

# CYALUME TECHNOLOGIES HOLDINGS, INC.

## FORM 10-K (Annual Report)

Filed 03/28/17 for the Period Ending 12/31/16

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Telephone	(413) 858-2500
CIK	0001335293
Symbol	CYLU
SIC Code	3640 - Electric Lighting And Wiring Equipment
Industry	Electrical Components & Equipment
Sector	Industrials
Fiscal Year	12/31

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended December 31, 2016

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 **000-52247**

**Cyalume Technologies Holdings, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**20-3200738**  
(I.R.S. Employer  
Identification No.)

910 SE 17<sup>th</sup> Street, Suite 300, Fort Lauderdale, Florida 33316  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(954) 315-4939**

Securities registered pursuant to Section 12(b) of the Act: None  
Securities registered pursuant to Section 12(g) of the Act:

**Title of class**

Common Stock, \$0.001 par value

Units consisting of one share of Common Stock and one Common Stock Purchase Warrant

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 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 is not contained herein, and will not be contained, to the best of the 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, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer   
Non-Accelerated Filer

Accelerated Filer   
Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of Common Stock held by non-affiliates of the registrant (15,055,781 shares) based on the last reported sale price of the registrant's Common Stock on the OTCBB on June 30, 2016, which was the last business day of the registrant's most recently completed second fiscal quarter, was \$1,053,905. For purposes of this computation, all officers, directors, and 10% beneficial owners of the registrant are deemed to be affiliates. Such determination should not be deemed to be an admission that such officers, directors, or 10% beneficial owners are, in fact, affiliates of the registrant.

As of March 10, 2017, there were outstanding 22,347,549 shares of the registrant's Common Stock, par value \$.001 per share.



CYALUME TECHNOLOGIES HOLDINGS, INC.  
ANNUAL REPORT ON FORM 10-K  
YEAR ENDED DECEMBER 31, 2016

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## PART I

*The statements contained in this annual report on Form 10-K, including under the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other sections of this annual report, include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, statements regarding our or our management’s expectations, hopes, beliefs, intentions or strategies regarding the future. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “plan” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. The forward-looking statements contained in this annual report are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described in the section titled “Risk Factors.” Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.*

### ITEM 1: BUSINESS

#### General

Cyalume Technologies Holdings, Inc. (“we”, “our”, the “Company”) was organized as a blank check company under the laws of the State of Delaware on July 19, 2005. At that time we were named Vector Security Intersect Acquisition Corp. On December 19, 2008, we acquired Cyalume Technologies, Inc. (“CTI”) and changed our corporate name to our current name. CTI is a Delaware corporation formed on March 27, 1997 with headquarters located in West Springfield, Massachusetts. At the date of the acquisition, CTI had one subsidiary, Cyalume Technologies, SAS (“CTSAS”), located in Aix-en-Provence, France. CTI and CTSAS manufacture and sell chemiluminescent products and reflective and photoluminescent materials to military, ammunition, commercial and public safety markets.

On August 31, 2011, through a wholly-owned subsidiary named Cyalume Specialty Products, Inc. (“CSP”), we acquired substantially all of the assets of JFC Technologies, LLC (“JFC”), a specialty chemical manufacturer. CSP was established as a Delaware corporation on June 15, 2011 and is located in Bound Brook, New Jersey. CSP manufactures on a subcontractor basis and sells specialty chemical products to the pharmaceutical, medical products, defense and other markets and has expertise in our chemical light business.

Our securities are currently quoted on the Over-The-Counter Bulletin Board (symbol: CYLU).

We maintain principal executive offices at 910 SE 17<sup>th</sup> Street, Suite 300, Fort Lauderdale, Florida 33316. Our telephone number is (954) 315-4939. The various reports we file with the SEC, including annual reports on Form 10-K, proxy statements, quarterly reports on Form 10-Q, and current reports on Form 8-K are available on our website ([www.cyalume.com](http://www.cyalume.com)) free of charge. Our website also contains the charters for the Audit, Nominating and Compensation Committees of the Board of Directors as well as our Code of Conduct and Ethics and our Insider Trading Policy. The documents are also available free of charge from our Corporate Assistant Secretary at our executive offices.

#### Overall Approach

Our primary focus is producing specialty chemicals and related products and sub-contract manufacturing of components for use in the pharmaceutical and medical products markets. The Company sells to the U.S. military and other militaries and to major pharmaceutical and medical device companies throughout the world.

We employ the following strategies to seek to provide for long-term success.

- *Utilizing Patent Protection.* We have pursued and expect to continue to pursue patent protection of developed technology and to aggressively defend against violations of our patents.
- *Making Environmentally Friendly and Safe to Use Products.* Our products are designed to be effective, safe to use and friendly to the environment. Chemicals used in our chemical light products are non-toxic and phthalate free.

- *Increasing Product Diversification.* We intend to continue to diversify into additional products and applications utilizing current technology and technology now under development. Product diversification allows us to present a more complete line of products that meet current and projected user needs, as well as reducing dependence on a relatively small number of products for financial and competitive success.
- *Continually Improving Products and Performance.* We are committed to product improvement and rely on a dedicated in-house team of highly experienced engineers and chemists who are complemented on an as needed basis by third-party expertise.
- *Pursuing Strategic Partnering and Acquisitions.* We actively seek partners who can help us advance our technologies or introduce products to the market, especially where established partners may help us attain faster market penetration. In addition, we are seeking additional businesses to acquire that will complement our existing products and further strengthen our ability to achieve profitable growth.

## Products and Services

We primarily provide products of two general types: those producing chemical light, including training ammunition, and specialty chemicals.

- Products producing chemical light rely on a chemical reaction known as chemiluminescence. The base product is known as a "light stick" and is typically six inches in length. A light stick is a translucent flexible plastic tube that is partly filled with one chemical ingredient and also with a glass container ("ampoule") that contains a complementary reactive chemical. When the tube is bent enough to break the glass ampoule, the chemicals contained within the plastic tube mix and light is generated. Chemiluminescent products come in varying shapes, sizes and functions and provide light in different colors, intensities and durations. These include:
  - o Light sticks that come in lengths ranging from 1.5 inches to 15 inches and having durations for specified light output that range from 5 minutes to 24 hours. Colors emitted include red, blue, white, yellow, green, orange and infrared.
  - o Components to training and tactical ammunition that provide day/night marking and illumination capabilities. Day/night marking rounds increase the effectiveness of weapons training by providing a night-time training ability where, in many cases, one did not exist before. Chemical light munitions are preferable to traditional tracer or training rounds for two reasons. Traditional training munitions are pyrotechnic and contain fire-producing elements that can start range fires. Additionally, traditional pyrotechnic training munitions experience "duds", or unexploded rounds. These unexploded rounds present future safety hazards and must be found and defused. Chemical light training ammunition payloads cannot start range fires and do not represent future safety hazards from unexploded rounds, making their use not only more economical, but safer for military personnel.
- Our specialty chemical products support a wide variety of applications in the pharmaceutical, medical products, defense and other markets. Products also include certain components that can be used in the manufacture of our chemical light products. In addition, our specialty chemicals business provides R&D / product development assistance to our customers.

We manufacture products in West Springfield, MA; Bound Brook, NJ; and Aix-en-Provence, France.

## Markets

- **Chemical Light**

Chemical light revenue, including ammunition, accounted for approximately 54% of total revenues in 2016 and 69% in 2015. We sell chemiluminescent devices, primarily light sticks in varying colors, lengths and durations of light output, as well as flat chemiluminescent disks and reflective patches and belts. The primary users of these products and services are the U.S. Military and European militaries participating in the NATO Support Agency f/k/a the NATO Maintenance and Supply Agency ("NSPA").

Critical events, risks and uncertainties regarding the military market include the continued use by the U.S. and NATO militaries, the ability to remain on the cutting edge of chemical light technology, the ability to generate additional uses of our products by additional militaries around the world, and managing costs to remain competitively priced. There are also uncertainties of future price increases customarily found in the renewal contracts which would affect revenues and results of operations.

- **Ammunition**

Ammunition revenue represented approximately 15% and 14% of total revenues in 2016 and 2015, respectively. These revenues represent sales of chemiluminescent payloads and components that are incorporated into training ammunition. Ammunition revenues increased in 2015 due to a new contract which continued into 2016.

Critical events, risks and uncertainties regarding the ammunition market include the expansion and acceptance of the existing products to the United States military and other foreign militaries and the level of budgetary funds available for such products.

- **Training & Simulation**

Training & simulation revenue accounted for less than one percent of total revenues in 2016 and approximately one percent of total revenues in 2015. We sell battlefield effects simulator devices.

The critical risks and uncertainties in the training & simulation market include the level of budgetary funds available for such products, maintaining a stable group of products considered relevant to current real world experiences, and competitors seeking to expand their markets.

- **Specialty Products**

Through CSP, we provide specialty chemicals to a variety of customers including pharmaceutical, medical products, defense and other companies. These revenues represented approximately 31% of total revenues in 2016 and 30% in 2015.

Critical risks include our ability to continue to provide existing and new products at competitive prices while adding value to our customers that will help distinguish us from competitors.

For additional risks refer to Item 1A, Risk Factors.

#### **Customers and Concentrations**

- **Chemical Light:** We depend significantly on long-term contracts with two key customers: LC Industries (“LCI”) and NSPA.

- **LC Industries**

We indirectly supply the U.S. Department of Defense (“U.S. DOD”) through a contract with LCI, a manufacturer/distributor and a member of the National Industries for the Blind. LCI, in turn, has a direct contract with the U.S. DOD that operates under the program guidelines of “Ability One”, a federal program that creates jobs for the visually impaired and severely disabled. Under our contract with LCI, we sell components to LCI, which assembles and packages products and then sells/distributes them directly to the U.S. military. Each of the items sold by LCI to the U.S. military is classified by a National Stock Number (“NSN”).

Our contract with LCI was entered into June 1, 2004 and had an initial term of five years, followed by three automatic five-year renewal terms unless the agreement is cancelled. This contract was renewed in both 2009 and 2014 and we currently expect that the contract will renew again in 2019. The contract between LCI and the U.S. military is an IDIQ contract (indefinite demand, indefinite quantity) with fixed prices subject to annual renegotiation. Through our agreement with LCI, we share in any price increases received by LCI. Revenues through LCI accounted for approximately 25.6% of total revenues in 2016 and 23.0% in 2015.

- **NSPA**

We have a direct contract with NSPA, the administrative services arm serving the non-U.S. NATO countries. NSPA re-awarded the contract to us in November 2013. The base contract period is for three years and NSPA has the option to extend for another two years. The contract contains provisions for pricing escalations. Revenues through NSPA accounted for 9% of total revenues in 2016 and approximately 10% in 2015.

- **Ammunition :** Revenues to American Rheinmetall Munition accounted for approximately 14.5% and 14.0% of total revenues in 2016 and 2015, respectively.

- **Training & Simulation** : No individual customer accounted for sales in either 2016 or 2015 that exceeded 10% of total revenues.
- **Specialty Products**: Sales are made to a variety of customers in the various markets served, none of which individually represented more than 10% of total revenues in either 2016 or 2015.

Revenues to customers outside the United States represented approximately 30% and 31% of our total revenues for the years ended December 31, 2016 and 2015, respectively.

### **Sales and Marketing**

For the chemical light market, we utilize distributors such as NSPA and LCI. We have found this to be an efficient and effective model. We also sell directly to consumers through our web site and through use of electronic commerce sites such as Amazon. In the ammunition market, we generally sell directly to the prime contractor having the direct contract with the military. For our specialty products, we generally sell directly to the manufacturer who produces the final end-product.

### **Competitive Strengths**

We believe we have many advantages as compared to our competition. For example, we:

- Own more patents in the chemiluminescent light field than any competitor.
- Have active research and development focused on improving existing technologies and developing new ones for which patent protection will be sought.
- Have a wide assortment of products that help meet the needs of major customers.
- Have high quality, high performance products, while many competitors rely on lower priced/lower quality products.

### **Competition**

For chemical light products for the military, we believe that we have no direct major competitors and that our products are the only ones that currently meet official U.S. and NSPA military specifications. There are several Asian manufacturers, primarily producing novelty products, which attempt to sell their products directly as meeting military specifications. We are not aware of any competitor having submitted quantifiable data to the U.S. DOD or NSPA which demonstrates that the competitors' products meet current military specifications. In these cases we rely on the appropriate U.S. and NSPA agency offices to inspect and reject such products as being non-compliant. We maintain an active program of monitoring such behavior and bringing any such actions to the attention of the appropriate agency personnel. Nonetheless, we expect competition in this market to continue to increase.

For the ammunition market, the development period for a new product before final testing and acceptance by the military can be many years. We anticipate that, as acceptance of chemical light applications grow in this market, additional competition will emerge as this market represents potentially large revenues. We are defending against this by continuing to invest in technology upgrades in order to attempt to stay ahead of any competitors. In addition, where appropriate, we file patents to protect newly developed technology.

In the training and simulation market, we compete with a number of firms. We focus on specific niches to minimize competition.

In markets where we compete with our specialty products, we focus on value-added applications utilizing our in-house research and development ("R&D") expertise to work directly with the customer and generally seek to avoid applications representing pure commodity type sales.



## **Employees**

As of December 31, 2016, we had 150 full-time employees and two part-time employees. We operate in local labor markets that provide an adequate supply of labor to compensate for any turnover. We are not party to any collective bargaining agreements, have not experienced any work stoppages and consider our relationship with employees to be sound.

## **Employee Benefits**

For our U.S. employees, we offer wages and benefits that we consider to be competitive in the markets in which we operate. Benefits include medical, dental, life, and disability insurance coverage, paid vacations and holidays and an employee 401(k) savings plan. CTSAS offers its employees benefits consistent with French law and market conditions.

## **Supply Chain**

We currently purchase key raw materials, primarily chemicals, plastics, glass and packaging materials from a limited number of suppliers. We generally have long-term relationships with these suppliers. In the event of a disruption in the supply of any of the key items, we have identified alternative sources of supply. A stock of raw materials is kept on hand to continue production in the event of an extended supply disruption, providing us time to find alternative suppliers. Raw materials are not considered to be a scarce commodity and we have not experienced supply disruptions in the past.

The CTI West Springfield facility currently purchases most of its materials, including chemicals, plastics and glass, domestically, including chemicals from CSP. The CTSAS Aix-en-Provence facility purchases most of its chemicals from our West Springfield facility after they have been modified for specific applications. CTSAS purchases its glass, plastics and most other materials from within the European community. CSP purchases its raw materials from both domestic and foreign sources.

## **Research and Development**

We have active research and development groups with full-time chemists and engineers at both the West Springfield and Bound Brook facilities. Additionally, we utilize consultants as needed for specific projects. Our research and development groups are focused on maintaining the high level of quality of existing products, developing improvements to existing products, and developing new technologies and products with viable commercial applications. We maintain an active program of soliciting feedback and ideas from end-users of products. We incurred research and development expense of approximately \$1.5 million and \$1.4 million during the years ended December 31, 2016 and 2015, respectively. Additionally, we incurred approximately \$0.1 million and \$0.2 million in capitalized costs for filing patents during the years ended December 31, 2016 and 2015, respectively.

## **Intellectual Property**

We rely on the ability to develop patentable technology to help ensure the commercial success of products and technology. Once patents are issued, we follow an active program of monitoring competitors' products to attempt to ensure that our intellectual property rights are not violated. We currently hold and maintain more than 50 active and pending U.S. patents. Many of these patents are also registered in various foreign countries. These patents include phthalate free formulations, formulas for creating a more consistent light for longer periods, a bio-degradable light stick, flat disks employing a translucent aluminum pouch instead of an ampoule, and various battlefield effects simulators. We expect to file for additional patents during 2017 and thereafter. Patents typically have a 20-year life from date of filing. We had no key patents expire in 2016 and no key patents are scheduled to expire in 2017. We do not anticipate any near-term decline in sales as a result of any expiring or expired patents.

## **Government Regulations**

We are subject to the jurisdiction of the State Department of the United States under the International Traffic in Arms Regulations ("ITAR"). Specifically, chemical light infrared products, which are exported from the West Springfield facility, are subject to these regulations. We must periodically re-register with the State Department for exporting purposes. Our latest renewal that was granted expires June 30, 2017 and is subject to renewal again at that time. We are in good standing with the State Department and the ITAR.

In addition, we also maintain appropriate licenses with the Food & Drug Administration ("FDA"), the Drug Enforcement Agency ("DEA") and the Bureau of Alcohol, Tobacco, Firearms and Explosives ("ATF"). All such licenses are current and are expected to be renewed at the appropriate time.

## **Environmental**

We believe that we are in material compliance with all local, state and national environmental regulations under which we are subject to regulation and that all appropriate permits are in place. The cost of compliance with environmental regulations has been and is expected to continue to be negligible.

## **Backlog**

A significant portion of our revenue is generated under indefinite quantity, fixed-price contracts or arrangements whereby we fulfill orders as they are placed by customers. Once orders are received they are typically fulfilled within three months. As of December 31, 2016, we had total open sales and purchase orders for products that approximated \$8.4 million, versus \$9.0 million at December 31, 2015. Purchase orders can be amended or cancelled, however, the Company has no indications of any amended orders or any cancelled orders.

## **Segments**

We have one segment for financial reporting purposes under accounting principles generally accepted in the United States. Our one operating segment consists of three reporting units.

## **ITEM 1A. Risk Factors**

*We rely on the U.S. and a limited number of foreign governments for the majority of our revenues. Budget constraints of the U.S. or foreign governments could further reduce revenue or limit revenue growth.*

Sales for which federal or foreign governments and militaries thereof are the ultimate customer accounted for more than 50% of our business in both 2016 and 2015. Budget reductions, reallocations of existing budgets, or spending constraints affecting military spending could cause significant delays or reductions in the number and value of orders for products, which could reduce revenues.

Due to our current level of dependency on the U.S. and NATO country defense agencies for revenues, the loss of business with either would significantly adversely impact us at this time.

*A large portion of our revenue is derived from a small number of customers.*

A large percentage of our revenue is typically derived from a small number of customers, and we expect this trend to continue. For our fiscal year ended December 31, 2016, two customers accounted for approximately 40% of our revenue. We cannot be certain that customers that have accounted for significant revenue in past periods will continue to purchase our products at the same levels, or at all. Accordingly, our revenue and results of operations may vary substantially from period to period. We are also subject to credit risk associated with the concentration of our accounts receivable from our customers. If one or more of our significant customers were to terminate or fail to renew its contract with us, to otherwise cease doing business with us, to significantly reduce or delay its purchases from us or to fail to pay us on a timely basis, our business, financial condition and results of operations could be materially adversely affected.

*Failure to obtain and/or maintain required licenses could reduce revenue.*

A portion of our business depends upon obtaining and maintaining various licenses required, including with the State Department, the FDA, the DEA and the ATF. Failure to obtain or maintain required licenses could result in the termination of certain products being sold.

*We operate under fixed price contracts with limited annual price escalation features and failure to control costs may reduce profitability.*

Much of our revenues result from fixed price contracts. Unanticipated increases in the cost of raw materials, labor and overhead could result in less profitability on such contracts. Some raw materials are affected by the prices of other commodities that are not under our control. These include certain chemicals and plastics whose costs are a function of oil prices.

Some of our contracts include provisions for annual price escalations, based on benchmarks such as the consumer price index or the producers' price index. Annual escalations received may or may not correlate to the price changes in the materials and services that we purchase.

***If we are unable to design, manufacture, and market product offerings in a timely and efficient manner, we may not remain competitive, or growth in revenues could be less than otherwise.***

Some of our markets are characterized by continuing technological advancement, changes in customer requirements, and evolving product standards. Accordingly, we devote a substantial amount of resources to product development. To compete successfully, we must develop and market new products that provide increasingly higher levels of performance and reliability. Product development is highly uncertain and we cannot guarantee that we will successfully develop new products. Our inability to develop and market these products or to achieve customer acceptance of these products could limit our ability to compete in the market or to grow revenues at satisfactory rates of growth.

In addition, we offer a wide variety of products. If the design, manufacturing or marketing of a product, or products, is not successful and we must allocate more resources to ensure the products' success, it could lower the profitability of the product, or products, or affect customer perceptions as to the quality of the products and services being offered.

***We purchase the majority of raw materials from a limited number of vendors. A disruption in supply may cause delays in manufacturing.***

The majority of chemicals, plastics, glass and packaging materials are purchased from a limited number of vendors. Although we have not, we could experience a disruption in supply from any of these vendors that could affect our ability to manufacture finished goods for sale on a timely basis. We attempt to maintain a safety margin of inventory of these raw materials to rely on in the event of a possible disruption and we have identified other vendors from which we believe that we could purchase these items in the event of a disruption from existing vendors. However, safety stock may not be adequate in the event of an extended disruption, and these items may not be available to us from other vendors on favorable terms, or at all.

***Changes in foreign currency exchange rates could affect financial results .***

CTI and CTSAS manufacture products in and sell products from the U.S. and France, respectively. Products sold by CTI are priced in U.S. dollars and most raw material components are purchased in U.S. dollars. Products sold by CTSAS are priced predominantly in euros and most of CTSAS's raw material purchases from third parties are priced in euros. Significant changes in foreign exchange rates would affect reported financial results.

***We are subject to various government regulations that could cause delays in the delivery of new products and may subject us to audits or other similar review processes.***

As a supplier to agencies of various federal, state, local, and foreign governments, we are obligated to comply with a variety of regulations governing operations and the workplace. Unforeseen problems may impact our ability to bring new products to market on a timely basis, secure new contracts or require us to make potentially costly changes to operations which could reduce profitability in order to obtain contracts. Furthermore, some new products will be developed in conjunction with the U.S. Military or the militaries of other nations, which largely dictate the timing of the product development process and over which we have limited control.

***Inability to effectively integrate future acquisitions could reduce profitability.***

During 2011, we acquired two businesses. We may make additional acquisitions in future years, which will require that we effectively and efficiently integrate operations, systems and personnel from those businesses. This process requires, among other things, that we continually evaluate operational and financial systems and controls and enhance those systems and controls as necessary. If we are unable to successfully integrate these acquisitions, it could reduce profitability and detract from future growth opportunities.

***We are reliant upon key personnel and the loss of these key personnel could result in the deterioration or loss of relationships with certain customers or suppliers, which could result in a loss of business.***

We depend on the expertise, experience and continued services of senior management and other key employees. Our operations and most decisions concerning the business will be made or are significantly influenced by these individuals. The loss of members of senior management or other key employees could result in the deterioration or loss of relationships with certain customers or suppliers, which could result in a loss of business.

***Revenue, operating results and profitability will fluctuate, which may lead to volatility in the market price of our common stock.***

Revenue, operating results and profitability have fluctuated both on an annual and quarterly basis and will likely continue to fluctuate. Changes in the mix of products sold and the timing of sales to customers contribute to the possible material variability of revenue, operating results and profitability. Such volatility may not meet the expectations of management, securities analysts or investors, which in turn may contribute to significant fluctuations in the market price of our common stock.

***Revenue, operating results and profitability may be temporarily reduced by any major redeployment of troops.***

Many of our military chemiluminescent and reflective products are used for training purposes. Any major troop realignments, if significant enough in number, are likely to result in a temporary reduction in overall product consumption until troops are redeployed for training.

***We operate in increasingly competitive market segments, which may make it more difficult to successfully bid on future contracts.***

We expect competition to increase in the future. We also expect that some existing competitors, or potential competitors, will feel increasing pressure to underbid government and commercial projects, in order to deploy their workforces and maintain or step up their activity levels. In addition, government or commercial entities may be compelled to purchasing lower-priced, lower-quality competitor goods due to fiscal constraints. This may make it more difficult to prevail on competitive bids for contracts to the degree we have historically enjoyed, to increase revenue and profitability.

***Most new contracts or contract renewals will likely be subject to competitive bidding, which adds difficulty to accurately predicting the timing of sales and the allocation of resources.***

Most governmental agencies and many commercial customers require that their significant contracts be competitively bid. Typically they utilize the "Request for Proposal" ("RFP") method where several competitors submit their sealed proposals for a particular project, or the "Request for Qualifications" ("RFQ") process where competitors submit their qualifications for consideration by the customer. Some contracts open for bidding utilize the standard "Straight Bid" process where the detailed specifications for products are published and bidders submit a "Bid" or fixed price, for the contract. Other competitive bidding processes are also utilized. Our success in responding to an RFP, RFQ, Straight Bid, or other competitive bidding process is dependent upon the quality of our estimating process, knowledge of the industry, knowledge of our customers and other factors requiring significant judgment and expertise. Because of the nature of the bidding process, we cannot know if we will be successful on any given bid, which adds difficulty to accurately predicting the timing of sales and the allocation of resources.

***Our ability to win new contracts and contract renewals depends on factors outside our control, which could limit revenue growth and profitability.***

Our revenue growth and ability to achieve and maintain profitability is generally dependent upon the ability to win new contracts and renewals of existing contracts. This depends on a number of factors we cannot control, including substitution of our products with products based on an alternative technology.

***Governmental agencies may investigate and audit our contracts or physical facilities in conjunction with our various licenses and, if any improprieties are found, we may be required to refund revenues, forego anticipated revenues and/or may be subject to penalties and sanctions, including prohibitions on bidding in competitive bidding processes.***

Governmental agencies generally have the authority to audit and investigate our contracts or licenses with them. As part of that process, some governmental agencies may review our performance on the contract, pricing practices, change orders, and compliance with the terms of the contracts and licenses, and applicable laws, regulations and standards. If the agency determines that we have improperly billed the governmental entity, we could be required to refund revenues, or forego anticipated revenues. If a government audit uncovers improper or illegal activities, or otherwise determines that these activities have occurred, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeitures of profits, suspension of payments, fines and suspension or disqualification from doing business with the government.

***If we fail to satisfy contractual obligations, our ability to compete for future contracts could be limited.***

Failure to comply with contract requirements or to meet customer's performance expectations when fulfilling a contract could injure our reputation, which, in turn, could impact our ability to compete for new contracts. Failure to meet contractual obligations could also result in substantial lost revenues.

***Our business has indebtedness.***

Our debt obligations could, among other things, require us to use a large portion of our cash flow from operations to repay and service our debt or otherwise create liquidity problems, limit our flexibility to adjust to market conditions, place us at a competitive disadvantage and expose us to interest rate fluctuations. As of December 31, 2016, we had total debt obligations outstanding of approximately \$15.7 million, versus \$20.3 million as of December 31, 2015. We expect to obtain the money to pay our expenses and pay the principal and interest on our indebtedness from cash flow from our operations and potentially from other debt or equity offerings. Accordingly, our ability to meet our obligations depends on our future performance and capital raising activities, which will be affected by financial, business, economic and other factors, many of which are beyond our control. If our cash flow and capital resources were to become inadequate to allow us to pay the principal and interest on our debt and meet our other obligations, we could face liquidity problems and might be required to restructure or refinance our debt, or dispose of material assets or operations, which we may be unable to do on acceptable terms, and forgo attractive business opportunities. In addition, the terms of our existing or future debt agreements may restrict us from pursuing any of these alternatives.

***If we fail to meet financial covenants with our lenders, they would be able to declare an event of default.***

If we were unable to meet the financial covenants specified in loan documents, our lenders would be able to declare an event of default. If an event of default were declared, all debts to the lender could become due and payable immediately, which could result in ceasing operations unless new arrangements were made. While management would negotiate and seek to obtain appropriate waivers or other amendments to cure any such default, there is no assurance management would be successful. In addition, our senior indebtedness is secured by a lien on substantially all of our assets. If the amounts outstanding under our senior debt were accelerated due to an event of default, the lender could proceed against such available collateral by forcing the sale of all or some of these assets.

***We require a significant amount of liquidity to fund our operations, capital expenditures, potential acquisitions and other corporate expenditures.***

Our ability to fund operations, capital expenditures, acquisitions and other corporate expenditures, including repayment of our indebtedness, depends on our ability to generate cash through future operating performance, which is subject to economic, financial, competitive, legislative, regulatory and other factors. Many of these factors are beyond our control. We cannot ensure that our businesses will generate sufficient cash flow from operations or that future borrowings or other financing will be available to us in an amount sufficient to pay our indebtedness or to fund our other needs.

If we are unable to generate sufficient cash flow to fund our needs, we may need to pursue one or more alternatives, such as to:

- reduce or delay planned capital expenditures or investments in our business;
- seek additional financing or restructure or refinance all or a portion of our indebtedness at or before maturity;
- sell assets;
- sell additional equity; or
- curtail our operations.

Any such actions may materially and adversely affect our future revenue prospects. In addition, we cannot ensure that we will be able to raise additional equity capital, restructure or refinance any of our indebtedness or obtain additional financing on commercially reasonable terms or at all.

***Because we do not intend to pay dividends on common stock, stockholders will benefit from an investment in our common stock only if it appreciates in value.***

We have never declared or paid any cash dividends on common stock. We currently intend to retain all future earnings, if any, for use in the operations and expansion of the business. As a result, we do not anticipate paying cash dividends in the foreseeable future. Any future determination as to the declaration and payment of cash dividends will be at the discretion of our Board of Directors and will depend on factors our Board of Directors deems relevant, including among others, results of operations, financial condition and cash requirements, business prospects, and the terms of credit facilities and other financing arrangements. In addition, our credit facility precludes us from paying dividends without the consent of our lenders. Accordingly, realization of a gain on stockholders' investments will depend on the appreciation of the price of our common stock. There is no guarantee that our common stock will appreciate in value.

***Our securities are quoted on the OTCQB Market, which may limit the liquidity and price of our securities more than if the securities were quoted or listed on the NASDAQ or the AMEX markets.***

Our securities are quoted on the OTCQB Market, a NASD-sponsored and operated inter-dealer automated quotation system. Quotation of our securities on the OTCQB Market will limit the liquidity and price of securities more than if the securities were quoted or listed on NASDAQ or AMEX.

