



NEWS RELEASE

Cree Launches the Industry's Brightest and Most Efficient Royal Blue LED

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New XLamp XP-G3 Royal Blue LED Optimized for Horticulture Applications

DURHAM, N.C. -- Cree, Inc. (Nasdaq: CREE) announces the new XLamp® XP-G3 Royal Blue LED, the industry's highest performing Royal Blue LED. The new XP-G3 LED doubles the maximum light output of similar size competing LEDs and delivers breakthrough wall-plug efficiency of up to 81 percent. This superior performing Royal Blue LED expands Cree's leading high power portfolio, enabling lighting manufacturers to deliver differentiated LED solutions for applications such as horticulture, architectural and entertainment lighting.

Using the new XP-G3 Royal Blue LED and the recently introduced XP-E High Efficiency Photo Red LED, Cree has created a new horticulture reference design that achieves a Photosynthetic Photon Flux (PPF) efficiency of up to 3.2 $\mu\text{mol}/\text{J}$ at steady-state, which is over 50 percent more efficient than the traditional high pressure sodium solutions in use today. The XP-G3 Royal Blue LED delivers up to 3402 mW radiant flux, which corresponds to 13 $\mu\text{mol}/\text{s}$ PPF, at its 2A maximum current and 85 C junction temperature.

"Our newest horticulture-optimized products help lighting manufacturers push LED horticulture systems into mainstream use," said Dave Emerson, Cree LEDs senior vice president and general manager. "Cree's high power LED technology provides the best combination of photon output, efficiency and reliability to drive the replacement of outdated high pressure sodium lights with LED lighting solutions that minimize power consumption and maximize crop yield."

The XP-G3 Royal Blue LED is built on Cree's ceramic high-power technology, which can deliver excellent lifetimes even at the extreme temperature of 105 C. Additionally, horticulture lighting manufacturers can immediately take advantage of the existing ecosystem of drivers and optics proven to work with Cree's other 3.45 mm footprint XP

products to shorten their time to market.

Product samples of the new XP-G3 Royal Blue LEDs are available now and production quantities are available with standard lead times. For more information on Cree's horticulture LEDs or the new reference design, visit <https://www.cree.com/xlamp/horticulture>.

About Cree

Cree is a market-leading innovator of lighting-class LEDs, lighting products and power and radio frequency (RF) semiconductors. Cree's product families include LED lighting systems and bulbs, blue and green LED chips, high-brightness LEDs, lighting-class power LEDs, power-switching devices and RF devices. Cree's products are driving improvements in applications such as general illumination, electronic signs and signals, power supplies and inverters.

For additional product and Company information, please refer to www.cree.com.

This press release contains forward-looking statements involving risks and uncertainties, both known and unknown, that may cause actual results to differ materially from those indicated. Actual results may differ materially due to a number of factors, including the risk that actual savings and lifetimes will vary from expectations; the risk we may be unable to manufacture these new products with sufficiently low cost to offer them at competitive prices or with acceptable margins; the risk we may encounter delays or other difficulties in ramping up production of our new products; customer acceptance of our new products; the rapid development of new technology and competing products that may impair demand or render Cree's products obsolete; and other factors discussed in Cree's filings with the Securities and Exchange Commission, including its report on Form 10-K for the year ended June 26, 2016, and subsequent filings.

Please refer to www.cree.com for additional product and Company information.

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