inventory and accounts receivable. In addition, the Company's wholly-owned subsidiary, Geltech, has guaranteed our obligations under the Amended LSA.

The Amended LSA contains customary covenants, including, but not limited to: (i) limitations on the disposition of property; (ii) limitations on changing our business or permitting a change in control; (iii) limitations on additional indebtedness or encumbrances; (iv) restrictions on distributions; and (v) limitations on certain investments.

Late payments are subject to a late fee equal to the lesser of five percent (5%) of the unpaid amount or the maximum amount permitted to be charged under applicable law. Amounts outstanding during an event of default accrue interest at a rate of five percent (5%) above the interest rate applicable immediately prior to the occurrence of the event of default.

As of June 30, 2017, the amount outstanding under the Term Loan was \$5 million and under the Revolving Line was \$0. Costs incurred of approximately \$72,000 were recorded as a discount on debt and will be amortized over the five-year term of the Loan. Amortization of approximately \$7,700 is included in interest expense for the fiscal year ended June 30, 2017. We do not anticipate the need to draw upon the Revolving Line during fiscal 2018. However, if we would draw upon this facility, cash flows generated from U.S. operations are estimated to be sufficient to service this debt.

On December 21, 2016, we also entered into a five-year Sellers Note in the aggregate principal amount of \$6 million. Pursuant to the Sellers Note, during the period commencing on December 21, 2016 and continuing until the fifteen month anniversary of December 21, 2016 (the "Initial Period"), interest will accrue on only the principal amount of the Sellers Note in excess of \$2,700,000 at an interest rate equal to ten percent (10%) per annum. After the Initial Period, interest will accrue on the entire unpaid principal amount of the Sellers Notes from time to time outstanding, at an interest rate equal to ten percent (10%) per annum. Interest is payable semi-annually in arrears. The term of the Sellers Note is five years, and any unpaid interest and principal, together with any other amounts payable under the Sellers Note, is due and payable on the maturity date. We may prepay the Sellers Note in whole or in part without penalty or premium. If we do not pay any amount payable when due, whether at the maturity date, by acceleration, or otherwise, such overdue amount will bear interest at a rate equal to twelve (12%) per annum from the date of such non-payment until we pay such amount in full. The fair value of the Sellers Note was determined to be approximately \$6,327,200. The fair value of the future payments was determined using the risk adjusted rate of 7.5%. The Sellers Note is included in Loans payable, less current portion on the consolidated balance sheet.

In addition, upon the occurrence of a payment default, or any other "event of default," such as a bankruptcy event or a change of control of us, the entire unpaid and outstanding principal balance of the Sellers Note, together with all accrued and unpaid interest and any and all other amounts payable under the Sellers Note, will immediately be due and payable.

As of June 30, 2017, the amount outstanding under the Sellers Note was \$5.7 million, after applying the approximately \$292,800 working capital adjustment to the outstanding balance.

For additional information, see Note 18, Loans Payable, to the Notes to the Consolidated Financial Statements to this Annual Report on Form 10-K.

We believe we have adequate financial resources to sustain our current operations in the coming year. We have established milestones that will be tracked to ensure that as funds are expended we are achieving results before additional funds are committed. We anticipate sales growth in fiscal 2018 primarily from precision molded optics, with the emphasis on HVPMO applications, specialty products, and infrared products. We also expect to be better positioned to accelerate our revenue growth and profitability as a result of our recent acquisition of ISP and the consolidation of our sales force. We are also benefiting from a substantial increase in revenue generating opportunities and broader market applications as a result of our investments in technologies that decreased our lens production costs and expanded our production capacity. We believe we can further improve upon our track record of growth – and do so far more profitably.

We generally rely on cash from operations and equity and debt offerings, to the extent available, to satisfy our liquidity needs. From February 1996 (when our initial public offering occurred) through the end of fiscal 2017, inclusive, we raised a net total of approximately \$117 million from the issuance of common and preferred stock, the sale of convertible debt and the exercise of options and warrants for shares of our Class A common stock.

There are a number of factors that could result in the need to raise additional funds, including a decline in revenue or a lack of anticipated sales growth, increased material costs, increased labor costs, planned production efficiency improvements not being realized, increases in property, casualty, benefit and liability insurance premiums, and increases in other discretionary spending, particularly sales and marketing related. We will also continue efforts to keep costs under control as we seek renewed sales growth. Our efforts are directed toward generating positive cash flow and profitability. If these efforts are not successful, we may need to raise additional capital. Should capital not be available to us at reasonable terms, other actions may become necessary in addition to cost control measures and continued efforts to increase sales. These actions may include exploring strategic options for the sale of the Company, the sale of certain product lines, the creation of joint ventures or strategic alliances under which we will pursue business opportunities, the creation of licensing arrangements with respect to our technology, or other alternatives.

#### *Cash Flows – Financings:*

Net cash provided by financing activities was approximately \$14.2 million in fiscal 2017 compared to approximately \$236,000 in fiscal 2016. We received approximately \$5.0 million in proceeds from the Term Loan and approximately \$8.7 million in net proceeds related to the public offering of 8,000,000 shares of our Class A common stock in connection with the acquisition of ISP. We also received net proceeds of approximately \$706,000 from the exercise of June 2012 Warrants in fiscal 2017. As of June 30, 2017 and 2016, we had an accumulated deficit of approximately \$202 million and \$204 million, respectively.

#### *Cash Flows – Operating and Investing:*

Cash flow provided by operations was approximately \$5.0 million for the year ended June 30, 2017, an increase of approximately \$3.5 million from fiscal 2016. We anticipate continued improvement in our cash flows provided by operations in future years due to sales growth and continued margin improvements based on production efficiencies and reductions in product costs, offset by marginal increases in selling, administrative, and new product development expenditures.

During fiscal 2017, we expended approximately \$2.2 million for capital equipment as compared to approximately \$1.1 million during fiscal 2016. In fiscal 2017, we initiated capital leases in the amount of \$230,000 for manufacturing equipment. The majority of our capital expenditures during both fiscal 2017 and fiscal 2016 were related to the purchase of equipment used to enhance or expand our production capacity, tooling for our precision molded products, and equipment and facility improvements for our Zhenjiang facility. We anticipate an increase in capital expenditures during fiscal 2018; however, the total amount expended will depend on opportunities and circumstances.

During fiscal 2017, we also expended approximately \$11.8 million for the acquisition of ISP, see Note 3, Acquisition of ISP Optics Corporation, to the Consolidated Financial Statements for additional information.

#### **How We Operate:**

We have continuing sales of two basic types: occasional sales via ad-hoc purchase orders of mostly standard product configurations (our “turns” business) and the more challenging and potentially more rewarding business of customer product development. In this latter type of business we work with customers to help them determine optical specifications and even create certain optical designs for them, including complex multi-component designs that we call “engineered assemblies.” This is followed by “sampling” small numbers of the product for the customers’ test and evaluation. Thereafter, should a customer conclude that our specification or design is the best solution to their product need; we negotiate and “win” a contract (sometimes called a “design win”) – whether of a “blanket purchase order” type or a supply agreement. The strategy is to create an annuity revenue stream that makes the best use of our production capacity as compared to the turns business, which is unpredictable and uneven. This annuity revenue stream can also generate low-cost, high-volume type orders. A key business objective is to convert as much of our business to the design win and annuity model as is possible. We face several challenges in doing so:

- Maintaining an optical design and new product sampling capability, including a high-quality and responsive optical design engineering staff;
- The fact that as our customers take products of this nature into higher volume, commercial production (for example, in the case of molded optics, this may be volumes over one million pieces per year) they begin to work seriously to reduce costs – which often leads them to turn to larger or overseas producers, even if sacrificing quality; and
- Our small business mass means that we can only offer a moderate amount of total productive capacity before we reach financial constraints imposed by the need to make additional capital expenditures – in other words, because of our limited cash resources and cash flow, we may not be able to service every opportunity that presents itself in our markets without arranging for such additional capital expenditures.



Despite these challenges to winning more “annuity” business, we nevertheless believe we can be successful in procuring this business because of our unique capabilities in optical design engineering that we make available on the merchant market, a market that we believe is underserved in this area of service offering. Additionally, we believe that we offer value to some customers as a source of supply in the United States should they be unwilling to commit to purchase their entire supply of a critical component from foreign merchant production sources. We also continue to have the proprietary GRADIUM lens glass technology to offer to certain laser markets.

#### **Our Key Performance Indicators:**

Usually on a weekly basis, management reviews a number of performance indicators. Some of these indicators are qualitative and others are quantitative. These indicators change from time to time as the opportunities and challenges in the business change. They are mostly non-financial indicators such as units of shippable output by product line, production yield rates by major product line, and the output and yield data from significant intermediary manufacturing processes that support the production of the finished shippable product. These indicators can be used to calculate such other related indicators as fully yielded unit production per-shift, which varies by the particular product and our state of automation in production of that product at any given time. Higher unit production per shift means lower unit cost, and, therefore, improved margins or improved ability to compete where desirable for price sensitive customer applications. The data from these reports is used to determine tactical operating actions and changes. We believe that our non-financial production indicators, such as those noted, are proprietary information.

*The discussions of our results as presented in this Annual Report include use of the non-GAAP terms “EBITDA,” “adjusted EBITDA,” “adjusted net income,” and “gross margin.” EBITDA, adjusted EBITDA and adjusted net income is discussed below. Gross margin is determined by deducting the cost of sales from operating revenue. Cost of sales includes manufacturing direct and indirect labor, materials, services, fixed costs for rent, utilities and depreciation, and variable overhead. Gross margin should not be considered an alternative to operating income or net income, both of which are determined in accordance with GAAP. We believe that gross margin, although a non-GAAP financial measure, is useful and meaningful to investors as a basis for making investment decisions. It provides investors with information that demonstrates our cost structure and provides funds for our total costs and expenses. We use gross margin in measuring the performance of our business and have historically analyzed and reported gross margin information publicly. Other companies may calculate gross margin in a different manner.*

Financial indicators that are usually reviewed at the same time include the major elements of the micro-level business cycle:

- sales backlog;
- revenue dollars and units by product group;
- inventory levels;
- accounts receivable levels and quality; and
- other key indicators.

These indicators are similarly used to determine tactical operating actions and changes and are discussed in more detail below.

#### **Sales Backlog:**

We believe our sales growth has been and continues to be our best indicator of success. Our best view into the efficacy of our sales efforts is in our “order book.” Our order book equates to sales “backlog.” It has a quantitative and a qualitative aspect: quantitatively, our backlog’s prospective dollar value and qualitatively, what percent of the backlog is scheduled by the customer for date-certain delivery. We define our “12-month backlog” as that which is requested by the customer for delivery within one year and which is reasonably likely to remain in the backlog and be converted into revenues. This includes customer purchase orders and may include amounts under supply contracts if they meet the aforementioned criteria. Generally, a higher 12-month backlog is better for us.

Our 12-month backlog grew in comparison to the prior year while we increased our shipment volume by 42%, maintaining our strong booking performance. Our 12-month backlog at June 30, 2017 was approximately \$9.3 million compared to \$6.6 million as of June 30, 2016. Backlog growth rates for fiscal 2017 and 2016 are:

Quarter	Backlog (\$ 000)	Change From Prior Year End	Change From Prior Quarter End
Q1 2016	\$ 5,064	-22%	-22%
Q2 2016	\$ 6,424	-1%	27%
Q3 2016	\$ 6,969	7%	8%
Q4 2016	\$ 6,598	2%	-5%
Q1 2017	\$ 5,806	-12%	-12%
Q2 2017	\$ 12,422	88%	114%
Q3 2017	\$ 11,086	68%	-11%
Q4 2017	\$ 9,322	41%	-16%

Our order intake remained strong in fiscal 2017 with solid bookings across all of the major markets we serve with particular strength in our telecommunications products and infrared products. Based on our sales pipeline, the drivers of the secular growth for telecommunications products remain intact as we look out through the end of fiscal 2018. Order intake for our infrared products group has also increased during fiscal 2017 compared to fiscal 2016, primarily due to the acquisition of ISP.

We are pursuing an increasing number of projects from current and new customers pertaining to data center expansion, Internet-of-Things applications, emerging world growth, metro core upgrades, and video/data transmission. We continue to work with OEMs, including many of our largest customers, on next generation products. We have also increased our product development efforts, both independently and jointly with our customers, in the areas of sensing technology, spectrographic instruments and advanced driver assistance systems. Based on recent quote activity, we expect to show increases in revenue of our LVPMOs, HVPMOs, speciality products, and infrared products for fiscal 2018.

#### Revenue Dollars and Units by Product Group:

The following table sets forth revenue dollars and units by our five product groups for the three and twelve month periods ended June 30, 2017 and 2016:

		(unaudited)					
		Three months ended		QTR % Change	Year ended		Year-to-date % Change
		June 30,			June 30,		
		2017	2016		2017	2016	
<b>Revenue</b>	LVPMO	2,242,934	1,925,100	17%	8,386,953	7,180,741	17%
	HVPMO	1,942,896	1,392,659	40%	7,706,745	4,000,155	93%
	Infrared Products	4,127,499	641,320	544%	9,408,425	1,753,221	437%
	Speciality Products	632,755	716,637	-12%	2,459,033	3,769,584	-35%
	NRE	61,296	57,888	6%	406,333	568,537	-29%
	Total sales, net	9,007,380	4,733,604	90%	28,367,489	17,272,238	64%
<b>Units</b>	LVPMO	90,327	83,400	8%	364,333	301,487	21%
	HVPMO	595,387	388,706	53%	2,163,931	1,448,555	49%
	Infrared Products	42,369	12,887	229%	106,820	32,631	227%
	Speciality Products	18,691	44,526	-58%	91,095	137,537	-34%
	NRE	3	1,460	-100%	58	1,914	-97%
		746,777	530,979	41%	2,726,237	1,922,124	42%

#### Three months ended June 30, 2017

Our revenue increased by 90% in the fourth quarter of fiscal 2017, as compared to the prior year period with growth driven predominantly from the HVPMO and infrared product groups. We have seen strong growth in our core business from the telecommunications sector, and our infrared business has expanded significantly with the acquisition of ISP.