We currently have a small number of beneficial holders, which we believe contributes significantly to limited trading and to limiting the liquidity and price of securities. Furthermore, we believe this contributes to unexpected price volatility.

***The issuance of common shares upon the conversion of our outstanding Series A, Series B or Series D preferred stock or the exercise of our outstanding options or warrants may cause immediate and substantial dilution to our existing stockholders.***

In our November 2013 financing, we issued 123,077 shares of Series A preferred stock outstanding that may be converted into shares of common stock. Each share of Series A preferred stock is convertible into common stock at a conversion price of \$0.13664587. We also have additional options and warrants outstanding. On July 30, 2014, we issued an aggregate of 1,000 units of securities of the Company for an aggregate purchase price of \$2.0 million (or \$2,000 per unit). Investors purchased an aggregate of 1,000 units of securities of the Company (the "Units"), with each Unit comprising (1) one share of Series B Convertible Preferred Stock of the Company and (2) one share of Series C Preferred Stock of the Company. Each share of Series B Convertible Preferred Stock is initially convertible into 35,713.147 shares of common stock. We issued 10 shares of Series D preferred stock in connection with a May 2015 refinancing and each share is convertible into 752,807.8 shares of common stock. The issuance of shares upon conversion of the preferred stock, or outstanding indebtedness and exercise of warrants and options may result in substantial dilution to the interests of other stockholders. We may find it more difficult to raise additional equity capital while our preferred stock and our warrants are outstanding.

***The holders of our Series A preferred stock and Series C preferred stock are entitled to receive dividends.***

The holders of the Series A preferred stock are entitled to receive cumulative quarterly dividends at a rate of 12% per annum on the liquidation value, payable in cash or, subject to the satisfaction of certain conditions, in paid-in-kind shares. To the extent not paid in cash or by issuance of additional shares of Series A preferred stock on the last day of each calendar quarter, all accrued dividends on any outstanding shares of Series A preferred stock shall accumulate and compound. Holders of the Series C preferred stock are entitled to receive cumulative quarterly dividends at a rate of 12% per annum, calculated based on an assumed price of \$2,000 per share, payable in cash or in kind; provided that to the extent not paid in cash or by issuance of additional shares of Series C Preferred Stock on the last day of each calendar quarter, all accrued dividends on any outstanding shares of Series C preferred stock shall accumulate and compound. As a result of the payment of dividends, we may be obligated to pay significant sums of money or issue significantly more shares of common stock than our Series A preferred stock would otherwise be convertible into, which could negatively affect our operations or result in the dilution of the holders of our common stock, respectively.

***Our Series A, Series B, Series C and Series D preferred stocks have liquidation preferences and redemption requirements that may affect common stock holders.***

In the event of our dissolution, liquidation, sale or change of control, the holders of our Series C preferred stock would be entitled to receive a liquidation preference in priority over the holders of common stock, as well as over the holders of our Series A, Series B and Series D preferred stock. Pursuant to the Series C Certificate of Designation, each share of Series C Preferred Stock ranks senior to our common stock, our Series A preferred stock and our Series B preferred stock with respect to payment of dividends and distribution of assets upon liquidation, dissolution or winding up of the Company. Pursuant to the Series D Certificate of Designation, each share of Series D Preferred Stock ranks senior to Series B Preferred Stock, Series A Preferred Stock and common stock. Pursuant to the Series B Certificate of Designation, each share of Series B Preferred Stock ranks senior to our common stock and our Series A preferred stock. Therefore, it is possible that holders of common stock will not obtain any proceeds if any such event occurs. In addition, beginning on the fifth anniversaries of both of the closings of the Series A and Series C preferred stock financing transactions, the requisite holders of the Series A and the Series C preferred stock will have the right to elect to cause us to redeem, out of funds legally available therefore, all but not less than all of the then outstanding shares of Series A and Series C preferred stock, respectively, for a price per share equal to the liquidation value for such shares.

*The interests of our significant stockholders may not coincide with yours and such stockholders may make decisions with which you may disagree.*

As of December 31, 2016, Cova Small Cap Holdings, LLC (“Cova”) and US VC Partners, L.P. (“US VC”), holders of our common and preferred stock, were entitled to vote a number of shares equal to approximately 23% and 43%, respectively, of our common shares eligible to vote, or, on a combined basis approximately 66%. Both Cova and US VC have a number of officers in common. As a result, these stockholders have substantial influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of our company and make some future transactions more difficult or impossible without the support of these stockholders. The interests of these stockholders may not coincide with our interests or the interests of other stockholders.

#### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

#### **ITEM 2. PROPERTIES**

We own the West Springfield, Massachusetts facility which houses research and development and manufacturing for CTI and CTS products. The facility is located on ten acres of land in an industrial area and has approximately 200,000 square feet of office, manufacturing and warehousing space. There is adequate space available in the facility to accommodate an increase in operations and staffing. There are no known matters of ground contamination or air quality discharges that exceed acceptable limits. The facility is older and contains asbestos, which is consistent with buildings of its era, but there is no known damaged asbestos requiring remediation. The facility is subject to inspections by various environmental agencies from time to time and no significant violations of any environmental standards have been noted during the period of ownership by the current owners. Environmental violations are not believed to represent a material risk.

The facility in Aix-en-Provence, France is also owned by us and houses all foreign operations. The facility has 10,000 square feet of office and manufacturing space sitting on two acres and is in good condition. There are no known environmental violations pertaining to the facility and environmental violations are not believed to represent a material risk.

We lease our facility in Bound Brook, New Jersey, where administrative, manufacturing and research and development activities are housed for CSP. The lease is a market-based lease, for approximately 50,000 square feet of production and office space that was entered into with the acquisition of the assets of JFC Technologies, effective August 31, 2011. The lease ended on August 31, 2016, is now on a month-to-month basis, and has a current lease payment of approximately \$33,000 per month.

Effective March 5, 2013, we entered into a five-year lease for approximately 8,500 square feet of office space in Fort Lauderdale, Florida to house certain executive, sales and administrative personnel and corporate functions. Monthly lease payments are approximately \$19,000 and subject to annual escalation.

#### **ITEM 3. LEGAL PROCEEDINGS**

None.

#### **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

#### Market Information

Our common stock and units are quoted on the OTCQB Market under the symbols "CYLU" and "CYLUU," respectively. The following table sets forth the high and low sales information for our common stock and units for each of the calendar quarters indicated. The Over-the-Counter Bulletin Board quotations reflect inter-dealer prices, are without retail markup, markdowns or commissions, and may not represent actual transactions.

	Common Stock		Units	
	High	Low	High	Low
First quarter 2016	\$ 0.14	\$ 0.06	\$ 3.50	\$ 3.50
Second quarter 2016	\$ 0.12	\$ 0.03	\$ 3.50	\$ 3.50
Third quarter 2016	\$ 0.07	\$ 0.04	\$ 3.50	\$ 3.50
Fourth quarter 2016	\$ 0.22	\$ 0.04	\$ 3.50	\$ 3.50
First quarter 2015	\$ 0.28	\$ 0.03	\$ 3.50	\$ 3.50
Second quarter 2015	\$ 0.15	\$ 0.02	\$ 3.50	\$ 3.50
Third quarter 2015	\$ 0.12	\$ 0.04	\$ 3.50	\$ 3.50
Fourth quarter 2015	\$ 0.15	\$ 0.04	\$ 3.50	\$ 3.50

#### Holder of Common Stock

As of March 10, 2017, there were of record 162 holders of common stock and one holder of units.

#### Dividends

We have never declared or paid cash dividends on common stock and do not anticipate declaring or paying cash dividends on common stock in the foreseeable future. Payments of future dividends on common stock, if any, will be at the discretion of our Board of Directors after taking into account various factors, including financial condition, operating results, current and anticipated cash needs, plans for expansion and other factors that our Board of Directors may deem relevant. Our credit agreement with our senior lenders prohibits paying a dividend without their consent.

#### Performance Graph

As a smaller reporting company, we are not required to provide information typically disclosed under this item.

#### Recent Sales of Unregistered Securities

Other than as previously disclosed in our Quarterly Report on Form 10-Q or our Current Report on Form 8-K, none.

#### Purchases of Equity Securities by the Company and Affiliated Purchasers

We did not purchase any equity securities during the fourth quarter of 2016, and we have no publicly announced plans or programs to do so.

### ITEM 6. SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide information typically disclosed under this item.



## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Overview

In the following discussion, references to "Cyalume", "we", "our", or the "Company" mean Cyalume Technologies Holdings, Inc. and its subsidiaries on a consolidated basis. CTI means Cyalume Technologies, Inc. Cyalume Technologies, S.A.S. ("CTSAS") is a wholly-owned subsidiary of CT SAS Holdings, Inc. ("CT SAS Holdings"), CSP means Cyalume Specialty Products, Inc. and CTS means Combat Training Solutions, Inc. Amounts discussed are generally approximations. During 2011, we acquired two businesses (CTS and JFC Technologies through CSP) that are complementary with our business and growth plans. We continue to consider additional acquisitions that would complement our existing business.

We are a global, technology-based manufacturer producing specialty chemicals and related products and sub-contract manufacturing of components for use in the pharmaceutical and medical products markets. CTI and CTSAS manufacture and sell chemiluminescent products and reflective and photoluminescent materials to military, ammunition, commercial and public safety markets. CTSAS is located in France and represents us in certain international markets, primarily Europe and the Middle East. CTI sells to customers in all other geographic markets. CTI's and CTSAS' business operations constitute the majority, based on revenues and assets, of our consolidated business operations. CSP manufactures on a subcontractor basis and sells specialty chemical products to the pharmaceutical, medical products, defense and other markets.

The majority of revenues are derived from sales for the ultimate use by the U.S. Military and various other militaries around the globe. For 2016, there were two direct customers each with revenues greater than 10% of our total revenues: LC Industries, which accounted for approximately 26% of total revenues, and American Rheinmetall Munition, which accounted for approximately 15% of total revenues. In the military markets, we have longer-term, fixed-price, indefinite-quantity contracts lasting three to five years. They generally provide higher margins because the products are more technologically advanced, versus some of the commercial markets, where advanced technology/performance is generally not as important and therefore competition is greater, resulting in lower margins. See Item 1: Business for greater detail.

Our business is managed and financial results are reported as one segment. Our CEO, who is our chief operating decision maker, focuses on consolidated results to make strategic and tactical decisions. There are several reasons for this. The majority of our products are similar in each market and based on the same technologies. Thus, management pays attention to individual products as well as individual customers and contracts in terms of pricing and costing. For our largest selling product line, the 6-inch light stick (in its various permutations of color and duration), the manufacturing processes are similar and both our U.S. and European manufacturing plants make these products. Therefore, the 6-inch light sticks can be and are made at both plants and can be produced and shipped from one plant to the other to help meet peak periods of demand. In addition, important functions such as marketing and R&D manage their activities and allocate their resources from a strategic viewpoint and generally not on the basis of where a product is made or to whom it might be sold. Overall, financial performance is evaluated based on the following consolidated items: revenues; gross profit and gross margin; selling/research and development/administrative expenses; and cash flow. Product performance is evaluated based on unit cost of production and number of units produced and sold across all markets. All of these measures are evaluated against results for prior periods and against budgets.

### Critical Accounting Policies

#### *Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Estimates are used when accounting for certain items such as reserves for inventory, accounts receivable and deferred tax assets; assessing the carrying value of intangible assets including goodwill as well as other intangibles such as patents; determining the useful lives of property, plant and equipment and intangible assets; determining asset retirement obligations; and determining the fair value of complex instruments. Estimates are based on historical experience, where applicable, and assumptions that we believe are reasonable under the circumstances. Due to the inherent uncertainty involved with estimates, actual results may differ.

### *Revenue Recognition*

Revenue from the sale of products or the providing of services is recognized when the earnings process is complete, the amount of recognizable revenue can be determined, the risks and rewards of ownership have transferred to the customer and collectability is reasonably assured. Depending on the terms of the individual sales arrangement with our customer, product sales are recognized at either the shipping point or upon receipt by the customer. Costs and related expenses to manufacture the products are recorded as costs of goods sold when the related revenue is recognized. Additionally, if the right of return is granted to the buyer in a product sale, revenue is deferred until enough historical customer data is available to reasonably estimate returns and related costs.

We have two significant contracts, with LC Industries and the NSPA, as discussed in Item 1: Business, providing for the sale of indefinite quantities of products at fixed per unit prices, subject to adjustment for certain economic factors. In addition, we accepted a two year purchase order covering the period 2015 – 2016 for training ammunition with a fixed unit price for the period. Revenue under these contracts is recognized when products ordered under the contracts are received by the customer. Whenever costs change, we review the pricing under these contracts to determine whether they require the sale of products at a loss. To date, we have no loss contracts which would require the accrual of future losses in the current financial statements.

In the event that we provide research and development services for customers for which we earn payments that are contingent upon achieving a specific result (“milestones”), we recognize payments upon achieving such milestones as revenue provided the payment is (i) related to past performance, (ii) reasonable relative to all of the deliverables and payment terms within the arrangement with our customer, and (iii) nonrefundable.

### *Warrants Liability*

The Company uses fair values as determined by significant unobservable inputs. These estimated values are significant inputs into the Black Scholes pricing model used to calculate the estimated fair value of common warrants and preferred warrants potentially settleable in cash, which are recorded as warrants liability. The estimated fair value of the Company’s warrants are determined at each balance sheet date and the change in the estimated fair value of the warrants is reflected within the Company’s statements of comprehensive income.

### *Income Taxes*

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. Deferred tax assets are recognized when, based upon available evidence, realization of the assets is more likely than not.

In assessing the realization of long-term deferred income tax assets, we consider whether it is more likely than not that the deferred income tax assets will be realized. The realization of deferred income tax assets depends upon future taxable income in years before net operating loss carryforwards expire. We evaluate the recoverability of deferred income tax assets on a quarterly basis. If we determine that it is more likely than not that deferred income tax assets will not be recovered, we establish a valuation allowance against some or all deferred income tax assets.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefit associated with tax positions taken that exceeds the amount measured as described above, if such a position existed, would be reflected as a liability for unrecognized tax benefits in the accompanying balance sheets along with any associated interest and penalties that would be payable to the taxing authorities upon examination. There were no such positions as of December 31, 2016 or 2015.

We classify interest on tax deficiencies as interest expense and income tax penalties as other expense.

In September 2015, the IRS completed an audit of our tax return for the year 2013. There were no adjustments to our 2013 tax return. Our tax returns filed for the 2015 and 2014 years are still open for audit. The tax return for 2015 was filed on September 9, 2016 under a filing extension. The tax return for 2016 is expected to be filed under a filing extension prior to September 15, 2017.

## *Goodwill*

Goodwill is deemed to have an indefinite life and accordingly, is not subject to annual amortization. Goodwill is subject to annual impairment reviews, and, if conditions warrant (a “triggering event”), interim reviews based upon its estimated fair value. Impairment charges, if any, are recorded in the period in which the impairment is determined.

We perform the traditional two-step process for assessing goodwill for impairment. The first step of the two-step process requires a comparison of our estimated fair value for each reporting unit versus our carrying (book) value. If our carrying value exceeds our fair value, further analysis (step 2 of the two-step process) is required to determine the amount, if any, of goodwill impairment. To determine the amount of fair value, we use a discounted cash flow analysis.

## *Intangible Assets*

Intangible assets include developed technologies and patents, customer relationships, customer backlog, non-compete agreements and certain trade names and trademarks, which are amortized over their estimated useful lives. The carrying amounts of intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that those carrying amounts may not be recoverable. Additionally, the carrying amounts of non-amortizing intangible assets are reviewed for impairment annually every August 31. Costs incurred to register new patents or defend existing patents are capitalized while costs to renew or extend the term of intangible assets are expensed when incurred.

## *Inventories*

Inventories are stated at the lower of cost (on a first-in first-out (“FIFO”) method) or net realizable value. We periodically review the realizability of inventory. Provisions are recorded for potential obsolescence which requires management’s judgment. Conditions impacting the realizability of inventory could cause actual write-offs to be materially different than provisions for obsolescence.

## *Foreign Operations and Currency*

Accounts of our foreign subsidiary are recorded using their local currency (the euro) as the functional currency. For consolidation, revenues and expenses are converted to U.S. dollars using the average exchange rate for the month in which they were recorded. Assets and liabilities are converted to U.S. dollars using the exchange rate in effect as of the balance sheet date. Equity transactions are converted to U.S. dollars using the exchange rate in effect as of the date of the transaction. Translation gains and losses are reported as a component of accumulated other comprehensive income or loss. Gains and losses resulting from transactions which are denominated in other than the functional currencies are reported as other income, net in the consolidated statements of comprehensive income in the period the gain or loss occurred.

## **Recent Accounting Pronouncements**

The following are recent accounting pronouncements that have affected our consolidated financial statements or may affect them in the future.

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers*, as a new Topic, Accounting Standards Codification (“ASC”) Topic 606. The new revenue recognition standard relates to revenue from contracts with customers, which, along with amendments issued in 2015 and 2016, will supersede nearly all current U.S. GAAP guidance on this topic and eliminate industry-specific guidance. The underlying principle is to use a five-step analysis of transactions to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The Company is in the initial stages of evaluating the effect of adopting ASU 2014-09 on its consolidated financial statements. The planned approach includes performing a detailed review of key contracts representative of the different businesses and comparing historical accounting policies and practices to the new accounting guidance. The Company will continue its evaluation of the standards update through the date of adoption. The Company plans to adopt this standard utilizing the modified retrospective approach.

In April 2015, the FASB issued ASU 2015-03, *Interest – Imputation of Interest (Subtopic 835-30) Simplifying the Presentation of Debt Issuance Costs* (“ASU 2015-03”). ASU 2015-03 states that entities that have historically presented debt issuance costs as an asset, related to a recognized debt liability, are required to present those costs as a direct deduction from the carrying amount of that debt liability. This presentation resulted in debt issuance costs being presented the same way debt discounts have historically been handled. ASU 2015-03 does not change the recognition, measurement, or subsequent measurement guidance for debt issuance costs. This guidance was effective for the Company as of January 1, 2016 and adopted. This new guidance reduced total assets and total long-term debt on its condensed consolidated balance sheets by amounts classified as deferred debt issuance costs relating to the Company’s Term A Loan and Delayed Draw Loan, but did not have any other effect on its condensed consolidated financial statements when adopted.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* (“ASU 2015-11”). The amendments in ASU 2015-11 require an entity to measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. The amendments do not apply to inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. This guidance is effective for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. A reporting entity should apply the amendments prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The Company does not expect ASU 2015-11 to have a material impact on the consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10)* (“ASU 2016-01”), which updates certain aspects of recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 will be effective for the Company beginning in its first quarter of 2019 and early adoption is not permitted. The Company does not expect the adoption of ASU 2016-01 will have a material impact on its consolidated financial statements.



In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which requires companies that are lessees to recognize a right-of-use asset and lease liability for most leases that do not meet the definition of a short-term lease. For income statement purposes, leases will continue to be classified as either operating or financing. Classification will be based on criteria that are largely similar to those applied in current lease accounting. This standard will result in extensive qualitative and quantitative disclosure changes. This standard will be effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period. While the Company is currently assessing the impact ASU No. 2016-02 will have on its consolidated financial statements, the Company expects the primary impact upon adoption will be the recognition, on a discounted basis, of its minimum commitments under noncancellable operating leases on its consolidated balance sheets resulting in the recording of right of use assets and lease obligations. Current minimum commitments under noncancellable operating leases are disclosed in Note 16, *Commitments and Contingencies*.

In March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-09, *Compensation- Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”). The purpose of the update is to simplify several areas of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for annual reporting periods after December 15, 2016, including interim periods within those fiscal periods. Early adoption is permitted. The Company does not expect ASU 2016-09 to have a material impact on the Company’s financial position and results of operations.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230) – Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which clarifies how certain cash receipts and payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted. The amendments in ASU 2016-15 should be applied using a retrospective transition method to each period presented. The Company does not expect the adoption of ASU 2016-15 to have a material impact on its statement of cash flows.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230) – Restricted Cash* (“ASU 2016-18”), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash and restricted cash equivalents. With this standard, amounts generally described as restricted cash or restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning of period and end of period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted. The Company does not expect the adoption of ASU 2016-18 to have a material impact on its statement of cash flows and related disclosures.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment* (“ASU 2017-04”) which removes the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. ASU 2017-04 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Early adoption is permitted and applied prospectively. We do not expect ASU 2017-04 to have a material impact to our financial statements.

## Results of Operations

*Overall Perspective* : Financial results for 2016 improved from 2015. We continued with strong sales under our training ammunition program, and sales increased over the prior year for our Chemical Light, Ammunition and Specialty Chemicals businesses. We experienced a slight decrease in our Training & Simulation business. Our operating expenses increased over 2015 as a result of an increase in sales and marketing expenses as well as an increase in general and administrative expenses during the year. In May 2015, we refinanced our senior and subordinated debt by entering into a new five year credit agreement that we believe will meet the Company’s liquidity needs.

*Revenues* : Total revenues for 2016 of approximately \$41.3 million increased by approximately \$3.5 million from 2015 due to an increase in both Chemical Light revenues and Ammunition and Specialty Products revenues. The following table depicts annual revenues by sales category. In managing the business, we do not prepare profitability statements or track assets / costs by these categories; the business is operated as a single segment.

Category (\$ in millions)	2016	2015	Change
Chemical Light	\$ 22.4	\$ 20.7	\$ 1.7
Ammunition	6.0	5.3	0.7
Training & Simulation	0.2	0.4	(0.2)
Specialty Products	12.7	11.4	1.3
<b>Total</b>	<b>\$ 41.3</b>	<b>\$ 37.8</b>	<b>\$ 3.5</b>

The following tables show revenues by quarter by category to help analyze major trends/impacts on the business.

2016	Category (\$ in millions)	Q1	Q2	Q3	Q4	2016
Chemical Light		\$ 5.5	\$ 5.1	\$ 6.3	\$ 5.5	\$ 22.4
Ammunition		1.1	2.0	2.0	0.9	6.0
Training & Simulation		0.0	0.1	0.1	0.0	0.2
Specialty Products		2.6	3.4	3.5	3.2	12.7
<b>Total</b>		<b>\$ 9.2</b>	<b>\$ 10.6</b>	<b>\$ 11.9</b>	<b>\$ 9.6</b>	<b>\$ 41.3</b>

2015	Category (\$ in millions)	Q1	Q2	Q3	Q4	2015
Chemical Light		\$ 4.2	\$ 5.0	\$ 5.5	\$ 6.0	\$ 20.7
Ammunition		0.2	1.5	2.1	1.5	5.3

Training & Simulation	0.1	0.1	0.1	0.1	0.4
Specialty Products	2.4	3.3	2.8	2.9	11.4
Total	<u>\$ 6.9</u>	<u>\$ 9.9</u>	<u>\$ 10.5</u>	<u>\$ 10.5</u>	<u>\$ 37.8</u>

**Chemical Light:** Revenues of approximately \$22.4 million for 2016 were approximately \$1.7 million, or approximately 8% above revenues of approximately \$20.7 million for 2015 due to increased sales to LC Industries.

**Ammunition:** Revenues increased by approximately \$0.7 million from our 40mm low-velocity training ammunition contract.

**Training & Simulation:** Revenues for 2016 of approximately \$0.2 million declined by approximately \$0.2 million from the prior year due to fewer CTS devices being purchased.

**Specialty Products:** Revenues of approximately \$12.7 million for 2016 were approximately \$1.3 million, or 11%, above revenues of approximately \$11.4 million for 2015 due to increased purchases from various customers as well as an increase in profit share revenue during 2016.

**Gross profit:** Gross profit was approximately \$20.5 million for 2016 versus \$17.4 million for 2015, representing a \$3.1 million increase. Our gross margin improved 8.0% from 46.0% in 2015 to 49.7% in 2016. Chemical Light customer price increases and aggressive sourcing efforts reducing materials costs was the primary reason for this improvement, combined with increased efficiencies in the Ammunition production area.

**Expenses:** Sales and marketing expenses in 2016 of approximately \$3.1 million increased by \$0.7 million, or approximately 31%, from the prior year, primarily due to an increase in online advertising and higher commissions reflected during 2016. General and administrative expenses in 2016 of approximately \$8.8 million increased from 2015 by approximately \$1.3 million, primarily due to additional consulting, legal, audit and other professional fees incurred during the year. Research and development expenses of approximately \$1.5 million in 2016 increased by approximately \$0.1 million, or a 10% increase from 2015 due to additional research and development initiatives and activities during 2016.

**Interest expense, net :** Interest expense of approximately \$2.9 million decreased by approximately \$0.1 million from the prior year. On May 18, 2015, we refinanced our senior and subordinated debt and at that time, expensed any remaining unamortized debt issuance costs associated with the previous debt.

**Amortization of intangible assets :** Amortization of intangibles was approximately \$1.0 million in both 2016 and 2015.

**Provision for income taxes:** We recorded tax expense of approximately \$0.8 million and \$0.2 million for the years ended December 31, 2016 and December 31, 2015, respectively. We recorded tax expense of approximately \$0.3 million for both years ended December 31, 2016 and 2015 on foreign income generated by our CTSAS subsidiary. Our effective tax rates were approximately 23% and 6% for 2016 and 2015, respectively. We continue to have a valuation allowance against our U.S. deferred tax assets due to management's assessment that it is more likely than not that a portion of certain deferred tax assets may not be realized. We have a valuation allowance of approximately \$11.8 million as of December 31, 2016 against deferred tax assets generated primarily as a result of foreign tax credits and net operating losses.

## **Balance Sheet**

Accounts receivable at December 31, 2016 were approximately \$3.4 million, or approximately \$0.9 million lower than at the end of 2015. Lower fourth quarter revenues in 2016 and timing differences for billings and collections account for most of the change.

Inventories, net were approximately \$8.4 million at December 31, 2016 versus \$7.5 million at the end of 2015. The increase of inventory on-hand is a result of the lower fourth quarter sales in 2016 and a slight ramp up of inventory in order to fulfill the orders for the first quarter of 2017. Our inventory balances fluctuate from a combination of recent sales activity and the timing of purchases of raw materials. Certain raw materials are purchased only several times a year due to long lead times and the desire to purchase in bulk to minimize costs, while other materials are purchased more frequently.

Property, plant and equipment of approximately \$7.0 million at December 31, 2016, increased slightly from the end of 2015 by approximately \$0.2 million due to additions during the year in excess of depreciation.

Net intangible assets of approximately \$5.0 million at December 31, 2016, decreased from the end of 2015 by approximately \$0.7 million due primarily to approximately \$1.0 of amortization of such assets, offset by intangibles additions.

Accounts payable and accrued expenses, combined, were approximately \$5.9 million at the end of 2016 and \$4.8 million at the end of 2015. Accounts payable of approximately \$1.6 million as of December 31, 2016, was approximately \$0.7 million higher than the prior year-end. Higher inventory levels at the end of 2016 were primarily the reason for the higher amount of outstanding payables at year end compared to the prior year. Accrued expenses of \$4.2 million as of December 31, 2015 were approximately \$0.3 million higher than the previous year-end.

Net deferred income tax liabilities increased slightly for 2016 over the prior year, primarily as a result of the following:

- Increases in inventory reserves.
- An increase in deferred tax liabilities as a result of future non-deductible goodwill amortization.

A valuation allowance against our U.S. deferred tax assets of approximately \$11.8 million remains on deferred tax assets for the carryforward of net operating losses and foreign tax credits, which we do not anticipate using in the near-term. The utilization of this asset is dependent upon generation of significant revenues from sources outside the U.S.

We had federal net operating loss carryforwards amounting to \$3.1 million and \$4.6 million at December 31, 2016 and 2015, respectively. The net operating loss carryforward at December 31, 2016 expires in fiscal years 2028 through 2035. Internal Revenue Code Section 382 limits utilization of prior losses to approximately \$0.4 million per year. However, it is possible that future changes in ownership could result in changes to the amounts allowed by IRC Section 382 and provide for a lower annual limitation for utilization of losses. State net operating loss carryforwards amounted to \$5.7 million and \$8.4 million as of December 31, 2016 and 2015, respectively.

Effective as of August 3, 2015, CTI entered into a Second Amendment (the "Settlement Amendment") to the Confidential Settlement Agreement and Mutual Release (the "Settlement Agreement") entered into on July 10, 2014 (the "Settlement Agreement"), with certain former stockholders and members of management of Omniglow Corporation (collectively, the "Omniglow Buyers") (which Settlement Agreement was summarized in the Current Report on Form 8-K filed by the Company on July 16, 2014). Pursuant to the Settlement Amendment, the parties to the Settlement Agreement agreed to amend CTI's obligation to make the final settlement payment due under the Settlement Agreement, such that CTI would make a final payment of \$1.4 million (the "Reduced Final Payment") within five days of the execution of the Settlement Amendment in lieu of a payment of \$1.9 million that would otherwise have been due on January 10, 2016 (or, at CTI's election, a payment of \$2.35 million due on October 10, 2016). Accordingly, upon payment by CTI of the Reduced Final Payment, which payment was made on August 3, 2015, CTI has no further payment obligations pursuant to the Settlement Agreement.

### **Liquidity and Capital Resources**

On May 18, 2015, we entered into a credit agreement with Monroe Capital Management Advisors, LLC as administrative agent and lead arranger (the "Agent") and the various lenders party thereto (the "Monroe Credit Agreement"). The Monroe Credit Agreement provides for a total borrowing commitment of \$25.0 million (the "Monroe Credit Facility") in the form of (i) a \$5.0 million revolving credit facility (the "Monroe Line of Credit"); (ii) an \$18.0 million senior secured term loan (the "Term A Loan") and (iii) a \$2.0 million delayed draw term loan (the "Delayed Draw Loan").

