Thermal Simulation Service and Advanced Photometric Testing Accelerate LED Product Development

Extending the support services offered to LED lighting manufacturers that were launched this fall, Cree announced the addition of two new TEMPO (Thermal Electrical Mechanical Photometric Optical) simulation and photometric testing options are designed to remove barriers for LED lighting manufacturers and accelerate broader market adoption of LED lighting.

“No other LED manufacturer has the same level of end-to-end development support for lighting OEMs,” said Mark McClear, Cree, director of global applications engineering. “This is further evidence of Cree’s commitment to the success of our customers and the solid state lighting industry. Cree Services can remove design, engineering and manufacturing barriers for manufacturers—extending Cree’s expertise and equipment to the developers of LED luminaires and lamps.”

Cree’s TEMPO Thermal Simulation is a cost-effective solution to model the thermal performance of prototype LED fixtures. Effective LED luminaire thermal design is essential to ensure reliability and optimum performance. TEMPO Thermal Simulation predicts the thermal behavior of LED-based fixtures, including junction temperature, heat sink temperature, temperature profile and airflow profile.

“Ready access to the TEMPO Thermal Simulation service has saved our team weeks in the product engineering process,” said Jim Shapiro, FEIT ELECTRIC, director of product development. “And speed and quality are the name of the game in the LED marketplace.”

Cree has also added an additional, quick turn-around photometric evaluation option to its TEMPO SPOT service to help prevent costly design mistakes at any step of the development process. TEMPO SPOT services are designed to give a rapid photometric view on a prototype’s performance. This new service gives customers access to complex, costly equipment to measure the photometric performance of luminaires and replacement lamps. Customers can choose integrated measurements from a 2-meter sphere or 3-D measurements from a Type C Goniophotometer to visualize and predict the photometric performance of an installed luminaire.

“With the fast turnaround of Cree’s new TEMPO SPOT service we were able to quickly validate our design assumptions,” said Colin Piepgras, Digital Lumens, vice president of engineering. “Cree clearly understands the challenges of the LED fixture design cycle and its new service offerings hit the nail on the head, giving us precisely what we needed, in the time we needed it in.”

Cree currently provides TEMPO Services out of its Cree Technology Centers, located in Research Triangle Park, N.C. and Santa Barbara, Calif. Future TEMPO Service locations in Shenzhen, Munich, Shanghai and Taiwan are targeted to open in 2012. For more information, please visit cree.com/services.

About Cree
Cree is leading the LED lighting revolution and making energy-wasting traditional lighting technologies obsolete through the use of energy-efficient, mercury-free LED lighting. Cree is a market-leading innovator of lighting-class LEDs, LED lighting, and semiconductor products for power and radio-frequency (RF) applications.

Cree's product families include LED fixtures and bulbs, blue and green LED chips, high-brightness LEDs, lighting-class power LEDs, power-switching devices and RF devices. Cree products are driving improvements in applications such as general illumination, electronic signs and signals, power supplies and solar inverters.

For additional product and company information, please refer to www.cree.com [1].

To learn more about the LED Lighting Revolution, please visit www.creeledrevolution.com [2]

Links:
[1] http://www.cree.com
[2] http://www.creeledrevolution.com