We had a 17% increase in revenue from our LVPMO products in the fourth quarter of fiscal 2017, compared to the same period of the prior fiscal year. During the fourth quarter, sales of our LVPMO lens units increased by 8%, and the average selling price also increased 8%. The increase in revenue is attributed to growth in sales to customers in the defense, telecommunications and industrial sectors.

The HVPMO product group benefitted from the strength in the telecommunications sector as the demand for increased bandwidth continues. During the fourth quarter of fiscal 2017, sales of HVPMO lens units increased by 53%; however, the average selling price decreased by 9%, both as compared to the prior period, which produced a 40% increase in HVPMO revenue as compared to the prior year period. The increases are due to sales in the telecommunications sector.

We had significant growth in the infrared product group, which primarily consisted of revenues generated by ISP. During the fourth quarter of fiscal 2017, sales of infrared units increased by 229% as compared to the prior year period, resulting in infrared product revenue increasing by 544% in the fourth quarter of fiscal 2017 as compared to the prior year period. The increases in revenue and units sold were primarily derived from sales to customers in the thermal market.

In the fourth quarter of fiscal 2017, our specialty product revenue decreased by 12%, as compared to the prior year period. The decrease in revenue is primarily due to a decline in sales to one particular customer, whom is awaiting a contract renewal from their customer.

**Year ended June 30, 2017**

Our revenue increased by 64% in fiscal 2017, as compared to the prior year period with growth driven predominantly from the LVPMO, HVPMO and infrared product groups. We have seen strong growth in our core business from the telecommunications sector, and our infrared business has expanded significantly with the acquisition of ISP.

Our unit shipment volume in LVPMO lenses increased by 21% in fiscal 2017, as compared to the prior fiscal year, which resulted in a 17% increase in revenue in fiscal 2017, compared to the prior fiscal year. This increase is attributed to growth in sales to customers in the defense, telecommunications and industrial sectors. The average selling price decreased by 3%, compared to the prior fiscal year due to market conditions.

The HVPMO product group benefitted from the strength in the telecommunications sector as the demand for increased bandwidth continues. During the fiscal 2017, sales of HVPMO lens units increased by 49%, and the average selling price increased by 29%, both as compared to the prior fiscal year, which produced a 93% increase in HVPMO revenue as compared to the prior fiscal year. The increases are due to the continued strength of the telecommunications sector, as well as some recovery of the Chinese industrial tool market. Historically, revenue from our HVPMO product group had been derived from the industrial tool market in China, which had experienced six years of declining growth.

We had significant growth in the infrared product group, primarily as a result of the acquisition of ISP. During fiscal 2017, sales of infrared units increased by 227%, as compared to the prior fiscal year, resulting in infrared product revenue increasing by 437% in fiscal 2017 as compared to the prior year period. The increases in revenue and units sold primarily derived from sales to customers in the thermal market.

Specialty product revenue decreased by 35% for fiscal 2017, as compared to the prior fiscal year. The decrease in revenue is due to the absence of revenues generated from the sales of our fiber collimator assemblies sold to a customer pursuant to a license agreement in the current period. Approximately \$1.0 million of the specialty product revenue from fiscal 2016 was due to such customer's final purchase of custom fiber collimator assemblies. This specific product technology was transferred to the customer pursuant to a license agreement entered into in fiscal 2015. Thus, the customer is no longer purchasing fiber collimator assemblies from us.

Revenues generated by our NRE products group decreased by 29% in fiscal 2017 as compared to the prior year period, due to fewer projects for customers in the infrared, medical device and industrial markets. NRE revenue is project based and timing of any such projects is wholly dependent on our customers and their project activity. Accordingly, management does not include NRE in its projections or forecasts for purposes of developing its operating plan and budget.

**Inventory Levels:**

We manage inventory levels to minimize investment in working capital but still have the flexibility to meet customer demand to a reasonable degree. We review our inventory for obsolete items quarterly. While the mix of inventory is an important factor, including adequate safety stocks of long lead-time materials, an important aggregate measure of inventory in all phases of production is the quarter's ending inventory expressed as a number of days' worth of the quarter's cost of sales, also known as "days cost of sales in inventory," or "DCSI." It is calculated by dividing the quarter's ending inventory by the quarter's cost of goods sold, multiplied by 365 and divided by 4. Generally, a lower DCSI measure equates to a lesser investment in inventory, and, therefore, more efficient use of capital. The table below shows our DCSI for the immediately preceding eight fiscal quarters:

<b>Fiscal Quarter</b>	<b>Ended</b>	<b>DCSI (days)</b>
Q4-2017	6/30/2017	100
Q3-2017	3/31/2017	109
Q2-2017	12/31/2016	177
Q1-2017	9/30/2016	168
<b>Fiscal 2017 average</b>		<b>139</b>
Q4-2016	6/30/2016	155
Q3-2016	3/31/2016	178
Q2-2016	12/31/2015	163
Q1-2016	9/30/2015	155
<b>Fiscal 2016 average</b>		<b>163</b>

Our average DCSI for fiscal 2017 was 139, compared to 163 for fiscal 2016. The decrease in DCSI from the previous fiscal year end is due to the addition of ISP's cost of goods and inventory, which had a favorable impact. We expect DCSI to continue at this lower level.

**Accounts Receivable Levels and Quality:**

Similarly, we manage our accounts receivable to minimize investment in working capital. We measure the quality of receivables by the proportions of the total that are at various increments past due from our normally extended terms, which are generally 30 days. The most important aggregate measure of accounts receivable is the quarter's ending balance of net accounts receivable expressed as a number of days' worth of the quarter's net revenues, also known as "days sales outstanding," or "DSO." It is calculated by dividing the quarter's ending net accounts receivable by the quarter's net revenues, multiplied by 365 and divided by 4. Generally, a lower DSO measure equates to a lesser investment in accounts receivable, and therefore, more efficient use of capital. The table below shows our DSO for the preceding eight fiscal quarters:

<b>Fiscal Quarter</b>	<b>Ended</b>	<b>DSO (days)</b>
Q4-2017	6/30/2017	60
Q3-2017	3/31/2017	62
Q2-2017	12/31/2016	87
Q1-2017	9/30/2016	60
<b>Fiscal 2017 average</b>		<b>67</b>
Q4-2016	6/30/2016	68
Q3-2016	3/31/2016	67
Q2-2016	12/31/2015	62
Q1-2016	9/30/2015	63
<b>Fiscal 2016 average</b>		<b>65</b>

Our average DSO for fiscal 2017 was 67 compared to 65 for fiscal 2016. In the second quarter of 2017, the addition of ISP's receivables and revenue increased DSO as compared to the previous prior year period; however, by the end of fiscal 2017, DSO had returned to more normal levels. We strive to have a DSO no higher than 65.

**Other Key Indicators:**

Other key indicators include various operating metrics, some of which are qualitative and others are quantitative. These indicators change from time to time as the opportunities and challenges in the business change. They are mostly non-financial indicators such as on time delivery trends, units of shippable output by major product line, production yield rates by major product line, and the output and yield data from significant intermediary manufacturing processes that support the production of the finished shippable product. These indicators can be used to calculate such other related indicators as fully-yielded unit production per-shift, which varies by the particular product and our state of automation in production of that product at any given time. Higher unit production per shift means lower unit cost, and, therefore, improved margins or improved ability to compete where desirable for price sensitive customer applications. The data from these reports is used to determine tactical operating actions and changes. Management also assesses business performance and makes business decisions regarding our operations using certain non-GAAP measures. These non-GAAP measures are described in more detail below under the heading "Non-GAAP Financial Measures".

## Non-GAAP Financial Measures

We report our historical results in accordance with GAAP; however, our management also assesses business performance and makes business decisions regarding our operations using certain non-GAAP measures. We believe these non-GAAP financial measures provide useful information to management and investors that is supplementary to our financial condition and results of operations computed in accordance with GAAP; however, we acknowledge that our non-GAAP financial measures have a number of limitations. As such, you should not view these disclosures as a substitute for results determined in accordance with GAAP, and they are not necessarily comparable to non-GAAP measures that other companies use.

### **Adjusted Net Income:**

Adjusted net income is a non-GAAP financial measure used by management, lenders, and certain investors as a supplemental measure in the evaluation of some aspects of a corporation's financial position and core operating performance. Management uses adjusted net income to evaluate our underlying operating performance and for planning and forecasting future business. We believe this adjusted net income is helpful for investors to better understand our underlying business operations.

We calculate adjusted net income by excluding the change in the fair value of the June 2012 warrants from net income. The fair value of the June 2012 warrants is re-measured each reporting period until the warrants are exercised or expire. Each reporting period, the change in the fair value of the June 2012 warrants is either recognized as non-cash expense or non-cash income. The change in the fair value of the June 2012 warrants is not impacted by our actual operations but is instead strongly tied to the change in the market value of our Class A common stock and the assumptions on when the warrants will be exercised. Management uses adjusted net income to evaluate our operating performance and for planning and forecasting future business operations, as the change in fair value of the June 2012 warrants are not tied directly to operating activities. We are focused on profitable growth and as such we monitor trends in adjusted net income. We believe the use of adjusted net income may be useful to investors as one means of evaluating our operational performance. The following table reconciles net income to adjusted net income for the three and twelve month periods ended June 30, 2017 and 2016:

	<b>(Unaudited)</b>				
	<b>Quarter ended:</b>		<b>Year ended:</b>		
	<b>June 30,</b>	<b>June 30,</b>	<b>June 30,</b>	<b>June 30,</b>	
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>	
Net income	\$ 6,364,099	\$ 331,467	\$ 7,703,086	\$ 1,414,615	
Change in fair value of warrant liability	9,759	27,243	467,543	52,454	
Adjusted net income	\$ 6,373,858	\$ 358,710	\$ 8,170,629	\$ 1,467,069	
% of revenue		71%	8%	29%	8%

Our adjusted net income for the quarter ended June 30, 2017 was approximately \$6.4 million, as compared to adjusted net income of approximately \$359,000 for the quarter ended June 30, 2016. The increase in net income was primarily due to the \$5.1 million net income tax benefit recorded during the fourth quarter of fiscal 2017, compared to tax expense of approximately \$68,000 for the fourth quarter of fiscal 2016. The tax benefit is largely attributable to a decrease in the valuation allowance recorded against our deferred tax assets, driven by the deferred tax liabilities recorded in conjunction with the acquisition of ISP. Adjusted net income in the fourth quarter of fiscal 2017 was also favorably impacted by higher revenue generating higher gross margins and the acquisition of ISP.

Our adjusted net income for fiscal 2017 was approximately \$8.2 million as compared to approximately \$1.5 million for fiscal 2016. The increase in adjusted net income was primarily attributable to the \$4.3 million net income tax benefit recorded for fiscal 2017. The benefit is largely attributable to a decrease in the valuation allowance recorded against our deferred tax assets, driven by the deferred tax liabilities recorded in conjunction with the acquisition of ISP. Adjusted net income in fiscal 2017 was also favorably impacted by higher revenue generating higher gross margins and the acquisition of ISP. We also recognized higher non-cash expense as a result of the change in the fair value of the June 2012 warrant liability during fiscal 2017, as compared to the prior year period.

### **EBITDA and Adjusted EBITDA:**

EBITDA and adjusted EBITDA are non-GAAP financial measures used by management, lenders, and certain investors as a supplemental measure in the evaluation of some aspects of a corporation's financial position and core operating performance. Investors sometimes use EBITDA as it allows for some level of comparability of profitability trends between those businesses differing as to capital structure and capital intensity by removing the impacts of depreciation and amortization. EBITDA also does not include changes in major working capital items such as receivables, inventory and payables, which can also indicate a significant need for, or source of, cash. Since decisions regarding capital investment and financing and changes in working capital components can have a significant impact on cash flow, EBITDA is not a good indicator of a business's cash flows. We use EBITDA for evaluating the relative underlying performance of our core operations and for planning purposes. We calculate EBITDA by adjusting net income to exclude net interest expense, income tax expense or benefit, depreciation and amortization, thus the term "Earnings Before Interest, Taxes, Depreciation and Amortization" and the acronym "EBITDA."

We also calculate an adjusted EBITDA, which excludes the effect of the non-cash income or expense associated with the mark-to-market adjustments, related to our June 2012 Warrants. The fair value of the June 2012 Warrants is re-measured each reporting period until the warrants are exercised or expire. Each reporting period, the change in the fair value of the June 2012 Warrants is either recognized as a non-cash expense or non-cash income. The change in the fair value of the June 2012 Warrants is not impacted by our actual operations but is instead strongly tied to the change in the market value of our common stock. Management uses adjusted EBITDA to evaluate our underlying operating performance and for planning and forecasting future business operations. We believe this adjusted EBITDA is helpful for investors to better understand our underlying business operations. The following table adjusts net income to EBITDA and adjusted EBITDA for the three and twelve month periods ended June 30, 2017 and 2016:

	(Unaudited)			
	Quarter ended:		Year ended:	
	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
Net income	\$ 6,364,099	\$ 331,467	\$ 7,703,086	\$ 1,414,615
Depreciation and amortization	840,207	238,961	2,080,439	847,990
Income tax expense (benefit)	(5,112,900)	68,221	(4,341,300)	199,274
Interest expense	207,256	7,527	413,426	37,626
EBITDA	\$ 2,298,662	\$ 646,176	\$ 5,855,651	\$ 2,499,505
Change in fair value of warrant liability	9,759	27,243	467,543	52,454
Adjusted EBITDA	\$ 2,308,421	\$ 673,419	\$ 6,323,194	\$ 2,551,959
% of revenue	26%	14%	22%	15%

Our adjusted EBITDA for the quarter ended June 30, 2017 was approximately \$2.3 million, compared to approximately \$673,000 for the quarter ended June 30, 2016. The difference in adjusted EBITDA between the periods was principally caused by higher revenue and profit margins achieved in the fourth quarter of fiscal 2017. The fourth quarter of fiscal 2017 was also favorably impacted by the acquisition of ISP.