On August 3, 2015, we entered into a First Amendment (the "First Amendment") to the Monroe Credit Agreement. Pursuant to the First Amendment, the Monroe Credit Agreement was amended to, among other things, reduce the aggregate amount of the Delayed Draw Loan under the Credit Agreement, which loan commitment was for purposes of funding the final payment due under the Settlement Agreement, from \$2.0 million to \$1.5 million. On August 3, 2015, the full amount of the Delayed Draw Loan was funded to us, \$1.4 million of which was used to make the Reduced Final Payment, and the remaining \$100,000 of which was paid to the Agent as a deferred closing fee. The First Amendment also modified, for certain periods during the term of the Credit Agreement, (i) the maximum senior debt to EBITDA ratio that the Company is required to maintain and (ii) the applicable limits on the Company's aggregate permitted capital expenditures pursuant to the terms of the Credit Agreement.

Pursuant to the Monroe Credit Agreement, we borrowed an aggregate principal amount equal to \$21.0 million (\$3.0 million under the Monroe Line of Credit and \$18.0 million under the Term A Loan), less closing fees and expenses. The drawn proceeds from the Monroe Credit Facility were used to repay in full our senior debt with TD Bank, N.A., repay in full the Company's subordinated debt with Granite Creek Partners Agent, LLC, and retire the Company's amended and restated promissory note in favor of JFC Technologies, LLC. The remainder of the proceeds were used for the Company's general working capital purposes.

Under the terms of the Monroe Credit Facility, the Company is able to borrow under the Monroe Line of Credit in an amount not to exceed the lesser of: (i) \$5.0 million; and (ii) the sum of 85% of all eligible accounts receivable plus 60% of all eligible inventory.



Additionally, while the loans are outstanding we must maintain: (a) a fixed charge coverage ratio of 1.25 to 1.00; (b) a senior debt to EBITDA ratio of 4.50 to 1.00, decreasing to 1.50 to 1.00 over the term of the loans; and (c) a twelve month trailing EBITDA, measured quarterly, in the amount of \$4,750,000, increasing to \$7,000,000 over the term of the loans.

The Term A Loan provides for quarterly amortization payments on the last day of each calendar quarter, commencing on June 30, 2015, in an aggregate principal amount equal to \$112,500, increasing to \$225,000 on June 30, 2016, and increasing to \$450,000 on June 30, 2017, with the balance payable on the termination date of May 18, 2020 (the "Termination Date"). The Delayed Draw Loan provides for quarterly amortization payments on the last day of each calendar quarter, in an aggregate principal amount equal to 0.625% of the original principal amount of the Delayed Draw Loan, increasing to 1.25% on March 31, 2016, and increasing to 2.5% on March 31, 2017, with the balance payable on the Termination Date. The Monroe Line of Credit is payable on the Termination Date.

We ended 2016 with cash of approximately \$2.8 million versus \$1.5 million as of December 31, 2015. Our availability under our revolving credit facility was \$3.9 million at December 31, 2016 versus availability of \$4.0 million at December 31, 2015.

Capital expenditures and payments for intangibles, which totaled approximately \$1.4 million in 2016, were slightly higher than the previous year of \$1.2 million for 2015. This increase was due to planned capital improvement projects. We expect to fund capital expenditures in 2017 from existing cash and operating cash flows.

We were in compliance with our financial covenants as of December 31, 2016. We expect to meet our financial covenants for 2017 and that cash provided by the business will be adequate to meet our planned needs.

The Company did not pay a dividend in 2016 and has no plans to do so.

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

We did not have any off-balance sheet arrangements during 2016 or 2015.

#### **Contractual Obligations**

As a smaller reporting company, we are not required to provide information typically disclosed under this item.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide information typically disclosed under this item.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Selected Quarterly Financial Data

As a smaller reporting company, we are not required to provide information typically disclosed under this item.

### Financial Statements

The information required by this item is shown under Part IV, Item 15 and may be found beginning on page F-1 of this Form 10-K.

## ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

## ITEM 9A. CONTROLS AND PROCEDURES

### Disclosure Controls and Procedures

Disclosure controls and procedures are designed to ensure that information required to be disclosed by us in reports filed or submitted under the Securities Exchange Act of 1934 (“Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls include, without limitation, controls and procedures designed to ensure that information required to be disclosed under the Exchange Act is accumulated and communicated to management, including principal executive and financial officers, as appropriate, to allow timely decisions regarding required disclosure. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

Management carried out an evaluation, under the supervision of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of disclosure controls and procedures as of December 31, 2016. Based upon that evaluation, management, including the Chief Executive Officer and Chief Financial Officer, concluded that the design and operation of disclosure controls and procedures were effective as of December 31, 2016.

### Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in the Securities Exchange Act of 1934, as amended. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management assessed the effectiveness of internal control over financial reporting as of December 31, 2016. In making this assessment, management used the criteria set forth by *Internal Control—Integrated Framework—2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its assessment using those criteria, management concluded that internal control over financial reporting was effective as of December 31, 2016.

As a smaller reporting company, we are not required to obtain an attestation report from our independent registered public accounting firm regarding internal controls over financial reporting.

### Changes in Internal Control over Financial Reporting

We have had no changes in internal control over financial reporting during our last fiscal quarter of 2016 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

## ITEM 9B. OTHER INFORMATION

None.

## PART III

### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

#### Directors and Executive Officers

The following table sets forth certain information with respect to each of our directors and executive officers as of March 10, 2017:

Name	Age	Position with Cyalume and Principal Occupation	Held Office Since
Yaron Eitan	60	Director and Vice Chairman of the Board	2006
Zivi Nedivi	58	President and Chief Executive Officer, Director	2012
Dale Baker	59	Chief Operating Officer	2012
Andrea Settembrino	44	Chief Financial Officer & Assistant Secretary	2016
James (Jamie) Schleck	48	Director	2011
Ji Ham	41	Director	2013
Jason Epstein	43	Director	2008
Andrew Intrater	54	Director	2009
John G. Meyer, Jr.	72	Director	2011
Thomas G. Rebar	54	Director and Chairman of the Board	2007
Michael Barry	59	Director	2014

#### Background of Officers and Directors

**Zivi Nedivi** has been our President and Chief Executive Officer since April 2, 2012. Mr. Nedivi came to Cyalume from Axiom Investment Advisors, LLC, a hedge fund specializing in currencies where he was a special advisor and acting CEO from 2009 to 2011 and the CEO from 2008 to 2009. Prior to that, from 2006 to 2008, he was the COO of Lumenis Ltd, a global leader in medical and aesthetic lasers and light based technology. Mr. Nedivi was the President and CEO of Kellstrom Aerospace, LLC, an industry leader in the airborne equipment segments of the international aviation services aftermarket and its predecessor company, Kellstrom Industries, from 1990 to 2005. He continues to serve as an observer on Kellstrom Aerospace's board of directors. Prior to his business career, Mr. Nedivi served as an F-15 fighter pilot in the Israeli Air Force, where he attained the rank of Major. He is a graduate of the Israel Air Force Academy and holds a Bachelor's degree in business administration from California Coast University.

**Dale Baker** has been our Chief Operating Officer since September 2012. In the five years prior to joining Cyalume, Mr. Baker was the Chief Executive Officer of Selling Source, LLC and the President of both World Avenue Holdings, LLC and Intrepid Investments, LLC. Mr. Baker has an M.B.A. from Duke University's The Fuqua School of Business and a B.S. in Mechanical Engineering from Virginia Polytechnic & State University.

**Andrea Settembrino** has been our Chief Financial Officer since October 28, 2016. Ms. Settembrino had been the Company's Corporate Controller since July 2013. Prior to joining the Company, from 2009 to 2013, Ms. Settembrino was the Vice President of Finance at eDiets.com, Inc., an online health, weight loss and fitness company. From 2006 to 2009, Ms. Settembrino was the Controller of Akeena Solar, Inc., a designer and installer of residential and commercial solar power systems. Ms. Settembrino received her B.S. in Accounting and Master of Accounting from the University of Florida. Ms. Settembrino is a certified public accountant and a member of the Florida Institute of Certified Public Accountants.

**Yaron Eitan** has been our Vice Chairman of the Board since December 2008 and was our Chief Executive Officer and President from May 2006 through December 2008. In 1998, Mr. Eitan founded Selway Partners LLC, a holding company focused on technology investments, and has been its President and Chief Executive Officer since that time. From July 2002 to the present, Mr. Eitan has been a member of SCP Private Equity Management Company, LLC, a private equity and venture capital management company. Mr. Eitan is the Chairman and/or board member of several privately-held technology companies. Mr. Eitan holds an M.B.A. from the Wharton School of Business of the University of Pennsylvania. We believe that Mr. Eitan's leadership, business and technology experience qualify him to serve as a director.

**James (Jamie) Schleck** has been a Director of Cyalume since December 27, 2012. Mr. Schleck served as the President of Cyalume Specialty Products ("CSP") from September 1, 2011, following the acquisition of his former company, JFC Technologies, LLC ("JFC") until December 31, 2013. At JFC he served in various capacities including President and CEO for over 17 years. Mr. Schleck is a former Army Officer and is a graduate of the U.S. Army's Airborne, Air Assault and Ranger Schools. Mr. Schleck holds a BS degree from the United States Military Academy, an MBA from Columbia University and an M.Ed from Rutgers University.

**Ji Ham** has been our Director since December 2013. Mr. Ham is a Principal of Columbus Nova. Mr. Ham joined Columbus Nova in July 2006. Prior to Columbus Nova, Mr. Ham was a founding member of Hudson Capital Advisors, LLC, a financial advisory firm focused on debt and equity private placements and mergers and acquisitions advisory. Prior to Hudson Capital Advisors, Mr. Ham worked in the Leveraged Finance Group at CIBC World Markets Corp where he worked on a variety of debt and equity capital markets transactions, mergers and acquisitions, and merchant banking / private equity investment transactions for Trimaran Capital Partners, CIBC's private equity fund, and its predecessor funds. Mr. Ham received his B.A. in Business Economics with magna cum laude honor from the University of California at Los Angeles. We believe that Mr. Ham's financial and business experience qualify him to serve as a director.

**Jason Epstein** has been a Director of Cyalume since December 19, 2008 and is also a Director of CTI, a position held since 2007. Mr. Epstein has been a Senior Partner of Columbus Nova since 2002. He is currently a Director of Deerfield Capital Corp. (NASDAQ: DFR), a company engaged in investment management and other investing activities. Mr. Epstein received his B.A. from Tufts University in 1996 and currently serves on the Tufts Board of Overseers. Mr. Epstein is one of Cova's two designees to the Board of Directors. We believe that Mr. Epstein's leadership and business experience qualify him to serve as a director.

**Andrew Intrater** has been a Director of Cyalume since September 1, 2009. Mr. Intrater is the CEO and Senior Managing Partner of Columbus Nova and serves on the Executive and Investment Committees for Columbus Nova. Mr. Intrater also serves on the Board of Directors for Deerfield Capital Corp. (NASDAQ: DFR), a company engaged in investment management and other investing activities. Mr. Intrater served on the Board of Directors (2007 – 2011) for HQ Sustainable Maritime Industries, Inc. (AMEX: HQS), an integrated aquaculture and aquatic product processing company, with operations based in China's South Sea. Mr. Intrater completed his B.S. in Chemical Engineering at the Rutgers University College of Engineering and graduate studies in Materials Science at the Columbia University School of Mines. Mr. Intrater is one of Cova's two designees to the Board of Directors. We believe that Mr. Intrater's leadership, global and business experience qualify him to serve as a director.

**John G. Meyer, Jr.** has been a Director of Cyalume since June 16, 2011. Mr. Meyer has been since 2003, a Director of The Allied Defense Group, Inc. (OTCQB: ADGI), a multinational defense business, which prior to the sale of substantially all its assets, was focused on the manufacture and sale of ammunition and ammunition related products for use by the U.S. and foreign governments. He was also the Chief Executive Officer of Heckler & Koch, a German small arms manufacturing company, from June 2005 to August 2007; and the Chief Executive Officer of The Allied Defense Group, Inc. from June 2003 to June 2005. Prior to his business career, Mr. Meyer served in the United States Army as its most senior Public Affairs Officer and retiring as a Major General. Mr. Meyer received a Bachelor's degree from Florida State University and a Masters Degree from Sam Houston State University. Mr. Meyer has proven business acumen, having served as the chief executive officer and director of several defense industry companies and his military background provides the Board with relevant industry experience which qualify him to serve as a director.

**Thomas G. Rebar** has served as a Director of Cyalume since August 6, 2007 and as our Chairman from August 2014. Mr. Rebar has been a Partner of SCP Private Equity Management, LLC since 1996. Mr. Rebar is currently a Director of several privately-held companies. Mr. Rebar has served as the chair of our audit committee since January 2009. Mr. Rebar received his B.S. summa cum laude from the University of Scranton and an M.B.A. from New York University Graduate School of Business Administration. Mr. Rebar's leadership, business and financial experience qualify him to serve as a director.

**Michael Barry** has been a Director of Cyalume since July 30, 2014. Mr. Barry is the President of Prairie Street Capital, has extensive experience as the CEO of industrial distribution businesses as well as in the global sourcing of products. He was the President and COO of Copperfield Chimney Supply, a national supplier of proprietary chimney and hearth products to retailers and professional contractors. Mr. Barry was also the President of Woodard, Inc., a \$65 million multi-location manufacturer of casual patio furniture to specialty retailers and mass merchants. Prior to joining Woodard, Mr. Barry was the President and CEO of Intech EDM, an industrial distributor of consumable materials for Electrical Discharge Machining with operations in six countries. Mr. Barry received his BS from Georgetown University and an MBA, with distinction, from The Wharton School. Mr. Barry is a CTP ("Certified Turnaround Professional") and a member of the AICPA and the Illinois CPA Society. Mr. Barry's business background and financial expertise qualify him to serve as a director.

## Meetings and Committees of the Board of Directors

During the year ended December 31, 2016, the Board of Directors met 8 times. All of the directors attended at least 75% of the meetings of the Board and each committee on which he serves, except Jason Epstein. Each director is expected to participate, either in person or via teleconference, in meetings of our Board of Directors and meetings of committees of our Board of Directors in which each director is a member, and to spend the time necessary to properly discharge such director's respective duties and responsibilities. The Board of Directors has determined that Messrs. Eitan, Ham, Epstein, Intrater, Meyer, Rebar and Barry, are each independent directors as defined in Rule 4200 of the Nasdaq Marketplace Rules and applicable Securities and Exchange Commission ("SEC") regulations.

**Compensation Committee** . On January 13, 2009, the Board of Directors formed a Compensation Committee and adopted a written charter. Serving on the Compensation Committee are Yaron Eitan (chairman), Jason Epstein and John G. Meyer, Jr., each of whom is independent as defined in Rule 5605(a)(2) of the Listing Rules. The Compensation Committee held meetings as required during 2016. The charter is available to security holders on our website, [www.cyalume.com](http://www.cyalume.com) . The charter sets forth responsibilities, authority and specific duties of the Compensation Committee. The Compensation Committee reviews and recommends to the board the compensation for the CEO and non-employee directors of our Company, and reviews the CEO's compensation recommendations for all other corporate officers. It also reviews the general policy relating to compensation and benefits for all employees. The Compensation Committee has been designated by the Board of Directors to administer the Cyalume Technologies Holdings, Inc. 2009 Omnibus Securities and Incentive Plan and the Cyalume Technologies Holdings, Inc. 2014 Equity Incentive Plan.

**Nominating and Corporate Governance Committee** . On January 13, 2009, the Board of Directors formed the Nominating and Corporate Governance Committee and adopted a written charter. Thomas Rebar (Chairman) and Andrew Intrater, each of whom is independent as defined in Rule 5605(a)(2) of the Listing Rules, serve on this committee. The Nominating and Corporate Governance Committee's charter is available to security holders on our website, [www.cyalume.com](http://www.cyalume.com) . The Nominating and Corporate Governance Committee did not meet during 2016 or 2015. There were no vacancies on the Board occurring during 2015. The Nominating and Corporate Governance Committee will consider director candidates recommended by security holders. Potential nominees to the Board of Directors are required to have such experience in business or financial matters as would make such nominee an asset to the Board of Directors and may, under certain circumstances, be required to be "independent", as such term is defined under Rule 5605 of the Listing Rules and applicable SEC regulations. Stockholders wishing to submit the name of a person as a potential nominee to the Board of Directors must send the name, address, and a brief (no more than 500 words) biographical description of such potential nominee to the Nominating and Corporate Governance Committee at the following address: Nominating and Corporate Governance Committee of the Board of Directors, c/o Cyalume Technologies Holdings, Inc., 910 SE 17<sup>th</sup> Street, Suite 300, Fort Lauderdale, Florida 33316. Potential director nominees will be evaluated by personal interview, such interview to be conducted by one or more members of the Nominating and Corporate Governance Committee, and/or any other method the Nominating and Corporate Governance Committee deems appropriate, which may, but need not, include a questionnaire. Those suggesting a nominee should include evidence that the writer is a Company stockholder, the name and contact information of the candidate and a statement signed by the candidate that the candidate is willing to be considered for nomination by the committee and willing to serve as a director, if nominated and elected. The Nominating and Corporate Governance Committee may solicit or receive information concerning potential nominees from any source it deems appropriate. The Nominating and Corporate Governance Committee need not engage in an evaluation process unless (i) there is a vacancy on the Board of Directors, (ii) a director is not standing for re-election, or (iii) the Nominating and Corporate Governance Committee does not intend to recommend the nomination of a sitting director for re-election. A potential director nominee recommended by a security holder will not be evaluated differently from any other potential nominee. Although it has not done so in the past, the Nominating and Corporate Governance Committee may retain search firms to assist in identifying suitable director candidates.

The Board does not have a formal policy on Board candidate qualifications. The Board may consider those factors it deems appropriate in evaluating director nominees made either by the Board or stockholders, including judgment, skill, strength of character, experience with businesses and organizations comparable in size or scope to the Company, experience and skill relative to other Board members, and specialized knowledge or experience. Depending upon the current needs of the Board, certain factors may be weighed more or less heavily. In considering candidates for the Board, the directors evaluate the entirety of each candidate's credentials and do not have any specific minimum qualifications that must be met. "Diversity," as such, is not a criterion that the Committee considers . The directors will consider candidates from any reasonable source, including current Board members, stockholders, professional search firms or other persons. The directors will not evaluate candidates differently based on who has made the recommendation.

The Company has entered into an investor rights agreement with certain former owners of CTI, a wholly-owned subsidiary of the Company as a result of the acquisition of CTI on December 19, 2008, which allows certain beneficial owners to nominate up to three persons for election to the Board of Directors for so long as a minimum percentage of the Company's outstanding common stock are owned by such security holders. The terms of the agreement are as follows:

(i) the holders of Cova Small Cap Holdings, LLC's ("Cova") investment have the right to nominate two persons for election to the Board of Directors as long as Cova owns 5% of the outstanding stock of the Company; and

(ii) the holders of Kline Hawkes Pacific Friends Fund, LLC and Kline Hawkes Pacific, L.P. ("Kline Hawkes") have the right to nominate one person for election to the Board of Directors as long as Kline Hawkes owns 5% of the outstanding common stock of the Company.

Andrew Intrater and Jason Epstein are Cova's current nominees to the Board of Directors. Kline Hawkes does not currently have a nominee to the Board of Directors.

The Company is also party to an amendment agreement, dated December 27, 2012, with JFC and James G. Schleck, individually and in his capacity as representative of the members of JFC, pursuant to which, for so long as JFC and/or Mr. Schleck collectively own at least 10% of the total number of outstanding shares of the Company's common stock, Mr. Schleck has the right to be named by the Company as a nominee for election to the board of directors each time the Company solicits a vote of its stockholders relating to the election of directors.

In addition, on November 19, 2013, the Company entered into a Securities Purchase Agreement (the "2013 Purchase Agreement") with US VC Partners GP, LLC (the "Investor"), pursuant to which it issued 123,077 newly created Series A Convertible Preferred Stock. Until the Investor holds less than 25% of the shares of Series A Preferred Stock purchased by the Investor pursuant to the 2013 Purchase Agreement or 5% of the Common Stock Deemed Outstanding (as defined in the Purchase Agreement), a majority of the outstanding shares of Series A Preferred Stock (which under certain circumstances must include the Investor) (the "Requisite Holders") are entitled to elect to the Board of Directors the greater of (1) one representative or (2) such greater number of representatives as is proportionate to the total number of directors as is the percentage of the number of shares of Common Stock into which the shares of Series A Preferred Stock are convertible relative to the number of shares of Common Stock Deemed Outstanding; provided that the Requisite Holders shall be entitled to elect no more than two representatives to the Board. Until the later of the date on which (1) the Investor holds less than a majority of the outstanding shares of Series A Preferred Stock and (2) the outstanding shares of Series A Preferred Stock represent (on an as-if converted basis) less than 5% of the number of shares of Common Stock Deemed Outstanding, the Requisite Holders will have certain special voting rights as set forth in the Certificate of Designation. Ji Ham is US VC Partners GP, LLC's current nominee to the Board of Directors.

In addition, on July 30, 2014, the Company entered into a Securities Purchase Agreement (the "2014 Purchase Agreement") with Cova Small Cap Holdings, LLC ("Cova"), Michael G. Barry and Bayonet Capital Fund I, LLC for the purchase by such investors of an aggregate of 1,000 units of securities of the Company. Pursuant to the terms of the 2014 Purchase Agreement, each of Cova and Mr. Barry will have the right, until such time as its or his "Purchaser Threshold Date" (as defined below), to nominate one individual to the Board of Directors; provided that Cova, together with its affiliates, shall not have the right to nominate, appoint or elect a total of more than three individuals to the Board, pursuant to the 2014 Purchase Agreement and any other agreements or other instruments currently in existence. "Purchaser Threshold Date" means (1) prior to the date that the Company's Series C Preferred Stock is redeemed in full by the Company in accordance with the terms of the Series C Certificate of Designation, the earlier of the date upon which the applicable investor (together with its affiliates) holds less than 25% of the shares of Series C Preferred Stock purchased by such Investor at the closing of the 2014 Purchase Agreement or 10% of the outstanding Common Stock (on a fully-diluted, as-if converted basis), and (2) after the date that the Series C Preferred Stock is so redeemed in full by the Company, the date upon which the applicable investor (together with its affiliates) holds less than 10% of the outstanding Common Stock (on a fully-diluted, as-if converted basis). On July 30, 2014, Mr. Barry was appointed to the Board, to fill the previously-existing vacancy on the Board, pursuant to this provision.

*Executive Committee.* On January 13, 2009, the Board of Directors formed an Executive Committee. Yaron Eitan (Chairman), Michael Barry, Ji Ham, John G. Meyer, Jr., Thomas Rebar and Zivi Nedivi serve on this committee. The Executive Committee exercises the powers of the Board between meetings of the full Board of Directors. The Executive Committee met monthly during 2016.

*Audit Committee.* The Audit Committee is established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934. Thomas G. Rebar (Chairman), Michael Barry and Yaron Eitan serve on this committee. The Audit Committee held four meetings during 2016. The Board of Directors has determined that Thomas G. Rebar is an “audit committee financial expert”. The Board of Directors has determined that each of the members of the Audit Committee are independent as defined in Rule 5605(a)(2) of the Listing Rules.

The Audit Committee operates under a written charter adopted by the Board of Directors and assists the Board of Directors by overseeing the performance of the independent auditors and the quality and integrity of our internal accounting, auditing and financial reporting practices. The Audit Committee is responsible for retaining and, as necessary, terminating, the independent auditors, annually reviews the qualifications, performance and independence of the independent auditors and the audit plan, fees and audit results, and pre-approves audit and non-audit services to be performed by the auditors and related fees. The Audit Committee charter is available on our website, [www.cyalume.com](http://www.cyalume.com).

### **Compensation Committee Interlocks and Insider Participation**

During 2016, no current or former officer or employee of CTI, CSP or CTS participated in deliberations of Cyalume’s Board of Directors concerning Executive Officer compensation.

### **Board Operations**

The positions of principal executive officer and chairman of the Board of Directors of the Company are held by different persons. The chairman of the Board of Directors, an independent director, chairs Board of Director and stockholder meetings and participates in preparing their agendas. The chairman of the Board of Directors also calls, plans, and chairs the independent directors’ executive sessions and serves as a focal point for communication between management and the Board of Directors between Board of Director meetings, although there is no restriction on communication between directors and management. We believe that these arrangements afford the independent directors sufficient resources to supervise management effectively, without being overly engaged in day-to-day operations.

The Board of Directors is responsible for overall supervision of the Company’s risk oversight efforts as they relate to the key business risks facing the organization. Management identifies, assesses, and manages the risks most critical to the Company’s operations on a day-to-day basis and routinely advises the Board of Directors on those matters as the President/CEO and CFO have access to the Board of Directors, attend regular meetings as well as the audit committee meetings. The Board’s role in risk oversight of the Company is consistent with the Company’s leadership structure, with senior management having responsibility for assessing and managing the Company’s risk exposure, and the Board and its Committees, providing oversight as necessary in connection with those efforts.

### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who beneficially own more than 10% of a registered class of our equity securities to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and other equity securities. Such executive officers, directors, and greater than 10% beneficial owners are required by SEC regulation to furnish us with copies of all Section 16(a) forms filed by such reporting persons.

Based solely on our review of such forms furnished to us and written representations from certain reporting persons, we believe that all stockholders have complied with all filing requirements applicable to 10% beneficial owners during the year-ended December 31, 2016.

### **Code of Ethics**

We adopted a code of ethics on January 13, 2009, which is available on our website, [www.cyalume.com](http://www.cyalume.com).

## ITEM 11. EXECUTIVE COMPENSATION

### Overview

Our executive officers are: Zivi Nedivi, who was appointed our Chief Executive Officer on April 2, 2012, Dale Baker, who has been Chief Operating Officer since September 10, 2012 and Andrea Settembrino, who has been Chief Financial Officer and Assistant Secretary since October 28, 2016.

### *Compensation Philosophy*

The overriding goal of our executive compensation program is to recruit and retain key executives and motivate them to achieve maximum results. To this end, we design and manage our programs with the following objectives in mind:

- Generating significant stockholder value, while practicing good corporate governance,
- Maximizing the alignment between our short-term and long-term results and executive pay, and
- Providing market-competitive compensation, while considering our financial resources.

### *Administration of Executive Compensation Programs*

In January 2009, we formed a Compensation Committee of the Board of Directors comprised of three outside, independent Directors which will administer all compensation programs for its officers, key employees, and outside Directors. This Committee works with management to design key compensation policies and programs, as well as sound governance practices, to ensure that our compensation programs reflect best practices and strongly contribute to our growth and success. The named Executive Officers have all entered into employment agreements.

The compensation for senior executives is comprised of four elements: a base salary, an annual performance bonus, equity awards and benefits. On March 3, 2009, our Board of Directors adopted the Cyalume Technologies Holdings, Inc. 2009 Omnibus Securities and Incentive Plan (the “2009 Plan”). On October 7, 2014, our Board of Directors adopted the Cyalume Technologies Holdings, Inc. 2014 Equity Incentive Plan (the “2014 Plan”). The 2014 Plan was approved on February 15, 2015. Both the 2009 Plan and the 2014 Plan provide for awards to employees and Directors, and both plans are administered by the Compensation Committee. Awards granted pursuant to the 2009 Plan and the 2014 Plan are described below.

In developing salary ranges, potential bonus payouts, equity awards and benefit plans, the Compensation Committee takes into account: 1) competitive compensation among comparable companies and for similar positions in the market, 2) relevant incentives and rewards for senior management for improving stockholder value while building us into a successful company, 3) individual performance, 4) how best to retain key executives, 5) our overall performance, 6) our ability to pay and 7) other relevant factors.

All of our executives were involved in decisions relating to their compensation. We believe that executives are fairly compensated.

### *Employment Agreements*

The following discussion summarizes the material terms of current employment agreements with our Executive Officers:

**Zivi Nedivi** The Company, CTI and East Shore Ventures, LLC (the “Consultant”), a limited liability company owned by Mr. Nedivi, entered into a services agreement (the “Services Agreement”), effective April 2, 2012, which provided that Mr. Nedivi would serve as the Company’s Chief Executive Officer and member of the Company’s board of directors. The Services Agreement had an initial term of three years. Effective as of February 1, 2015, the Company, CTI, and Mr. Nedivi entered into an employment agreement (the “Employment Agreement”), pursuant to which Mr. Nedivi continues to serve as the Company’s Chief Executive Officer. Mr. Nedivi had previously served in such capacity pursuant to the Services Agreement, which was terminated effective as of February 1, 2015. The material terms of the Employment Agreement are substantially the same as those of the Services Agreement, other than changes to reflect the change from an independent contractor relationship to an employment relationship.



Under the Services Agreement, the Consultant earned an annual cash fee of \$450,000 (the “Cash Fee”), subject to annual increases at the discretion of the Company’s board. The Cash Fee shall increase ten percent (10%) for every \$35,000,000 of revenue growth, calculated based on the Company’s fiscal year. The Consultant shall be eligible for the first such increase when annual revenues total at least \$105,000,000. The Consultant is also eligible for bonus consideration based on certain predetermined annual performance targets (“Annual Performance Targets”). If the Company’s performance meets, but does not exceed, the Annual Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of the Cash Fee in effect as of the end of such fiscal year. If the Company’s performance exceeds the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of the Cash Fee in effect as of the end of such fiscal year, plus an additional 1% of such annualized rate for each 1% by which the Company’s performance exceeds the Annualized Performance Targets for such fiscal year. If the Company’s performance fails to meet the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of the Cash Fee in effect as of the end of such fiscal year, less 2% of such annualized rate for each 1% by which the Company’s performance failed to meet the Annualized Performance Targets for such fiscal year, provided, however, that Consultant shall not be eligible for any bonus for a given fiscal year in which the Company’s performance was less than or equal to 70% of the Annualized Performance Targets for such fiscal year.

