

FOR IMMEDIATE RELEASE:

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## High Power LED Light Engines for Large FOV Fluorescence Imaging Systems



**Woburn, MA, November 18, 2014** Innovations in Optics, Inc. offers high power LED Light Engines as excitation illuminators for large field-of-view fluorescent imagers used in life science instruments. Specific OEM applications are life science instruments such as: gel & Western blot documentation systems, real-time PCR thermocyclers, automated colony counters, chlorophyll fluorescence imagers, low density microarray analyzers and small animal, *in vivo* fluorescence imaging systems.

LumiBright LE Light Engines feature patented non-imaging optics that direct LED light into a desired cone angle, while producing highly uniform output, both angularly and spatially. The two standard far-field half-angles are 20 and 40 degrees. Available peak LED wavelengths range from 365 nm in the ultraviolet through 970 nm in the near-infrared. LumiBright LE Light Engines use state-of-the-art LED technology to meet the most demanding requirements involving fluorescence excitation. The light engines support easy integration into OEM or end-user systems.

LumiBright LE Light Engines feature densely packed chip-on-board LED arrays that are offered in single or multi-wavelength options. The light engines' metallic core circuit boards sustain the thermal management of LED die operated at high current density drive conditions which enables each LumiBright LE to emit several watts of optical power. Some models include mounted excitation filters that are often critical for fluorescence applications to ensure that the excitation spectrum does not overlap the emission spectrum for generating optimal fluorescent images.

For OEM applications, LumiBright light engines provide intense and stable optical power, short warm-up time, high energy efficiency, low maintenance and long rated life. All models include a board mounted thermistor for real-time temperature monitoring. Some models can also be supplied with a

photodiode for feedback light control, and some can be fiber-coupled. Light engine system accessories include thermal management devices, wire harnesses and driver/controllers.

Innovations in Optics, Inc. (IOI), founded in 1993 and located near Boston, is widely recognized as a leading innovator in the areas of high brightness LED chip-on-board (COB) products and illumination engineering and technology. Leveraging a unique, multidisciplinary approach to systems design, the company pushes the technology envelope to develop industry-leading ultra-high brightness LED products. IOI light engines and illumination systems feature patented and patent-pending optics which collect, direct and maximize output efficiency and uniformity, enabling some of today's most revolutionary solutions in cutting-edge technical applications for LED light sources.