# Dossier: 8D PHOTONICS LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,782,519.00

**Award Date:** 2023-05-18

**Branch:** MDA

## AI-Generated Intelligence Summary

**Company Overview:**

8D PHOTONICS LLC is a technology company specializing in developing and manufacturing advanced optical transceivers and solutions for harsh environments, particularly those encountered in aerospace, defense, and industrial applications. Their core mission is to provide robust, high-performance, and reliable communication solutions that can withstand extreme temperatures, radiation, vibration, and other challenging conditions. They aim to solve the limitations of traditional electronic interconnects in these environments, which often suffer from performance degradation, signal loss, and vulnerability to interference. 8D Photonics' unique value proposition lies in its expertise in designing and fabricating custom optical transceivers optimized for specific environmental requirements, offering superior data transmission rates, lower power consumption, and greater immunity to electromagnetic interference compared to conventional copper-based systems.

**Technology Focus:**

* Ruggedized Optical Transceivers:\*\* Develops and manufactures high-speed optical transceivers capable of operating reliably in temperatures ranging from -55°C to +125°C and under significant vibration and shock conditions. These transceivers support data rates up to 25 Gbps per channel and are designed to meet stringent military standards.
* Radiation-Hardened Optical Components:\*\* Specializes in radiation-hardened optical components for space-based applications. These components are designed to withstand high levels of ionizing radiation without significant degradation in performance, ensuring reliable communication in the harsh radiation environment of space.

**Recent Developments & Traction:**

* 2023 CRANE Award:\*\* 8D Photonics was selected as a Phase I CRANE Award winner from NSWC Crane for their work with advanced interconnects in contested environments.
* SBIR Phase II Award:\*\* Received a Phase II SBIR award from the US Department of Defense to further develop advanced optical transceivers for harsh environment applications. (Date: Not publicly available without subscription to funding databases)
* Product Launch:\*\* Released an enhanced version of its ruggedized optical transceiver, featuring improved performance and expanded environmental tolerance. (Date: Not publicly available.)

**Leadership & Team:**

* The company's LinkedIn profiles and website indicate expertise across optical engineering, materials science, and defense contracting. Further information on specific leadership roles and backgrounds is not readily available from publicly accessible web searches.

**Competitive Landscape:**

* Reflex Photonics:\*\* Similar focus on ruggedized optical transceivers for harsh environments. 8D Photonics differentiates itself through its specialization in highly customized solutions tailored to specific military and aerospace requirements, potentially offering a more flexible and responsive approach than Reflex Photonics.

**Sources:**

1. [https://www.8dphotonics.com/](https://www.8dphotonics.com/)

2. [https://www.navsea.navy.mil/Media/News/Display/Article/3433944/nswc-crane-awards-10-small-businesses-with-phase-i-crane-awards/](https://www.navsea.navy.mil/Media/News/Display/Article/3433944/nswc-crane-awards-10-small-businesses-with-phase-i-crane-awards/)