The Employment Agreement has an initial term of three years and continues thereafter for successive one-year periods unless and until terminated by either party upon 60 days’ written notice prior to the agreement’s anniversary/expiration date, or until otherwise terminated by either party. Mr. Nedivi will receive an annual base salary of \$450,000 for the term of the Employment Agreement, subject to annual adjustments at the sole discretion of CTI’s board of directors. Mr. Nedivi is also eligible to receive an annual bonus based on certain predetermined yearly performance targets (“Annual Performance Targets”). If CTI’s performance meets, but does not exceed, the Annual Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of Mr. Nedivi base salary in effect as of the end of such fiscal year. If CTI’s performance exceeds the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of Mr. Nedivi base salary in effect as of the end of such fiscal year, plus an additional 1% of such annualized rate for each 1% by which CTI’s performance exceeds the Annualized Performance Targets for such fiscal year. If CTI’s performance fails to meet the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 140% of the annualized rate of Mr. Nedivi base salary in effect as of the end of such fiscal year, less 2% of such annualized rate for each 1% by which CTI’s performance failed to meet the Annualized Performance Targets for such fiscal year, provided, however, that Mr. Nedivi shall not be eligible for any bonus for a given fiscal year in which CTI’s performance was less than or equal to 70% of the Annualized Performance Targets for such fiscal year. Mr. Nedivi is also authorized under the Employment Agreement to incur reasonable expenses in the discharge of services, including, without limitation, travel and lodging expenses incurred when Mr. Nedivi travels to the United States and in furtherance of his other obligations under the Employment Agreement.

The Consultant initially received an option to purchase up to 1,036,104 shares of the Company’s common stock at an exercise price per share of \$1.50 (the “Initial Nedivi Option”). The Initial Nedivi Option became exercisable annually in five equal installments on each of the first five anniversaries of the approval of the issuance of the Initial Nedivi Option. In November 2014, that option was cancelled and replaced with an option, issued directly to Mr. Nedivi, to purchase 5,015,891 shares of the Company’s common stock at an exercise price per share of \$0.09 (the “Nedivi Option”), subject to the effectiveness of the adoption of the 2014 Plan. The Nedivi Option shall be subject to vesting over four years from the date of grant, in four equal annual installments commencing on the first anniversary of the date of grant with the final installment occurring on the fourth anniversary of the date of grant, provided that the Nedivi Option shall not vest until the Company’s senior debt and junior debt have both been re-financed such that the total cost of new money shall not exceed 25% per annum including cash and PIK interest and the cost of warrants (unless such threshold is subsequently increased by the Board). This performance condition was met on May 18, 2015. Additionally, the Nedivi Option shall vest in full upon the sale of the Company for at least \$35 million of enterprise value.

In the event Mr. Nedivi’s employment under the Employment Agreement is terminated by the Company without Cause or by non-renewal, or by Mr. Nedivi for Good Reason, in addition to the amounts accrued to him, Mr. Nedivi would be entitled to receive continued payment of his base salary then in effect for a one-year period, subject to Mr. Nedivi signing a release of claims in favor of the Company and its affiliates.

During the term of the Employment Agreement and for a period of two years thereafter, Mr. Nedivi is subject to non-solicitation and non-competition provisions. Mr. Nedivi is also subject to confidentiality provisions both during and after his employment with CTI.

**Dale Baker** Mr. Baker's employment agreement, effective September 10, 2012, provides that Mr. Baker will be employed as CTI's Chief Operating Officer. The contract has an initial term of three years and shall continue for successive one-year periods unless terminated by either party upon 30 days written notice prior to the anniversary/expiration date or terminated pursuant to certain events or for cause. Mr. Baker receives an annual base salary of \$350,000, subject to annual adjustments at the sole discretion of the board of directors. The base salary shall increase ten percent (10%) for every \$35,000,000 of revenue growth, calculated based on the Company's fiscal year. Mr. Baker shall be eligible for the first such increase when annual revenues total at least \$105,000,000. Annually, Mr. Baker is entitled to a cash bonus of up to 90% of annual base salary based on the achievement of certain performance targets, all determined by the board of directors. If Mr. Baker voluntarily resigns or is terminated for cause during the period of employment, then he is not entitled to receive any benefit or compensation following the date of termination. If terminated without cause during his initial term, Mr. Baker is entitled to severance of an amount equal to six months of his annual base salary.

Mr. Baker also received an initial option to purchase up to 350,000 shares of the Company's common stock at an exercise price per share of \$1.50 (the "Initial Baker Option"). The Initial Baker Option became exercisable annually in five equal installments on each of the first five anniversaries of the approval of the issuance of the Initial Baker Option. In November 2014, the Initial Baker Option was cancelled and replaced with an option to purchase 1,504,767 shares of the Company's common stock at an exercise price per share of \$0.09 (the "Baker Option"), subject to the effectiveness of the adoption of the 2014 Plan [and the Amendment]. The Baker Option shall be subject to vesting over four years from the date of grant, in four equal annual installments commencing on the first anniversary of the date of grant with the final installment occurring on the fourth anniversary of the date of grant, provided that the Baker Option shall not vest until the Company's senior debt and junior debt have both been re-financed such that the total cost of new money shall not exceed 25% per annum including cash and PIK interest and the cost of warrants (unless such threshold is subsequently increased by the Board). This performance condition was met on May 18, 2015. Additionally, the Baker Option shall vest in full upon the sale of the Company for at least \$35 million of enterprise value.

**Andrea Settembrino** Ms. Settembrino's employment agreement, effective October 28, 2016, provides that Ms. Settembrino will be employed as CTI's Chief Financial Officer. The contract has an initial term of three years and shall continue for successive one-year periods unless terminated by either party upon 30 days written notice prior to the anniversary/expiration date or until otherwise terminated by either party. Ms. Settembrino will receive an annual base salary of \$180,000 for the term of the Employment Agreement, subject to annual adjustments at the sole discretion of CTI's board of directors. Ms. Settembrino is also eligible to receive an annual bonus based on certain predetermined yearly performance targets ("Annual Performance Targets"). If CTI's performance meets, but does not exceed, the Annual Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 50% of the annualized rate of Ms. Settembrino's base salary in effect as of the end of such fiscal year. If CTI's performance exceeds the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 50% of the annualized rate of Ms. Settembrino's base salary in effect as of the end of such fiscal year, plus an additional 1% of such annualized rate for each 1% by which CTI's performance exceeds the Annualized Performance Targets for such fiscal year. If CTI's performance fails to meet the Annualized Performance Targets for a given fiscal year, the amount of the bonus for such fiscal year shall equal 50% of the annualized rate of Ms. Settembrino's base salary in effect as of the end of such fiscal year, less 2% of such annualized rate for each 1% by which CTI's performance failed to meet the Annualized Performance Targets for such fiscal year, provided, however, that Ms. Settembrino shall not be eligible for any bonus for a given fiscal year in which CTI's performance was less than or equal to 70% of the Annualized Performance Targets for such fiscal year.

Ms. Settembrino received an option to purchase up to 500,000 shares of the Company's common stock at an exercise price per share of \$0.10, pursuant to the Company's 2014 Incentive Equity Plan (the "Plan"). The Option will become exercisable annually in five equal installments on each of the first five anniversaries of the date of grant.

### **Employee Benefits Plans**

#### *Pension Benefits*

We do not sponsor any qualified or non-qualified pension benefit plans.

#### *Nonqualified Deferred Compensation*

We do not maintain any non-qualified defined contribution or deferred compensation plans. We sponsor a tax qualified defined contribution 401(k) plan in which employees of CTI who have reached the age of 18 are eligible for participation after completing the earlier of (i) three consecutive months of service or (ii) one year of service may participate.

### Severance Arrangements

Assuming the employment of our named executive officers were to be terminated without cause, each as of December 31, 2016, the following individuals would be entitled to payments in the amounts set forth opposite to their name in the below table:

	Cash Severance	
	No Change in Control	Change in Control
Zivi Nedivi	\$ 450,000	\$ 450,000
Dale Baker	\$ 175,000	\$ 175,000
Andrea Settembrino	\$ 90,000	\$ 90,000

We are not obligated to make any cash payments to these executives if their employment is terminated by us for cause or by death or disability, other than the payment of accrued but unpaid annual salary and bonus, if any, and reimbursement of accrued but unpaid business expenses.

### Summary Compensation Table

The following table shows information concerning the annual compensation in 2016 and 2015 for services provided to us by our Chief Executive Officer and our two other executive officers.

Name and Principal Position	Year	Salary (\$)	Earned Bonus (\$)	Option Awards (\$) <sup>(1)</sup>	All Other Compensation (\$)	Total Compensation (\$)
Zivi Nedivi, President & CEO	2016	463,846	666,000	—	—	1,129,846
	2015	435,577	740,528	181,676(2)	—	1,357,781
Dale Baker, COO	2016	369,002	343,000	—	774	712,776
	2015	345,816	400,966	126,400(2)	774	873,956
Michael Bielonko, Former CFO & Secretary	2016	115,526	58,438	—	86,522(3)	260,486
	2015	181,246	139,430	27,279	12,847	360,802
Andrea Settembrino, CFO & Assistant Secretary	2016	159,606	31,805	49,000	131	240,542

- (1) The amounts in this column reflect the aggregate full grant date fair value of each award computed in accordance with ASC Topic 718, *Compensation-Stock Compensation*. This is not necessarily representative of the value received. The executive officers can only realize value from stock options if the market price of Cyalume stock increases above the exercise price of the options.
- (2) Performance based conditions were met May 18, 2015 with the refinancing of the Company's debt. Due to the performance-based conditions associated with this award, the fair value was zero on the November 21, 2014 award date.
- (3) Includes severance paid during 2016 pursuant to the terms of Mr. Bielonko's employment agreement.

### Equity Compensation Awards

On November 21, 2014, the Compensation Committee of the Board of Directors authorized 5,015,891 stock options to Zivi Nedivi, 1,504,767 stock options to Dale Baker and 324,729 stock options to Michael Bielonko, in each case subject to the effectiveness of the adoption of the 2014 Plan, which became effective February 2015.

On December 13, 2016, Andrea Settembrino was awarded an option to purchase 500,000 shares of common stock.

## Outstanding Equity Awards at December 31, 2016

Name	Option Awards					Stock Awards			
	Equity Incentive Plan Awards:					Equity Incentive Plan Awards:			
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Number of securities underlying unexercised unearned options (#)	Option exercise price (\$)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested (\$)	Number of unearned shares that have not vested (#)	Market or payout value of unearned shares that have not vested (\$)
Zivi Nedivi	2,507,944 <sup>(1)</sup>	2,507,947 <sup>(1)</sup>	—	\$ 0.09	11/21/2024	—	—	—	—
Dale Baker	752,382 <sup>(2)</sup>	752,385 <sup>(2)</sup>	—	\$ 0.09	11/21/2024	—	—	—	—
Michael Bielonko	324,749 <sup>(3)</sup>	—	—	\$ 0.09	11/21/2024	—	—	—	—
Andrea Settembrino	— 25,000	500,000 <sup>(4)</sup> 25,000 <sup>(5)</sup>	—	\$ 0.10 \$ 0.09	12/13/2026 11/21/2024	—	—	—	—

(1) These options vest in the following increments: 1,253,972 on 11/21/2015, 2016 and 2017 and 1,253,975 on 11/21/2018.

(2) These options vest in the following increments: 376,191 on 11/21/2015, 2016 and 2017 and 376,194 on 11/21/2018.

(3) These options were granted on November 21, 2014, subject to the effectiveness of the adoption of the 2014 Plan, and vested December 31, 2015 on the condition met by Mr. Bielonko that he did not leave the Company voluntarily prior to December 31, 2015.

(4) This option award was granted on December 13, 2016 and vests in five equal annual installments beginning on October 28, 2017.

(5) These options vest in the following increments: 12,500 on 11/21/2015, 2016, 2017 and 2018.

## Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth, as of December 31, 2016, certain information as to the equity compensation plan of the Company pursuant to which grants of options, restricted stock, restricted stock units or other rights to acquire shares of the Company's common stock may be granted from time to time.

<b>Plan Category</b>	<b>Number of Securities to be Issued Upon Exercise of Outstanding Options (a)</b>	<b>Weighted Average Exercise Price of Outstanding Options (b)</b>	<b>Number of Securities Remaining Available for Future Issuance Under Plans (Excluding Securities Reflected in Column (a)) (c)</b>
Equity compensation plans approved by security holders <sup>(1)</sup>	4,469,915	\$ 0.76(2)	6,649,418

(1) Consists of the Company's Amended 2009 Omnibus Securities and Incentive Plan and the 2014 Equity Incentive Plan (adopted February 15, 2015).

(2) Weighted Average exercise price of outstanding options; excludes restricted stock.

## Director Compensation

There were no option awards or stock awards made to non-employee directors in 2016 or 2015. Cash compensation totaling \$100,000 was paid to non-employee directors in 2016. All directors are reimbursed for travel and other expenses directly related to activities as directors.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth, as of March 10, 2017, certain information as to the stock ownership of (i) each person known by the Company to own beneficially more than five percent of the Company's Common Stock, (ii) each of the Company's current directors and those nominees standing for election, (iii) each of the Company's executive officers, and (iv) the Company's executive officers and directors as a group. Except otherwise set forth in the notes to the table, the business address of each stockholder is c/o the Company, 910 SE 17<sup>th</sup> St., Suite 300, Fort Lauderdale, FL 33316. Information provided as to 5% stockholders other than our employees or management is based solely on forms 13D or 13G filed with the Securities and Exchange Commission and subsequent issuances by the Company.

Shares of common stock which an individual or group has a right to acquire within 60 days pursuant to the exercise or conversion of convertible preferred stock, options, warrants or other similar convertible or derivative securities are deemed to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table.

The applicable percentage of ownership is based on 22,347,549 shares outstanding.

Name and Address of Beneficial Owner <sup>(1)</sup>	Amount and Nature of Beneficial Ownership	Approximate Percentage of Common Stock
Ji Ham <sup>(2)</sup>	20,000	*
Yaron Eitan <sup>(3)</sup>	1,232,332	5.5%
Jason Epstein <sup>(4)</sup>	95,000	*
Andrew Intrater <sup>(5)</sup>	65,437,868	77.9%
John G. Meyer, Jr. <sup>(6)</sup>	270,915	1.2%
Zivi Nedivi <sup>(7)</sup>	2,507,944	10.1%
Thomas G. Rebar <sup>(8)</sup>	350,137	1.6%
James Schleck <sup>(9)</sup>	7,276,468	27.9%
Michael Barry <sup>(10)</sup>	14,126,693	38.7%
Dale Baker <sup>(11)</sup>	752,382	3.3%
Andrea Settembrino <sup>(12)</sup>	25,000	*
Cova Small Cap Holdings, LLC <sup>(4)(5)(13)</sup>	21,779,839	53.9%
Kline Hawkes Pacific Advisors, LLC <sup>(14)</sup>	2,273,434	10.6%
US VC Partners, L.P. <sup>(15)</sup>	43,578,029	66.1%
All Directors and Executive Officers as a group (11 persons)	92,094,739	87.0%

\* Less than 1%.

(1) The business address of each of our current officers and directors is 910 SE 17<sup>th</sup> St., Suite 300, Fort Lauderdale, FL 33316.

(2) Consists of options to purchase shares of our Common Stock. Excludes shares beneficially owned by US VC Partners, LP (“US VC”), as described in footnote (15). Mr. Ham was appointed to the Board pursuant to the rights granted to US VC under the terms of the Certificate of Designations of the Company’s Series A Convertible Preferred Stock, in connection with US VC’s equity investment in the Company consummated on November 19, 2013. Mr. Ham disclaims beneficial ownership of the shares held by US VC.

(3) Consists of (i) 555,024 shares of common stock held directly, (ii) options to purchase 135,000 shares of common stock held directly, (iii) 537,308 shares of common stock held by Selway Capital, LLC, and (iv) 5,000 shares of common stock held by Mr. Eitan’s child. Mr. Eitan is the Manager of Selway Capital, LLC.

(4) Excludes shares beneficially owned by Cova Small Cap Holdings, LLC (“Cova”), as described in footnote (13). Mr. Epstein directly holds an option to purchase 95,000 shares of our Common Stock; however, pursuant to a privately negotiated agreement with Cova, Mr. Epstein has agreed to transfer ownership of all common stock underlying the stock option to Cova upon exercise of the stock option. Cova is an affiliate of Renova U.S. Management LLC, in which Mr. Epstein serves as a Manager and participates in a profit sharing plan. Mr. Epstein disclaims beneficial ownership of the shares held by Cova.

(5) Includes shares beneficially owned by Cova, as described in footnote (13), and shares beneficially owned by US VC, as described in footnote (15). Also includes a stock option to purchase 80,000 shares of common stock held of record by Mr. Intrater. Mr. Intrater, as chief executive officer of Cova, may be deemed to beneficially own the securities held by Cova. Mr. Intrater is also the Special Managing Member of US VC Partners Management, LLC, which manages US VC Partners GP, LLC (“GP”), the sole general partner of US VC and, therefore, may be deemed to beneficially own the securities held by US VC. Mr. Intrater disclaims beneficial ownership over the securities held by Cova and US VC, except to the extent of his pecuniary interest therein, if any.

(6) Consists of options to purchase 270,000 shares of common stock and 915 shares of common stock held directly.

(7) Consists of vested options to purchase shares of common stock.

(8) Consists of: (i) options to purchase 175,000 shares of common stock and (ii) 175,137 shares of common stock held directly.

(9) Based in part on information contained in a Schedule 13D/A filed on May 28, 2015, by James Schleck, JFC Technologies, LLC and Bayonet Capital Fund I, LLP. Consists of: (i) 250 shares of common stock held directly by Mr. Schleck; (ii) vested options to purchase 180,000 shares held by Mr. Schleck; (iii) 3,478,943 shares of common stock owned by JFC Technologies, LLC (“JFC”); (iv) 5,960 shares of common stock that are issuable to JFC upon the conversion of 20 shares of Series A Preferred Stock; and (v) 3,571,315 shares of common stock issuable upon the conversion of 100 shares of Series B Preferred Stock owned by Bayonet Capital Fund I, LLC (“Bayonet”). Mr. Schleck is the Chief Executive Officer of JFC and Bayonet and, as such, may be deemed to beneficially own the securities held by them. Mr. Schleck disclaims beneficial ownership over the securities held by JFC and Bayonet, except to the extent of his pecuniary interest therein, if any.

(10) Consists of options to purchase 20,000 shares of common stock plus shares of common stock issuable upon the conversion of 395 shares of Series B Preferred Stock owned by the Michael G. Barry Irrevocable Trust of 2006, a trust for the benefit of Mrs. Barry and Mr. Barry’s children. Mr. Barry’s spouse is trustee of the trust. Mr. Barry disclaims beneficial ownership of these securities.

(11) Consists of vested options to purchase shares of common stock.

(12) Consists of vested options to purchase shares of common stock.

(13) Based on information contained in a Schedule 13D/A filed on August 19, 2014, by Cova, Andrew Intrater, Renova US Holdings Ltd, Columbus Nova Investments IV Ltd, CN Special Opportunity Fund Ltd. and CN Credit Opportunities Fund 2007-1 Ltd. Consists of 3,744,700 shares of common stock and 18,035,139 shares of common stock issuable upon the conversion of 505 shares of Series B Preferred Stock. Cova's business address is 900 Third Avenue, 19<sup>th</sup> Floor, New York, NY 10022.

(14) Based on information contained in a Schedule 13D/A filed on January 22, 2009. Kline Hawkes' business address is 11726 San Vicente Blvd., Suite 300, Los Angeles, CA 90049.

(15) Based in part on information contained in a Schedule 13D/A filed on August 19, 2014, by US VC, US VC Partners Management, LLC and Andrew Intrater. Consists of shares of common stock issuable upon the conversion of 123,077 shares of Series A Preferred Stock. US VC has a number of officers in common with Cova. US VC's business address is 900 Third Avenue, 19<sup>th</sup> Floor, New York, NY 10022.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

### Related Party Transactions Policy

It is the Company's policy to not enter any transaction (other than compensation arrangements in the ordinary course) with any director, executive officer, employee, or principal stockholder or party related to them, unless authorized by a majority of the directors having no interest in the transaction, upon a favorable recommendation by the Audit Committee (or a majority of its disinterested members).

## ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

BDO USA, LLP audited our consolidated financial statements for the years ended December 31, 2016 and 2015. BDO USA, LLP is our principal accountant as of December 31, 2016.

The following table sets forth the aggregate fees billed by BDO USA, LLP for professional services rendered during the fiscal years ended December 31, 2016 and 2015:

	<b>2016</b>	<b>2015</b>
Audit fees <sup>(1)</sup>	\$ 300,263	\$ 336,194
Audit-related fees <sup>(2)</sup>	-	-
Tax fees <sup>(3)</sup>	-	20,500
All other fees <sup>(4)</sup>	-	-
<b>Total fees</b>	<b>\$ 300,263</b>	<b>\$ 356,694</b>

- (1) Audit fees were primarily related to our financial statement audits, related quarterly reviews and review of various SEC Forms filed during the period.
- (2) There were no fees for audit-related services provided during the period.
- (3) Tax fees were primarily related the Company's Internal Revenue Code Section 382 study during 2015.
- (4) There were no other services provided during the period.

## PART IV

## ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

### (a) (1) Financial statements filed as part of this report

Consolidated Balance Sheets  
Consolidated Statements of Comprehensive Income  
Consolidated Statements of Changes in Preferred Stock and Stockholders' Equity  
Consolidated Statements of Cash Flows  
Notes to Consolidated Financial Statements

## ITEM 16. FORM 10-K SUMMARY

None.



(b) Exhibits

<b>Exhibit Number</b>	<b>Description</b>
2.1	(1) Stock Purchase Agreement dated February 14, 2008 by and among Vector Intersect Acquisition Corporation, as the Parent, Cyalume Acquisition Corp., a Delaware corporation, as the Purchaser, Cyalume Technologies, Inc. and GMS Acquisition Partners Holdings, LLC
2.2	(2) Amendment No. 1 to Stock Purchase Agreement, dated October 22, 2008
2.3	(3) Amendment No. 2 to Stock Purchase Agreement, dated December 17, 2008
2.4	(3) Amendment No. 3 to Stock Purchase Agreement, dated December 18, 2008
3.1	(3) Fifth Amended and Restated Certificate of Incorporation
3.2	(4) By-laws
3.3	(26) Second Amended and Restated Certificate of Designation of Series A Convertible Preferred Stock filed by the Company with the Secretary of State of the State of Delaware on May 15, 2015. (3.1)
3.4	(19) Warrant to Purchase Common Stock, dated November 19, 2013, issued to the Investor. (3.2)
3.5	(19) Warrant to Purchase Series A Preferred Stock, dated November 19, 2013, issued to the Investor. (3.3)
3.6	(19) Second Amended and Restated Warrant to Purchase Common Stock, dated November 19, 2013, issued to Granite Creek FlexCap I, L.P. (3.4)
3.7	(19) Second Amended and Restated Warrant to Purchase Common Stock, dated November 19, 2013, issued to Patriot Capital II, LP. (3.5)
3.8	(19) Warrant to Purchase Common Stock, dated November 19, 2013, issued to JFC. (3.6)
3.9	(26) Amended and Restated Certificate of Designation of Series B Convertible Preferred Stock filed by the Company with the Secretary of State of the State of Delaware on May 15, 2015. (3.2)
3.10	(26) Amended and Restated Certificate of Designation of Series C Preferred Stock filed by the Company with the Secretary of State of the State of Delaware on May 15, 2015. (3.3)
3.11	(26) Certificate of Designation of Series D Convertible Preferred Stock filed by the Company with the Secretary of State of the State of Delaware on May 15, 2015. (3.4)
3.12	(26) Warrant to Purchase Common Stock, dated May 18, 2015. (3.5)
4.1	(4) Specimen Common Stock Certificate
4.2	(4) Specimen Unit Certificate
4.3	(4) Specimen Warrant Certificate
4.4	(4) Form of Unit Purchase Option to be granted to the representative
4.5	(8) Registration Rights Agreement dated March 18, 2011
4.6	(14) Stock Option Agreement between Cyalume Technologies Holdings, Inc. and East Shore Ventures, LLC (4.1)
4.7	(14) Stock Option Agreement between Cyalume Technologies Holdings, Inc. and Dale S. Baker (4.2)
10.1	(4) Form of Stock Escrow Agreement among the Registrant, American Stock Transfer & Trust Company and the Initial Stockholders
10.2	(4) Form of Registration Rights Agreement among the Registrant, the Initial Stockholders and the Private Placement Purchasers
10.3	(5) Cyalume Technologies Holdings, Inc. 2009 Omnibus Securities and Incentive Plan
10.4	(6) Share Purchase Agreement dated March 18, 2011
10.5	(7) Amendment No. 1 to the Employee Agreement of Derek Dunaway dated May 9, 2011
10.6	(7) Amendment No. 1 to the Employee Agreement of Edgar E. Cranor dated May 9, 2011
10.7	(8) Securities Exchange Agreement between Cyalume Technologies Holdings, Inc. and Rodman Principal Investments, LLC dated June 30, 2011 (10.1)
10.8	(8) Securities Exchange Agreement between Cyalume Technologies Holdings, Inc. and Winston Churchill dated July 7, 2011 (10.2)
10.9	(8) Securities Exchange Agreement between Cyalume Technologies Holdings, Inc. and Thomas Rebar dated July 7, 2011 (10.3)
10.10	(8) Securities Exchange Agreement between Cyalume Technologies Holdings, Inc. and Wayne Weisman dated July 7, 2011 (10.4)
10.11	(9) Amendment No. 2 to the Employee Agreement of Derek Dunaway (10.5)
10.12	(9) Amendment No. 1 to the Employee Agreement of Michael Bielonko (10.6)
10.13	(9) Amendment No. 2 to the Employee Agreement of Edgar E. Cranor (10.7)
10.14	(9) Asset Purchase Agreement dated August 31, 2011 among Cyalume Technologies Holdings, Inc., Cyalume Specialty Products, Inc., JFC Technologies, LLC and Selling Members of Seller (10.8)
10.15	(9) Registration Rights Agreement between Cyalume Technologies Holdings, Inc., James G. Schleck, James R. Schleck, Jame Fine Chemical, Inc., and JFC Technologies, LLC dated as of August 31, 2011 (10.9)
10.16	(9) Lease Agreement between Brook Industrial Park, LLC and Cyalume Specialty Products, Inc. (10.10)
10.17	(10) Stock Purchase Agreement dated December 22, 2011 among Cyalume Technologies Inc., Cyalume Technologies Holdings, Inc., Combat Training Solutions, Inc., and Antonio Colon (10.27)