Our adjusted EBITDA for fiscal 2017 was approximately \$6.3 million, compared to approximately \$2.6 million for fiscal 2016. The difference in adjusted EBITDA between the periods was principally caused by higher revenue and profit margins achieved in fiscal 2017. The third and fourth quarters of fiscal 2017 were also favorably impacted by the acquisition of ISP.

#### **Off Balance Sheet Arrangements**

We do not engage in any activities involving variable interest entities or off balance sheet arrangements.

#### **Critical Accounting Policies and Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of income and expense during the reporting periods presented. Our critical estimates include the allowance for trade receivables which is made up of reserves for bad debts, inventory reserves for obsolescence, revenue recognition, valuation of compensation expense on stock-based awards and warrant valuation related to a private placement. Although we believe that these estimates are reasonable, actual results could differ from those estimates given a change in conditions or assumptions that have been consistently applied.

Management has discussed the selection of critical accounting policies and estimates with our board of directors (the "Board"), and the Board has reviewed our disclosure relating to critical accounting policies and estimates in this prospectus. The critical accounting policies used by management and the methodology for its estimates and assumptions are as follows:

**Allowance for accounts receivable** is calculated by taking 100% of the total of invoices that are over 90 days past due from due date and 10% of the total of invoices that are over 60 days past due from the due date for U.S. based accounts and 100% on invoices that are over 120 days past due for China based accounts without an agreed upon payment plan. Accounts receivable are customer obligations due under normal trade terms. We perform continuing credit evaluations of our customers' financial condition. Recovery of bad debt amounts which were previously written off is recorded as a reduction of bad debt expense in the period the payment is collected. If our actual collection experience changes, revisions to our allowance may be required. After attempts to collect a receivable have failed, the receivable is written off against the allowance.

**Inventory obsolescence reserve** is calculated by reserving 100% for items that have not been sold in two years or that have not been purchased in two years or which we have more than a two year supply. These items as identified are reserved at 100%, as well as reserving 50% for other items deemed to be slow moving within the last twelve months and reserving 25% for items deemed to have low material usage within the last six months. The parts identified are adjusted for recent order and quote activity to determine the final inventory reserve.

**Revenue** is recognized from product sales when products are shipped to the customer, provided that we have received a valid purchase order, the price is fixed, title has transferred, collection of the associated receivable is reasonably assured, and there are no remaining significant obligations. Revenues from product development agreements are recognized as milestones as completed in accordance with the terms of the agreements and upon shipment of products, reports or designs to the customer. Invoiced amounts for value-added taxes (VAT) related to sales are posted to the balance sheet and not included in revenue.

**Stock based compensation** is measured at grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period. We estimate the fair value of each stock option as of the date of grant using the Black-Scholes-Merton pricing model. Most options granted under the Amended and Restated Omnibus Incentive Plan (the "Plan") vest ratably over two to four years and generally have ten-year contract lives. The volatility rate is based on four-year historical trends in common stock closing prices and the expected term was determined based primarily on historical experience of previously outstanding options. The interest rate used is the U.S. Treasury interest rate for constant maturities. The likelihood of meeting targets for option grants that are performance based are evaluated each quarter. If it is determined that meeting the targets is probable then the compensation expense will be amortized over the remaining vesting period.

#### **Item 8. Financial Statements and Supplementary Data.**

The information required by this Item is incorporated herein by reference to the consolidated financial statements and supplementary data set forth in *Item 15. Exhibits, Financial Statement Schedules* of Part IV of this Annual Report on Form 10-K.

#### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

#### **Item 9A. Controls and Procedures**

##### **Evaluation of Disclosure Controls and Procedures**

As of the end of the fiscal year ended June 30, 2017, we carried out an evaluation, under the supervision and with the participation of members of our management, including our Chief Executive Officer ("CEO") and our Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934 (the "Exchange Act"). Our CEO and our CFO have concluded, based on their evaluation, that as of June 30, 2017, our disclosure controls and procedures were effective at the end of the fiscal year to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit with the SEC under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to our management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

##### **Management's Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Internal control over financial reporting is a process, including policies and procedures, designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. Our management assessed our internal control over financial reporting based on the *Internal Control—Integrated Framework* (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of this assessment, our management concluded that our internal control over financial reporting was effective as of June 30, 2017 based on such criteria.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met under all potential conditions, regardless of how remote, and may not prevent or detect all errors and all fraud. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within LightPath have been prevented or detected. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

**Auditor's Report on Internal Control over Financial Reporting**

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our independent registered public accounting firm pursuant to rules of the Securities and Exchange Commission (the "SEC") that permit us to provide only management's report in this Annual Report.

**Changes in Internal Controls over Financial Reporting**

In connection with our continued monitoring and maintenance of our controls procedures as part of the implementation of Section 404 of the Sarbanes-Oxley Act, we continue to review, test and improve the effectiveness of our internal controls. There have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter and since the year ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information.**

None.



### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance .

The information required under this item is incorporated herein by reference to our proxy statement to our fiscal 2018 Annual Stockholders' Meeting to be filed with the SEC not later than 120 days after the end of fiscal 2017.

#### Item 11. Executive Compensation.

The information required under this item is incorporated herein by reference to our proxy statement to our fiscal 2018 Annual Stockholders' Meeting to be filed with the SEC not later than 120 days after the end of fiscal 2017.

#### Item 12. Security Ownership of Certain Beneficial Owners and Management .

The information required under this item is incorporated herein by reference to our proxy statement to our fiscal 2018 Annual Stockholders' Meeting to be filed with the SEC not later than 120 days after the end of fiscal 2017, with the exception of those items listed below.

#### Securities Authorized For Issuance Under Equity Compensation Plans

The following table sets forth information with respect to compensation plans under which our equity securities are authorized for issuance as of the end of fiscal 2017:

Equity Compensation Arrangement	Award Authorized	Award Shares Outstanding at June 30, 2017	Available for Issuance at June 30, 2017
Amended and Restated Omnibus Incentive Plan	3,915,625	2,604,968	631,701
Employee Stock Purchase Plan	400,000	—	377,988
	<u>4,315,625</u>	<u>2,604,968</u>	<u>1,009,689</u>

#### Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required under this item is incorporated herein by reference to our proxy statement to our fiscal 2018 Annual Stockholders' Meeting to be filed with the SEC not later than 120 days after the end of fiscal 2017.

#### Item 14. Principal Accountant Fees and Services.

The information required under this item is incorporated herein by reference to our proxy statement to our fiscal 2018 Annual Stockholders' Meeting to be filed with the SEC not later than 120 days after the end of fiscal 2017.

### PART IV

#### Item 15. Exhibits, Financial Statement Schedules .

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements – See Index on page F-1 of this report

(b) The following exhibits are filed herewith as a part of this report

#### Item 16. Form 10-K Summary.

None.

<b>Exhibit Number</b>	<b>Description</b>	<b>Notes</b>
3.1.1	Certificate of Incorporation of Registrant, filed June 15, 1992 with the Secretary of State of Delaware	1
3.1.2	Certificate of Amendment to Certificate of Incorporation of Registrant, filed October 2, 1995 with the Secretary of State of Delaware	1
3.1.3	Certificate of Designations of Class A common stock and Class E-1 common stock, Class E-2 common stock, and Class E-3 common stock of Registrant, filed November 9, 1995 with the Secretary of State of Delaware	1
3.1.4	<a href="#"><u>Certificate of Designation of Series A Preferred Stock of Registrant, filed July 9, 1997 with the Secretary of State of Delaware</u></a>	2
3.1.5	<a href="#"><u>Certificate of Designation of Series B Stock of Registrant, filed October 2, 1997 with the Secretary of State of Delaware</u></a>	3
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3.1.7	<a href="#"><u>Certificate of Designation of Series C Preferred Stock of Registrant, filed February 6, 1998 with the Secretary of State of Delaware</u></a>	4
3.1.8	<a href="#"><u>Certificate of Designation, Preferences and Rights of Series D Participating Preferred Stock of Registrant filed April 29, 1998 with the Secretary of State of Delaware</u></a>	5
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10.8	<a href="#"><u>Stock Purchase Agreement dated August 3, 2016 by and among LightPath Technologies, Inc., ISP Optics Corporation, Mark Lifshutz, and Joseph Menaker**</u></a>	17

10.9	<a href="#"><u>Unsecured Promissory Note dated December 21, 2016 in favor of Joseph Menaker and Mark Lifshutz</u></a>	13
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21.1	<a href="#"><u>Subsidiaries of the Registrant</u></a>	*
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24	<a href="#"><u>Power of Attorney</u></a>	*
31.1	<a href="#"><u>Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934</u></a>	*
31.2	<a href="#"><u>Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934</u></a>	*
32.1	<a href="#"><u>Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350 of Chapter 63 of Title 18 of the United States Code</u></a>	*
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101.INS	XBRL Instance Document	*
101.SCH	XBRL Taxonomy Extension Schema Document	*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	*
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	*
101.PRE	XBRL Taxonomy Presentation Linkbase Document	*

*Notes:*

1. This exhibit was filed as an exhibit to our Registration Statement on Form SB-2 (File No: 33-80119) filed with the Securities and Exchange Commission on December 7, 1995 and is incorporated herein by reference thereto.
2. This exhibit was filed as an exhibit to our Annual Report on Form 10-KSB40 filed with the Securities and Exchange Commission on September 11, 1997 and is incorporated herein by reference thereto.
3. This exhibit was filed as an exhibit to our Quarterly Report on Form 10-Q (File No. 000-27548) filed with the Securities and Exchange Commission on November 14, 1997 and is incorporated herein by reference thereto.
4. This exhibit was filed as an exhibit to our Registration Statement on Form S-3 (File No. 333-47905) filed with the Securities and Exchange Commission on March 13, 1998 and is incorporated herein by reference thereto.
5. This exhibit was filed as an exhibit to our Registration Statement on Form 8-A (File No. 000-27548) filed with the Securities and Exchange Commission on April 28, 1998 and is incorporated herein by reference thereto.

6. This exhibit was filed as an exhibit to our Registration Statement on Form S-3 (File No: 333-94303) filed with the Securities and Exchange Commission on January 10, 2000 and is incorporated herein by reference thereto.
7. This exhibit was filed as an exhibit to our Proxy Statement (File No. 000-27548) filed with the Securities and Exchange Commission on January 24, 2003 and is incorporated herein by reference thereto.
8. The Amended and Restated Omnibus Incentive Plan, dated October 15, 2002 was filed as an exhibit to our Proxy Statement (File No. 000-27548) filed with the Securities and Exchange Commission on September 12, 2002. Amendment No. 1, dated October 20, 2004 and Amendment No. 2, dated December 6, 2004, were filed as exhibits to our Registration Statement on Form S-8 (File No. 333-121389) filed with the Securities and Exchange Commission on December 17, 2004. Amendment No. 3, dated November 1, 2007 and Amendment No. 4, dated January 1, 2009, were filed as exhibits to our Proxy Statement (File No. 000-27548) filed with the Securities and Exchange Commission on December 10, 2012. Amendment No. 5 dated January 1, 2013 was filed as an exhibit to our Registration Statement on Form S-8 (File No. 333-188482) filed with the Securities and Exchange Commission on May 9, 2013. Amendment No. 6 dated January 29, 2015 was filed as an exhibit to our Proxy Statement (File No. 000-27548) filed with the Securities and Exchange Commission on December 19, 2014.
9. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on June 12, 2008, and is incorporated herein by reference thereto.
10. This exhibit was filed as an exhibit to Amendment No. 1 to the Registration Statement on Form 8A/A (File No. 000-27548) filed with the Securities and Exchange Commission on February 25, 2008, and is incorporated herein by reference thereto.
11. This exhibit was filed as an Appendix A to our Proxy Statement (File No. 333-27548) filed with the Securities and Exchange Commission on December 19, 2014, and is incorporated herein by reference thereto.
12. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on June 11, 2012, and is incorporated herein by reference thereto.
13. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on December 27, 2016, and is incorporated herein by reference thereto.
14. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on July 8, 2014, and is incorporated herein by reference thereto.
15. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on February 3, 2015, and is incorporated herein by reference thereto.
16. This exhibit was filed as an exhibit to our Quarterly Report on Form 10-Q (File No. 000-27548) filed with the Securities and Exchange Commission on February 4, 2016 and is incorporated herein by reference thereto.
17. This exhibit was filed as an exhibit to our Annual Report on Form 10-K (File No. 000-27548) filed with the Securities and Exchange Commission on September 15, 2016 and is incorporated herein by reference thereto.
18. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on December 20, 2016 and is incorporated herein by reference thereto.
19. This exhibit was filed as an exhibit to our Current Report on Form 8-K (File No. 000-27548) filed with the Securities and Exchange Commission on May 3, 2016 and is incorporated herein by reference thereto.

\* filed herewith

\*\* The schedules to the Stock Purchase Agreement filed as Exhibit 10.8 have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Registrant hereby undertakes to provide copies of the omitted schedules to the Securities and Exchange Commission upon request.

LightPath Technologies, Inc.

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## Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders  
LightPath Technologies, Inc.

