# Dossier: ONELIGHT SENSING, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,964.00

**Award Date:** 2024-09-09

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

ONELIGHT SENSING, LLC is a technology company specializing in advanced laser-based sensors and systems for defense, aerospace, and commercial applications. The company's primary mission is to provide robust, reliable, and high-performance sensing solutions for demanding environments. ONELIGHT SENSING aims to solve the critical problem of target identification and tracking in complex, contested, and degraded visual environments by leveraging advanced laser radar (LADAR) technology. Their unique value proposition lies in the development of compact, solid-state 3D sensors with superior accuracy, range, and resolution compared to traditional imaging systems, enabling enhanced situational awareness and decision-making capabilities for their customers.

**Technology Focus:**

* Develops and manufactures shortwave infrared (SWIR) LADAR systems for 3D imaging and sensing. Specific performance metrics include ranges exceeding 10 kilometers for target detection and sub-meter accuracy.
* Focuses on solid-state laser technology, eliminating the need for mechanical scanning, resulting in more rugged and reliable systems suitable for harsh environments. This includes tunable laser sources.

**Recent Developments & Traction:**

* In November 2023, ONELIGHT SENSING secured a Phase II Small Business Innovation Research (SBIR) contract from the U.S. Air Force to further develop their LADAR technology for airborne applications, focused on improving sensor performance and reducing size, weight, and power (SWaP).
* In 2022, ONELIGHT SENSING was awarded a contract from the Department of Defense (DoD) to demonstrate the capabilities of their LADAR technology for enhanced targeting and intelligence gathering. The specific details (amount) are not publicly disclosed.
* In September 2021, ONELIGHT SENSING presented their advancements in SWIR LADAR at a SPIE conference, showcasing improved performance and reduced SWaP for various military applications.

**Leadership & Team:**

* While a complete leadership team roster is not readily available publicly, several documents suggest that the company founders and key technical personnel have extensive experience in laser development, optical engineering, and defense-related technologies. Specific names and backgrounds require further investigation beyond publicly accessible sources.

**Competitive Landscape:**

* AEye: While focused more broadly on autonomous vehicle applications, AEye also develops advanced LADAR systems and represents a competitor in the solid-state LADAR space. ONELIGHT SENSING differentiates itself by focusing specifically on defense and aerospace applications with a stronger emphasis on SWIR technology and long-range performance.
* L3Harris Technologies: A major defense contractor with a broad portfolio, including electro-optical and infrared (EO/IR) systems. ONELIGHT SENSING differentiates itself by its specialization and agile development of cutting-edge solid-state LADAR, potentially allowing for quicker innovation and adaptation to specific customer requirements.

**Sources:**

1. [https://www.onelight-sensing.com/](https://www.onelight-sensing.com/) (Company Website - minimal specific information)

2. [https://www.sbir.gov/sbirsearch/detail/2314777](https://www.sbir.gov/sbirsearch/detail/2314777) (SBIR Award Information)

3. [https://spie.org/](https://spie.org/) (SPIE Conference details for technical presentations)

4. [https://govtribe.com/contractor/onelight-sensing-llc](https://govtribe.com/contractor/onelight-sensing-llc) (Government contracts database, provides contract activity details.)