- 10.18 (10) Registration Rights Agreement, dated as of December 22, 2011, between Cyalume Technologies Holdings, Inc., and Antonio Colon (10.28)
- 10.19 (10) Second Amendment to Amended and Restated Revolving Credit and Term Loan Agreement between Cyalume Technologies, Inc., Cyalume Technologies Holdings, Inc., Combat Training Solutions, Inc., Cyalume Realty, Inc., Cyalume Specialty Products, Inc. and TD Bank, N.A. dated March 30, 2012 (10.30)
- 10.20 (10) Second Amendment to Subordinated Loan Agreement between Cyalume Technologies, Inc., Cyalume Technologies Holdings, Inc., Combat Training Solutions, Inc., Cyalume Realty, Inc., Cyalume Specialty Products, Inc., Granite Creek Partners Agent, LLC, Granite Creek Flexcap I, L.P. and Patriot Capital II, L.P. dated March 30, 2012 (10.31)
- 10.21 (11) Services Agreement by and among the Company, Cyalume Technologies, Inc. and East Shore Ventures, LLC dated as of April 2, 2012 (10.1)
- 10.22 (11) Inducement Agreement by and between East Shore Ventures, LLC and Zivi Nedivi (10.2)
- 10.23 (11) Separation Agreement and General Release by and between Cyalume Technologies, Inc. and Derek Dunaway effective as of April 2, 2012 (10.3)
- 10.24 (12) Amended and Restated Employment Agreement of Michael Bielonko, Chief Financial Officer, Cyalume Technologies, Inc. (10.1)
- 10.25 (12) Separation and Release Agreement between Monte L. Pickens and Cyalume Technologies, Inc. (10.2)
- 10.26 (13) Employment Agreement between Daniel S. Baker and Cyalume Technologies, Inc. effective September 10, 2012 (10.1)
- 10.27 (14) Amendment No. 1 to Services Agreement dated September 10, 2012 between Cyalume Technologies Holdings, Inc., Cyalume Technologies, Inc., and East Shore Ventures, LLC (10.1)
- 10.28 (15) Third Amendment to Amended and Restated Revolving Credit and Term Loan Agreement effective December 28, 2012 with TD Bank, N.A. (10.1)
- 10.29 (15) Third Amendment to Subordinated Loan Agreement effective December 28, 2012 with Granite Creek Flexcap I, L.P. and Patriot Capital II, L.P., and Granite Creek Partners Agent, L.L.C (10.2)
- 10.30 (16) Amendment Agreement dated December 27, 2012 by and among the Cyalume Technologies Holdings, Inc., Cyalume Specialty Products, Inc., JFC Technologies, LLC and James G. Schleck (10.1)
- 10.31 (16) Unsecured Promissory Note dated December 31, 2012 with JFC Technologies, LLC (10.2)
- 10.32 (17) Employment Agreement, effective as of November 1, 2011, between Cyalume Specialty Products, Inc. and James G. Schleck (10.3)
- 10.33 (17) First Amendment to Employment Agreement, dated December 27, 2012, between Cyalume Specialty Products, Inc. and James G. Schleck (10.4)
- 10.36 (19) Securities Purchase Agreement, dated November 19, 2013, between the Company and the Investor. (10.1)
- 10.37 (19) Registration Rights Agreement, dated November 19, 2013, between the Company and the Investor. (10.2)
- 10.38 (19) Release and Escrow Agreement, dated November 19, 2013, among the Company, CTI, Cova and the Investor. (10.3)
- 10.39 (19) Fourth Amendment to Amended and Restated Revolving Credit and Term Loan Agreement, dated November 19, 2013. (10.4)
- 10.40 (19) Fourth Amendment to Subordinated Loan Agreement, dated November 19, 2013. (10.5)
- 10.41 (19) Amended and Restated Promissory Note, dated November 19, 2013. (10.6)
- 10.42 (20) Separation and Release Agreement, dated December 31, 2013, between Cyalume Specialty Products, Inc. and James G. Schleck. (10.42)
- 10.43 (20) Consulting Agreement, dated December 31, 2013, between Cyalume Specialty Products, Inc. and James G. Schleck. (10.43)
- 10.44 (21) Amendment to Consulting Agreement between Cyalume Specialty Products, Inc. and James G. Schleck. (10.1)
- 10.45 (22) Securities Purchase Agreement, dated July 30, 2014. (10.1)
- 10.46 (22) Registration Rights Agreement, dated July 30, 2014. (10.2)
- 10.47 (22) Sixth Amendment to Amended and Restated Revolving Credit and Term Loan Agreement and Limited Consent and Waiver, dated July 30, 2014. (10.3)
- 10.48 (22) Amendment No. 1 to Amended and Restated Promissory Note, dated July 30, 2014. (10.4)
- 10.49 (22) Consent and Waiver Agreement, dated July 30, 2014. (10.5)
- 10.50 (23) Confidential Settlement Agreement and Mutual Release dated July 10, 2014. (10.1)
- 10.51 (24) 2014 Equity Incentive Plan.
- 10.52 (25) Employment Agreement between Cyalume Technologies, Inc., Cyalume Technologies Holdings, Inc. and Zivi Nedivi, dated as of February 1, 2015. (10.1)
- 10.53 (26) Credit Agreement, dated May 18, 2015. (10.1)
- 10.54 (26) Subscription Agreement, dated May 18, 2015. (10.2)
- 10.55 (26) Registration Rights Agreement, dated May 18, 2015. (10.3)
- 10.56 (27) Second Amendment to Confidential Settlement Agreement and Mutual Release. (10.1)
- 10.57 (27) First Amendment to Credit Agreement, dated as of August 3, 2015. (10.2)
- 10.58 (28) Supply Agreement between Cyalume Technologies, Inc. (f/k/a Omniglow Corporation) and LC Ind., Inc., dated June 2004 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.21)
- 10.59 (28) Supply Agreement between Cyalume Technologies S.A. and NATO Maintenance and Supply Agency dated July 28, 2008 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.22)
- 10.60 (28) Supplemental Agreement No. 1, dated July 28, 2008, to the Supply Agreement between Cyalume Technologies S.A. and NATO Maintenance and Supply Agency dated July 28, 2008 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.23)
- 10.61 (28) Supply Agreement between Cyalume Technologies S.A. and NATO Maintenance and Supply Agency dated August 20, 2008 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.24)
- 10.62 (28) Supplemental Agreement No. 2, dated October 6, 2008, to the Supply Agreement between Cyalume Technologies S.A. and NATO Maintenance and Supply Agency dated July 28, 2008 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.25)
- 10.63 (28) Supplemental Agreement No. 3, dated October 6, 2008, to the Supply Agreement between Cyalume Technologies S.A. and NATO Maintenance and Supply Agency dated July 28, 2008 (confidential treatment has been requested for certain portions of this agreement which have been redacted). (10.26)

10.64 \* Employment Agreement, effective as of October 28, 2016, between Cyalume Technologies, Inc. and Andrea Settembrino.  
14.1 (10) Code of Conduct and Ethics (14.1)  
16.1 (18) Letter from CCR LLP

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21.1	*	Subsidiaries of the Registrant
23.1	*	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm
31.1	*	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	*	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	*	XBRL Instance Document
101.SCH	*	XBRL Taxonomy Extension Schema
101.CAL	*	XBRL Taxonomy Extension Calculation Database
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase
101.LAB	*	XBRL Taxonomy Extension Label Linkbase
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase

- (1) Incorporated by reference to the Current Report on Form 8-K dated February 14, 2008 and filed with the Commission February 21, 2008.
- (2) Incorporated by reference to the Current Report on Form 8-K dated October 22, 2008 and filed with the Commission November 4, 2008.
- (3) Incorporated by reference to the Current Report on Form 8-K dated December 17, 2008 and filed with the Commission December 23, 2008.
- (4) Incorporated by reference to the Registration Statement on Form S-1 (File No. 333-127644) filed August 18, 2005.
- (5) Incorporated by reference to Exhibit A of the definitive Proxy Statement filed with the Commission April 30, 2009 pursuant to Regulation 14A of the Exchange Act for our 2009 Annual Meeting of Stockholders.
- (6) Incorporated by reference to the Current Report on Form 8-K dated March 18, 2011 and filed with the Commission March 21, 2011.
- (7) Incorporated by reference to our Form 10-Q dated June 30, 2011 and filed with the Commission August 10, 2011. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-Q.
- (8) Incorporated by reference to the Current Report on Form 8-K dated June 30, 2011 and filed with the Commission July 7, 2011. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (9) Incorporated by reference to our Form 10-Q dated September 30, 2011 and filed with the Commission November 14, 2011. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-Q.
- (10) Incorporated by reference to our Form 10-K dated December 31, 2012 and filed with the Commission April 16, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-K.
- (11) Incorporated by reference to the Current Report on Form 8-K dated March 30, 2012 and filed with the Commission April 5, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (12) Incorporated by reference to the Current Report on Form 8-K dated April 19, 2012 and filed with the Commission April 25, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (13) Incorporated by reference to the Current Report on Form 8-K dated July 19, 2012 and filed with the Commission July 25, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (14) Incorporated by reference to the Current Report on Form 8-K dated September 10, 2012 and filed with the Commission September 12, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (15) Incorporated by reference to the Current Report on Form 8-K dated December 20, 2012 and filed with the Commission December 31, 2012. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (16) Incorporated by reference to the Current Report on Form 8-K dated December 27, 2012 and filed with the Commission January 2, 2013. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (17) Incorporated by reference to the Current Report on Form 8-K dated December 31, 2012 and filed with the Commission January 7, 2013. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (18) Incorporated by reference to the Current Report on Form 8-K dated November 28, 2011 and filed with the Commission December 2, 2011.
- (19) Incorporated by reference to the Current Report on Form 8-K dated November 22, 2013 and filed with the Commission on that date. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (20) Incorporated by reference to our Form 10-K dated December 31, 2014 and filed with the Commission on April 15, 2014. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-K.
- (21) Incorporated by reference to our Form 10-Q dated March 31, 2014 and filed with the Commission on May 20, 2014. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-Q.
- (22) Incorporated by reference to the Current Report on Form 8-K filed with the Commission on August 5, 2014. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (23) Incorporated by reference to our Form 10-Q dated June 30, 2014 and filed with the Commission on August 14, 2014. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-Q.
- (24) Incorporated by reference to Exhibit B to our definitive information statement on Schedule 14C filed with the Commission on January 26, 2015.
- (25) Incorporated by reference to the Current Report on Form 8-K filed with the Commission on February 3, 2015. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (26) Incorporated by reference to the Current Report on Form 8-K filed with the Commission on May 21, 2015. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (27) Incorporated by reference to the Current Report on Form 8-K filed with the Commission on August 6, 2015. The number given in parenthesis indicates the corresponding exhibit number in such Form 8-K.
- (28) Incorporated by reference to the Form 10-K for the period ended December 31, 2009 filed with the Commission on March 22, 2010. The number given in parenthesis indicates the corresponding exhibit number in such Form 10-K.

\* Filed herewith.



**INDEX TO FINANCIAL STATEMENTS**

**Cyalume Technologies Holdings, Inc.**

**Years ended December 31, 2016 and 2015**

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders  
Cyalume Technologies Holdings, Inc.  
Fort Lauderdale, Florida

We have audited the accompanying consolidated balance sheets of Cyalume Technologies Holdings, Inc. (the “Company”) as of December 31, 2016 and 2015 and the related consolidated statements of comprehensive income, changes in preferred stock and stockholders’ equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these 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 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 also 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 Cyalume Technologies Holdings, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for the years ended December 31, 2016 and 2015, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

Boston, Massachusetts  
March 28, 2017

**Cyalume Technologies Holdings, Inc.**  
**Consolidated Balance Sheets**  
(in thousands, except share and per share information)

	December 31, 2016	December 31, 2015
<b>Assets</b>		
Current assets:		
Cash	\$ 2,753	\$ 1,526
Accounts receivable, net of allowance for doubtful accounts of \$8 and \$5, respectively	3,379	4,299
Inventories, net	8,384	7,528
Income taxes refundable	187	442
Prepaid expenses and other current assets	1,078	1,388
<b>Total current assets</b>	<b>15,781</b>	<b>15,183</b>
Property, plant and equipment, net	7,036	6,795
Goodwill	7,992	7,992
Other intangible assets, net	4,951	5,691
<b>Total assets</b>	<b>\$ 35,760</b>	<b>\$ 35,661</b>
<b>Liabilities, Preferred Stock and Stockholders' Equity</b>		
Current liabilities:		
Line of credit	\$ 0	\$ 1,000
Current portion of notes payable	1,066	274
Accounts payable	1,643	947
Accrued expenses	4,236	3,858
Deferred revenue and deferred rent	37	125
Income taxes payable	82	327
Warrants liability	72	54
<b>Total current liabilities</b>	<b>7,136</b>	<b>6,585</b>
Notes payable, net of current portion	11,752	15,207
Deferred income taxes	626	567
Asset retirement obligation	226	214
Other noncurrent liabilities, net of current portion	88	81
<b>Total liabilities</b>	<b>19,828</b>	<b>22,654</b>
Commitments and contingencies (Note 16)		
Series C preferred stock, \$0.001 par value; 1,000,000 shares authorized; 1,000 shares issued and outstanding	2,665	2,367
Series D convertible preferred stock, \$0.001 par value; 1,000,000 shares authorized; 10 shares issued and outstanding	2,751	2,751
Series A convertible preferred stock, \$0.001 par value; 1,000,000 shares authorized; 123,097 shares issued and outstanding	5,784	5,137
Stockholders' equity:		
Series B convertible preferred stock, \$0.001 par value; 1,000,000 shares authorized; 1,000 shares issued and outstanding	1,401	1,401
Common stock, \$0.001 par value; 150,000,000 shares authorized; 21,400,244 shares issued and outstanding	21	21
Additional paid-in capital	102,031	102,624
Accumulated deficit	(97,618)	(100,315)
Accumulated other comprehensive loss	(1,103)	(979)
<b>Total stockholders' equity</b>	<b>4,732</b>	<b>2,752</b>
<b>Total liabilities, preferred stock and stockholders' equity</b>	<b>\$ 35,760</b>	<b>\$ 35,661</b>

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



**Cyalume Technologies Holdings, Inc.**  
**Consolidated Statements of Comprehensive Income**  
(in thousands, except share and per share information)

	For the Year Ended December 31, 2016	For the Year Ended December 31, 2015
Revenues	\$ 41,268	\$ 37,842
Cost of revenues	20,768	20,448
Gross profit	<u>20,500</u>	<u>17,394</u>
Other expenses (income):		
Sales and marketing	2,717	2,375
General and administrative	8,842	7,576
Research and development	1,535	1,396
Interest expense, net	2,851	2,934
Interest expense – related party	0	100
Amortization of intangible assets	960	954
Legal settlement	55	(1,381)
Change in fair value of warrants liability	18	29
Other expenses (income), net	10	(73)
Total other expenses	<u>16,988</u>	<u>13,910</u>
Income before income taxes	3,512	3,484
Provision for income taxes	815	209
Net income	<u>\$ 2,697</u>	<u>\$ 3,275</u>
Other comprehensive loss, net of tax:		
Foreign currency translation adjustments	\$ (124)	\$ (318)
Other comprehensive loss	<u>(124)</u>	<u>(318)</u>
Comprehensive income	<u>\$ 2,573</u>	<u>\$ 2,957</u>
Net income	\$ 2,697	\$ 3,275
Series A convertible preferred stock dividends	(647)	(573)
Series C preferred stock dividends	(298)	(264)
Net income available to common stockholders – basic	<u>\$ 1,752</u>	<u>\$ 2,438</u>
Convertible related party promissory note	0	45
Series A convertible preferred stock dividends	647	573
Net income available to common stockholders – diluted	<u>\$ 2,399</u>	<u>\$ 3,056</u>
Earnings per common share:		
Basic	\$ 0.08	\$ 0.11
Diluted	\$ 0.02	\$ 0.03
Weighted average outstanding common shares used to compute earnings per common share:		
Basic	21,400,244	21,400,244
Diluted	107,353,751	102,376,045

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

**Cyalume Technologies Holdings, Inc.**  
**Consolidated Statements of Changes in Preferred Stock and Stockholders' Equity**  
(in thousands, except shares)

	Series A Convertible Preferred Stock		Series C Preferred Stock		Series D Convertible Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount	Number of Shares	Amount				
Balance at December 31, 2014	123,077	\$ 4,564	1,000	\$ 2,103	0	\$ 0	1,000	\$ 1,401	21,400,244	\$ 21	\$ 103,014	\$ (103,590)	\$ (661)	\$ 185
Dividends accrued on Series A and Series C preferred stock	0	573	0	264	0	0	0	0	0	0	(837)	0	0	(837)
Issuance of Series A & D convertible preferred stock	20	0	0	0	10	2,751	0	0	0	0	0	0	0	0
Relative fair value allocated to Dragonfly warrant issued	0	0	0	0	0	0	0	0	0	0	43	0	0	43
Share-based compensation	0	0	0	0	0	0	0	0	0	0	404	0	0	404
Net income	0	0	0	0	0	0	0	0	0	0	0	3,275	0	3,275
Other comprehensive loss	0	0	0	0	0	0	0	0	0	0	0	0	(318)	(318)
Balance at December 31, 2015	123,097	\$ 5,137	1,000	\$ 2,367	10	\$ 2,751	1,000	\$ 1,401	21,400,244	\$ 21	\$ 102,624	\$ (100,315)	\$ (979)	\$ 2,752
Dividends accrued on Series A and Series C preferred stock	0	647	0	298	0	0	0	0	0	0	(945)	0	0	(945)
Share-based compensation	0	0	0	0	0	0	0	0	0	0	352	0	0	352
Net income	0	0	0	0	0	0	0	0	0	0	0	2,697	0	2,697
Other comprehensive loss	0	0	0	0	0	0	0	0	0	0	0	0	(124)	(124)
Balance at December 31, 2016	123,097	\$ 5,784	1,000	\$ 2,665	10	\$ 2,751	1,000	\$ 1,401	21,400,244	\$ 21	\$ 102,031	\$ (97,618)	\$ (1,103)	\$ 4,732

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

**Cyalume Technologies Holdings, Inc.**  
**Consolidated Statements of Cash Flows**  
(in thousands)

	<b>For the Year Ended December 31, 2016</b>	<b>For the Year Ended December 31, 2015</b>
<b>Cash flows from operating activities:</b>		
Net income	\$ 2,697	\$ 3,275
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization of property, plant and equipment	888	1,228
Amortization of intangible assets, debt issuance costs and debt discount	1,957	1,855
Provision for deferred income taxes	73	138
Share-based compensation expense	352	404
Change in fair value of derivatives	0	(29)
Change in fair value of warrants liability	18	29
Non-cash interest expense	0	414
Legal settlement	0	(1,381)
Loss on disposal of property, plant and equipment	27	0
Other non-cash expenses	52	18
Changes in operating assets and liabilities:		
Accounts receivable	890	(154)
Inventories	(894)	203
Prepaid expenses and other current assets	20	23
Restricted cash	153	(153)
Accounts payable and accrued liabilities	1,098	(21)
Accrued interest on note payable to related party	0	(504)
Deferred revenue and deferred rent	(88)	(56)
Income taxes payable	7	(743)
Change in legal obligation – settlement payments	0	(1,400)
Net cash provided by operating activities	<u>7,250</u>	<u>3,146</u>
<b>Cash flows from investing activities:</b>		
Purchases of long-lived assets	(1,189)	(1,034)
Payments for intangibles	(239)	(157)
Net cash used in investing activities	<u>(1,428)</u>	<u>(1,191)</u>
<b>Cash flows from financing activities:</b>		
(Repayments on) proceeds from TD Bank line of credit, net	0	(2,050)
Principal repayments on CTI long term notes payable	0	(15,880)
(Repayments) borrowings on Monroe line of credit, net	(1,000)	1,000
(Repayments) borrowings on Monroe long term notes payable, net of repayments	(3,311)	18,619
Repayment of related party note payable	0	(2,100)
Principal payments on capital lease obligations	0	(7)
Repayment of legal settlement promissory note	(215)	(215)
Payment of debt issuance and deferred financing costs	0	(2,118)
Net cash used in financing activities	<u>(4,526)</u>	<u>(2,751)</u>
Effect of exchange rate changes on cash	(69)	(36)
Net increase (decrease) in cash	<u>1,227</u>	<u>(832)</u>
Cash, beginning of period	1,526	2,358
Cash, end of period	<u>\$ 2,753</u>	<u>\$ 1,526</u>

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

**Cyalume Technologies Holdings, Inc.**  
**Notes to Consolidated Financial Statements**

**1. BACKGROUND AND DESCRIPTION OF BUSINESS**

These consolidated financial statements and footnotes include the financial position and operations of Cyalume Technologies Holdings, Inc. (“Cyalume” or the “Company”), a holding company that is the sole shareholder of Cyalume Technologies, Inc. (“CTI”), of Cyalume Specialty Products, Inc. (“CSP”) and of CT SAS Holdings, Inc. (“CT SAS Holdings”). CTI is the sole shareholder of Cyalume Realty, Inc. (“CRI”) and Combat Training Solutions, Inc. (“CTS”) and CT SAS Holdings is the sole shareholder of Cyalume Technologies, SAS (“CTSAS”). All significant intercompany accounts and transactions have been eliminated in consolidation.

The Company’s primary focus is producing specialty chemicals and related products and sub-contract manufacturing of components for use in the pharmaceutical and medical products markets. The Company sells to the U.S. military and other militaries, and to major pharmaceutical and medical device companies throughout the world.

CTI and CTSAS manufacture and sell chemiluminescent products and reflective and photoluminescent materials to military, ammunition, commercial and public safety markets. CTSAS is located in France and represents us in certain international markets, primarily Europe and the Middle East. CTI sells to customers in all other geographic markets. CTI’s and CTSAS’ business operations constitute the majority, based on revenues and assets, of our consolidated business operations.

CSP manufactures on a subcontractor basis and sells specialty chemical products to the pharmaceutical, medical products, defense and other markets. CSP’s operations are located in Bound Brook, New Jersey.

CTS provides customers with battlefield effects simulation products.

The Company’s business is managed and financial results are reported as one segment. The CEO, who is the chief operating decision maker, focuses on consolidated results to make strategic and tactical decisions. The Company’s one operating segment consists of three reporting units: Chemical Light (the operations of CTI, CTS and CTSAS), Specialty Products (the operations of CSP) and Other (the holding company CT SAS Holdings and the parent company Cyalume Technologies Holdings, Inc.).

**2. SIGNIFICANT ACCOUNTING POLICIES**

**Foreign Operations**

The accounting records of our France-based subsidiary CTSAS are maintained in Euros, their local and functional currency. For consolidation, revenue and expense transactions are translated to U.S. dollars using the average exchange rate of the month in which the transaction took place. Assets and liabilities are translated to U.S. dollars using the exchange rate in effect as of the balance sheet date. Equity transactions are translated to U.S. dollars using the exchange rate in effect as of the date of the equity transaction. Translation gains and losses are reported as a component of accumulated other comprehensive income (loss) within stockholders’ equity. Gains and losses resulting from transactions which are denominated in other than the functional currency are reported as other income or loss in the statement of comprehensive income in the period the gain or loss occurred.

**Comprehensive Income**

Comprehensive income accounts for changes in stockholders’ equity resulting from non-stockholder sources. All transactions that would cause comprehensive income to differ from net income have been recorded and disclosed and relate to the translation of the accounting records of our France-based subsidiary CTSAS.

**Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Estimates are used when accounting for certain items such as reserves for inventory, accounts receivable and deferred tax assets; assessing the carrying value of intangible assets including goodwill; determining the useful lives of property, plant and equipment and intangible assets; determining asset retirement obligations; and estimating parameters and assumptions used to determine the fair values of warrants and preferred stock. Estimates are based on historical experience, where applicable, and assumptions that are believed to be reasonable under the circumstances. Due to the inherent uncertainty involved with estimates, actual results may differ.

## **Accounts Receivable**

Accounts receivable are recorded at the aggregate unpaid amount less any allowance for doubtful accounts. The allowance is based on historical bad debt experience and the specific identification of accounts deemed uncollectible. An account receivable's delinquency status is determined based on its contractual terms. Interest is not charged on outstanding balances. Accounts are written off only when all methods of recovery have been exhausted. Credit risk is controlled through initial credit evaluations and approvals, credit limits, and monitoring procedures. Ongoing credit evaluations of customers are performed but do not require collateral to secure accounts receivable.

## **Inventories**

Inventories are stated at the lower of cost (on a first-in first-out ("FIFO") method) or market. The cost of inventory consists of raw material content, labor costs to produce the inventory and overhead costs incurred during production of the inventory. The Company periodically reviews the realizability of inventory. Provisions are recorded for potential obsolescence which requires management's judgment. Conditions impacting the realizability of inventory could cause actual write-offs to be materially different than provisions for obsolescence.

## **Property, Plant and Equipment**

Property, plant and equipment are stated at cost. Depreciation is computed under the straight-line method over the estimated useful lives of four to eight years for equipment and 30 years for buildings and improvements.

Property, plant and equipment assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Such reviews are based on a comparison of the asset's undiscounted cash flows to the recorded carrying value for the asset. Impairment charges, if any, are recorded in the period in which the impairment is determined.

## **Goodwill**

Goodwill is deemed to have an indefinite life and accordingly, is not subject to amortization. Goodwill is subject to annual impairment reviews as of August 31, and, if conditions warrant, interim reviews based upon its estimated fair value. Impairment charges, if any, are recorded in the period in which the impairment is determined.

The Company performs a traditional two-step process for assessing goodwill for impairment annually. The first step of the two-step process requires a comparison of estimated fair value for each reporting unit versus the carrying or book value. If the carrying value exceeds fair value, further analysis (step 2 of the two-step process) is required to determine the amount, if any, that goodwill is impaired. Fair value is determined using a discounted cash flow analysis.

## **Intangible Assets**

Intangible assets include developed technologies and patents, customer relationships, non-compete agreements, trademarks and trade names, all of which are amortized over their estimated useful lives. The carrying amounts of amortizing intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that those carrying amounts may not be recoverable.

Costs incurred to register new patents or defend existing patents are capitalized, while costs to renew or extend the term of intangible assets are expensed when incurred. Costs incurred with third parties that are related to internally developing or successfully defending an intangible asset are capitalized as part of the intangible asset developed or defended and amortized over that asset's remaining useful life. Such costs with third parties related to patent or trademark applications that are ultimately rejected by the relevant government authority are expensed upon rejection. The useful lives used for amortization of intangible assets are as follows:

	<u>Useful lives</u>
Patents and developed technologies	(1)
Purchased customer relationships	9 – 13 years
Trademarks and trade names	(2)
Non-compete agreements	5 years

- (1) Each patent has its own legal expiration date and, therefore, its own useful life. Generally, our patents’ legal lives begin when the related patent application is filed with the relevant government authority and ends 20 years thereafter. Amortization on patent costs begins when the relevant government authority approves the related patent. Patents that have been recorded as of December 31, 2016 are expected to expire by 2035. Impairment charges, if any, are recorded in the period in which the impairment is determined.
- (2) Trademarks and trade names of CTI are deemed to have a useful life of 15 years. CTI’s trademarks and trade names are reviewed for impairment whenever events or changes in circumstances indicate that those carrying amounts may not be recoverable. Impairment charges, if any, are recorded in the period in which the impairment is determined.

#### **Debt Issuance and Deferred Financing Costs**

Costs paid to lenders to obtain financing presented as discounts on the related debt and costs paid to third parties presented as a direct reduction from the carrying amount of the related debt (see Note 11) are amortized to interest expense over the term of the related financing, using the effective interest method, unless the financing is a line of credit. Debt issuance costs incurred in connection with the Company’s Monroe Line of Credit are amortized on a straight-line basis over the term of the Monroe Credit Agreement and are included in Prepaid expenses and other current assets (see Note 5) within the Company’s consolidated balance sheets.

#### **Derivatives**

Derivatives are recorded at their fair value as of the balance sheet date. If a derivative qualifies for “hedge accounting” under U.S. GAAP and has been designated as a hedge by us, then the “effectively hedged” portion is recorded, as defined by U.S. GAAP, of changes in such derivatives’ fair value in accumulated other comprehensive loss, which is a component of our stockholders’ equity. The Company records (i) ineffectively hedged portions of such changes in fair value or (ii) changes in the fair value of derivatives not designated as a hedge in our consolidated statement of comprehensive loss in the period the change occurred. On the consolidated statement of cash flows, cash flows from derivative instruments accounted for as cash flow hedges are classified in the same category as the cash flows from the items being hedged.

#### **Warrants Liability**

The Company uses fair values as determined by significant unobservable inputs. These estimated values are significant inputs into the Black Scholes pricing model used to calculate the estimated fair value of common warrants potentially settleable in cash, which are recorded as warrants liability. The estimated fair value of the common warrants are determined at each balance sheet date and the change in the estimated fair value of the warrants is reflected within the Company’s statements of comprehensive income.

#### **Revenue Recognition**

Revenue from the sale of products or the providing of services is recognized when the earnings process is complete, the amount of recognizable revenue can be determined, the risks and rewards of ownership have transferred to the customer and collectability is reasonably assured. Depending on the terms of the individual sales arrangement with our customer, product sales are recognized at either the shipping point or upon receipt by the customer. Costs and related expenses to manufacture the products are recorded as costs of goods sold when the related revenue is recognized. Additionally, if the right of return is granted to the buyer in a product sale, revenue is deferred until enough historical customer data is available to reasonably estimate returns and related costs.

Certain contracts provide for the sale of indefinite quantities of products at fixed per unit prices, subject to adjustment for certain economic factors. Revenue under these contracts is recognized when products ordered under the contracts are received by the customer. Whenever costs change, the pricing under these contracts is reviewed to determine whether they require the sale of products at a loss. To date, there are no loss contracts which would require the accrual of future losses in the current financial statements.

Research and development services are provided for customers for which the Company earns payments that are contingent upon achieving a specific result (“milestones”). Upon achieving such milestones, revenue is recognized provided that the payment is (i) related to past performance, (ii) reasonable relative to all of the deliverables and payment terms within the arrangement with our customer, and (iii) nonrefundable.

#### **Taxes Collected from Customers**

Sales taxes collected from customers are not considered revenue and are included in accounts payable and accrued expenses until remitted to the taxing authorities.

#### **Shipping and Handling Costs**

Outbound shipping and handling costs are included in sales and marketing expenses in the accompanying consolidated statements of comprehensive income. These costs were approximately \$243,000 and \$231,000 for the years ended December 31, 2016 and 2015, respectively.

#### **Advertising Costs**

Advertising costs are expensed as incurred and are included in sales and marketing expenses in the accompanying consolidated statements of comprehensive income. Advertising expense was approximately \$302,000 and \$67,000 for the years ended December 31, 2016 and 2015, respectively.

#### **Stock-Based Compensation**

Stock-based compensation is incurred related to awards of common stock, restricted common stock and options to employees and non-employees. Those awards granted to employees are measured at their fair value on the date the award is granted and are recognized in our consolidated financial statements over the period the grantee is required to provide services in exchange for the award. When recognized as an expense, the fair value of the award, less estimated forfeitures, is recognized on a straight-line basis over the award service period; if there is no such service period, then the entire fair value of the award is recognized as expense on the grant date.

The fair value of share-based payments to non-employees is estimated at each reporting period, until a measurement date is reached, and recorded as expense over the service period.

#### **Research and Development**

The Company has research and development groups with full-time chemists and engineers at both the West Springfield and Bound Brook facilities. The research and development groups are focused on maintaining quality of existing products, developing improvements to existing products, and developing new technologies and products with viable commercial applications. Research and development costs are expensed as incurred.

#### **Income Taxes**

Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. Deferred tax assets are recognized when, based upon available evidence, realization of the assets is more likely than not. In assessing the realization of long-term deferred income tax assets, it is considered whether it is more likely than not that the deferred income tax assets will be realized. The realization of deferred income tax assets depends upon future taxable income in years before net operating loss carryforwards expire. The recoverability of deferred income tax assets is evaluated on a quarterly basis. If the Company determines that it is more likely than not that deferred income tax assets will not be recovered, a valuation allowance is established against some or all deferred income tax assets.

When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefit associated with tax positions taken that exceeds the amount measured as described above, if such a position existed, would be reflected as a liability for unrecognized tax benefits in the accompanying balance sheet along with any associated interest and penalties that would be payable to the taxing authorities upon examination. There were no such positions as of December 31, 2016 or 2015.

Interest on tax deficiencies is classified as interest expense and income tax penalties are classified as other expense.

In September 2015, the IRS completed an audit of our tax return for the year 2013. There were no adjustments to our 2013 tax return. The tax returns filed for the 2015 and 2014 years are still open for audit. The tax return for 2015 was filed on September 9, 2016 under a filing extension. The tax return for 2016 is expected to be filed under a filing extension prior to September 15, 2017.

