

**Media Contact:**

Lew Stolpner  
RIO Inc. Director of Program Management  
Phone: 408-970-3500 ext. 312  
Email: [lew.stolpner@rio-inc.com](mailto:lew.stolpner@rio-inc.com)

**NEWS RELEASE****Redfern Integrated Optics (RIO) Completed First Phase of PLANEX™ Laser Reliability Testing Program for NASA Space LIDAR Applications**

**Santa Clara, Calif. – December 21, 2011** – Redfern Integrated Optics, Inc. (RIO) today announced the completion of first phase of a reliability testing program of its planar external cavity narrow-linewidth low-noise PLANEX™ lasers for space applications. The program included extensive environmental stress tests performed by RIO and by LGS Innovations (the subsidiary of Alcatel-Lucent), a NASA prime contractor.

RIO's proprietary external-cavity semiconductor lasers are packaged in the standard 14-pin compact "butterfly" package, and provide a single-frequency output in the 1550 nm spectral region with a linewidth less than 2kHz, low phase noise, low relative intensity noise (RIN), high immunity to vibrations, over a wide range of ambient temperatures. RIO's lasers are already qualified to Telcordia optical communications standards and are widely deployed in LIDAR and fiber optic sensing applications. The inherent reliability and stability of the PLANEX™ lasers make them ideal candidates for aerospace applications.

"NASA selected RIO's PLANEX lasers for unique combination of mission critical performance with a compact and robust design. LGS performed environmental stress testing and concluded that performance and reliability testing done to date has indicated that the PLANEX™ laser is robust and well positioned to meet the qualification requirements of NASA missions" said Alfonso Piccirilli, Technical Manger at LGS.

"Environmental testing of RIO PLANEX™ lasers for NASA was demanding and included a large number of wide temperature range cycles at various conditions and enhanced hermeticity testing. All lasers were produced on RIO's manufacturing line without special selection and passed all tests without failures. The results confirm the high reliability of RIO's products, that is critical not only for future aerospace applications, but also for our current OEM customers," added Dr. Georgios Margaritis, RIO's Director of Operations, Quality and Reliability.

**About RIO Inc.**

Redfern Integrated Optics, Inc. (RIO) is the leading global supplier of single frequency narrow linewidth lasers, modules, and subsystems to the clean energy, security, oil and gas, and test and measurement markets. RIO's lasers have ultra-low noise, unparalleled wavelength stability, small size, low power dissipation, Telecom grade lifetime reliability, at affordable prices. For more information, please visit [www.rio-inc.com](http://www.rio-inc.com), email [sales@rio-inc.com](mailto:sales@rio-inc.com), or call 408-970-3500 ext.310.

**About LGS Innovations LLC**

LGS Innovations LLC is an independent subsidiary of Alcatel-Lucent, and is dedicated solely to serving the U.S. Federal Government. Building on its Bell Labs heritage, LGS delivers advanced networking and communications solutions, including Advanced Multimedia/RF, cybersecurity, and Photonics R&D and product development. For more information, please visit [www.lgsinnovations.com](http://www.lgsinnovations.com).