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Punchier stage lighting delivered by three new multi-color LED Engin emitter platforms

LZ4, LZ7 and LZP provide class-leading luminous flux and beam intensity

San Jose, CA, USA – April 15, 2015: LED Engin, Inc. announces a trio of multi-color emitters that deliver punchier stage lighting over a greater distance and enable compact lighting fixtures to be designed with fewer emitters. With unrivalled high luminous flux density and beam intensity, the products benefit from LED Engin's proprietary multi-layer thermally efficient substrate, robust die-attach and advanced optical technologies.

Geared towards high performance wall wash lamps, moving heads with zoom optics, and follow spot fixtures: the LZ4 is a multi-color (RGBW) 4-die flat top emitter using a new 40% thinner package with half the thermal resistance of the previous generation; the LZ7 7-die (RGBW, cyan, amber and violet) flat top emitter; and the LZP 25-die RGBW emitter in flat top or dome lens options, both utilizing the same new package technology. Precise color control is achieved via the ability to individually address each color, in conjunction with in-source color mixing.

With its significantly lower thermal resistance, just 0.6 degrees per watt, the LZ4 can be driven harder – up to 3A per die – to provide the highest flux density in its class. Its close packed 1mm^2 dies provide compatibility with existing zoom lens systems or those developed specifically for the LZ4 from Gaggione and Fraen Corporation. With lower thermal resistance which allows the dies to run cooler, secondary optics can be positioned closer to the light emitting surface without degradation.

Providing the same flux density per die as 4-die products, the LZ7 emitter adds amber, cyan and violet to existing RGBW channels to achieve a richer and wider color combination for more sophisticated mixing. This solution, specified at 850mA per die, can be boosted up to 1.5A if required. Secondary zoom optics (a mixing rod and collimator) have been created especially for the LZ7 by Fraen Corporation to enable existing moving head designs to be instantly and easily upgraded to 7 colors. Being the same size as a standard LZ4 emitter, virtually all fixtures can be upgraded to 7 colors by simply switching to the LED Engin LZ7 emitter.

The 25-die LZP emitters with four independently color-controlled channels (RGBW) can be packed closely in a 3-or-4 up high power array to allow slimmer profile lamps or new moving head designs. The glass dome and flat top primary optic versions are compatible with TIR and mixing rod secondary optics. Besides stage lighting, the deployment of LED Engin's 84mm 13, 21, 36, and 47 degree secondary TIR optics will enable 'plug and play' design capability for architectural fixtures too.

President and CEO of LED Engin, David Tahmassebi, comments, "LED innovation now meets the challenging requirements that professionals demand of stage lighting. The new emitters from LED Engin deliver punch that is ideal for spot, moving head or wash light fixtures. And when it comes to emitting the maximum multi-color light from a tiny surface area, fixture manufacturers need look no further – particularly given the ground-breaking level of thermal resistance they offer. "

Samples of the new LZ4 high current version (up to 3A/die) emitters are available from LED Engin in May while the LZ4 (1.5A/die), LZ7 and LZP are available now.

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.

About Fraen Corporation

Fraen Corporation specializes in the design, development and manufacture of optics for high-powered LEDs. Fraen offers a wide range of standard products as well as custom optic design services. Fraen's other businesses include its Custom Manufacturing Division, which specializes in lighted plastic automotive interior components and complex metal fabrication; and Fraen Machining Corporation, which manufactures precision-turned metal components.