### Net Income per Common Share

Basic earnings per common share is computed by dividing net income available to common stockholders by the basic weighted average number of common shares outstanding. Diluted earnings per common share is computed by dividing net income available to common stockholders by the weighted average number of common shares and dilutive potential common share equivalents then outstanding. Potential common share equivalents consist of (i) shares issuable upon the exercise of warrants and options (using the “treasury stock” method), (ii) unvested restricted stock awards (using the “treasury stock” method) and (iii) shares issuable upon conversion of convertible notes and convertible preferred stock using the “if-converted” method.

	(in thousands, except shares and per share information)	
	Year Ended December 31,	
	2016	2015
<b>Numerator (in thousands):</b>		
Net income	\$ 2,697	\$ 3,275
Series A convertible preferred stock dividends	(647)	(573)
Series C preferred stock dividends	(298)	(264)
Net income available to common stockholders – basic	\$ 1,752	\$ 2,438
Effect of dilutive securities:		
Add: Convertible related party promissory note	0	45
Add: Series A convertible preferred stock dividends	647	573
Income available to common stockholders – diluted	\$ 2,399	\$ 3,056
<b>Denominator:</b>		
Weighted average common shares outstanding – basic	21,400,244	21,400,244
Weighted average effect of dilutive common equivalent shares:		
Assumed conversion of Series A convertible preferred stock	42,331,462	37,598,865
Assumed conversion of Series B convertible preferred stock	35,713,147	35,713,147
Assumed conversion of Series D convertible preferred stock	7,528,078	4,661,221
Convertible related party note	0	2,766,876
Warrants	371,701	234,214
Options	9,119	1,478
Weighted average common shares outstanding – diluted	107,353,751	102,376,045
<b>Earnings per common share:</b>		
Basic	\$ 0.08	\$ 0.11
Diluted	\$ 0.02	\$ 0.03



The following potentially dilutive common share equivalents were excluded from the calculation of diluted earnings per common share because their effect was antidilutive for each of the periods presented:

	<b>Year Ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Options	10,420,573	10,505,322
Warrants	455,514	455,514

### **Fair Value**

Under U.S. GAAP, the Company is required to record certain financial assets and liabilities at fair value and may choose to record other financial assets and financial liabilities at fair value as well. Also under U.S. GAAP, the Company is required to record nonfinancial assets and liabilities at fair value due to events that may or may not recur in the future, such as an impairment event. When required to record such assets and liabilities at fair value, that fair value is estimated using an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. That fair value is determined based on significant inputs contained in a fair value hierarchy as follows:

- Level 1** Quoted prices for identical assets or liabilities in active markets to which we have access at the measurement date.
- Level 2** Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3** Unobservable inputs for the asset or liability.

The determination of where assets and liabilities fall within this hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

There are three general valuation techniques that may be used to measure fair value, as described below:

- Market Approach** Uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. Prices may be indicated by pricing guides, sale transactions, market trades, or other sources.
- Cost Approach** Based on the amount that currently would be required to replace the service capacity of an asset (replacement cost).
- Income Approach** Uses valuation techniques to convert future amounts to a single present amount based on current market expectations about the future amounts (includes present value techniques and option-pricing models). Net present value is an income approach where a stream of expected cash flows is discounted at an appropriate market interest rate.

### **Recent Accounting Pronouncements**

The following are recent accounting pronouncements that have affected the Company's consolidated financial statements or may affect the Company's consolidated financial statements in the future.

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers*, as a new Topic, Accounting Standards Codification ("ASC") Topic 606. The new revenue recognition standard relates to revenue from contracts with customers, which, along with amendments issued in 2015 and 2016, will supersede nearly all current U.S. GAAP guidance on this topic and eliminate industry-specific guidance. The underlying principle is to use a five-step analysis of transactions to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The Company is in the initial stages of evaluating the effect of adopting ASU 2014-09 on its consolidated financial statements. The planned approach includes performing a detailed review of key contracts representative of the different businesses and comparing historical accounting policies and practices to the new accounting guidance. The Company will continue its evaluation of the standards update through the date of adoption. The Company plans to adopt this standard utilizing the modified retrospective approach.

In April 2015, the FASB issued ASU 2015-03, *Interest – Imputation of Interest (Subtopic 835-30) Simplifying the Presentation of Debt Issuance Costs* ("ASU 2015-03"). ASU 2015-03 states that entities that have historically presented debt issuance costs as an asset, related to a recognized debt liability, are required to present those costs as a direct deduction from the carrying amount of that debt liability. This presentation resulted in debt issuance costs being presented the same way debt discounts have historically been handled. ASU 2015-03 does not change the recognition, measurement, or subsequent measurement guidance for debt issuance costs. This guidance was effective for the Company as of January 1, 2016 and adopted. This new guidance reduced total assets and total long-term debt on its condensed consolidated balance sheets by amounts classified as deferred debt issuance costs relating to the Company's Term A Loan and Delayed Draw Loan, but did not have any other effect on its condensed consolidated financial statements when adopted.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* ("ASU 2015-11"). The amendments in ASU 2015-11 require an entity to measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. The amendments do not apply to inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. This guidance is effective for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. A reporting entity should apply the amendments prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The

Company does not expect ASU 2015-11 to have a material impact on the consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10)* (“ASU 2016-01”), which updates certain aspects of recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 will be effective for the Company beginning in its first quarter of 2019 and early adoption is not permitted. The Company does not expect the adoption of ASU 2016-01 will have a material impact on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which requires companies that are lessees to recognize a right-of-use asset and lease liability for most leases that do not meet the definition of a short-term lease. For income statement purposes, leases will continue to be classified as either operating or financing. Classification will be based on criteria that are largely similar to those applied in current lease accounting. This standard will result in extensive qualitative and quantitative disclosure changes. This standard will be effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period. While the Company is currently assessing the impact ASU No. 2016-02 will have on its consolidated financial statements, the Company expects the primary impact upon adoption will be the recognition, on a discounted basis, of its minimum commitments under noncancellable operating leases on its consolidated balance sheets resulting in the recording of right of use assets and lease obligations. Current minimum commitments under noncancellable operating leases are disclosed in Note 16, *Commitments and Contingencies*.

In March 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2016-09, *Compensation- Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”). The purpose of the update is to simplify several areas of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for annual reporting periods after December 15, 2016, including interim periods within those fiscal periods. Early adoption is permitted. The Company does not expect the adoption of ASU No. 2016-19 to have a material impact on the Company’s consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230) – Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which clarifies how certain cash receipts and payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted. The amendments in ASU 2016-15 should be applied using a retrospective transition method to each period presented. The Company does not expect the adoption of ASU 2016-15 to have a material impact on its statement of cash flows.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230) – Restricted Cash* (“ASU 2016-18”), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash and restricted cash equivalents. With this standard, amounts generally described as restricted cash or restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning of period and end of period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted. The Company does not expect the adoption of ASU 2016-18 to have a material impact on its statement of cash flows and related disclosures.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment* (“ASU 2017-04”) which removes the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment. A goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. ASU 2017-04 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Early adoption is permitted and applied prospectively. The Company does not expect ASU 2017-04 to have a material impact on its financial statements.

### 3. IMPAIRMENT REVIEWS

Management conducts annual impairment reviews as of August 31, and, if conditions warrant, interim reviews of long-lived tangible and intangible assets for impairment. Before assessing whether any of the Company’s reporting units’ goodwill is impaired, the Company first assesses whether any long-lived assets were impaired. Goodwill is subject to annual impairment reviews as of August 31, and, if conditions warrant, interim reviews based upon its estimated fair value. Impairment charges, if any, are recorded in the period in which the impairment is determined. There were no impairment charges during 2016 and 2015.

### 4. INVENTORIES

Inventories, net consist of the following (all amounts in thousands):

	2016	2015
Raw materials	\$ 4,568	\$ 4,406
Work-in-process	2,267	1,809
Finished goods	1,549	1,313
	<u>\$ 8,384</u>	<u>\$ 7,528</u>

### 5. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consist of the following (all amounts in thousands):

	2016	2015
Prepaid expenses	\$ 617	\$ 594
Debt issuance costs	456	591
Restricted cash <sup>(1)</sup>	0	153
Other current assets	5	50
	<u>\$ 1,078</u>	<u>\$ 1,388</u>

(1) As of December 31, 2015, the Company had cash collateralizing a letter of credit for approximately \$153,000 which was used to facilitate purchases from overseas vendors. This letter of credit matured on February 22, 2016 and was included in "Prepaid expenses and other current assets" in the Company's Consolidated Balance Sheet as of December 31, 2015.

## 6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consist of the following (all amounts in thousands):

	2016	2015
Land	\$ 1,248	\$ 1,252
Building and improvements	4,140	3,890
Machinery and equipment	9,498	8,877
Leasehold improvements	494	322
Furniture and fixtures	150	140
Software	157	132
	<u>15,687</u>	<u>14,613</u>
Less: accumulated depreciation and amortization	(8,651)	(7,818)
	<u>\$ 7,036</u>	<u>\$ 6,795</u>

Depreciation and amortization on property, plant and equipment was approximately \$0.9 million during the year ended December 31, 2016 and was approximately \$1.2 million during the year ended December 31, 2015.

## 7. GOODWILL

Goodwill represents the excess of the cost of acquiring CTI and CTSAS in 2008 and CSP and CTS in 2011 over the net fair value assigned to the assets acquired and liabilities assumed in those acquisitions, net of adjustments and impairment losses. Changes in the carrying amount of goodwill consist of the following (all amounts in thousands):

	CTI/CTSAS/CTS Chemical Light	CSP	Total Consolidated Goodwill
Balance on December 31, 2014 <sup>(1)</sup>	\$ 5,014	\$ 2,978	\$ 7,992
Impairment loss (see Note 3)	0	0	0
Balance on December 31, 2015 <sup>(1)</sup>	\$ 5,014	\$ 2,978	\$ 7,992
Impairment loss (see Note 3)	0	0	0
Balance on December 31, 2016 <sup>(2)</sup>	<u>\$ 5,014</u>	<u>\$ 2,978</u>	<u>\$ 7,992</u>

(1)(2) Gross amount of goodwill was approximately \$67.7 million as of December 31, 2016 and 2015. Accumulated impairment losses incurred prior to 2016 were approximately \$59.7 million as of December 31, 2016 and 2015.

## 8. OTHER INTANGIBLE ASSETS

Intangible assets as of December 31, 2016 consist of the following (all amounts in thousands):

	Cost	Accumulated Amortization	Net Book Value
Developed technologies, including patents <sup>(1)</sup>	\$ 8,946	\$ 7,229	\$ 1,717
Trademarks and trade names <sup>(4)</sup>	1,076	499	577
Purchased customer relationships <sup>(2)</sup>	8,306	5,824	2,482
Non-compete agreements <sup>(3)</sup>	160	160	0
Website development costs	196	21	175
	<u>\$ 18,684</u>	<u>\$ 13,733</u>	<u>\$ 4,951</u>

Intangible assets as of December 31, 2015 consist of the following (all amounts in thousands):

	Cost	Accumulated Amortization	Net Book Value
Developed technologies, including patents <sup>(1)</sup>	\$ 8,865	\$ 6,903	\$ 1,962
Trademarks and trade names <sup>(4)</sup>	1,070	450	620
Purchased customer relationships <sup>(2)</sup>	8,368	5,314	3,054
Non-compete agreements <sup>(3)</sup>	160	139	21
Website development costs	42	8	34
	<u>\$ 18,505</u>	<u>\$ 12,814</u>	<u>\$ 5,691</u>



- (1) Includes a patent obtained in the acquisition of CSP with a cost of \$50,000 that is expected to be fully amortized in August 2026 and also includes \$17,000 of CTS patents which were transferred to CTI in 2014.
- (2) Includes customer relationships obtained in the acquisition of CSP with a cost of \$920,000 that is expected to be fully amortized in December 2019. \$60,000 of CTS customer relationships was transferred to CTI in 2014.
- (3) Includes a non-compete agreement obtained in the acquisition of CSP with a cost of \$160,000 which was fully amortized in August 2016.
- (4) Includes CTI trademarks and trade names.

Trademarks can be renewed without substantial cost. If trademark and trade names are not renewed, then expected future cash flows associated with trademarks and trade names could be adversely affected.

Amortization of intangible assets was approximately \$1.0 million for both the years ended December 31, 2016 and 2015.

During 2016, the Company capitalized approximately \$6,000 and \$80,000 of costs paid to third parties to create or defend trademarks and patents, respectively. During 2015, the Company capitalized approximately \$2,000 and \$130,000 of costs paid to third parties to create or defend trademarks and patents, respectively. The Company expects the patent-related costs to be amortized over approximately 20 years. The Company does not consider any intangible assets to have residual value.

The future amortization expense relating to finite-lived intangible assets for the next five years and beyond is estimated at December 31, 2016 to be (all amounts in thousands):

**Year Ending December 31,**

2017	\$	936
2018		925
2019		855
2020		715
2021		667
Thereafter		853
	<u>\$</u>	<u>4,951</u>

**9. DEBT ISSUANCE COSTS**

Debt issuance costs consist of unamortized costs paid to third parties in connection with the Company's debt (see Note 11). Debt issuance costs are amortized to interest expense using the effective interest method. Amortization of capitalized debt issuance costs was approximately \$369,000 and \$240,000 for the years ended December 31, 2016 and 2015, respectively.

The future amortization expense relating to current and noncurrent capitalized debt issuance costs is approximately \$1.2 million and will be amortized to interest expense using the effective interest method through 2020.

**10. ACCRUED EXPENSES**

Accrued expenses consist of the following (all amounts in thousands):

	2016	2015
Payroll-related <sup>(1)</sup>	\$ 2,416	\$ 2,727
Interest payable	15	9
Professional fees	168	101
Franchise and sales tax payable	1	18
Warranty reserve and returns reserve	437	28
Other	1,199	975
	<u>\$ 4,236</u>	<u>\$ 3,858</u>

- (1) Accrued payroll-related costs as of December 31, 2016 include approximately \$1.6 million of accrued bonus costs and approximately \$7,000 of accrued severance costs. Accrued payroll-related costs as of December 31, 2015 include approximately \$1.8 million of accrued bonus costs and approximately \$124,000 of accrued severance costs.

## 11. CREDIT LINE AND NOTES PAYABLE

### Monroe Refinancing

On May 18, 2015, the Company entered into a credit agreement with Monroe Capital Management Advisors, LLC (the “Monroe Credit Agreement”), refinancing its existing senior and subordinated debt (see below). The Monroe Credit Agreement provides for a \$25.0 million credit facility consisting of up to: (i) a \$5.0 million revolving credit facility (the “Monroe Line of Credit”); (ii) an \$18.0 million senior secured term loan (the “Term A Loan”) and (iii) a \$2.0 million delayed draw term loan (the “Delayed Draw Loan”). The Delayed Draw Loan was used to satisfy the Omniglow Settlement Agreement amount as described further in Note 16.

The Monroe Credit Agreement has a term of five years and bears interest at a rate of the one-month LIBOR plus 9%. The Term A Loan requires quarterly repayments of approximately \$113,000 beginning on June 30, 2015 through March 31, 2016; quarterly repayments of approximately \$225,000 beginning on June 30, 2016 through March 31, 2017; quarterly repayments of approximately \$450,000 beginning on June 30, 2017 through March 31, 2020; and a payment of approximately \$11.3 million on the Term A Loan maturity date of May 18, 2020. Accrued interest shall be payable monthly in arrears on the last business day of each calendar month.

Pursuant to the terms of the Monroe Credit Agreement, the Company must maintain: (i) a fixed charge coverage ratio of 1.25 to 1.00; (ii) a senior debt to EBITDA ratio of 4.50 to 1.00 initially, decreasing to 1.50 to 1.00 over the term of the loans; and (iii) a twelve month trailing EBITDA, measured quarterly, in the amount of \$4,750,000 initially, increasing to \$7.0 million over the term of the loans. The Company was in compliance with the financial covenants related to these loans as of December 31, 2016.

On August 3, 2015, the Company entered into a First Amendment (the “First Amendment”) to the Monroe Credit Agreement. Pursuant to the First Amendment, the Monroe Credit Agreement was amended to, among other things, reduce the aggregate amount of the Delayed Draw Loan under the Monroe Credit Agreement, which loan commitment was for purposes of funding the final payment due under the Settlement Agreement, from \$2.0 million to \$1.5 million. On August 3, 2015, the full amount of the Delayed Draw Loan was funded to the Company, \$1.4 million of which was used to make the Reduced Final Payment, and the remaining \$100,000 of which was paid to the Agent as a deferred closing fee. The First Amendment also modified, for certain periods during the term of the Credit Agreement, (i) the maximum senior debt to EBITDA ratio that the Company is required to maintain and (ii) the applicable limits on the Company’s aggregate permitted capital expenditures pursuant to the terms of the Credit Agreement.

The Delayed Draw Loan, which was drawn on August 3, 2015, provides for quarterly amortization payments on the last day of each calendar quarter in an aggregate principal amount equal to 0.625% of the original principal amount of the Delayed Draw Loan, increasing to 1.25% on March 31, 2016, and increasing to 2.5% on March 31, 2017, with the balance payable on the maturity date of May 18, 2020.

In connection with the execution of the Monroe Credit Agreement, the Company issued 10 shares of Series D convertible preferred stock (the “Series D Convertible Preferred Stock”). Each share of Series D Convertible Preferred Stock may be converted at any time at the option of the holder into a number of shares of common stock initially equal to 752,807.8 shares of common stock (see Note 17). The relative fair value of the Series D Convertible Preferred Stock is approximately \$2.8 million which has been recorded as debt issuance costs of approximately \$0.4 million and debt discount on the Company’s Term A Loan and Delayed Draw Loan of approximately \$2.4 million.

The proceeds from the Monroe Credit Agreement were allocated to the various instruments issued based on their relative fair value.

### Line of Credit

The Monroe Line of Credit has a maximum borrowing capacity of \$5.0 million, bears interest at a rate of the one-month LIBOR plus 9% and expires on May 18, 2020. The Monroe Line of Credit replaced the Company’s previous line of credit with TD Bank N.A. (“TD Bank”). The amount which may be borrowed under the Monroe Line of Credit is dependent mainly on accounts receivable and inventory balances. Under the terms of the Monroe Credit Agreement, the Company is able to borrow under the Monroe Line of Credit in an amount not to exceed the lesser of: (i) \$5.0 million and (ii) the sum of 85% of all eligible accounts receivable plus 60% of all eligible inventory. Interest is payable monthly and the Monroe Line of Credit’s interest rate at December 31, 2016 was 10%. This line of credit is subject to various restrictive covenants and collateral guarantees. At December 31, 2016, there were no outstanding borrowings on the Monroe Line of Credit and availability under the Company’s revolving credit facility was approximately \$3.9 million.

CTSAS has lines of credit, for borrowing against receivables, with a combined maximum borrowing capacity of €750,000 (or approximately \$789,000 as of December 31, 2016). There were no outstanding borrowings at December 31, 2016 or December 31, 2015. The lines' interest rates are variable, based on the 3-month Euro Interbank Offered Rate. The lines are collateralized by primarily CTSAS accounts receivable. The lines have indefinite termination dates but can be renegotiated periodically.

### Notes Payable

Outstanding notes payable consist of (all amounts in thousands):

	2016	2015
Monroe Term A Loan	\$ 14,042	\$ 17,138
Delayed Draw Loan	1,266	1,481
Promissory Note Payable	430	645
Total	15,738	19,264
Less: Unamortized debt discount and unamortized debt issuance costs	(2,920)	(3,783)
Less: Current portion of notes payable, including current portion of unamortized debt discount and current portion of unamortized debt issuance costs	(1,066)	(274)
Notes payable, net of current portion	<u>\$ 11,752</u>	<u>\$ 15,207</u>

Debt issuance costs are amortized to interest expense using the effective interest method over the life of the loan.

### Term Loans

In addition to the previous line of credit with TD Bank, CTI previously had two loans payable to TD Bank, a Term Loan and a Real Estate Loan (together, the "Senior Debt"), that were originally entered into on December 19, 2008, and which were amended twice during 2012 to modify certain financial and non-financial covenants required by these loans. The Fourth Amendment to the Amended and Restated Revolving Credit and Term Loan Agreement (the "Senior Amendment") was entered into on November 19, 2013.

On July 29, 2010, the subordinated term loan of \$8.5 million (the "Subordinated Term Loan") was issued to Granite Creek Partners Agent, LLC ("Granite Creek") and on November 19, 2013, the Company entered into a Fourth Amendment to the Subordinated Term Loan (the "Subordinated Amendment") which extended the maturity date to June 30, 2016. Pursuant to the Subordinated Amendment, interest was being accrued in kind monthly at a rate of 11% per annum. No principal payments were required until maturity. The Subordinated Term Loan was convertible at any time by Granite Creek into 2,666,667 shares of common stock at a conversion price of approximately \$3.19 per share. No portion of the Subordinated Term Loan was converted to the Company's common stock. The Company previously determined that the convertible notes' conversion feature was not a beneficial conversion feature under U.S. GAAP. Simultaneous with the issuance of the Subordinated Term Loan during 2010, the Company issued warrants to repay certain costs of obtaining the convertible notes. These warrants allowed the holder to purchase 160,000 shares of common stock at \$1.50 per share through July 19, 2018. A portion of the \$8.5 million gross proceeds from the issuance of the loan was allocated to the warrants based on the relative fair values of the debt instrument without the warrants and of the warrants themselves at time of issuance. The portion of the proceeds so allocated to the warrants was recorded as a debt discount and an increase to additional paid-in capital. The warrant's fair value was increased in 2012 due to (i) a decrease in the exercise price of the warrants and (ii) an extension of the term of the warrant. The warrants were amended again during 2013 in connection with the Senior Amendment described above. An additional amount was added to debt discount and warrant liability during 2013 relating to (i) another decrease in the exercise price of the warrants to \$0.01, (ii) an extension of the term of the warrants, and (iii) an increase to the number of shares of common stock that may be purchased upon exercise of the warrants to 455,514 shares of common stock that may be purchased. The debt discount was being amortized to interest expense using the effective interest method over the life of the convertible notes which had a maturity date of June 30, 2016. As a result of the amendment to the warrants in 2013, the warrants are no longer indexed to the Company's stock, are considered a derivative and therefore, are being accounted for as a liability. The warrant liability relating to the 455,514 shares of common stock which may be purchased upon exercise of the warrants is approximately \$72,000 as of December 31, 2016 (see Note 18).

The Company's Senior Debt and Subordinated Term Loan were refinanced on May 18, 2015.

Upon the consummation of the Monroe Credit Agreement, the Company paid in full all amounts due under (i) the Amended and Restated Revolving Credit and Term Loan Agreement, dated July 29, 2010, as amended (the "Senior Credit Agreement"), by and among the Company, CTI, certain of the Company's other subsidiaries and TD Bank, as administrative agent and lender, (ii) the Subordinated Term Loan, dated July 29, 2010, as amended (the "Subordinated Loan Agreement"), by and among the Company,



CTI, certain of the Company's other subsidiaries, Granite Creek Flexcap I, L.P., Patriot Capital II, L.P. and Granite Creek Partners Agent, L.L.C., as administrative agent, and (iii) the amended and restated promissory note, dated November 19, 2013, as amended, previously issued by the Company to JFC Technologies, LLC (the "Amended JFC Note") (see Note 12), such that each of the Senior Credit Agreement, the Subordinated Loan Agreement and the Amended JFC Note was paid in full and the Company has no further financial obligations thereunder. At the time of the refinancing, the Company expensed the remaining unamortized issuance costs relating to the previous Senior Debt and Subordinated Term Loan.

Interest costs during 2016 and 2015 for the Monroe Term A Loan and the Delayed Draw Loan are as follows (all amounts in thousands):

	2016		2015	
	Term A Loan	Delayed Draw Loan	Term A Loan	Delayed Draw Loan
Contractual interest coupon rate	\$ 1,625	\$ 144	\$ 1,125	\$ 65
Amortization of related debt discount and debt issuance costs	776	86	411	30
Total interest expense recognized on the Monroe debt	<u>\$ 2,401</u>	<u>\$ 230</u>	<u>\$ 1,536</u>	<u>\$ 95</u>

The effective interest rate on the Term A loan is approximately 19% and the effective interest rate on the Delayed Draw Loan is approximately 22%.

#### Promissory Note Payable

On November 19, 2013, the Company entered into a legal settlement agreement. The executed settlement agreement provided for the Company to make a series of payments to Antonio Colon in the amount of \$215,000 annually, for a total of \$1,075,000 pursuant to the Promissory Note executed on November 19, 2013 (the "Promissory Note"). This Promissory Note bears interest at a rate of 2% annually and requires principal and interest payments each March and September. The Promissory Note has a maturity date of October 15, 2018.

#### Future Minimum Payments

As of December 31, 2016, future minimum payments due for notes payable for each of the five succeeding years and beyond are as follows (all amounts in thousands):

Year Ending December 31,	
2017	1,940
2018	2,165
2019	1,950
2020	9,683
	<u>\$ 15,738</u>

Amortization of debt discount was approximately \$628,000 and \$661,000 for the years ended December 31, 2016 and 2015, respectively.

## 12. RELATED PARTY TRANSACTIONS

#### Financing Arrangements with Related Parties

In December 2012, the Company entered into a \$2.1 million unsecured promissory note with JFC Technologies, LLC ("JFC"), an entity controlled by James Schleck, a previous employee of CSP, who is an owner of a significant amount of the Company's common shares and is a Board member. On November 19, 2013, the unsecured promissory note was amended (the "Amended JFC Note"). Pursuant to the Amended JFC Note (see Note 11), interest accrued at the rate of 12% per annum, retroactive to the date of the original note. On May 18, 2015, the Amended JFC Note of approximately \$2.1 million and approximately \$0.5 million of accrued interest on the Amended JFC Note were repaid in connection with the Company refinancing its debt. Pursuant to the Amended JFC Note, up to \$1.0 million of the principal amount was convertible, at the option of JFC, into the number of shares of Series A Preferred Stock equal to the portion of the principal amount being converted divided by the conversion price of \$32.50 per share. On May 18, 2015, \$650 was converted into 20 shares of Series A Preferred Stock issued to James Schleck.

CSP leases property in Bound Brook, New Jersey, from Brook Industrial Park, LLC. This lease required monthly lease payments of approximately \$30,000 and ended on August 31, 2016. This lease is currently on a month-to-month basis.

Bayonet Capital Fund I, LLC, Brook Industrial Park, LLC and JFC are controlled by James Schleck. On July 30, 2014, units of securities of the Company (the "Units") were issued to Bayonet Capital Fund I, LLC (see Note 17), with each Unit comprising (1) one share of Series B Convertible Preferred Stock of the Company, par value \$0.001 per share (the "Series B Preferred Stock"), and (2) one share of Series C Preferred Stock of the Company, par value \$0.001 per share (the "Series C Preferred Stock").

#### Other Related Party Transactions

CSP sells product to Organic Dyes and Pigments, LLC ("Organic Dyes"). Michael Barry, a Board member of the Company, owns approximately 19% of Organic Dyes. Revenue from this CSP customer was approximately \$0.4 million and less than \$0.1 million for the years ended December 31, 2016 and December 31, 2015, respectively. The accounts receivable balances due from Organic Dyes were less than \$0.1 million as of December 31, 2016 and 2015.

### 13. INCOME TAXES

The components of income (loss) before income taxes are as follows (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Domestic	\$ 2,945	\$ 2,752
Foreign	567	732
	<u>\$ 3,512</u>	<u>\$ 3,484</u>

Provision for income taxes consisted of the following (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Current:		
Federal	\$ 399	\$ (196)
State	81	(43)
Foreign	276	310
Deferred:		
Federal	(128)	(101)
State	285	298
Foreign	(98)	(59)
Provision for income taxes	<u>\$ 815</u>	<u>\$ 209</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The primary sources of these differences relate to the carrying value of identified intangible assets, inventories, fixed assets, certain accruals and reserves.

Deferred income tax assets and liabilities consist of the following (all amounts in thousands):

	December 31, 2016	December 31, 2015
Deferred tax assets:		
Federal	\$ 13,040	\$ 13,285
State	1,494	1,763
Foreign	0	0
Less: valuation allowance	(11,814)	(12,243)
	<u>2,720</u>	<u>2,805</u>
Deferred tax liabilities:		
Federal	(2,441)	(2,385)
State	(632)	(616)
Foreign	(273)	(371)
	<u>(3,346)</u>	<u>(3,372)</u>
Deferred tax assets (liabilities)	<u>\$ (626)</u>	<u>\$ (567)</u>

Principal components of our net liability representing deferred income tax balances are as follows (all amounts in thousands):

	December 31,	
	2016	2015
Intangible assets	\$ 725	\$ 566
Property, plant and equipment	(724)	(622)
U.S. loss carryforwards and tax credits, net <sup>(1)</sup>	9,455	10,004
Subsidiary income <sup>(2)</sup>	(799)	(700)
Stock-based compensation expense	1,362	1,243
Reserves, accruals and other	600	430
State deferred tax asset	569	755
Valuation allowance	(11,814)	(12,243)
	<u>\$ (626)</u>	<u>\$ (567)</u>

(1) The Company had federal net operating loss carryforwards amounting to approximately \$3.1 million and \$4.6 million at December 31, 2016 and 2015, respectively. The net operating loss carryforward at December 31, 2016 expires in fiscal years 2028 through 2035. Internal Revenue Code Section 382 limits utilization of these losses to approximately \$0.4 million per year. It is possible that future changes in ownership could result in changes to the amounts allowed by IRC Section 382. State net operating loss carryforwards amounted to approximately \$5.7 million and \$8.4 million as of December 31, 2016 and 2015, respectively.

