Prototype LED bulb delivers more than 1250 lumens and consumes only 7.3 watts

Less than one year after showcasing the 152 lumens-per-watt concept LED bulb, Cree delivers a new performance benchmark with the 170 lumens-per-watt (LPW) prototype LED light bulb. The innovations behind the high-performance 170 LPW LED bulb are enabling significantly higher efficacy and lower cost for Cree's luminaire portfolio and demonstrate Cree's continued commitment to accelerate the adoption of LED lighting by addressing initial cost and payback – key barriers to widespread LED lighting adoption.

LED lighting at this level of performance is only made possible by advancements across all elements of the LED lighting system – lighting-class LEDs, optics, drivers and thermal management. LEDs based on Cree's innovative SC^3 Technology Platform enable this industry-leading R&D lighting result. The SC^3 Technology Platform is built upon Cree's advanced silicon carbide technology and features advancements in the LED chip architecture and phosphor.

"Optimizing each LED design element was critical in achieving the performance reached by Cree's new prototype LED bulb," said Nick Medendorp, vice president of research and development, Cree lighting. "The technology embodied in the new 170 LPW concept LED bulb is enabling us to develop higher-performance and lower-cost Cree LED luminaires. By pushing the limits of what is possible, Cree continues to strive to develop new technology that uses less energy and provides unmatched light quality and value to our customers."

Third party testing by independent lab OnSpeX confirmed that Cree's new 170 lumen-per-watt prototype LED bulb delivered more than 1250 lumens and consumes only 7.3 watts. The bulb uses Cree® TrueWhite® Technology to deliver a CRI of 90+. As an efficiency comparison, a traditional 75-Watt incandescent light bulb produces 1100 lumens, which is only 14.6 lumens per watt.

For additional information about Cree LED lighting, please visit www.cree.com/lighting [1].

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Links:
[1] http://www.cree.com/lighting