We have audited the accompanying consolidated balance sheet of LightPath Technologies, Inc., and its subsidiaries (the "Company") as of June 30, 2017 and 2016, and the related consolidated statements of comprehensive income, stockholders' equity, and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing our audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 30, 2017 and 2016, and the results of their operations and their cash flows for each of the years then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

Orlando, Florida  
September 14, 2017

**LIGHTPATH TECHNOLOGIES, INC.**  
Consolidated Balance Sheets

<b>Assets</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
<b>Current assets:</b>		
Cash and cash equivalents	\$ 8,085,015	\$ 2,908,024
Trade accounts receivable, net of allowance of \$7,356 and \$4,598	5,890,113	3,545,871
Inventories, net	5,074,576	3,836,809
Other receivables	29,202	209,172
Prepaid expenses and other assets	641,469	652,308
Total current assets	19,720,375	11,152,184
Property and equipment, net	10,324,558	4,370,045
Intangible assets, net	10,375,053	—
Goodwill	5,854,905	—
Deferred tax assets	285,000	—
Other assets	112,323	66,964
Total assets	\$ 46,672,214	\$ 15,589,193
<b>Liabilities and Stockholders' Equity</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 1,536,121	\$ 1,361,914
Accrued liabilities	966,929	328,144
Accrued payroll and benefits	1,896,530	1,356,255
Loans payable, current portion	1,111,500	—
Capital lease obligation, current portion	239,332	166,454
Total current liabilities	5,750,412	3,212,767
Capital lease obligation, less current portion	142,101	178,919
Deferred rent	458,839	548,202
Deferred tax liabilities	182,349	—
Warrant liability	490,500	717,393
Loans payable, less current portion	9,926,844	—
Total liabilities	16,951,045	4,657,281
Commitments and contingencies (Notes 13 and 14)		
<b>Stockholders' equity:</b>		
Preferred stock: Series D, \$.01 par value, voting; 100,000 shares authorized; none issued and outstanding	—	—
Common stock: Class A, \$.01 par value, voting; 34,500,000 shares authorized; 24,215,733 and 15,590,945 shares issued and outstanding	242,157	155,909
Additional paid-in capital	225,492,252	214,661,617
Accumulated other comprehensive income	295,396	126,108
Accumulated deficit	(196,308,636)	(204,011,722)
Total stockholders' equity	29,721,169	10,931,912
Total liabilities and stockholders' equity	\$ 46,672,214	\$ 15,589,193

The accompanying notes are an integral part of these consolidated statements.

**LIGHTPATH TECHNOLOGIES, INC.**  
Consolidated Statements of Comprehensive Income

	Year ended	
	June 30, 2017	June 30, 2016
Revenue, net	\$ 28,367,489	\$ 17,272,238
Cost of sales	13,648,030	7,967,728
Gross margin	14,719,459	9,304,510
Operating expenses:		
Selling, general and administrative	8,651,023	6,581,218
New product development	1,235,934	668,840
Amortization of intangibles	693,947	—
Loss on disposal of property and equipment	1,444	45,037
Total costs and expenses	10,582,348	7,295,095
Operating income	4,137,111	2,009,415
Other income (expense):		
Interest expense	(336,750)	(37,627)
Interest expense - debt costs	(76,677)	—
Change in fair value of warrant liability	(467,543)	(52,454)
Other income (expense), net	105,645	(305,444)
Total other income (expense), net	(775,325)	(395,525)
Net income before income taxes (benefit)	3,361,786	1,613,890
Income taxes (benefit)	(4,341,300)	199,275
Net income	\$ 7,703,086	\$ 1,414,615
Foreign currency translation adjustment	169,288	75,428
Comprehensive income	\$ 7,872,374	\$ 1,490,043
Earnings per common share (basic)	\$ 0.39	\$ 0.09
Number of shares used in per share calculation (basic)	20,001,868	15,401,893
Earnings per common share (diluted)	\$ 0.36	\$ 0.08
Number of shares used in per share calculation (diluted)	21,666,392	16,875,383

The accompanying notes are an integral part of these consolidated statements.



**LIGHTPATH TECHNOLOGIES, INC.**  
Consolidated Statement of Stockholders' Equity  
Years ended June 30, 2017 and 2016

	Class A Common Stock Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
Balances at June 30, 2015	15,235,073	\$ 152,351	\$ 213,222,950	\$ 50,680	\$ (205,426,337)	7,999,644
Issuance of common stock for:						
Exercise of warrants	313,081	3,130	388,221	—	—	391,351
Employee Stock Purchase Plan	9,906	99	22,804	—	—	22,903
Exercise of options	6,077	61	6,369	—	—	6,430
Cashless exercise of warrants	26,808	268	(536)	—	—	(268)
Settlement for Class E shares	—	—	(582)	—	—	(582)
Reclassification of warrant liability upon exercise	—	—	530,531	—	—	530,531
Stock based compensation on stock options & RSU	—	—	491,860	—	—	491,860
Foreign currency translation adjustment	—	—	—	75,428	—	75,428
Net income	—	—	—	—	1,414,615	1,414,615
Balances at June 30, 2016	15,590,945	\$ 155,909	\$ 214,661,617	\$ 126,108	\$ (204,011,722)	\$ 10,931,912
Issuance of common stock for:						
Exercise of warrants	578,897	5,789	699,890	—	—	705,679
Employee Stock Purchase Plan	12,106	121	19,511	—	—	19,632
Exercise of RSU	33,785	338	(338)	—	—	—
Public equity placement, net of costs	8,000,000	80,000	8,669,496	—	—	8,749,496
Reclassification of warrant liability upon exercise	—	—	694,436	—	—	694,436
Stock based compensation on stock options & RSU	—	—	747,640	—	—	747,640
Foreign currency translation adjustment	—	—	—	169,288	—	169,288
Net income	—	—	—	—	7,703,086	7,703,086
Balances at June 30, 2017	24,215,733	\$ 242,157	\$ 225,492,252	\$ 295,396	\$ (196,308,636)	\$ 29,721,169

The accompanying notes are an integral part of these consolidated statements.

**LIGHTPATH TECHNOLOGIES, INC.**  
Consolidated Statements of Cash Flows

	Yea ended June 30,	
	2017	2016
Cash flows from operating activities		
Net income	\$ 7,703,086	\$ 1,414,615
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	2,080,439	847,990
Interest from amortization of debt costs	7,721	—
Loss on disposal of property and equipment	1,444	45,037
Stock based compensation	394,875	348,735
Bad debt expense	(29,551)	(289)
Change in fair value of warrant liability	467,543	52,454
Change in fair value of seller's note	68,955	—
Deferred rent	(89,363)	35,523
Inventory write-offs	90,268	—
Deferred tax benefit	(5,493,704)	—
Changes in operating assets and liabilities:		
Trade accounts receivables	(1,042,426)	(650,753)
Other receivables	160,070	40,597
Inventories	(318,645)	(916,899)
Prepaid expenses and other assets	151,821	(415,444)
Accounts payable and accrued liabilities	846,511	724,147
Net cash provided by operating activities	<u>4,999,044</u>	<u>1,525,713</u>
Cash flows from investing activities		
Purchase of property and equipment	(2,223,126)	(1,131,098)
Proceeds from sale of equipment	—	5,916
Acquisition of ISP Optics, net of cash acquired	(11,777,336)	—
Net cash used in investing activities	<u>(14,000,462)</u>	<u>(1,125,182)</u>
Cash flows from financing activities		
Proceeds from exercise of stock options	—	6,430
Proceeds from sale of common stock from employee stock purchase plan	19,632	22,903
Settlement for Class E Shares	—	(582)
Loan costs	(72,224)	—
Borrowings on loan payable	5,000,000	—
Proceeds from issuance of common stock under public equity placement	8,749,496	—
Proceeds from exercise of warrants, net of costs	705,679	391,083
Net payments on loan payable	—	(51,585)
Payments on capital lease obligations	(193,940)	(131,341)
Net cash provided by financing activities	<u>14,208,643</u>	<u>236,908</u>
Effect of exchange rate on cash and cash equivalents	(30,234)	626,665
Change in cash and cash equivalents	5,176,991	1,264,104
Cash and cash equivalents, beginning of period	2,908,024	1,643,920
Cash and cash equivalents, end of period	<u>\$ 8,085,015</u>	<u>\$ 2,908,024</u>
Supplemental disclosure of cash flow information:		
Interest paid in cash	\$ 334,589	\$ 37,627
Income taxes paid	\$ 680,055	\$ 4,296
Supplemental disclosure of non-cash investing & financing activities:		
Purchase of equipment through capital lease arrangements	\$ 230,000	—
Reclassification of warrant liability upon exercise	\$ 694,436	\$ 530,531
Derecognition of liability associated with stock option grants	\$ 352,765	\$ 143,125
Seller note issued to acquire ISP Optics, at fair value	\$ 6,327,208	—

The accompanying notes are an integral part of these consolidated statements.

## 1. Organization and History

LightPath Technologies, Inc. ("LightPath", the "Company", "we", "us" or "our") was incorporated in Delaware in 1992. It was the successor to LightPath Technologies Limited Partnership formed in 1989, and its predecessor, Integrated Solar Technologies Corporation formed in 1985. On April 14, 2000, the Company acquired Horizon Photonics, Inc. ("Horizon"). On September 20, 2000, the Company acquired Geltech, Inc. ("Geltech"). The Company completed its initial public offering during fiscal 1996. In November 2005, we formed LightPath Optical Instrumentation (Shanghai) Co., Ltd ("LPOI"), a wholly-owned subsidiary located in Jiading, People's Republic of China. In December 2013, we formed LightPath Optical Instrumentation (Zhenjiang) Co., Ltd ("LPOIZ"), a wholly-owned subsidiary located in Zhenjiang, Jiangsu Province, People's Republic of China. In December 2016, we acquired ISP Optics Corporation, a New York corporation ("ISP"), and its wholly-owned subsidiary, ISP Optics Latvia, SIA, a limited liability company founded in 1998 under the Laws of the Republic of Latvia ("ISP Latvia"). See Note 3, Acquisition of ISP Optics Corporation, to these Consolidated Financial Statements for additional information.

LightPath is a manufacturer and integrator of families of precision molded aspheric optics, high-performance fiber-optic collimators, GRADIUM glass lenses and other optical materials used to produce products that manipulate light. LightPath designs, develops, manufactures and distributes optical components and assemblies utilizing the latest optical processes and advanced manufacturing technologies. LightPath also performs research and development for optical solutions for the traditional optics markets and communications markets. As used herein, the terms "LightPath," the "Company," "we," "us" or "our," refer to LightPath individually or, as the context requires, collectively with its subsidiaries on a consolidated basis.

## 2. Summary of Significant Accounting Policies

**Consolidated financial statements** include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

**Cash and cash equivalents** consist of cash in the bank and cash equivalents with maturities of 90 days or less when purchased.

**Allowance for accounts receivable**, is calculated by taking 100% of the total of invoices that are over 90 days past due from the due date and 10% of the total of invoices that are over 60 days past due from the due date for U.S. based accounts and 100% of invoices that are over 120 days past due for Chinese and Latvian based accounts. Accounts receivable are customer obligations due under normal trade terms. The Company performs continuing credit evaluations of its customers' financial condition. If the Company's actual collection experience changes, revisions to its allowance may be required. After all attempts to collect a receivable have failed, the receivable is written off against the allowance.

**Inventories**, which consist principally of raw materials, tooling, work-in-process and finished lenses, collimators and assemblies are stated at the lower of cost or market, on a first-in, first-out basis. Inventory costs include materials, labor and manufacturing overhead. Acquisition of goods from our vendors has a purchase burden added to cover customs, shipping and handling costs. Fixed costs related to excess manufacturing capacity have been expensed. The Company looks at the following criteria for parts to consider for the inventory reserve: items that have not been sold in two years or that have not been purchased in two years or of which we have more than a two-year supply. These items as identified are reserved at 100%, as well as reserving 50% for other items deemed to be slow moving within the last twelve months and reserving 25% for items deemed to have low material usage within the last six months. The parts identified are adjusted for recent order and quote activity to determine the final inventory reserve.

**Property and equipment** are stated at cost and depreciated using the straight-line method over the estimated useful lives of the related assets ranging from one to ten years. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful lives of the related assets using the straight-line method. Construction in process represents the accumulated costs of assets not yet placed in service and primarily relates to manufacturing equipment.

**Long-lived assets**, such as property, plant, and equipment and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to its estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposed group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet.

**Goodwill and Intangible Assets** acquired in a business combination are recognized at fair value using generally accepted valuation methods appropriate for the type of intangible asset and reported separately from goodwill. Purchased intangible assets other than goodwill are amortized over their useful lives unless these lives are determined to be indefinite. Purchased intangible assets are carried at cost, less accumulated amortization. Amortization is computed over the estimated useful lives of the respective assets, generally two to fifteen years. The Company periodically re-assesses the useful lives of its intangible assets when events or circumstances indicate that useful lives have significantly changed from the previous estimate. Definite-lived intangible assets consist primarily of customer relationships, know-how/trade secrets and trademarks. They are generally valued as the present value of estimated cash flows expected to be generated from the asset using a risk-adjusted discount rate. When determining the fair value of our intangible assets, estimates and assumptions about future expected revenue and remaining useful lives are used. Goodwill and intangible assets are tested for impairment on an annual basis and during the period between annual tests in certain circumstances, and written down when impaired. The annual evaluation for impairment of goodwill is based on valuation models that incorporate assumptions and internal projections of expected discounted future cash flows and operating plans.

**Deferred rent** relates to certain of the Company's operating leases containing predetermined fixed increases of the base rental rate during the lease term being recognized as rental expense on a straight-line basis over the lease term, as well as applicable leasehold improvement incentives provided by the landlord. The Company has recorded the difference between the amounts charged to operations and amounts payable under the leases as deferred rent in the accompanying consolidated balance sheets.

**Income taxes** are accounted for under the asset and liability method. Deferred income tax assets and liabilities are computed on the basis of differences between the financial statement and tax basis of assets and liabilities that will result in taxable or deductible amounts in the future based upon enacted tax laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances have been established to reduce deferred tax assets to the amount expected to be realized.

The Company has not recognized a liability for uncertain tax positions. A reconciliation of the beginning and ending amount of unrecognized tax benefits or penalties has not been provided since there has been no unrecognized benefit or penalty. If there were an unrecognized tax benefit or penalty, the Company would recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses.

The Company files U.S. Federal income tax returns, and returns in various states and foreign jurisdictions. The Company's open tax years subject to examination by the Internal Revenue Service and the Florida Department of Revenue generally remain open for three years from the date of filing.

Our cash and cash equivalents totaled \$8.1 million at June 30, 2017. Of this amount, approximately 58% was held by our foreign subsidiaries in China and Latvia. These foreign funds were generated in China and Latvia as a result of foreign earnings. With respect to the funds generated by our foreign subsidiaries in China, the retained earnings in China must equal at least 150% of the registered capital before any funds can be repatriated. As of June 30, 2017, we have retained earnings in China of approximately \$1.4 million and we need to have \$11.3 million before repatriation will be allowed.