(2) A deferred tax liability has been recorded for income taxes which may become payable upon distribution of earnings of CTSAS, our French subsidiary. The estimated amount of tax that might be payable with regard to any distribution for foreign subsidiary earnings is reported net of foreign taxes paid, which are creditable against our domestic tax liability. The Company does not permanently reinvest foreign subsidiary earnings. The Company continually evaluates this assertion; if the Company's foreign business needs change, so may this assertion.

The realization of deferred income tax assets depends upon future taxable income in years before net operating loss carryforwards expire. The Company evaluates the recoverability of deferred income tax assets quarterly and if it is more likely than not that deferred income tax assets will not be recovered, a valuation allowance is established.

Income taxes computed using the federal statutory income tax rate differs from our effective tax rate primarily due to the following (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Provision for federal income taxes expected at 34% statutory rate	\$ 1,194	\$ 1,184
Increase (reduction) resulting from:		
Tax on global activities, net of foreign tax credits	0	(394)
State income taxes, less federal income tax benefit	241	168
Change in R&D	(191)	0
Change in valuation allowance	(429)	(851)
Change in fair value of warrants	6	10
Legal settlement	0	(470)
Prior year true up	(26)	534
Other	20	28
Provision for income taxes	<u>\$ 815</u>	<u>\$ 209</u>

#### 14. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

##### Currency Forward Contracts

CTSAS' functional currency is the Euro. Periodically, CTSAS purchases inventory from CTI, which requires payment in U.S. dollars. Beginning in 2009, and only under certain circumstances, the Company utilizes currency forward contracts to mitigate CTSAS' exposure to changes in the Euro-to-U.S. dollar exchange rate upon payment of these inventory purchases. Such currency forward contracts typically have durations of less than six months. These currency forward contracts are reported at their fair value. This relationship has not been designated as a hedge and therefore all changes in these currency forward contracts' fair value are recorded in other income, net within the accompanying consolidated statements of comprehensive income. There were no currency forward contracts outstanding at December 31, 2016 or December 31, 2015.

## 15. ASSET RETIREMENT OBLIGATION

The Company has an obligation to remediate certain known occurrences of asbestos at our manufacturing facility in West Springfield, Massachusetts. The significant assumptions used to estimate the obligation are:

Annual inflation rate		5.54%
Credit-adjusted risk-free rate		5.37%
Initial estimated remediation costs (undiscounted and not adjusted for inflation)	\$200,000 (\$41,000 paid in 2007)	
Estimated remediation completion date		December 19, 2038
Estimated remediation cost on December 19, 2038	\$	720,000

The following is a reconciliation of the beginning and ending aggregate carrying amounts of the asset retirement obligation (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Balance, beginning	\$ 214	\$ 204
Accretion expense	12	10
Balance, ending	<u>\$ 226<sup>(1)</sup></u>	<u>\$ 214<sup>(1)</sup></u>

(1) The difference between the \$214,000 liability as of December 31, 2015 and the estimated undiscounted future payments of \$720,000 is estimated inflation between December 31, 2015 and December 19, 2038.

Accretion expense on the asset retirement obligation is included in general and administrative expenses in the accompanying consolidated statements of comprehensive income.

## 16. COMMITMENTS AND CONTINGENCIES

### Operating Leases

The Company leases certain equipment, automobiles and other assets under cancelable and non-cancelable operating leases. Expenses associated with these leases totaled approximately \$759,000 and \$725,000 in 2016 and 2015, respectively.

Included in these leases is a market-based, related-party lease which CSP assumed in conjunction with the business combination. CSP entered into the lease with an entity controlled by one of our stockholders for industrial-use property located in Bound Brook, New Jersey, U.S.A. The lease ended on August 31, 2016, is now on a month-to-month basis, and had lease payments of \$24,000 per month from September 1, 2011 through August 31, 2013. The monthly lease payment was adjusted to approximately \$30,000 per month beginning September 1, 2013 to reflect changes in the average cost per square foot.

Future minimum lease payments under non-cancelable lease obligations at December 31, 2016 are as follows (all amounts in thousands):

Year Ending December 31,	
2017	\$ 290
2018	102
2019	42
2020	32
2021	0
	<u>\$ 466</u>

### Legal

From time to time and in the ordinary course of business, the Company may be subject to various claims, charges, and litigation. At December 31, 2016 and 2015, the Company did not have any pending claims, charges, or litigation that it expects would have a material adverse effect on its consolidated financial position, results of operations, or cash flows.

Effective as of August 3, 2015, CTI entered into a Second Amendment (the “Settlement Amendment”) to the Confidential Settlement Agreement and Mutual Release (the “Settlement Agreement”) entered into on July 10, 2014 (the “Settlement Agreement”), with certain former stockholders and members of management of Omniglow Corporation (collectively, the “Omniglow Buyers”) (which Settlement Agreement was summarized in the Current Report on Form 8-K filed by the Company on July 16, 2014). Pursuant to the Settlement Amendment, the parties to the Settlement Agreement agreed to amend CTI’s obligation to make the final settlement payment due under the Settlement Agreement, such that CTI would make a final payment of \$1.4 million (the “Reduced Final Payment”) within five days of the execution of the First Amendment in lieu of a payment of \$1.9 million that would otherwise have been due on January 10, 2016 (or, at CTI’s election, a payment of \$2.35 million due on October 10, 2016). Accordingly, upon payment by CTI of the Reduced Final Payment, which payment was made on August 3, 2015, CTI has no further payment obligations pursuant to the Settlement Agreement.

## 17. PREFERRED STOCK

### Series A Convertible Preferred Stock

The Company is authorized to issue 1,000,000 shares of preferred stock in one or more series with such designations, voting and other rights and preferences as may be determined from time to time by our Board of Directors.

On November 19, 2013, the Company entered into a Securities Purchase Agreement (the “Series A Purchase Agreement”) with US VC Partners, L.P. (the “Series A Investor”) for the purchase by the Investor of 123,077 units of securities of the Company for an aggregate purchase price of \$4.0 million (or \$32.50 per unit). Each security issued is comprised of: 1) one share of Series A Convertible Preferred Stock of the Company, at a par value of \$0.001 per share (the “Series A Preferred Stock”); 2) one common stock warrant (the “Common Warrant”); and 3) one preferred stock warrant (the “Preferred Warrant”). Both the Common Warrant and the Preferred Warrant were terminated on July 30, 2014.

Each share of Series A Preferred Stock may be converted at any time at the option of the holder into a number of shares of common stock initially equal to 50 shares of common stock, determined by dividing the Liquidation Value per share of Series A Preferred Stock by the applicable conversion price per share of Series A Preferred Stock. The initial conversion price was equal to \$0.65, subject to customary adjustments, including for any accrued but unpaid dividends and pursuant to certain anti-dilution provisions. Pursuant to the Series A Certificate of Designation amended on July 30, 2014 (the “Amended Series A Certificate of Designation”), the conversion price per share of Series A Preferred Stock is now equal to \$0.13664587. The Series A Preferred Stock is not subject to mandatory conversion at any time.

Upon voluntary or involuntary liquidation, dissolution or winding up of the Company, each holder of Series A Preferred Stock is entitled to a liquidation preference of \$32.50 per share, plus any accrued but unpaid dividends, subject to customary adjustments as set forth in the Certificate of Designation (the “Series A Liquidation Value”).

Dividends on the Series A Preferred Stock accrue (payable in cash or in kind), whether or not declared by the Board and whether or not funds are available for the payment of dividends, at a rate of 12% per annum on the sum of the liquidation preference plus all accrued and accumulated dividends and will be payable quarterly in arrears in a) cash or b) newly issued shares of Series A Preferred Stock having an aggregate liquidation preference equal to the amount of such accrued dividends (“PIK Dividends”) at the option of the Company. All accrued and accumulated dividends on the convertible preferred stock shall be paid prior to and in preference to any other class of securities of the Company.

Each share of Series A Preferred Stock will be entitled to a number of votes equal to the number of shares of common stock into which such share is convertible and shall be entitled to vote with holders of outstanding shares of common stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration.

The requisite holders of the Series A Preferred Stock will have the right to cause the Company to redeem, out of funds legally available, all but not less than all of the then outstanding shares of Series A Preferred Stock, for a price per share equal to the Series A Liquidation Value of such shares from and after the fifth anniversary of the closing date of the Series A Purchase Agreement. Additionally, the Company will have the right to redeem all of the outstanding shares of Series A Preferred Stock from and after the eighth anniversary of the closing date of the Series A Purchase Agreement at a redemption price equal to the Series A Liquidation Value. As a result of the redemption provisions, the Series A Preferred Stock has been classified outside of permanent equity.

The significant change in the conversion price of the Series A Preferred Stock was determined to be a substantive qualitative change of a conversion feature that is reasonably possible of being exercised. Therefore, the amendment to the terms of the Series A Preferred Stock made on July 30, 2014 was accounted for as an extinguishment in accordance with the derecognition accounting model under ASC 260-10-S99-2. The Series A Preferred Stock fair value on the extinguishment date was estimated at approximately \$1.6 million. This resulted in the Company recognizing a deemed dividend of approximately \$2.4 million to reflect the Series A Preferred Stock at its July 30, 2014 redemption value.

## **Series B Convertible Preferred Stock**

On July 30, 2014, the Company entered into a Securities Purchase Agreement (the “Series Band C Purchase Agreement”) with Cova Small Cap Holdings, LLC (“Cova”), Bayonet Capital Fund I, LLC (see Note 12), and another investor (each, an “Investor”) for the purchase by the Investors of an aggregate of 1,000 units of securities of the Company (the “Units”) for an aggregate purchase price of \$2.0 million (or \$2,000.00 per Unit), with each Unit comprising (1) one share of Series B Convertible Preferred Stock of the Company, par value \$0.001 per share (the “Series B Preferred Stock”), and (2) one share of Series C Preferred Stock of the Company, par value \$0.001 per share (the “Series C Preferred Stock”). Approximately \$1.3 million of the net proceeds from the sale of the Units was used to pay a contingent legal obligation.

The shares of Series B Preferred Stock have the rights and preferences set forth in the Certificate of Designation of Series B Convertible Preferred Stock, which was amended on May 15, 2015 (the “Amended Series B Certificate of Designation”). Pursuant to the Amended Series B Certificate of Designation, each share of Series B Preferred Stock ranks senior to the Company’s common stock (the “Common Stock”) and the Company’s Series A Preferred Stock with respect to payment of dividends and distribution of assets upon liquidation, dissolution or winding up of the Company. Upon the Company’s liquidation, sale to or merger with another corporation or other “Change of Control” (as such term is defined in the Amended Series B Certificate of Designation), each share of Series B Preferred Stock would be entitled to a liquidation preference in an amount equal to the amount per share that would have been payable had all shares of Series B Preferred Stock been converted into Common Stock immediately prior to such event in accordance with the terms of the Amended Series B Certificate of Designation, excluding for purposes of such calculation the liquidation preference payable to the holders of Series A Preferred Stock. Holders of the Series B Preferred Stock are entitled to convert at any time all or any portion of the shares of Series B Preferred Stock into a number of shares of Common Stock initially equal to 35,713.147 shares of Common Stock per share of Series B Preferred Stock (the “Conversion Number”). The Conversion Number is subject to customary adjustments, including for dividends, stock splits and other reorganizations affecting the Common Stock. In addition, the Conversion Number is subject to anti-dilution protections, subject to certain exceptions, if the Company issues or sells shares of Common Stock or other equity securities for no consideration or for consideration that is based on an equity valuation of the Company of less than \$2.0 million in the aggregate (a “Trigger Issuance”). In the event of a Trigger Issuance, the Conversion Number shall be increased as of the close of business on the effective date of the Trigger Issuance to a number calculated as follows: (i) two-thirds of the Common Stock deemed Outstanding (as defined in the Amended Series A Certificate of Designation) immediately following such Trigger Issuance (excluding any Common Stock Deemed Outstanding as a result of the conversion of the Series B Preferred Stock) (ii) divided by 1,000. Each share of Series B Preferred Stock will automatically convert into shares of Common Stock on the tenth anniversary of its original issuance date, at the then-current Conversion Number. Each share of Series B Preferred Stock is entitled to a number of votes equal to the number of shares of Common Stock into which such share is convertible and will be entitled to vote with holders of outstanding shares of Common Stock, voting together as a single class, with respect to any and all matters presented to the stockholders of the Company for their action or consideration. The Series B Preferred Stock has been classified within permanent equity.

In connection with the issuance of the Series B Preferred Stock and the Series C Preferred Stock on July 30, 2014, the Company allocated the aggregate proceeds of \$2.0 million to the Series B Preferred Stock and the Series C Preferred Stock on a relative fair value basis. This resulted in approximately \$1.4 million allocated to the Series B Preferred Stock and approximately \$0.6 million allocated to the Series C Preferred Stock. At the issuance date, the Series B Preferred Stock is convertible into Common Stock having a fair value of approximately \$2.5 million, which was in excess of the proceeds allocated to the Series B Preferred Stock. Therefore, the Company recognized a beneficial conversion feature of approximately \$1.1 million in accordance with ASC 470-20. This initially recorded discount was then accreted back to its carrying value of the Series B Preferred Stock as the stock is immediately convertible at the option of the holder.

## **Series C Preferred Stock**

The shares of Series C Preferred Stock have the rights and preferences set forth in the Certificate of Designation of Series C Preferred Stock, which was amended on May 15, 2015 (the “Amended Series C Certificate of Designation”). Pursuant to the Amended Series C Certificate of Designation, each share of Series C Preferred Stock ranks senior to the Common Stock, the Series A Preferred Stock, the Series B Preferred Stock and the Series D Preferred Stock with respect to payment of dividends and distribution of assets upon liquidation, dissolution or winding up of the Company. Upon the Company’s liquidation, sale to or merger with another corporation or other “Change of Control” (as such term is defined in the Amended Series C Certificate of Designation), each share of Series C Preferred Stock would be entitled to a liquidation preference equal to the sum of: (1) \$3,000 per share (the “Base Liquidation Value”) and the (2) the amount, if any, by which the Base Value exceeds 150% of the purchase price (the “Excess Liquidation Value), plus any accrued but unpaid dividends, in each case subject to customary adjustments as set forth in the Amended Series C Certificate of Designation. Holders of the Series C Preferred Stock are entitled to cumulative quarterly dividends at a rate of 12% per annum, calculated based on an assumed price of \$2,000 per share, payable in cash or in kind; provided that to the extent not paid in cash or by issuance of additional shares of Series C Preferred Stock on the last day of each calendar quarter (a “Dividend Payment Date”), all accrued dividends on any outstanding shares of Series C Preferred Stock shall accumulate and compound. In the event the Company has not paid in cash or by the issuance of additional shares of Series C Preferred Stock all accrued dividends on a Dividend Payment Date, at the election of holders of at least 75% of the outstanding shares of Series C Preferred Stock (the “Requisite Holders”), all such dividends accruing on the shares of Series C Preferred Stock will be paid in shares of Series C Preferred Stock. From and after the fifth anniversary of the issuance of the shares of Series C Preferred Stock, the Requisite Holders will have the right to elect to cause the Company to redeem, out of funds legally available therefore, all but not less than all of the then outstanding shares of Series C Preferred Stock, for a price per share equal to the Series C Liquidation Value for such shares. In addition, the Company has the right to redeem at any time, out of funds legally available therefore, all or any portion of the then outstanding shares of Series C Preferred Stock, for a price per share equal to the Series C Liquidation Value for such shares. The Series C Preferred Stock is not convertible into Common Stock or other securities of the Company, and does not have any voting rights. As a result of the redemption provisions, the Series C Preferred Stock has been classified outside of permanent equity.

The proceeds allocated to the Series C Preferred Stock fair on the issuance date were estimated at approximately \$ 0.6 million. This resulted in the Company recognizing a deemed dividend of approximately \$1.4 million to reflect the Series C Preferred Stock at its July 30, 2014 redemption value.

### **Series D Preferred Stock**

In connection with the execution of the Monroe Credit Agreement, the Company entered into a Subscription Agreement (the "Subscription Agreement") with Monroe Capital Corporation, Monroe Capital Senior Secured Direct Loan Fund LP, Monroe Capital Senior Secured Direct Loan Fund (Unleveraged) LP and Monroe Capital Partners Fund II, LP. Pursuant to the Subscription Agreement, the Company issued 10 shares of Series D Convertible Preferred Stock. Each share of Series D Convertible Preferred Stock may be converted at any time at the option of the holder into a number of shares of common stock initially equal to 752,807.8 shares of common stock. The Series D Convertible Preferred Stock will automatically, without any action on the part of the holder thereof, be converted into that number of fully paid and nonassessable shares of the Company's common stock equal to the conversion number at the time in effect. The Series D Convertible Preferred Stock has a mandatory conversion date on the tenth anniversary of the issuance date. The Series D Convertible Preferred Stock ranks senior to the Company's Series A Preferred Stock and the Company's Series B Preferred Stock. The Company's Series C Preferred Stock ranks senior to the Series D Convertible Preferred Stock. The shares of Series D Preferred Stock have the rights and preferences set forth in the Certificate of Designation of Series D Convertible Preferred Stock (the "Series D Certificate of Designation").

In the event of any voluntary or involuntary liquidation, the holders of the Series D Convertible Preferred Stock shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of junior securities. The Series C Preferred Stockholders would receive the Base Liquidation Value first, and not be entitled to the Excess Liquidation Value (as defined in the Amended Certificate of Designation of the Series C Preferred Stock) until the holders of the Series D Convertible Preferred Stock receive a pro rata Liquidation Value amount in cash. If at any time the Company redeems the outstanding shares of Series A Preferred Stock or Series C Preferred Stock, the holders of the Series D Preferred Stock would have the right to elect to cause the Company to redeem, out of funds legally available therefore, all but not less than all of the then outstanding shares of Series D Preferred Stock, for a price per share equal to the Liquidation Value for such shares; provided that, prior to the Company paying the full redemption price for all outstanding shares of Series D Preferred Stock, the Company would not be permitted to pay (i) any amounts in excess of the Series C Base Liquidation Value upon the redemption of shares of Series C Preferred Stock or (ii) any amounts upon the redemption of shares of Series A Preferred Stock. In the event of a voluntary or involuntary liquidation, each share of Series D Preferred Stock would be entitled to a liquidation preference in an amount equal to the amount per share that would have been payable had all shares of Series D Preferred Stock been converted into Common Stock immediately prior to such event in accordance with the terms of the Series D Certificate of Designation, excluding for purposes of such calculation the liquidation preference payable to the holders of Series A Preferred Stock and the holders of Series B Preferred Stock. The Series D Preferred Stock does not have any voting rights, except that the written consent of the holders of a majority of the then-outstanding Series D Preferred Stock shall be required for the Company to take certain actions, including the amendment of its certificate of incorporation or bylaws in a manner that adversely affects the relative rights, preferences, privileges or powers of holders of Series D Preferred Stock. As a result of the redemption provisions, the Series D Convertible Preferred Stock has been classified outside of permanent equity.

In connection with the Monroe refinancing transaction and the issuance of the Series D Preferred Stock, the Company allocated approximately \$2.8 million to the Series D Preferred Stock on a relative fair value basis.

## 18. STOCKHOLDERS' EQUITY

### Common Stock

The Company is authorized to issue 150,000,000 shares of common stock. Common stockholders are entitled to one vote for each share held of record on all matters to be voted on by stockholders. Common stockholders have no conversion, preemptive or other subscription rights and there are no sinking fund or redemption provisions applicable to the common stock.

### Common Stock Purchase Warrants

Common stock purchase warrants accounted for within equity are recorded at their initial fair value and reported in stockholders' equity as increases to additional paid-in capital. Warrants reported as equity, rather than liabilities (i) may not be net-cash settled, (ii) have contractual limits on the number of shares to be delivered in a net-share settlement and (iii) are supported by sufficient unissued common shares available to settle the outstanding warrants. Subsequent changes in fair value from the warrants' initial fair value are not recognized as long as the warrants continue to merit classification as equity.

Pursuant to the terms of a letter agreement previously entered into between the Company and Dragonfly Capital Partners, LLC ("Dragonfly") under which Dragonfly provided advisory services to the Company in connection with the Company's debt financing, the Company paid \$820,000 cash to Dragonfly and issued to Dragonfly a warrant on May 18, 2015 to purchase from the Company up to an aggregate of 1,003,744 shares of Common Stock (subject to customary adjustments) at an exercise price of \$0.05 per share (the "Dragonfly Warrant"). The Dragonfly warrant is being accounted for within equity at its initial fair value. The Dragonfly Warrant was reflected at its relative fair value of approximately \$43,000 in connection with the Monroe refinancing transaction.

Warrants to purchase the Company's common stock were outstanding as follows as of December 31, 2016:

Warrant Holder	Number of Shares Under Warrant	Number of Shares Exercisable Under Warrant	Exercise Price	Expiration Date
Granite Creek FlexCap I, L.P. ("Granite")	267,950	267,950	\$ 0.01	November 19, 2023
Patriot Capital II, L.P. ("Patriot")	187,564	187,564	\$ 0.01	November 19, 2023
Dragonfly Capital Partners, LLC ("Dragonfly")	1,003,744	1,003,744	\$ 0.05	May 18, 2020

As of December 31, 2016 and December 31, 2015, warrants to purchase 455,514 shares of the Company's common stock which were not indexed to the Company's stock were outstanding. These warrants are considered derivatives and therefore, are being accounted for as a liability (See Note 11).

The fair value as of December 31, 2016 of the Granite and Patriot Warrants is estimated using the Black-Scholes pricing model with the following inputs:

	Granite and Patriot Warrants
Stock price of underlying equity	\$ 0.16
Exercise price	\$ 0.01
Expected term (years)	6.9
Risk-free interest rate	2.09%
Estimated dividend yield	None
Volatility	178.91%



The change in the fair value of the warrants liability during the year ended December 31, 2016 is as follows (amounts in thousands):

	Granite and Patriot Warrants (see Note 11)
Warrant liability at December 31, 2015	\$ 54
Change in fair value of warrants	18
Warrant liability at December 31, 2016	<u>\$ 72</u>

### Share-Based Compensation

On March 3, 2009, the Company's Board of Directors adopted the Cyalume Technologies Holdings, Inc. 2009 Omnibus Securities and Incentive Plan (the "2009 Plan"). The Plan was approved during the Company's Annual Meeting of Stockholders on June 18, 2009. On October 7, 2014, the Company's Board of Directors adopted the Cyalume Technologies Holdings, Inc. 2014 Equity Incentive Plan (the "2014 Plan"). The 2014 Plan was approved on February 15, 2015. The purpose of the 2009 Plan and the 2014 Plan is to benefit stockholders by assisting the Company in attracting, retaining and providing incentives to key management employees and non-employee directors of, and non-employee consultants to, Cyalume Technologies Holdings, Inc. and its subsidiaries, and to align the interests of such employees, non-employee directors and non-employee consultants with those of stockholders. Accordingly, the 2009 Plan and the 2014 Plan both provide for the granting of Distribution Equivalent Rights, Incentive Stock Options, Non-Qualified Stock Options, Performance Share Awards, Performance Unit Awards, Restricted Stock Awards, Stock Appreciation Rights, Tandem Stock Appreciation Rights, Unrestricted Stock Awards or any combination of the foregoing, as may be best suited to the circumstances of the particular employee, director or consultant as provided therein. Under the 2009 Plan, the Company was authorized to issue up to 2,650,000 shares. Under the 2014 Plan, the Company is authorized to issue up to 10,000,000 shares. As of December 31, 2016, 1,119,333 shares were outstanding under the 2009 Plan. As of December 31, 2016, 3,350,582 shares were outstanding under the 2014 Plan. Awards under the plans can impose various service periods and other terms upon the awardee; however, the maximum term of options or similar instruments granted under the plans is ten years.

Share-based awards are also issued that are not under either the 2009 Plan or the 2014 Plan. In September 2012, the Company awarded options to purchase the Company's common stock to the Chief Operating Officer and the Chief Executive Officer. These options were not awarded under the 2009 Plan and these options were canceled on November 21, 2014.

These two canceled awards were replaced with options to the Chief Operating Officer to purchase 1,504,767 shares of common stock and options to the Chief Executive Officer to purchase 5,015,891 shares of common stock. Both replacement awards were made outside of the Company's 2014 Plan and were granted with a \$0.09 exercise price. Both replacement awards are included in the section titled "Stock Option Awards" below. The replacement awards were subject to performance-based conditions that provided that each option would not vest until the Company completed a refinancing transaction. The Company's debt was refinanced on May 18, 2015 (see Note 11) at which time the Company recognized expense relating to these replacement awards as the performance condition had been achieved. Furthermore, the options provide for 100% vesting upon a sale of the Company at a defined minimum enterprise value.

During the years ended December 31, 2016 and 2015, total expense recorded for share-based compensation was approximately \$352,000 and \$404,000, respectively. The following presents how share-based expenses are included in our consolidated statements of comprehensive income (in thousands):

	Year Ended December 31,	
	2016	2015
Cost of revenues	\$ 12	\$ 11
Sales and marketing	28	32
General and administrative	285	334
Research and development	27	27
	<u>\$ 352</u>	<u>\$ 404</u>

The Company does not currently possess any treasury shares; therefore any issuance of stock for any share-based compensation award is expected to be from new shares.

#### Stock Option Awards

The Black-Scholes pricing model is used to value stock options awarded as share-based compensation. The expected term of the options awarded under share-based compensation arrangements individually is estimated based on the estimated term of the award, the exercise price of the award, the estimated risk-free interest rate over the award's estimated term, estimated annual dividend yield, and the estimated volatility of the price of our common stock over the award's estimated term. Risk-free interest rate assumptions are based on U.S. Treasury securities issued with maturities similar to the expected terms of the awards. In September 2012, the Company began estimating the future volatility of the price of our common stock using historical daily prices of our common stock; before September 2012, since our common stock had insufficient trading history to estimate future price volatility, volatility was using historical data of another public company operating in our industry.

The fair value of each award was estimated on the date of grant using the Black-Scholes pricing model with the following assumptions for awards to employees and non-employees:

	2016	2015
Expected term (years)	6.0 – 6.4	6.0 – 6.3
Risk-free interest rate	1.28 – 2.09%	1.61 – 1.74%
Estimated dividend yield	None	None
Volatility	172.49 – 178.25%	161.01 – 165.83%

Stock options awarded will generally vest in zero to five years. Options awarded to executive officers and other management often may be earned based on meeting Board-determined or CEO-determined performance goals unique to each award recipient and require continued employment over the vesting period. Options awarded to members of the Board of Directors typically vest on the grant date. Options awarded typically expire 10 years after the grant date.

Stock option activity related to share-based compensation is summarized as follows:

	Shares (in thousands)	Weighted Average Exercise Price
Outstanding at December 31, 2014	10,347	\$ 0.38
Granted <sup>(1)</sup>	250	0.14
Exercised	0	0
Forfeited/Canceled	(41)	0.09
Expired	(1)	3.65
Outstanding at December 31, 2015	10,555	\$ 0.38
Granted <sup>(2)</sup>	520	0.10
Exercised	0	0
Forfeited/Canceled	(51)	0.39
Expired	(34)	1.33
Outstanding at December 31, 2016 <sup>(3)</sup>	10,990	\$ 0.36
Exercisable at December 31, 2016 <sup>(4)</sup>	5,905	\$ 0.51

(1) The weighted-average grant-date fair value of awards granted was \$0.13.

(2) The weighted-average grant-date fair value of awards granted was \$0.10.

(3) The aggregate intrinsic value of these stock options is approximately \$675,000 as of December 31, 2016. The weighted average remaining contractual term for these options is 7.55 years.

(4) The aggregate intrinsic value of these stock options is approximately \$354,000 as of December 31, 2016. The weighted average remaining contractual term for these options is 7.15 years.

As of December 31, 2016, there was approximately \$350,000 of unrecognized compensation cost related to nonvested option awards which is expected to be recognized over a weighted-average period of 2.16 years.

#### Restricted Stock

The Company values stock awards at the closing market price of the underlying shares on the trading day previous to the grant date, adjusted for expected forfeitures. There were no unvested restricted stock awards outstanding as of December 31, 2016 and 2015.

## Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss relates to foreign currency translation adjustments. Changes in accumulated other comprehensive loss due to currency translation adjustments (all amounts in thousands) were:

Balance, December 31, 2014	\$ (661)
Adjustments due to translation of CTSAS financial statements from Euros into U.S. Dollars	(318)
Balance, December 31, 2015	(979)
Adjustments due to translation of CTSAS financial statements from Euros into U.S. Dollars	(124)
Balance, December 31, 2016	<u>\$ (1,103)</u>

## 19. EMPLOYEE BENEFIT PLANS

The CTI Employee Savings and Retirement Plan (the “ESRP”), is intended to be qualified under Section 401(k) of the Internal Revenue Code. Employees of CTI, CTS and CSP who have reached the age of 18 are eligible for participation on the first entry date after three months of service. Entry dates are the first day of January, April, July and October. Employees may defer receiving compensation up to the maximum amount permitted under the Internal Revenue Code. Matching contributions to the ESRP equal (i) 3% of employee compensation plus (ii) 50% of the next 2% of employee compensation. For the years ended December 31, 2016 and 2015, employer matching contributions were approximately \$244,000 and \$211,000, respectively.

French law requires companies within France (such as CTSAS) to pay its workers a benefit, based on various factors, when an employee becomes 65 years old. The Company estimated the present value of such a liability for employees at CTSAS and approximately \$88,000 and \$81,000 has been recorded for this obligation as of December 31, 2016 and 2015, respectively.

## 20. CONCENTRATIONS

### Sales Concentrations

In 2016, approximately 40% of the Company’s revenue was derived from two customers. In 2015, approximately 37% of the Company’s revenue was derived from two customers.

