

LED Engin announces robust, RGBW LED emitters with 30% more output for crisp, narrow-beam stage lighting

San Jose, CA, USA: April 2, 2013: [LED Engin, Inc.](#), a leader in high lumen density LED products, announces the LZ4 flat lens family of compact, 4-die RGBW emitters for wash lamps and follow spots used in stage lighting applications. Two variants are available: LZ4 that can be driven to 1A and LZ4-Plus that can be driven to 1.5A per die, producing up to 550 and 725 lumens output respectively, some 30% more than rival products. The multi-color LED die, which are mounted onto LED Engin's proprietary, multi-layer thermally efficient substrate, are capped with a flat glass primary lens.

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. The compact LZ4 emitters with flat glass windows can be used with various secondary optics, including zoom lenses and imaging optics, and are capable of delivering beam widths down to 6 degrees in such systems.

This latest emitter technology facilitates the design of more reliable, controllable and versatile studio lighting compared with high intensity discharge (HID) lamps, often in much smaller enclosures. The LEDs also deliver more consistent color over their service life, run much cooler and save energy.

The technology underpinning the new emitters is LED Engin's LuxiGen platform. LED die are fixed to a low thermal resistance substrate using a unique gold-tin eutectic die-attach process. This allows users to drive the LED dies with higher current and generate more light, while keeping junction temperatures low to ensure long operating life. In the LZ4 RGBW emitters, four die of the same dimensions are closely packed together onto each substrate for optimized étendue. This produces narrower, punchy beams with better color mixing and sharp cut-offs. Utilizing a flat glass lens allows the primary optic to be closer to the die for highest coupling efficiencies and facilitating the use of zoom optics, mixing rods, light pipes and other TIR optics. The product also has its anodes and cathodes aligned, simplifying board design when using multiple emitters in a single lighting fixture.

President and CEO of LED Engin, David Tahmassebi, comments, “Stage and studio lighting have some of the most demanding requirements for LED emitters. Our technology not only produces the highest ‘Lux-on-Target’ for a given power rating, but also gives lighting designers greater creative freedom. Fixtures that use the technology produce focused, punchy light with minimal glare and are capable of fast, precise color changes to create dramatic effects.”

The new emitters are available now direct from LED Engin.

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 .