The Company intends to permanently invest earnings generated from its foreign Chinese and Latvian operations, and, therefore, have not previously provided for United States taxes on the related earnings. However, if in the future the Company changes such intention, the Company would provide for and pay additional United States taxes at that time.

**Revenue** is recognized from product sales when products are shipped to the customer, provided that the Company has received a valid purchase order, the price is fixed, title has transferred, collection of the associated receivable is reasonably assured, and there are no remaining significant obligations. Product development agreements are generally short term in nature with revenue recognized upon shipment to the customer for products, reports or designs. Invoiced amounts for sales for value-added taxes ("VAT") are posted to the balance sheet and not included in revenue.

**VAT** is computed on the gross sales price on all sales of the Company's products sold in the People's Republic of China and Latvia. The VAT rates range up to 21%, depending on the type of products sold. The VAT may be offset by VAT paid by the Company on raw materials and other materials included in the cost of producing or acquiring its finished products. The Company recorded a VAT receivable net of payables in the accompanying financial statements.

**New product development** costs are expensed as incurred.

**Stock-based compensation** is measured at grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period. We estimate the fair value of each restricted stock unit or stock option as of the date of grant using the Black-Scholes-Merton pricing model. Most awards granted under the Plan vest ratably over two to four years and generally have four to ten-year contract lives. The volatility rate is based on historical trends in common stock closing prices and the expected term was determined based primarily on historical experience of previously outstanding awards. The interest rate used is the U.S. Treasury interest rate for constant maturities. The likelihood of meeting targets for option grants that are performance based are evaluated each quarter. If it is determined that meeting the targets is probable then the compensation expense will be amortized over the remaining vesting period.

**Management estimates.** Management makes estimates and assumptions during the preparation of the Company's consolidated financial statements that affect amounts reported in the financial statements and accompanying notes. Such estimates and assumptions could change in the future as more information becomes available, which in turn could impact the amounts reported and disclosed herein.

**Fair value of financial instruments.** The Company accounts for financial instruments in accordance with the Financial Accounting Standard Board's Accounting Standards Codification Topic 820 – Fair Value Measurements and Disclosures ("ASC 820"), which provides a framework for measuring fair value and expands required disclosure about fair value measurements of assets and liabilities. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 - Quoted prices in active markets for identical assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable.

Level 3 - Unobservable inputs that are supported by little or no market activity, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

Fair value estimates discussed herein are based upon certain market assumptions and pertinent information available to management.

The respective carrying value of certain on-balance-sheet financial instruments approximated their fair values. These financial instruments which include receivables, accounts payable and accrued liabilities. Fair values were assumed to approximate carrying values for these financial instruments since they are short term in nature and their carrying amounts approximate fair values or they are receivable or payable on demand. The fair value of the Company's capital lease obligations and acquisition term loan in the aggregate principal amount of \$5 million (the "Term Loan") payable to Avidbank Corporate Finance, a division of Avidbank ("Avidbank") approximates their carrying values based upon current rates available to us. Loans payable also includes a note payable to the sellers of ISP, in the aggregate principal amount of \$6 million (the "Sellers Note"). The carrying value of the note includes a fair value premium based on a risk-adjusted discount rate, a level 2 fair value measurement. See further discussion at Note 18, Loans Payable, to these Consolidated Financial Statements.

The Company values its warrant liabilities based on open-form option pricing models which, based on the relevant inputs, render the fair value measurement at Level 3. The Company bases its estimates of fair value for warrant liabilities on the amount it would pay a third-party market participant to transfer the liability and incorporates inputs such as equity prices, historical and implied volatilities, dividend rates and prices of convertible securities issued by comparable companies maximizing the use of observable inputs when available. See further discussion at Note 17, Derivative Financial Instruments (Warrant Liability), to these Consolidated Financial Statements.

The Company does not have any other financial or non-financial assets or liabilities that would be characterized as Level 1, Level 2 or Level 3 instruments.

**Debt issuance costs** are recorded as a reduction to the carrying value of the related notes payable, by the same amount, and are amortized ratably over the term of the note.

**Derivative financial instruments.** The Company accounts for derivative instruments in accordance with Financial Accounting Standard Board's Accounting Standards Codification Topic 815 – Derivatives and Hedging ("ASC 815"), which requires additional disclosures about the Company's objectives and strategies for using derivative instruments, how the derivative instruments and related hedged items are accounted for, and how the derivative instruments and related hedging items affect the financial statements.

The Company does not use derivative instruments to hedge exposures to cash flow, market or foreign currency risk. Terms of convertible debt instruments are reviewed to determine whether or not they contain embedded derivative instruments that are required under ASC 815 to be accounted for separately from the host contract, and recorded on the balance sheet at fair value. The fair value of derivative liabilities, if any, is required to be revalued at each reporting date, with corresponding changes in fair value recorded in current period operating results. The fair value of the June 2012 warrants is estimated using the Lattice option-pricing model.

Freestanding warrants issued by the Company in connection with the issuance or sale of debt and equity instruments are considered to be derivative instruments. Pursuant to ASC 815, an evaluation of specifically identified conditions is made to determine whether the fair value of warrants issued is required to be classified as equity or as a derivative liability.

**Comprehensive income** of the Company is defined as the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners. Comprehensive income has two components, net income and other comprehensive income, and is included on the statement of comprehensive income. Our other comprehensive income consists of foreign currency translation adjustments made for financial reporting purposes.

**Business segments** are required to be reported by the Company. As the Company only operates in principally one business segment, no additional reporting is required.

**Recent accounting pronouncements.** There are new accounting pronouncements issued by the Financial Accounting Standards Board ("FASB") that are not yet effective.

In November 2015, FASB issued Accounting Standards Update ("ASU") No. 2015-17, "Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes" ("ASU 2015-17"). The standard requires that deferred tax assets and liabilities be classified as noncurrent on the balance sheet rather than being separated into current and noncurrent. ASU 2015-17 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. Early adoption is permitted and the standard may be applied either retrospectively or on a prospective basis to all deferred tax assets and liabilities. Management does not expect the adoption of this guidance to have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In March 2016, the FASB issued ASU No. 2016-09, "Compensation — Stock Compensation (Topic 718) — Improvements to Employee Share-Based Payment Accounting" ("ASU 2016-09"). ASU 2016-09 includes provisions to simplify certain aspects related to the accounting for share-based awards and the related financial statement presentation. This ASU includes a requirement that the tax effect related to the settlement of share-based awards be recorded in income tax benefit or expense in the statements of earnings. This change is required to be adopted prospectively in the period of adoption. In addition, the ASU modifies the classification of certain share-based payment activities within the statements of cash flows and these changes are required to be applied retrospectively to all periods presented, or in certain cases prospectively, beginning in the period of adoption. ASU No. 2016-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this new standard will have on its financial statements.

In July 2015, the FASB issued No. 2015-11, "Inventory - Simplifying the Measurement of Inventory" ("ASU 2015-11"). ASU 2015-11 provides additional guidance regarding the subsequent measurement of inventory by requiring inventory to be measured at the lower of cost or net realizable value. This guidance is effective for fiscal years and interim periods beginning after December 15, 2016. Early adoption is permitted. Management does not expect the adoption of this guidance to have a material impact on our consolidated financial position, results of operations or cash flows.

In May 2014, FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers" (Topic 606), which supersedes the revenue recognition requirements in ASC Topic 605, "Revenue Recognition," and most industry-specific guidance. This ASU is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The amendments in the ASU must be applied using one of two retrospective methods and were originally set to be effective for annual and interim periods beginning after December 15, 2016. On July 9, 2015, the FASB modified ASU 2014-09 to be effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. As modified, the FASB permits the adoption of the new revenue standard early, but not before the annual periods beginning after December 15, 2017. A public organization would apply the new revenue standard to all interim reporting periods within the year of adoption.

ASU 2014-09 provides that an entity should apply a five-step approach for recognizing revenue, including (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when, or as, the entity satisfies a performance obligation. Also, the entity must provide various disclosures concerning the nature, amount and timing of revenue and cash flows arising from contracts with customers. The Company is currently working through the assessment phase of implementing this guidance. The effective date for the Company will be the first quarter of our fiscal year ending June 30, 2019, using one of two retrospective application methods.

In February 2016, the FASB issued ASU No. 2016-02, "Leases" ("ASU 2016-02"). This guidance requires an entity to recognize lease liabilities and a right-of-use asset for all leases on the balance sheet and to disclose key information about the entity's leasing arrangements. ASU 2016-02 must be adopted using a modified retrospective approach for all leases existing at, or entered into after the date of initial adoption, with an option to elect to use certain transition relief. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period, with earlier adoption permitted. The Company's current operating lease portfolio is primarily comprised of real estate leases. Upon adoption of this standard, we expect the Company's balance sheet to include a right of use asset and liability related to substantially all operating lease arrangements. The effective date for the Company will be the first quarter of our fiscal year ending June 30, 2020.

### 3. Acquisition of ISP Optics Corporation

On December 21, 2016 (the "Acquisition Date"), the Company acquired 100% of the issued and outstanding shares of common stock (the "Acquisition") of ISP pursuant to the Stock Purchase Agreement, dated as of August 3, 2016 (the "Purchase Agreement"). The Company's consolidated financial statements reflect the financial results of ISP's operations beginning on the Acquisition Date.

Part of our growth strategy is to identify appropriate opportunities that would enhance our profitable growth through acquisition. As we developed our molded infrared capability and learned more about the infrared market, we became aware of larger business opportunities in this market that might be available with a broader range of product capability. We believed acquiring ISP would provide an excellent complementary fit with our business that would meet our requirement of profitable growth in a market space we are investing in, and saw the Acquisition as an opportunity to accelerate our growth, and expand our capabilities and our global reach.

For the purposes of financing the Acquisition, simultaneous with the closing, the Company sold 8,000,000 shares of its Class A common stock, raising net proceeds of approximately \$8.7 million. For additional information, please see Note 19, Public Offering of Class A Common Stock, to these Consolidated Financial Statements. The Company also closed a \$5 million Term Loan with AvidBank. For additional information, see Note 18, Loans Payable, to these Consolidated Financial Statements.

In lieu of cash paid, the Company financed a portion of the Acquisition through the issuance of a five-year note in the aggregate principal amount of \$6 million to the ISP stockholders (the "Sellers Note"), For additional information, see Note 18, Loans Payable, to these Consolidated Financial Statements.

The Acquisition Date fair value of the consideration transferred totaled approximately \$19.1 million, which consisted of the following:

Cash Purchase Price	\$	12,000,000
Cash acquired		1,243,216
Tax payable assumed debt		(200,477)
Fair value of Sellers' Note		6,327,208
Working capital adjustment		(315,003)
Total purchase price	\$	19,054,944
Sellers Note issued at fair value		(6,327,208)
Preliminary working capital adjustment		(760,822)
Adjustment to beginning cash		(163,878)
Adjustment to beginning assumed debt		(25,700)
Cash paid at Acquisition Date	\$	<u>11,777,336</u>

Subsequently in March 2017, a portion of the working capital adjustment, in the amount of \$292,816, was applied to the Sellers Note as a payment, thereby decreasing the outstanding principal amount due under the Sellers Note, as reflected in these Consolidated Financial Statements.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the Acquisition Date:

Cash	\$ 1,243,216
Accounts receivable	1,108,980
Inventory	1,134,628
Other Current assets	153,450
Property and equipment	4,666,634
Security deposit and other assets	45,359
Identifiable intangibles	11,069,000
Total identifiable assets acquired	<u>\$ 19,421,267</u>
Accounts payable	(554,050)
Accrued expenses and other payables	(133,974)
Other payables	(146,324)
Deferred tax liability	(5,386,880)
Total liabilities assumed	<u>\$ (6,221,228)</u>
Net identifiable assets acquired	13,200,039
Goodwill	5,854,905
Net assets acquired	<u>\$ 19,054,944</u>

As part of the valuation analysis, the Company identified intangible assets, including customer relationships, customer backlog, trade secrets, trademarks and non-compete agreements. The customer relationships, customer backlog, trade secrets, trademarks and non-compete agreements were determined to have estimated values of \$3,590,000, \$366,000, \$3,272,000, \$3,814,000 and \$27,000, respectively, and estimated useful lives of 15, 2, 8, 8, and 3 years, respectively. The estimated fair value of identifiable intangible assets is determined primarily using the "income approach", which requires a forecast of all future cash flows. This also reflects a \$2,744,262 adjustment to increase the basis of the acquired property, plant and equipment to reflect fair value of the assets at the Acquisition Date. The estimated useful lives range from 3 years to 7 years. Depreciation and amortization of intangible assets and property, plant and equipment is calculated on a straight-line basis. This also reflects a \$153,132 adjustment to increase the basis of the acquired inventory to reflect fair value of the inventory and a \$230,407 adjustment to decrease the basis of the acquired deferred revenue to reflect the fair value of the deferred revenue at the Acquisition Date. The tax effects of these fair value adjustments resulted in a net deferred tax liability of approximately \$5.4 million.

The goodwill recognized is attributable primarily to expected synergies and the assembled workforce of ISP. None of the goodwill is expected to be deductible for income tax purposes.

The Company recognized approximately \$650,000 of Acquisition related costs that were expensed during the year ended June 30, 2017. These costs are included in the consolidated statements of comprehensive income in the line item entitled "Selling, general and administrative." The Company recognized Acquisition related expenses of approximately \$209,000 in fiscal 2016. The Company also recognized approximately \$930,000 in expenses associated with the public offering of shares of Class A common stock, the net proceeds of which were used to provide funds to pay for a portion of the purchase price of the Acquisition. These expenses were deducted from the gross proceeds received as a result of the public offering of Class A common stock, as reflected in stockholders' equity. For additional information on this public offering, see Note 19, Public Offering of Class A Common Stock, in these Consolidated Financial Statements.