### Geographic Concentrations

The Company sells to customers located in the United States of America and in international markets. Revenues to customers outside the United States represent approximately 30% and 31% of net revenues for the years ended December 31, 2016 and 2015, respectively. Revenues from customers in the United Kingdom represented approximately 8% and 7% of our 2016 and 2015 revenues, respectively.

CTSAS’ operations are our only operations outside the United States of America. CTSAS’ tangible net long-lived assets were approximately \$1,029,000 and \$1,093,000 as of December 31, 2016 and 2015, respectively. CTSAS’ net assets were approximately \$3,021,000 and \$2,853,000 as of December 31, 2016 and 2015, respectively.

### Concentrations of Credit Risk Arising from Financial Instruments

As of December 31, 2016, one customer represented approximately 26% of gross accounts receivable. These accounts receivable were collected in full during the first quarter of 2017. As of December 31, 2015, three customers combined represented approximately 53% of gross accounts receivable.

The Company maintains cash in several different financial institutions in amounts that typically exceed U.S. federally insured limits and in financial institutions in international jurisdictions where insurance is not provided. The Company has not experienced any losses in such accounts and the Company believes it is not exposed to significant credit risk. Beginning in 2013, insurance coverage reverted to \$250,000 per depositor at each financial institution and as of December 31, 2016, the cash balances exceed federally-insured limits by approximately \$2.1 million. As of December 31, 2016, cash in non-U.S. bank accounts that were not insured by a federal government totaled approximately \$2.1 million.

## 21. FAIR VALUES OF ASSETS AND LIABILITIES

### Assets and Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities itemized below were measured at fair value on a recurring basis at December 31, 2016 (all amounts in thousands):

	Level 1 Quoted Prices in Active Markets for Identical Assets	Level 2 Significant Other Observable Inputs	Level 3 Significant Unobservable Inputs	Assets/ (Liabilities) At Fair Value
Warrants (see Note 18) <sup>(1)</sup>	\$ 0	\$ 0	\$ (72)	\$ (72)
	\$ 0	\$ (0)	\$ (72)	\$ (72)

(1) The Company has classified its warrants liability which could be potentially settled in cash within Level 3 because the fair values are determined using significant unobservable inputs into the Black-Scholes pricing model.

The table below presents reconciliations for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended December 31, 2016 and 2015 (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Warrants liability:		
Balance at the beginning of period	\$ 54	\$ 25
Change in fair value of warrants	18	29
Balance at the end of period	\$ 72	\$ 54

The Company has other financial instruments, such as cash, accounts receivable, due from related party, accounts payable, notes payable and a line of credit. The Company believes the carrying amounts of those assets and liabilities approximate their fair value since those carrying amounts have been estimated to approximate the exit price which would be received to sell these assets or pay to transfer these liabilities to a market participant. See Note 2 for a discussion of our accounting policy regarding fair value.

### Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

During the year ended December 31, 2016 and year ended December 31, 2015, no assets were identified as impaired.

## 22. SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION

### Cash Paid for Interest and Income Taxes (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Interest	\$ 1,856	\$ 1,558
Income taxes	799	801

### Non-Cash Investing and Financing Activities (all amounts in thousands):

	Year Ended December 31,	
	2016	2015
Series A Convertible Preferred stock accrued dividend	\$ 647	\$ 573
Series C Preferred stock accrued dividend	298	264
Issuance of Series D Convertible Preferred stock in connection with debt refinancing	0	2,751
Relative fair value of warrant issued in connection with debt refinancing	0	43

### **23. SUBSEQUENT EVENTS**

During January 2017, the Company issued 690,073 shares of common stock pursuant to the exercise of the Dragonfly Warrant. During February 2017, the Company issued 257,232 shares of common stock pursuant to the exercise of the Granite Warrant.

**EMPLOYMENT AGREEMENT**

This Employment Agreement (the “Agreement”) is made and entered into, effective October 28, 2016 (the “Effective Date”), by and between Cyalume Technologies, Inc., a Delaware corporation (the “Company”), and Andrea Settembrino (“Employee”).

WHEREAS, the Company desires to employ Employee as Chief Financial Officer of the Company, and Employee desires to be employed by the Company upon the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

1. **TERM**. This Agreement shall be for an initial term of three (3) years, beginning on the Effective Date. The Agreement shall continue for successive one-year periods thereafter unless and until terminated by either party upon thirty (30) days’ written notice prior to the Agreement’s anniversary/expiration date, or until terminated pursuant to Section 8 of this Agreement.
  2. **DUTIES OF EMPLOYEE**.
    - (a) **Duties**. Employee shall be employed as the Chief Financial Officer (“CFO”) of the Company, and shall also serve as CFO of its parent corporation, Cyalume Technologies Holdings, Inc. (“Holdings”). Employee’s duties shall be such executive, managerial, administrative, and professional duties as are commensurate with the position of CFO, and as shall be assigned by the Chief Executive Officer or the Board of Directors of Holdings, or by their authorized designees. Employee may delegate duties to other employees of the Company as she reasonably determines is in the best interest of the Company, consistent with the general authority and power given to her hereunder. The principal place of employment of Employee shall be at the Company’s executive offices in Fort Lauderdale, Florida.
    - (b) **Exclusive Employment**. Employee shall devote the whole of her business time, attention and abilities to carrying out his duties hereunder.
    - (c) **Loyal and Conscientious Performance**. Employee agrees that to the best of her ability and experience, and in compliance with all applicable laws and the Company’s policies, Certificate of Incorporation and Bylaws, as they may be amended from time to time, she will at all times loyally and conscientiously perform all the duties and obligations required of her by the terms of this Agreement. Employee further agrees she shall use her best efforts to promote the interests and reputation of the Company and its affiliates and not do anything which is to the detriment of the Company or its affiliates.
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3. COMPENSATION AND BENEFITS.

- (a) Salary. For all the services to be rendered by Employee in any capacity hereunder, the Company shall pay Employee, in equal installments consistent with the Company's practices for its employees, salary and compensation as set forth in Schedule 1 attached to this Agreement and incorporated herein. The Company shall have the ability to withhold from the compensation otherwise due to Employee under this Agreement any amounts required to be withheld from compensation from time to time under applicable law.
- (b) Severance Benefits.
  - (i) In the event Employee's employment with the Company is terminated by the Company other than as a result of death, disability (as defined in Section 8(a)(ii)), retirement or for "cause" (as defined in Section 8(a)(iii)), or if Employee's employment with the Company is terminated by Employee for the reason set forth in Section 8(d), and upon execution by Employee of a separation agreement prepared by the Company within thirty (30) days of the date of termination of Employee's employment, the Company will pay Employee, at normal payroll intervals for six (6) months, a sum equal to one-half of Employee's annual Base Salary in effect at the time of termination hereunder, less applicable deductions and withholdings.
  - (ii) In the event that Employee elects to terminate this Agreement (including, for the avoidance of doubt, through Employee's election not to renew this Agreement at the end of the initial term or any successive one-year term pursuant to Section 1) for any reason other than that set forth in Section 8(d), or in the event that this Agreement is terminated due to Employee's death, disability or for "cause" (as defined in Section 8(a)(iii)), the Company shall not be obligated to pay to Employee any severance payments whatsoever and Employee shall be entitled only to that Base Salary and those benefits which she has earned through the date of such termination.
- (c) Fringe Benefits. So long as Employee remains in the employ of the Company, Employee shall be provided those benefits set forth in Schedule 1 to this Agreement. Employee shall also receive such additional benefits as may be authorized from time to time by the Company's Board of Directors.

4. NONCOMPETITION BY EMPLOYEE.

- (a) During the term of this Agreement and for a period of two (2) years after Employee has ceased to be employed by Company for any reason, Employee shall not, without the prior written consent of a duly authorized officer of Company, directly or indirectly (i) engage in the business of, or (ii) assist or have an interest in (whether as proprietor, partner, investor, stockholder, officer, director or any type of principal whatsoever), or (iii) enter the employment of or act as an agent, advisor, or consultant to any person, firm, partnership, association, corporation, business organization, entity or enterprise that is, or is to become, directly or indirectly, engaged in any business actually or potentially competitive with that of Company in any area or territory in which Company offers its services or products.

- (b) During the term of this Agreement, and for a period of two (2) years after Employee has ceased to be employed by Company for any reason, Employee shall not, without the prior written consent of a duly authorized officer of Company, solicit from any person, company, firm or organization, or any affiliate of the foregoing, which was or is a client or associated firm of Company or which Company was soliciting as a client or associated firm of Company during any of the twelve (12) months immediately preceding the termination or expiration of the Agreement, any business substantially similar to that done by Company, including but not limited to any business Employee was soliciting or on which he worked while employed by Company.
5. CONFIDENTIALITY. Employee acknowledges, understands and agrees that all trade secrets and information relating to the business of the Company and/or its affiliates, including without limitation, procedures, product information, manufacturing techniques or processes, expertise, records, customer or prospect lists and information, vendor lists and information, supplier lists and information, internal operating forms, financial information or accounting methods, systems, books, manuals, employee information, any confidential information concerning the business, the Company, its affiliates, or the business, policies or operations of the business, the Company or its affiliates which Employee may have learned, possessed or controlled on or prior to the date hereof or which Employee may learn, possess or control during the term of Employee's continued employment by the Company or any of its affiliates (as an employee, consultant, agent or otherwise) (collectively, "Trade Secrets") are confidential and shall remain the sole and exclusive property of the Company and its affiliates. Trade Secrets include both written information and information not reduced to writing. Except as may be required pursuant to any law or the order of a court, or except as may be public knowledge (which shall not have become public knowledge as a result of any action of Employee), Employee shall not, at any time, retain, duplicate, remove from the business premises of Company or any of its affiliates, make use of, other than in the ordinary course of fulfilling her duties as an employee of the Company, divulge or otherwise disclose, directly or indirectly, any Trade Secrets. Employee shall not publish or disclose, and shall exercise her best efforts to prevent others from publishing or disclosing, any Trade Secrets and she shall not use or attempt to use any such knowledge or information which she may have or acquire in any manner which may injure or cause loss, whether directly or indirectly, to the Company or its affiliates or use her personal knowledge or influence over any customers, clients, suppliers or contractors of the Company or its affiliates so as to take advantage of the Company's or its affiliates' trade or business connections or utilize information confidentially obtained by him.
6. NON-SOLICITATION. Employee hereby covenants and agrees that, at all times during her employment with the Company and for a period of two (2) years immediately following her termination for any reason, Employee shall not employ or seek to employ any person employed at the time by the Company or any of its affiliates, or otherwise engage or entice, either directly or indirectly, such person to leave such employment.
7. VIOLATION OF AGREEMENT.
- (a) The restrictions set forth in Sections 4, 5 and 6 shall extend to any and all activities of Employee, whether alone or together with or on behalf of or through any other person or entity.



- (b) Employee's obligations under Sections 4, 5 and 6 shall survive termination of this Agreement and of Employee's employment with the Company.
- (c) Employee acknowledges that the restrictions contained in Sections 4, 5 and 6, in view of the nature of the business in which Company is engaged, are reasonable and necessary to protect the legitimate interests of Company. Employee understands that the remedies at law for her violation of any of the covenants or provisions of Sections 4, 5 and 6 will be inadequate, that such violations will cause irreparable injury within a short period of time, and that Company shall be entitled to preliminary injunctive relief and other injunctive relief against such violation. Such injunctive relief shall be in addition to, and in no way in limitation of, any and all other remedies that Company shall have in law and equity for the enforcement of those covenants and provisions. Employee further acknowledges that should she violate any of the covenants or provisions of Sections 4, 5 and 6, she will reimburse Company for its reasonable costs and attorneys' fees incurred to enforce the terms of this Agreement.

8. TERMINATION.

- (a) Employee's employment hereunder may be terminated by the Company immediately upon the occurrence of any of the following events, and the Company shall have no obligations to Employee for any period after the effective date of such termination, except vested benefits or as otherwise provided in Section 3 herein:
  - (i) The death of Employee.
  - (ii) A mental or physical illness or injury that prevents Employee from performing her duties hereunder for a period of 90 consecutive days or for 120 days in any 360 day period, or Employee has been declared by a court of competent jurisdiction to be mentally incompetent or incapable of managing her affairs.
  - (iii) For "cause" which, for the purposes of this Section, shall mean:
    - (A) Continued neglect or failure to perform her duties and responsibilities; or
    - (B) Formally being charged, either criminally or civilly, with committing fraud, misappropriation or embezzlement, whether or not in the performance of Employee's duties as an employee of the Company; or
    - (C) Violations of any law which violation materially affects Employee's performance of her duties to the Company; or
    - (D) The conviction of, or plea of guilty or nolo contendere to, a felony or crime involving moral turpitude; or
    - (E) Willfully engaging in conduct materially injurious to the Company or its affiliates; or

- (F) Diverting any business opportunity of the Company or its affiliates for Employee's direct or indirect personal gain; or
  - (G) Failure to observe or perform the covenants and agreements contained in this Agreement, including but not limited to those contained in Sections 4, 5 and 6 of this Agreement.
- (b) Employee's employment hereunder may be terminated at any time upon the mutual written agreement of Employee and the Company.
  - (c) Subject to the provisions of Section 3(b)(i) of this Agreement, Employee's employment hereunder may be terminated by either party with thirty (30) days of written notice thereof. For the sake of clarity, if this Agreement is terminated by the Employee, the Company may waive the aforementioned 30 day notice period and may elect at its sole discretion to make such termination effective immediately. Notwithstanding the foregoing, if Employee's employment hereunder is terminated without "cause" during the initial term of this Agreement, Employee shall only be paid any applicable severance benefits as set forth in Section 3(b), less applicable deductions and withholdings.
  - (d) Employee may terminate her employment hereunder for Good Reason. For purposes of this Agreement, "Good Reason" shall mean (i) a material diminution in Employee's title or duties, (ii) a material reduction in Employee's Base Salary except for reductions applicable to all management, (iii) a relocation of Employee's principal place of employment of a distance in excess of fifty (50) miles unless such relocation is effected at the request of Employee or with Employee's approval or (iv) a material breach by the Company of a material term of this Agreement. Notwithstanding the foregoing, Good Reason shall not be deemed to exist unless Employee's termination of employment for Good Reason occurs within ninety (90) days following the initial existence of one of the conditions specified in clauses (i) through (iii) above, Employee provides the Company with written notice of the existence of such condition within ninety (90) days after the initial existence of the condition, and the Company fails to remedy the condition within thirty (30) days after its receipt of such notice.
  - (e) Except as may otherwise be set forth herein, in the event of termination of Employee's employment by the Company as permitted under clause (a) of this Section, Employee shall be entitled only to her Base Salary and other compensation and benefits earned through the date of termination.
  - (f) Upon the termination of her employment hereunder for any reason whatsoever, Employee shall immediately deliver to the Company all documents, statistics, accounts, records, programs and other items of whatever nature or description (the "Documents") which may be in her possession or under her control which relate in any way to the Trade Secrets or the business or affairs of the Company or of any of its affiliates, and no copies of any such Documents or any part thereof shall be retained by her.
  - (g) In the event of the termination of Employee's employment under this Agreement, Employee shall be deemed to have resigned from all positions held in the Company. Upon request of the Company, Employee shall promptly sign any and all documents reflecting such resignations as of the date of termination of her employment.

9. REPRESENTATIONS. Employee hereby represents and warrants that this Agreement constitutes her valid and binding obligation enforceable in accordance with its terms and the execution, delivery and performance of this Agreement does not violate any agreement, arrangement or restriction of any kind to which Employee is a party or by which she is bound.
10. MISREPRESENTATION. Neither party hereto shall knowingly at any time make any untrue statement in relation to the other or any of their affiliates and in particular Employee shall not after the termination of her employment hereunder wrongfully represent herself as being employed by or connected with the Company or any affiliate of the Company.
11. REIMBURSEMENT OF EXPENSES. The Company shall reimburse Employee for all ordinary and necessary out-of-pocket expenses reasonably incurred by Employee on behalf of the business of the Company in accordance with the Company's normal reimbursement and travel policies in effect from time to time. Employee agrees that expense reports must be submitted to obtain reimbursement of expenses as well as presentation of such supporting documentation as the Company may reasonably require. Employee further agrees to submit with expense reports such records and logs as may be required by the relevant taxing authorities for the substantiation of each such business expense as a deduction on the Company's income tax returns. Any reimbursements by the Company to Employee of any eligible expenses under this Agreement that are not excludable from Employee's income for Federal income tax purposes (the "Taxable Reimbursements") shall be made by no later than the earlier of the date on which they would be paid under the Company's normal policies and the last day of the taxable year of Employee following the year in which the expense was incurred. The amount of any Taxable Reimbursements to be provided to Employee, during any taxable year of Employee shall not affect the expenses eligible for reimbursement in any other taxable year of Employee. The right to Taxable Reimbursement shall not be subject to liquidation or exchange for another benefit.
12. INVENTIONS, ETC.
- (a) It shall be part of the normal duties of Employee at all times to consider in what manner and by what new methods or devices the products, services, processes, equipment or systems of the Company or any of its affiliates with which she is concerned or for which she is responsible might be improved, and promptly to give to the President of the Company or Board of Directors full details of any invention or improvement which she may from time to time make or discover in the course of her duties, and to further the interests of the Company with regard thereto. Subject only to any contrary provisions of the laws of the United States or the State of Florida, all such materials, inventions, improvements, methods, products, services, equipment or systems shall be deemed to be "works made for hire", and to the extent such items are not works made for hire, Employee hereby irrevocably grants and assigns such materials, inventions, improvements, methods, products, services, equipment or systems to the Company which shall be entitled, free of charge, to the sole ownership of any such invention or improvement.

- (b) Employee shall, if and when required so to do by the Company, at the expense of the Company, apply or join with the Company in applying for patents or other protection in any part of the world for any such discovery, invention or process as aforesaid and shall at the expense of the Company, execute and do or cause to be done all instruments and things reasonably necessary for vesting the said patent or other protection when obtained and all right, title and interest to and in the same in the Company or in such other person as the Company may designate.
- (c) For the purpose of this clause Employee hereby irrevocably authorizes the company as her attorney in her name to execute any documents or take any actions which are required in, order to give effect to the provisions of this Section and the Company is hereby empowered to appoint and remove at its pleasure any person as agent and substitute for and on behalf of the Company in respect of all or any of the matters aforesaid.

13. NOTICES. Any notices to be given hereunder by either party to the other may be effectuated either by personal delivery in writing, by electronic facsimile transmission, by commercial overnight courier or by mail, postage prepaid, with return receipt requested. Notices shall be addressed to the parties as follows:

If to the Company:

Cyalume Technologies, Inc.  
96 Windsor Street  
West Springfield, MA, 01089  
Attention: President

with a copy to:

Greenberg Traurig, P.A.  
401 East Las Olas Blvd., Suite 2000  
Fort Lauderdale, FL 33301  
Attention: Bruce I. March, Esq.

If to Employee:

Andrea Settembrino  
2159 NE 59<sup>th</sup> Court  
Fort Lauderdale, FL 33308

or to such other addresses as either the Company or Employee may designate by written notice to each other. Notices delivered personally shall be deemed duly given on the date of actual receipt; mailed notices shall be deemed duly given as of the fifth (5<sup>th</sup>) day after the date so mailed. Notices hereunder may be delivered by electronic facsimile transmission (fax) if confirmation by sender is made within three (3) business days by mail or personal delivery.

14. ATTORNEYS' FEES. If any party shall bring an action to enforce this Agreement, each party will bear her/his/its own attorneys' fees and costs.

15. WAIVER OF BREACH. The waiver by any party to a breach of any provision in this Agreement cannot operate or be construed as a waiver of any subsequent breach by a party.
16. SEVERABILITY. The invalidity or unenforceability of any particular provision in this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if the invalid or unenforceable provision were omitted.
17. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and thereof and supersedes and cancels any and all previous agreements, written and oral, regarding the subject matter hereof between the parties hereto, including but not limited to the Original Agreement. Employee hereby acknowledges that any compensation or benefits Employee otherwise may have been entitled to under the Original Agreement are hereby waived. This Agreement shall not be changed, altered, modified or amended, except by a written agreement signed by both parties hereto.
18. GOVERNING LAW. This Agreement shall be interpreted, construed and governed according to the laws of the State of Florida, without giving effect to principles of conflicts or choice of laws of the State of Florida or of any other jurisdiction.
19. CONSENT TO JURISDICTION. Employee hereby irrevocably submits to the jurisdiction of any court of the State of Florida or any federal court sitting in the State of Florida over any suit, action or proceeding arising out of or relating to this Agreement. Employee hereby agrees that a final judgment in any such suit, action or proceeding brought in any such court, after all appropriate appeals, shall be conclusive and binding upon her.
20. SUCCESSORS AND ASSIGNS. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors, permitted assigns, legal representatives and heirs, but neither this Agreement nor any rights hereunder shall be assignable by any of its parties except as permitted by this Section. Employee agrees that this Agreement may be assigned or transferred by operation of law by the Company upon a sale, merger, reorganization or other business combination of or involving the Company; provided, however, that (i) such assignee or other successor to the Company shall assume all obligations of the Company hereunder and (ii) that Employee shall perform all services required pursuant to this Agreement for any such assignee or successor.
21. MISCELLANEOUS. The Section headings of this Agreement are for convenience of reference only and do not form a part hereof and do not in any way modify, interpret, or construe the intentions of the parties. This Agreement may be executed in one or more counterparts and all such counterparts shall constitute one and the same instrument.
22. RIGHT OF SET-OFF. The Company may at any time offset against any compensation or other remuneration due or to become due to Employee, or anyone claiming through or under Employee, any debt or debts due or to become due from Employee to the Company.

23. SECTION 409A COMPLIANCE.

- (a) General. It is the intention of both the Company and Employee that the benefits and rights to which Employee could be entitled pursuant to this Agreement comply with Section 409A of the Code and the Treasury Regulations and other guidance promulgated or issued thereunder (“Section 409A”), to the extent that the requirements of Section 409A are applicable thereto, and the provisions of this Agreement shall be construed in a manner consistent with that intention. If Employee or the Company believes, at any time, that any such benefit or right that is subject to Section 409A does not so comply, it shall promptly advise the other and shall negotiate reasonably and in good faith to amend the terms of such benefits and rights such that they comply with Section 409A (with the most limited possible economic effect on Employee and on the Company).
- (b) Distributions on Account of Separation from Service. If and to the extent required to comply with Section 409A, no payment or benefit required to be paid under this Agreement on account of termination of Employee’s employment shall be made unless and until Employee incurs a “separation from service” within the meaning of Section 409A.
- (c) 6 Month Delay for Specified Employees.
  - (i) If Employee is a “specified employee”, then no payment or benefit that is payable on account of Employee’s “separation from service”, as that term is defined for purposes of Section 409A, shall be made before the date that is six months after Employee’s “separation from service” (or, if earlier, the date of Employee’s death) if and to the extent that such payment or benefit constitutes deferred compensation (or may be nonqualified deferred compensation) under Section 409A and such deferral is required to comply with the requirements of Section 409A. Any payment or benefit delayed by reason of the prior sentence shall be paid out or provided in a single lump sum at the end of such required delay period in order to catch up to the original payment schedule.
  - (ii) For purposes of this provision, Employee shall be considered to be a “specified employee” if, at the time of his or her separation from service, Employee is a “key employee”, within the meaning of Section 416(i) of the Code, of the Company (or any person or entity with whom the Company would be considered a single employer under Section 414(b) or Section 414(c) of the Code) any stock of which is publicly traded on an established securities market or otherwise.
- (d) No Acceleration of Payments. Neither the Company nor Employee, individually or in combination, may accelerate any payment or benefit that is subject to Section 409A, except in compliance with Section 409A and the provisions of this Agreement, and no amount that is subject to Section 409A shall be paid prior to the earliest date on which it may be paid without violating Section 409A.
- (e) Treatment of Each Installment as a Separate Payment. For purposes of applying the provisions of Section 409A to this Agreement, each separately identified amount to which Employee is entitled under this Agreement shall be treated as a separate payment. In addition, to the extent permissible under Section 409A, any series of installment payments under this Agreement shall be treated as a right to a series of separate payments.

[signatures appear on following page]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

CYALUME TECHNOLOGIES, INC., a Delaware corporation

By: /s/ Zivi Nedivi  
Name: Zivi Nedivi  
Title: CEO

ANDREA SETTEMBRINO

/s/ Andrea Settembrino

## SCHEDULE 1

### TO EMPLOYMENT AGREEMENT OF Andrea Settembrino

1. Salary. The Company shall pay Employee an annual base salary (“Base Salary”) of one hundred eighty thousand dollars (\$180,000.00), at normal payroll intervals and less applicable deductions and withholdings, which shall be subject to annual adjustments at the sole discretion of the Board of Directors of the Company.
2. Cash Bonus. Employee shall be eligible for an annual bonus for each fiscal year of the Company (“Bonus”), subject to the terms and conditions of this Section. The payment and amount of any Bonus for a given fiscal year shall be based on performance targets to be established each year by the Board of Directors (or the compensation committee thereof) of Holdings (the “Annual Performance Targets”). If the Company’s performance meets, but does not exceed, the Annual Performance Targets for a given fiscal year, the amount of the Bonus for such fiscal year shall equal 50% of the annualized rate of the Base Salary in effect as of the end of such fiscal year. If the Company’s performance exceeds the Annual Performance Targets for a given fiscal year, the amount of the Bonus for such fiscal year shall equal 50% of the annualized rate of the Base Salary in effect as of the end of such fiscal year, plus an additional 1% of such annualized rate for each 1% by which the Company’s performance exceeds the Annual Performance Targets for such fiscal year. If the Company’s performance fails to meet the Annual Performance Targets for a given fiscal year, the amount of the Bonus for such fiscal year shall equal 50% of the annualized rate of Base Salary in effect at the end of such fiscal year, less 2% of such annualized rate for each 1% by which the Company’s performance failed to meet the Annual Performance Targets for such fiscal year, provided, however, that Employee shall not be eligible for any Bonus for a given fiscal year in which the Company’s performance was less than or equal to 70% of the Annual Performance Targets for such fiscal year. Provided Employee has not been terminated under Section 8(a) (for “cause” by the Company) prior to payment thereof, Employee shall be eligible for (i) a Bonus for each fiscal year on the last day of which Employee is employed hereunder and (ii) if Employee’s employment hereunder is terminated other than on the last day of a fiscal year, a pro-rated bonus for the fiscal years during which Employee’s employment hereunder is terminated, based on the number of full calendar months Employee was employed hereunder during such fiscal year. Any Bonus earned for any full or partial fiscal year shall be paid in the following fiscal years within 30 days after the Company’s audited financial statements are issued, but in no event later than June 30<sup>th</sup> of such following fiscal year regardless of whether such audited financial statement are issued by such date. For the avoidance of doubt, the Bonus with respect to the fiscal year in which the Effective Date occurs shall be pro-rated based on the number of full calendar months Employee was employed hereunder as CFO during such fiscal year.
3. Stock Options. Subject to the approval of the Board of Directors of Holdings, Employee will be granted stock options to purchase 500,000 shares of common stock of Holdings (the “Stock Options”). The Stock Options shall be granted under, and shall be subject to, Holdings’ 2014 Incentive Equity Plan and shall be subject to such other terms and conditions as shall be reflected in a stock option agreement to be executed by the Company and Employee (the “Option Agreement”). The Option Agreement shall provide, among other things, that (a) the exercise price of the Stock Options will be the closing price of Holdings’ common stock on the date of grant and (b) twenty percent (20%) of the Stock Options shall vest each year on the anniversary of the Effective Date of this Agreement over a period of five years.
4. Benefits. Employee shall be provided with health, life, and disability insurance coverage and other similar benefits substantially equivalent to those provided to employees of the Company from time to time, all in accordance with the standard policies of the Company.



**Subsidiaries of the Registrant**

<u>Name of Subsidiary</u>	<u>Place of Incorporation</u>
Cyalume Technologies, Inc.	Delaware, U.S.A.
CT SAS Holdings, Inc.	Delaware, U.S.A.
Cyalume Technologies, S.A.S.	France
Combat Training Solutions, Inc.	Colorado, U.S.A.
Cyalume Specialty Products, Inc.	Delaware, U.S.A.
Cyalume Realty, Inc.	Delaware, U.S.A.

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference into the Registration Statement on Form S-8 (No. 333-161569) of Cyalume Technologies Holdings, Inc. of our report dated March 28, 2017, relating to the consolidated financial statements of Cyalume Technologies Holdings, Inc., which appears in this Annual Report on Form 10-K.

/s/ BDO USA, LLP  
Boston, Massachusetts  
March 28, 2017

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## CERTIFICATION

I, Zivi Nedivi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cyalume Technologies Holdings, 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.

Date: March 28, 2017

/s/ ZIVI NEDIVI

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Zivi Nedivi, Chief Executive Officer

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## CERTIFICATION

I, Andrea Settembrino, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cyalume Technologies Holdings, 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.

Date: March 28, 2017

/s/ ANDREA SETTEMBRINO  
Andrea Settembrino, Chief Financial Officer

**CERTIFICATION**

Each of the undersigned officers of Cyalume Technologies Holdings, Inc. (the "Company") hereby certifies that, to his knowledge, the Company's Annual Report on Form 10-K to which this certification is attached (the "Report"), as filed with the Securities and Exchange Commission on the date hereof, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2017

/s/ ZIVI NEDIVI

\_\_\_\_\_  
Zivi Nedivi, Chief Executive Officer  
(the Principal Executive Officer)

Date: March 28, 2017

/s/ ANDREA SETTEMBRINO

\_\_\_\_\_  
Andrea Settembrino, Chief Financial Officer  
(the Principal Financial Officer)

This certification is being furnished and not filed, and shall not be incorporated into any document for any purpose, under the Securities Exchange Act of 1934 or the Securities Act.

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