

LDI SHOW PREVIEW: Booth 2341

LED Engin combines its compact LZ4-Plus emitter with Gaggione's optics to deliver breakthrough stage lighting performance

San Jose, CA, USA: November 22, 2013: [LED Engin, Inc.](#), a leader in high flux density LED products, announces a combination of LZ4-Plus emitters and Gaggione 8 to 45-degree zoom optics that produces class-leading candela/lumen performance, beam quality and control. LED Engin's LZ4-Plus are compact, 4-die RGBW emitters for wash lamps and follow spots. They can be driven to 1.5A per die to produce 30% higher output than rival products. Matched to the Gaggione lenses, this technology enables luminaire manufactures to design much smaller, lighter and more powerful products than have been possible until now. The resulting entertainment luminaires will help lighting designers create stunning effects by delivering amazingly bright, smooth, flat, progressive beams that feature soft yet clearly defined edges over the full color spectrum.

When driving each die to 1.5A reliability and operating life are not compromised because LED Engin's proprietary, multi-layer, thermally efficient substrate dissipates heat very effectively.

Precise color control is achieved via the ability to individually address each die, in conjunction with in-source color mixing and without the added complexity and cost of attaching color filters to lamps. Based on LED Engin's proprietary LuxiGen™ platform, the compact LZ4 emitters, capped with flat glass primary lenses, are used with secondary optics, including zoom lenses and imaging optics. The die are mounted close together to create a very small light source. This has two benefits: it maximizes in-source mixing to produce uniform color across the beam and it enables very narrow beam angles to be created. Precisely controlled narrow beam angles, down to 8 degrees or less, can only be produced when a very compact light source is employed.

The total internal reflection (TIR) zoom lens developed by Gaggione is one of the most efficient in the market, maximizing candelas per lumen (cd/lm) in the beam. Gaggione also offers fixed, high precision TIR lenses with narrow, medium, wide or elliptical beam angle profiles.

LZ4-Plus emitters are offered in single flux bins per color, reducing the need to mix multiple bins.

The products are being unveiled for the first time on Booth 2341 at LDI –the annual entertainment lighting show held in Las Vegas, opening today.

For more information, please visit <http://www.ledengin.com/files/products/LZ4/LZ4-04MDCA.pdf> and <http://www.lednlight.com>.

About LED Engin, Inc.

LED Engin, based in California's Silicon Valley, specializes in ultra-bright, ultra-compact solid state lighting solutions that allow designers and engineers the freedom to create uncompromised yet energy efficient lighting experiences. The company's LuxiGen™ Platform - an emitter and lens combination or integrated module, delivers superior flexibility in light output, ranging from 3W to 90W, a wide spectrum of available colors, including whites, multi-color and UV, and the ability to deliver upwards of 5,000 high quality lumens to a target. The small size combined with powerful output allows for a previously unobtainable freedom of design wherever high flux density, directional light is required.

LED Engin products are sold directly through LED Engin sales channels and its distributors. They are available for immediate sampling. For additional information, or to find a sales representative, please visit: www.LEDEngin.com.

About Gaggione

Gaggione has developed and manufactured standard and custom optical components in injection moulded plastics for over 40 years using PMMA and PC polymers. Gaggione recently expanded its capabilities, introducing liquid optical silicone injection services for optical components. The company's advanced lenses feature homogeneous light distribution, high on-axis efficiency (34cd/lm), and effective mixing of all colors. The lenses are available in a 5x range from narrow to wide beam and more than 80% light output ration (LOR) is achieved in all zoom positions. Gaggione's services include optical design, tool development, injection moulding, peripheral processes and test. More information is available at www.gaggione.com.