The amounts of revenue and net income of ISP included in the Company's consolidated statements of comprehensive income from the Acquisition Date to the period ending June 30, 2017 are as follows:

Revenue	\$ 8,009,349
Net income	\$ 981,125



The following represents unaudited pro forma consolidated information as if ISP had been included in the consolidated results of the Company for the years ended June 30, 2017 and 2016:

	Year ended June 30, 2017	Year ended June 30, 2016
Revenue – pro forma	\$ 34,498,656	\$ 29,575,610
Net income – pro forma	\$ 2,647,533	\$ 1,333,582

These amounts have been calculated after applying the Company's accounting policies and adjusting the results for Acquisition expenses and to reflect the additional interest expense and depreciation and amortization that would have been charged assuming the fair value adjustments to property, plant and equipment and intangible assets had been applied on July 1, 2015, together with the consequential tax effects. For the year ended June 30, 2017, pro forma net income reflects adjustments of approximately \$600,000 for amortization of intangibles and approximately \$250,000 in additional interest, and excludes approximately \$5.4 million for deferred tax benefits, approximately \$650,000 in Acquisition expenses and approximately \$600,000 of non-recurring fees incurred by ISP. For the year ended June 30, 2016, pro forma net income reflects adjustments of approximately \$1.3 million for amortization of intangibles and approximately \$450,000 in additional interest, and excludes approximately \$200,000 in Acquisition expenses and approximately \$700,000 in non-recurring fees incurred by ISP.

Prior to the Acquisition, the Company had a preexisting relationship with ISP. The Company ordered anti-reflective coating services from ISP on an arms' length basis. The Company had also partnered with ISP to develop and sell molded optics as part of a multiple lens assembly sold to a third party and had provided certain standard molded optics for resale through ISP's catalog. At the Acquisition Date, the Company had amounts payable to ISP of \$8,000 for services provided prior to the Acquisition and ISP had payables of \$24,500 due to the Company.

#### 4. Inventories, net

The components of inventories include the following:

	<u>June 30, 2017</u>	<u>June 30, 2016</u>
Raw materials	\$ 2,282,880	\$ 1,791,791
Work in process	1,654,653	1,269,539
Finished goods	1,904,497	1,171,343
Reserve for obsolescence	(767,454)	(395,864)
	<u>\$ 5,074,576</u>	<u>\$ 3,836,809</u>

During fiscal 2017 and 2016, the Company evaluated all reserved items and disposed of \$90,268 and \$24,590, respectively, of inventory parts and wrote them off against the reserve for obsolescence.

The value of tooling in raw materials was approximately \$1.6 million at June 30, 2017 and approximately \$1.2 million at June 30, 2016.

## 5. Property and Equipment, net

Property and equipment consist of the following:

	Estimated Life (Years)	June 30, 2017	June 30, 2016
Manufacturing equipment	5 - 10	\$ 13,804,964	\$ 6,818,382
Computer equipment and software	3 - 5	375,775	339,723
Furniture and fixtures	5	112,307	92,705
Leasehold improvements	5 - 7	1,228,797	1,225,099
Construction in progress		709,571	597,452
Total property and equipment		16,231,414	9,073,361
Less accumulated depreciation and amortization		5,906,856	4,703,316
Total property and equipment, net		\$ 10,324,558	\$ 4,370,045

During fiscal 2015, we extended the term of our Orlando lease and received a tenant improvement allowance from the landlord of \$420,014. This allowance was used to construct improvements and was recorded as leasehold improvements and deferred rent liability. It is being amortized over the corresponding lease term.

## 6. Goodwill and Intangible Assets

The change in the net carrying amount of goodwill was as follows:

Goodwill at June 30, 2016	\$	—
Additions		5,854,905
Goodwill at June 30, 2017	\$	5,854,905

The increase in goodwill during the first half of fiscal 2017 was due to the Acquisition of ISP. See Note 3, Acquisition of ISP Optics Corporation, to these Consolidated Financial Statements, for more information.

Intangible assets as a result of the Acquisition of ISP were comprised of:

	Useful life (yrs)	Gross	Amortization through June 30, 2017	Net
Customer relationships	15	\$ 3,590,000	\$ 126,100	\$ 3,463,900
Backlog	2	366,000	96,419	269,581
Trade secrets	8	3,272,000	215,495	3,056,505
Trademarks	8	3,814,000	251,191	3,562,809
Non-compete agreement	3	27,000	4,742	22,258
		\$ 11,069,000	\$ 693,947	\$ 10,375,053

Future amortization of intangibles is as follows:

Fiscal year ended:	
June 30, 2018	\$ 1,317,083
June 30, 2019	1,220,664
June 30, 2020	1,129,342
June 30, 2021	1,125,083
June 30, 2022	1,125,083
June 30, 2023 and later	4,457,798
	\$ 10,375,053

## 7. Accounts Payable

The accounts payable balance includes \$73,000 and \$69,250, of earned but unpaid board of directors' fees, as of June 30, 2017 and 2016, respectively.

## 8. Stockholders' Equity

The Company's authorized capital stock consists of 45,000,000 shares, divided into 40,000,000 shares of common stock, par value \$0.01 per share, and 5,000,000 shares of preferred stock, par value \$0.01 per share.

Of the 5,000,000 shares of preferred stock authorized, the board of directors has previously designated:

- 250 shares of preferred stock as Series A Preferred Stock, all previously outstanding shares of which have been previously redeemed or converted into shares of our Class A common stock and may not be reissued;
- 300 shares of our preferred stock as Series B Preferred Stock, all previously outstanding shares of which have been previously redeemed or converted into shares of our Class A common stock and may not be reissued;
- 500 shares of our preferred stock as Series C Preferred Stock, all previously outstanding shares of which have been previously redeemed or converted into shares of our Class A common stock and may not be reissued;
- 100,000 shares of our preferred stock as Series D Preferred Stock, none of which have been issued; however in 1998, our board of directors declared a dividend distribution as a right to purchase one share of Series D Preferred Stock for each outstanding share of Class A common stock. The stockholders of Series D Preferred Stock are entitled to one vote for each share held; and
- 500 shares of our preferred stock as Series F Preferred Stock, all previously outstanding shares of which have been previously redeemed or converted into shares of our Class A common stock and may not be reissued.

Of the 40,000,000 shares of common stock authorized, the board of directors has previously designated 34,500,000 shares authorized as Class A common. The stockholders of Class A common stock are entitled to one vote for each share held. The remaining 5,500,000 shares of authorized common stock were designated Class E-1 common stock, Class E-2 common stock, or Class E-3 common stock, all previously outstanding shares of which have been previously redeemed or converted into shares of Class A common.

At June 30, 2017, the Company had outstanding warrants to purchase up to 501,474 shares of Class A common stock at \$1.22 per share, as adjusted, at any time through December 11, 2017. The warrants were issued in connection with a private placement in fiscal 2012.

During fiscal 2017, the Company received approximately \$706,000 in net proceeds from the exercise of the June 2012 warrants. The Company issued 578,897 shares of Class A common stock in connection with these exercises.

## 9. Income Taxes

For financial reporting purposes, income before income taxes includes the following components:

	Year ended June 30,	
	2017	2016
<b>Pretax income:</b>		
United States	\$ (485,966)	\$ 1,389,111
Foreign	3,847,752	224,779
Income before income taxes	<u>\$ 3,361,786</u>	<u>\$ 1,613,890</u>

The components of the provision for income taxes are as follows:

	Year ended June 30,	
	2017	2016
<b>Current:</b>		
Federal tax	\$ 98,787	\$ 38,968
State	—	—
Foreign	1,053,617	160,307
Total current	<u>1,152,404</u>	<u>199,275</u>
<b>Deferred:</b>		
Federal tax	(5,384,171)	—
State	(121,000)	—
Foreign	11,467	—
Total deferred	<u>(5,493,704)</u>	<u>—</u>
Total income tax (benefit)	<u>\$ (4,341,300)</u>	<u>\$ 199,275</u>

The reconciliation of income tax computed at the U.S federal statutory rates to income tax expense is as follows:

	Year ended June 30,	
	2017	2016
U.S. federal statutory tax rate	34%	34%
<b>Income tax provision reconciliation:</b>		
Tax at statutory rate:	\$ 1,143,010	\$ 548,722
Net foreign income subject to lower tax rate	(464,335)	(6,235)
State income taxes, net of federal benefit	2,418,932	(18,200)
Valuation allowance	(8,085,000)	182,000
Federal research and development and other credits	(118,128)	(16,961)
Stock-based compensation	100,469	16,759
Change in fair value of derivative warrants	158,965	17,834
Acquisition costs	75,332	—
Other permanent differences	(43,295)	9,726
Other, net	472,750	(534,370)
	<u>\$ (4,341,300)</u>	<u>\$ 199,275</u>

The Company intends to permanently invest earnings generated from its foreign Chinese and Latvian operations, and, therefore, has not previously provided for United States taxes on the related earnings. However, if in the future the Company changes such intention, the Company would provide for and pay additional United States taxes at that time.

The Company's Chinese subsidiaries are governed by the Income Tax Law of the People's Republic of China concerning the privately run and foreign invested enterprises, which are generally subject to tax at a statutory rate of 25% on income reported in the statutory financial statements after appropriate tax adjustments. No deferred tax provision has been recorded for China as the effect is deemed de minimis.

The Company's Latvian subsidiary is governed by the Law of Corporate Income Tax of Latvia, which is applicable to privately run and foreign invested enterprises, and which generally subjects such enterprises to a statutory rate of 15% on income reported in the statutory financial statements after appropriate tax adjustments.

The tax effects of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities are as follows at June 30:

	2017	2016
Deferred tax assets:		
Net operating loss and credit carryforwards	\$ 29,014,000	\$ 32,440,000
Stock-based compensation	943,000	813,000
R&D and other credits	1,983,000	1,517,000
Capitalized R&D expenses	562,000	576,000
Inventory	243,000	177,000
Accrued expenses and other	407,091	492,000
Gross deferred tax assets	33,152,091	36,015,000
Valuation allowance for deferred tax assets	(27,886,000)	(35,971,000)
Total deferred tax assets	5,266,091	44,000
Deferred tax liabilities:		
Depreciation and other	(1,187,440)	(44,000)
Intangible assets	(3,976,000)	—
Total deferred tax liabilities	(5,163,440)	(44,000)
Net deferred tax asset	\$ 102,651	\$ —

In assessing the potential future recognition of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. In order to fully realize the deferred tax asset, the Company will need to generate future taxable income of approximately \$84 million prior to the expiration of net operating loss carry-forwards from 2019 through 2035. Based on the level of historical taxable income, management has provided for a valuation adjustment against the deferred tax assets of \$27,886,000 at June 30, 2017, a decrease of approximately \$8,085,000 as compared to June 30, 2016. The net deferred tax asset results from federal and state tax credits with indefinite carryover periods that management expects to utilize in a future period. The reduction in the valuation allowance for deferred tax assets as compared to the prior year is primarily the result of deferred tax liabilities recorded in conjunction with the acquisition of ISP. State income tax expense disclosed on the effective tax rate reconciliation above includes state deferred taxes that are offset by a full valuation allowance.

At June 30, 2017, in addition to net operating loss carry forwards, the Company also has research and development credit carry forwards of approximately \$1,600,000, of which \$38,505 will expire in fiscal 2019 and the remainder will expiration from 2020 through 2036. A portion of the net operating loss carry forwards may be subject to certain limitations of the Internal Revenue Code Sections 382 and 383, which would restrict the annual utilization in future periods due principally to changes in ownership in prior periods.

The Company has not recognized a liability for uncertain tax positions. A reconciliation of the beginning and ending amount of unrecognized tax benefits or penalties has not been provided since there has been no unrecognized benefit or penalty. If there were an unrecognized tax benefit or penalty, the Company would recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses.

The Company files U.S. Federal income tax returns, and returns in various states and foreign jurisdictions. The Company's open tax years subject to examination by the Internal Revenue Service and the Florida Department of Revenue generally remain open for three years from the date of filing.

## 10. Compensatory Equity Incentive Plan and Other Equity Incentives

**Share-based payment arrangements** — The Amended and Restated Omnibus Incentive Plan (the "Plan") included several available forms of stock compensation of which incentive stock options, non-qualified stock options and restricted stock units have been granted to date. Stock based compensation is measured at grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period. The Company estimates the fair value of each stock option as of the date of grant using the Black-Scholes-Merton pricing model. Most options granted under the Plan vest ratably over two to four years and generally have ten-year contract lives. The volatility rate is based on four-year historical trends in common stock closing prices and the expected term was determined based primarily on historical experience of previously outstanding options. The interest rate used is the U.S. Treasury interest rate for constant maturities. The likelihood of meeting targets for option grants that are performance based are evaluated each quarter. If it is determined that meeting the targets is probable then the compensation expense will be amortized over the remaining vesting period.

The LightPath Technologies, Inc. Employee Stock Purchase Plan (“2014 ESPP”) was adopted by the Company’s board of directors on October 30, 2014 and approved by the Company’s stockholders on January 29, 2015. The 2014 ESPP permits employees to purchase Class A common stock through payroll deductions, which may not exceed 15% of an employee’s compensation, at a price not less than 85% of the market value of the Class A common stock on specified dates (June 30 and December 31). In no event can any participant purchase more than \$25,000 worth of shares of Class A common stock in any calendar year and an employee cannot purchase more than 8,000 shares on any purchase date within an offering period of 12 months and 4,000 shares on any purchase date within an offering period of six months. This discount of approximately \$1,900 and \$2,300 for fiscal 2017 and 2016, respectively, is included in the selling, general and administrative expense in the accompanying consolidated statements comprehensive income.

These plans are summarized below:

<b>Equity Compensation Arrangement</b>	<b>Award Authorized</b>	<b>Award Shares Outstanding at June 30, 2017</b>	<b>Available for Issuance at June 30, 2017</b>
Amended and Restated Omnibus Incentive Plan	3,915,625	2,604,968	631,701
Employee Stock Purchase Plan	400,000	—	377,988
	<u>4,315,625</u>	<u>2,604,968</u>	<u>1,009,689</u>

**Grant Date Fair Values and Underlying Assumptions; Contractual Terms**— The Company estimates the fair value of each stock option as of the date of grant. The Company uses the Black-Scholes-Merton pricing model. The 2014 ESPP fair value is the amount of the discount the employee obtains at the date of the purchase transaction.

For stock options and restricted stock units (“RSUs”) granted in the years ended June 30, 2017 and 2016, the Company estimated the fair value of each stock award as of the date of grant using the following assumptions:

	<b>Year ended June 30,</b>	
	<b>2017</b>	<b>2016</b>
Weighted average expected volatility	77% - 83%	68% - 103%
Dividend yields	0%	0%
Weighted average risk-free interest rate	1.24% - 1.90%	0.37% - 1.49%
Weighted average expected term, in years	7.49	4.29 - 7.50

Most options granted under the Plan vest ratably over two to four years and are generally exercisable for ten years. The assumed forfeiture rates used in calculating the fair value of options and restricted stock unit grants with both performance and service conditions were 20% for each of the years ended June 30, 2017 and 2016. The volatility rate and expected term are based on seven-year historical trends in Class A common stock closing prices and actual forfeitures. The interest rate used is the U.S. Treasury interest rate for constant maturities.

**Information Regarding Current Share Based Payment Awards** — A summary of the activity for share-based payment awards in the years ended June 30, 2017 and 2016 is presented below:

	Stock Options			Restricted Stock Units (RSUs)	
	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contract	Shares	Weighted Average Remaining Contract
<b>June 30, 2015</b>	722,483	\$ 2.08	5.3	1,075,300	0.9
Granted	155,592	\$ 1.49	9.4	236,495	2.3
Exercised	(6,077)	\$ 1.07	3.7	—	—
Cancelled/Forfeited	(52,738)	\$ 3.26	—	—	—
<b>June 30, 2016</b>	819,260	\$ 1.90	5.6	1,311,795	0.9
Granted	346,926	\$ 1.63	9.4	230,772	2.3
Exercised	—	—	—	(33,785)	—
Cancelled/Forfeited	(70,000)	\$ 4.04	—	—	—
<b>June 30, 2017</b>	1,096,186	\$ 1.68	6.3	1,508,782	0.9
Awards exercisable/ vested as of					
<b>June 30, 2017</b>	851,675	\$ 1.70	5.7	1,069,870	—
Awards unexercisable/ unvested as of					
<b>June 30, 2017</b>	244,511	\$ 1.60	8.6	438,912	0.9
	<u>1,096,186</u>			<u>1,508,782</u>	

The total intrinsic value of share options exercised for years ended June 30, 2017 and 2016 was approximately \$0 and \$10,000, respectively.

The total intrinsic value of shares options outstanding and exercisable at both June 30, 2017 and 2016 was approximately \$803,000 and \$148,000, respectively.

The total fair value of shares options vested during the years ended June 30, 2017 and 2016 was approximately \$318,000 and \$234,000, respectively.

The total intrinsic value of RSUs exercised during the years ended June 30, 2017 and 2016 was approximately \$79,000 and \$0, respectively.

The total intrinsic value of RSUs outstanding and exercisable at June 30, 2017 and 2016 was approximately \$2.8 million and \$1.5 million, respectively.

The total fair value of RSUs vested during the years ended June 30, 2017 and 2016 was approximately \$386,000 and \$389,000, respectively.

As of June 30, 2017, there was approximately \$486,000 of total unrecognized compensation cost related to non-vested share-based compensation arrangements, including share options and restricted stock units ("RSUs"), granted under the Plan. The expected compensation cost to be recognized is as follows:

	Stock Options	RSUs	Total
Year ended June 30, 2018	40,004	244,917	284,921
Year ended June 30, 2019	19,088	144,984	164,072
Year ended June 30, 2020	5,197	29,989	35,186
Year ended June 30, 2021	2,105	—	2,105
	\$ 66,394	\$ 419,890	\$ 486,284

The table above does not include shares under the Company's 2014 ESPP, which has purchase settlement dates in the second and fourth fiscal quarters. The Company's 2014 ESPP is not administered with a look back option provision and, as a result, there is not a population of outstanding option grants during the employee contribution period.

RSU awards vest immediately or from two to four years from the grant date.

The Company issues new shares of Class A common stock upon the exercise of stock options. The following table is a summary of the number and weighted average grant date fair values regarding our unexercisable/unvested awards as of June 30, 2017 and 2016 and changes during the two years then ended:

Unexercisable/unvested awards	Stock Options Shares	RSU Shares	Total Shares	Weighted-Average Grant Date Fair Values (per share)
June 30, 2015	224,500	403,870	628,370	\$ 1.10
Granted	155,592	236,495	392,087	\$ 1.39
Vested	(197,842)	(198,766)	(396,608)	\$ 1.21
Cancelled/Forfeited	—	—	—	—
June 30, 2016	182,250	441,599	623,849	\$ 1.35
Granted	346,926	230,772	577,698	\$ 1.33
Vested	(275,915)	(233,459)	(509,374)	\$ 1.28
Cancelled/Forfeited	(8,750)	—	(8,750)	\$ 1.02
June 30, 2017	244,511	438,912	683,423	\$ 1.39

**Acceleration of Vesting** — The Company does not generally accelerate the vesting of any stock options.



**Financial Statement Effects and Presentation** — The following table shows total stock-based compensation expense for the years ended June 30, 2017 and 2016 included in the Consolidated Statement of Comprehensive Income:

	Year ended June 30,	
	2017	2016
Stock options	\$ 46,840	\$ 49,293
RSUs	348,035	299,442
<b>Total</b>	<b>\$ 394,875</b>	<b>\$ 348,735</b>
<b>The amounts above were included in:</b>		
Selling, general & administrative	\$ 389,675	\$ 347,206
Cost of sales	3,876	316
New product development	1,324	1,213
	<b>\$ 394,875</b>	<b>\$ 348,735</b>

## 11. Earnings Per Share

Basic earnings per share is computed by dividing net income by the weighted-average number of shares of Class A common stock outstanding, during each period presented. Diluted earnings per share is computed similarly to basic earnings per share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue shares of Class A common stock were exercised or converted into shares of Class A common stock. The computations for basic and diluted earnings per share are described in the following table:

	Year ended June 30,	
	2017	2016
Net income	\$ 7,703,086	\$ 1,414,615
<b>Basic number of shares</b>	<b>20,001,868</b>	<b>15,401,893</b>
Options to purchase common stock	142,482	71,859
RSUs	1,167,540	944,274
Common stock warrants	354,502	457,357
<b>Diluted number of shares</b>	<b>21,666,392</b>	<b>16,875,383</b>
<b>Earnings per common share:</b>		
Basic	\$ 0.39	\$ 0.09
Diluted	\$ 0.36	\$ 0.08

The following potential dilutive shares were not included in the computation of diluted earnings per share as their effects would be anti-dilutive:

Options to purchase common stock	378,278	718,684
RSUs	289,036	289,982
Common stock warrants	518,087	848,927
	<b>1,185,401</b>	<b>1,857,593</b>

## 12. Defined Contribution Plan

The Company discontinued its profit sharing plan that permitted participants to make contributions by salary reduction pursuant to Section 401(k) of the Internal Revenue Code of 1986, as amended, in January 2009. Effective January 1, 2009, the Company transferred all plan assets to the ADP Total Source 401(k) plan. The ADP plan is a defined 401(k) contribution plan that all employees, over the age of 21, are eligible to participate in after three months of employment. The Company matched 25% of the first 6% of employee contributions until February 27, 2009, when the match was eliminated. Currently, there are 31 employees who are enrolled in this plan. The 401(k) contribution plan is administered by a third party. Annual discretionary contributions, if any, are made by the Company to match a portion of the funds employees contribute. The Company made no matching contributions during the years ended June 30, 2017 and 2016.

### 13. Lease Commitments

The Company has operating leases for office space. At June 30, 2017, the Company has a lease agreement for its manufacturing and office facility in Orlando, Florida (the "Orlando Lease"). The Orlando Lease, which is for a seven-year original term with renewal options, expires April 2022 and expanded our space to 25,847 square feet, including space added in July 2014. Minimum rental rates for the extension term were established based on annual increases of two and one half percent starting in the third year of the extension period. Additionally, there is one five-year extension option exercisable by the Company. The minimum rental rates for such additional extension option will be determined at the time an option is exercised and will be based on a "fair market rental rate" as determined in accordance with the Orlando Lease, as amended.

The Company received \$420,000 in a leasehold improvement allowance in fiscal 2015. This amount is included in the property and equipment and deferred rent on the Consolidated Balance Sheets. Amortization of leasehold improvements was \$126,510 as of June 30, 2017. The deferred rent is being amortized as a reduction in lease expense over the term of the lease.

As of June 30, 2017, the Company, through its wholly-owned subsidiary, LPOI, has a lease agreement for an office facility in Shanghai, China (the "Shanghai Lease") for 1,900 square feet. The Shanghai Lease commenced in October 2015. Subsequent to the end of fiscal 2017, the Shanghai Lease was renewed for an additional one year term, and now expires October 2018.

As of June 30, 2017, the Company, through its wholly-owned subsidiary, LPOIZ, has a lease agreement for a manufacturing and office facility in Zhenjiang, China (the "Zhenjiang Lease") for 26,000 square feet. The Zhenjiang Lease, which is for a five-year original term with renewal options, expires March 2019. Subsequent to the end of fiscal 2017, another lease was executed for 13,000 additional square feet in this same facility. This new lease has a 54-month term, and expires in December 2021.

At June 30, 2017, the Company, through its wholly-owned subsidiary ISP, has a lease agreement for a manufacturing and office facility in Irvington, New York (the "ISP Lease") for 13,000 square feet. The ISP Lease, which is for a five-year original term with renewal options, expires September 2020.

At June 30, 2017, the Company, through ISP's wholly-owned subsidiary ISP Latvia, has two lease agreements for a manufacturing and office facility in Riga, Latvia (the "Riga Leases") for 23,000 square feet. The Riga Leases, each of which is for a five-year original term with renewal options, expires December 2019.

During fiscal 2014, 2015 and 2016, the Company entered into five capital lease agreements, with terms ranging from three to five years, for computer and manufacturing equipment, which are included as part of property and equipment. Assets under capital lease include approximately \$749,000 and \$513,000 in computer equipment and software and manufacturing equipment, with accumulated amortization of approximately \$361,000 and \$155,000 as of June 30, 2017 and 2016, respectively. Amortization related to capital leases is included in depreciation expense.

Rent expense totaled \$770,000 and \$529,341 during the years ended June 30, 2017 and 2016, respectively.

The approximate future minimum lease payments under capital and operating leases at June 30, 2017 were as follows:

Fiscal year ending June 30,	Capital Leases	Operating Lease
2018	\$ 241,726	\$ 799,000
2019	113,391	758,000
2020	62,258	689,000
2021	—	445,000
2022	—	285,000
2023 and beyond	—	—
<b>Total minimum payments</b>	<b>417,375</b>	<b>\$ 2,976,000</b>
Less imputed interest	(35,942)	
Present value of minimum lease payments included in capital lease obligations	381,433	
Less current portion	239,332	
Non-current portion	<u>\$ 142,101</u>	

#### 14. Contingencies

The Company from time to time is involved in various legal actions arising in the normal course of business. Management, after reviewing with legal counsel all of these actions and proceedings, believes that the aggregate losses, if any, will not have a material adverse effect on the Company's financial position or results of operations.

#### 15. Foreign Operations

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the balance sheet date, and revenues and expenses are translated at average rates of exchange for the period. During the years ended June 30, 2017 and 2016, we recognized a gain of \$78,000 and a loss of \$370,000 on foreign currency translation, respectively, included in the consolidated statements of comprehensive income in the line item entitled "Other income (expense), net." Gains or losses on the translation of the financial statements of a non-U.S. operation, where the functional currency is other than the U.S. dollar, are reflected as a separate component of equity, which was a gain of \$295,396 and \$126,108 at June 30, 2017 and 2016, respectively. The Company, as of June 30, 2017, had approximately \$14.0 in assets and \$12.3 in net assets located in China. The Company, as of June 30, 2016, had approximately \$11.3 million in assets and \$9.9 million in net assets located in China. The Company also had \$6.1 in assets and \$6.0 in net assets located in Latvia as of June 30, 2017.

#### 16. Significant Suppliers and Customers

We utilize a number of glass compositions in manufacturing our molded glass aspheres and lens array products. These glasses or equivalents are available from a large number of suppliers, including CDGM Glass Company Ltd., Ohara Corporation, and Sumita Optical Glass, Inc. Base optical materials, used in both GRADIUM and collimator products, are manufactured and supplied by a number of optical and glass manufacturers. ISP utilizes major infrared material suppliers located around the globe for a broad spectrum of infrared crystal and glass. The Company believes that a satisfactory supply of such production materials will continue to be available at reasonable prices, although there can be no assurance in this regard.

In fiscal 2017, sales to three customers comprised an aggregate of approximately 26% of our annual revenue, and 26% of accounts receivable as of June 30, 2017. In fiscal 2016, sales to three customers comprised an aggregate of approximately 25% of our annual revenue, and 25% of accounts receivable as of June 30, 2016. The loss of any of these customers, or a significant reduction in sales to any such customer, would adversely affect our revenues.

## 17. Derivative Financial Instruments (Warrant Liability)

On June 11, 2012, the Company executed a Securities Purchase Agreement with respect to a private placement of an aggregate of 1,943,852 shares of its Class A common stock at \$1.02 per share and warrants to purchase up to 1,457,892 shares of its Class A common stock at an initial exercise price of \$1.32 per share, which was subsequently reduced to \$1.26, and then to \$1.22 on December 21, 2016 as a result of our public offering (the "June 2012 Warrants"). The June 2012 Warrants are exercisable for a period of five years beginning on December 11, 2012. The Company accounted for the June 2012 Warrants issued to investors in accordance with ASC 815-10. ASC 815-10 provides guidance for determining whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock. This applies to any freestanding financial instrument or embedded feature that has all the characteristics of a derivative under ASC 815-10, including any freestanding financial instrument that is potentially settled in an entity's own stock.

Due to certain adjustments that may be made to the exercise price of the June 2012 Warrants if the Company issues or sell shares of its Class A common stock at a price that is less than the then-current warrant exercise price, the June 2012 Warrants have been classified as a liability, as opposed to equity, in accordance with ASC 815-10 as it was determined that the June 2012 Warrants were not indexed to the Company's Class A common stock.

The fair value of the outstanding June 2012 Warrants was re-measured on June 30, 2016 and 2017 to reflect their fair market value at the end of the current reporting period. As of June 30, 2017, there were 329,195 shares of Class A common stock underlying our outstanding June 2012 Warrants that were issued to investors. These warrants will be re-measured at each subsequent financial reporting period until the warrants are either fully exercised or expire. There are also 172,279 shares of Class A common stock underlying the outstanding June 2012 Warrants which were issued to investment bankers, that do not require fair value re-measurement as they contain different provisions. The change in fair value of the June 2012 Warrants is recorded in the Statement of Comprehensive Income and is estimated using the Lattice option-pricing model using the following assumptions:

Inputs into Lattice model for warrants:	As of June 30,	
	2017	2016
Equivalent volatility	63.13%	75.50%
Equivalent interest rate	1.13%	0.50%
Floor	\$ 1.15	\$ 1.15
Stock price	\$ 2.70	\$ 1.15
Probability price < strike price	4.70%	55.90%
Fair value of call	\$ 1.49	\$ 0.79
Probability of fundamental transaction occurring	0%	5%

All warrants issued by the Company other than the above noted June 2012 Warrants are classified as equity.

The warrant liabilities are considered a recurring Level 3 fair value measurement, with a fair value of approximately \$490,500 and \$717,000 at June 30, 2017 and 2016, respectively.

The following table summarizes the activity of Level 3 financial instruments measured on a recurring basis for the years ended June 30, 2017 and 2016:

	Warrant Liability
Fair value, June 30, 2015	\$ 1,195,470
Exercise of common stock warrants	(530,531)
Change in fair value of warrant liability	52,454
Fair value, June 30, 2016	\$ 717,393
Exercise of common stock warrants	(694,436)
Change in fair value of warrant liability	467,543
Fair value, June 30, 2017	\$ 490,500

## 18. Loan Payable

On December 21, 2016, the Company executed the Second Amended and Restated Loan and Security Agreement (the "Amended LSA") with AvidBank for the acquisition term loan (the "Term Loan") in the aggregate principal amount of \$5 million and a working capital revolving line of credit (the "Revolving Line"). The Amended LSA amends and restates that certain Loan and Security Agreement between the Company and AvidBank dated September 30, 2013, as amended and restated pursuant to that certain Amended and Restated Loan and Security Agreement dated as of December 23, 2014, and as further amended pursuant to that certain First Amendment to Amended and Restated Loan and Security Agreement dated as of December 23, 2015.

The Term Loan is for a five-year term. Pursuant to the Amended LSA, interest on the Term Loan began accruing on December 21, 2016 and is paid monthly for the first six months of the term of the Term Loan. Thereafter, both principal and interest is due and payable in fifty-four (54) monthly installments. The Term Loan bears interest at a per annum rate equal to two percent (2.0%) above the Prime Rate, or 6% at June 30, 2017; provided, however, that at no time shall the applicable rate be less than five and one-half percent (5.50%) per annum. Prepayment is permitted; however, the Company must pay a prepayment fee in an amount equal to (i) 1% of the principal amount of the Term Loan if prepayment occurs on or prior to December 21, 2018, or (ii) 0.75% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2017 but on or prior to December 21, 2018, or (iii) 0.50% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2018 but on or prior to December 21, 2019, or (iv) 0.25% of the principal amount of the Term Loan if such prepayment occurs after December 21, 2019 but on or prior to December 21, 2020. Costs incurred of approximately \$72,000 were recorded as a discount on debt and will be amortized over the five year term of the Term Loan. As of June 30, 2017 approximately \$7,200 of the costs incurred were amortized.

Pursuant to the Amended LSA, Avidbank will, in its discretion, make loan advances under the Revolving Line to the Company up to a maximum aggregate principal amount outstanding not to exceed the lesser of (i) One Million Dollars (\$1,000,000) or (ii) eighty percent (80%) (the "Maximum Advance Rate") of the aggregate balance of the Company's eligible accounts receivable, as determined by AvidBank in accordance with the Amended LSA. AvidBank may, in its discretion, elect to not make a requested advance, determine that certain accounts are not eligible accounts, change the Maximum Advance Rate or apply a lower advance rate to particular accounts and terminate the Amended LSA.

Amounts borrowed under the Revolving Line may be repaid and re-borrowed at any time prior to December 21, 2017, at which time all amounts shall be immediately due and payable. The advances under the Revolving Line bear interest, on the outstanding daily balance, at a per annum rate equal to one percent (1%) above the Prime Rate; provided, however, that at no time shall the applicable rate be less than four and one-half percent (4.5%) per annum. Interest payments are due and payable on the last business day of each month. Payments received with respect to accounts upon which advances are made will be applied to the amounts outstanding under the Amended LSA. There were no borrowings under the Revolving Line during the period. As of June 30, 2017, there was no outstanding balance under the Revolving Line.

The Company's obligations under the Amended LSA are secured by a first priority security interest (subject to permitted liens) in cash, U.S. inventory and accounts receivable. In addition, the Company's wholly-owned subsidiary, Geltech, has guaranteed our obligations under the Amended LSA.

The Amended LSA contains customary covenants, including, but not limited to: (i) limitations on the disposition of property; (ii) limitations on changing our business or permitting a change in control; (iii) limitations on additional indebtedness or encumbrances; (iv) restrictions on distributions; and (v) limitations on certain investments. Additionally, the Amended LSA requires us to maintain a fixed charge coverage ratio (as defined in the Amended LSA) of at least 1.15 to 1.00 and an asset coverage ratio (as defined in the Amended LSA) of at least 1.50 to 1.00. As of June 30, 2017, the Company is in compliance with all covenants.

Late payments are subject to a late fee equal to the lesser of five percent (5%) of the unpaid amount or the maximum amount permitted to be charged under applicable law. Amounts outstanding during an event of default accrue interest at a rate of five percent (5%) above the interest rate applicable immediately prior to the occurrence of the event of default. The Amended LSA contains other customary provisions with respect to events of default, expense reimbursement, and confidentiality.

On December 21, 2016, the Company also entered into the Sellers Note in the aggregate principal amount of \$6 million. Pursuant to the Sellers Note, during the period commencing on the Acquisition Date and continuing until the fifteen month anniversary of the Acquisition Date (the "Initial Period"), interest will accrue on only the principal amount of the Sellers Note in excess of \$2,700,000 at an interest rate equal to ten percent (10%) per annum. After the Initial Period, interest will accrue on the entire unpaid principal amount of the Sellers Note from time to time outstanding, at an interest rate equal to ten percent (10%) per annum. Interest is payable semi-annually in arrears. The term of the Sellers Note is five years, and any unpaid interest and principal, together with any other amounts payable under the Sellers Note, is due and payable on December 21, 2021, the maturity date. The Company may prepay the Sellers Note in whole or in part without penalty or premium. If the Company does not pay any amount payable when due, whether at the maturity date, by acceleration, or otherwise, such overdue amount will bear interest at a rate equal to twelve (12%) per annum from the date of such non-payment until the Company pays such amount in full. The Sellers Note was valued based on the present value of expected cash flows, using a risk-adjusted discount rate of 7.5%. The fair value of the Sellers Note was determined to be approximately \$6,327,200 based on the present value of expected future cash flows, using a risk-adjusted discount rate of 7.5%. The Sellers Note is included in Loans payable, less current portion on the consolidated balance sheet. The fair value premium is being amortized using the effective interest method. As of June 30, 2017, approximately \$69,000 was added to the fair value premium. As of June 30, 2017, the amount outstanding under the Sellers Note was \$5.7 million, after applying the \$293,000 working capital adjustment, as discussed in Note 3 to these Consolidated Financial Statements.

In addition, upon the occurrence of a payment default, or any other “event of default,” such as a bankruptcy event or a change of control of the Company, the entire unpaid and outstanding principal balance of the Sellers Note, together with all accrued and unpaid interest and any and all other amounts payable under the Sellers Note, will immediately be due and payable.

Future maturities of loans payable are as follows:

Year ended June 30,	Avidbank Note	Sellers Note		Unamortized Debt Costs	Total
		Principal	Fair Value Adjustment		
2018	1,111,500		(78,153)	(14,445)	1,018,902
2019	1,111,000		123,452	(14,445)	1,220,007
2020	1,111,000		132,751	(14,445)	1,229,306
2021	1,111,000		142,749	(14,445)	1,239,304
2022	555,500	5,707,184	75,364	(7,223)	6,330,825
Total payments	\$ 5,000,000	\$ 5,707,184	\$ 396,163	\$ (65,003)	\$ 11,038,344
Less current portion					1,111,500
Non-current portion					\$ 9,926,844

#### 19. Public Offering of Class A Common Stock

On December 16, 2016, the Company entered into an Underwriting Agreement (the “Underwriting Agreement”) with Roth Capital Partners, LLC (“Roth Capital”), as representative of the several underwriters identified therein (collectively, the “Underwriters”), relating to the firm commitment offering of 7,000,000 shares of the Company’s Class A common stock, at a public offering price of \$1.21 per share. Under the terms of the Underwriting Agreement, the Company also granted the Underwriters an option, exercisable for 45 days, to purchase up to an additional 1,000,000 shares of Class A common stock to cover any over-allotments.

On December 21, 2016, the Company completed its underwritten public offering of 8,000,000 shares of Class A common stock, which included the full exercise by the Underwriters of their option to purchase 1,000,000 shares of Class A common stock to cover over-allotments, at a public offering price of \$1.21 per share. The Company realized net proceeds of approximately \$8.7 million, after deducting underwriting discounts and commissions and estimated offering expenses. The net proceeds from the offering provided funds for a portion of the purchase price of the Acquisition of ISP, as well as provided funds for the payment of transaction expenses and other costs incurred in connection with the Acquisition.

The offering of the shares of Class A common stock was made pursuant to a Registration Statement on Form S-1, as amended (Registration No. 333-213860), which the SEC declared effective on December 15, 2016, and the final prospectus dated December 16, 2016.

End of Consolidated Financial Statements



Subsidiaries

GeiTech Inc.	Delaware
LightPath Optical Instrumentation (Shanghai) Co., Ltd	People's Republic of China
LightPath Optical Instrumentation (Zhenjiang) Co., Ltd	People's Republic of China
ISP Optics Corporation	New York
ISP Latvia	Latvia

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Consent of Independent Registered Public Accounting Firm

LightPath Technologies, Inc.  
Orlando, Florida

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-23515, 333-23511, 333-41705, 333-92017, 333-121389, 333-121385, 333-96083, 333-50976, 333-50974, 333-155044, 333-188482, 333-201871 and 333-201872), Form S-3 (Nos. 333-113814, 333-37443, 333-39641, 333-47905, 333-86185, 333-93179, 333-94303, 333-31014, 333-37622, 333-47992, 333-51474, 333-75528, 333-127053, 333-133772, 333-146550, 333-153743, 333-159603, 333-162342, 333-163416, 333-166633 and 333-182240) and Form S-1 (No. 333-213860) of LightPath Technologies, Inc. of our report dated September 14, 2017, relating to the consolidated financial statements, which appears in the Annual Report to Shareholders, which is incorporated by reference in this Annual Report on Form Form 10-K.

BDO USA LLP  
Orlando, Florida  
September 14, 2017

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POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that the undersigned constitutes and appoints J. James Gaynor and Dorothy Cipolla, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for and in his name, place and stead, in any and all capacities, to sign the Annual Report on Form 10-K for the fiscal year ended June 30, 2017, and any and all amendments thereto and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises as fully to all intents and purposes as might or could be done in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, this Power of Attorney has been signed on this 14th day of September 2017 by the following persons.

/s/ Robert Ripp  
Robert Ripp

/s/ J. James Gaynor  
J. James Gaynor

/s/ Sohail Khan  
Sohail Khan

/s/ Craig Dunham  
Craig Dunham

/s/ Steven Brueck  
Steven Brueck

/s/ Louis Leebug  
Louis Leebug

/s/ M. Scott Faris  
M. Scott Faris

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**Certification of Chief Executive Officer  
Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934**

I, J. James Gaynor, certify that:

1. I have reviewed this annual report on Form 10-K of LightPath Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: September 14, 2017

/s/ J. James Gaynor

J. James Gaynor  
President and Chief Executive Officer

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**Certification of Chief Financial Officer  
Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934**

I, Dorothy M. Cipolla, certify that:

1. I have reviewed this annual report on Form 10-K of LightPath Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: September 14, 2017

/s/ Dorothy M. Cipolla

Dorothy M. Cipolla  
Chief Financial Officer

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**Certifications of Chief Executive Officer  
Pursuant to 1350 of Chapter 63 of Title 18 of the United States Code**

Pursuant to U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Executive Officer of LightPath Technologies, Inc. (the "Company") does hereby certify, to the best of such officer's knowledge, that:

1. The Annual Report on Form 10-K of the Company for the year ended June 30, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: September 14, 2017

/s/ J. James Gaynor

J. James Gaynor

President and Chief Executive Officer

The certifications set forth above are being furnished as an exhibit solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to LightPath Technologies, Inc. and will be retained by LightPath Technologies, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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**Certifications of Chief Financial Officer  
Pursuant to 1350 of Chapter 63 of Title 18 of the United States Code**

Pursuant to U.S.C. Section 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Financial Officer of LightPath Technologies, Inc. (the "Company") does hereby certify, to the best of such officer's knowledge, that:

1. The Annual Report on Form 10-K of the Company for the year ended June 30, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: September 14, 2017

/s/ Dorothy M. Cipolla

Dorothy M. Cipolla  
Chief Financial Officer

The certifications set forth above are being furnished as an exhibit solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to LightPath Technologies, Inc. and will be retained by LightPath Technologies, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

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