

SSL Postings

As this will be the last Posting of 2011, it's a good opportunity to look back and review the year's highlights. High on the list has to be the awarding in August of the first [L Prize](#)[®], which went to Philips Lighting North America for its entry in the competition's 60W replacement bulb category. The winning product successfully completed 18 months of intensive tire-kicking – short- and long-term testing carried out by independent laboratories, field assessments conducted with utility and energy-efficiency program partners, and stress tests that subjected it to extreme conditions such as high and low temperatures, humidity, and vibration. The new bulb is expected to be in stores in early 2012, and Philips is working with retailers, distributors, and more than 30 L Prize partners to implement coordinated promotional programs and incentives for the winning product.

The impact of the first L Prize goes well beyond Philips and those who'll buy the new product. Ultimately, we're all winners, because competitions drive innovation, and innovation drives market competition. The launch of the L Prize competition and the submission of the Philips entry both helped in that regard, moving the industry as a whole farther along the route toward high-quality replacement lamps for incandescent bulbs, just as "a rising tide lifts all boats."

Another highlight of 2011 was the work of DOE's [Solid-State Street Lighting Consortium](#), which, with more than 315 primary members and still counting, has made quite an impact in its first full year. Last month, more than 1,100 people from all 50 states and beyond

attended a live webcast on a [Model Specification for LED Roadway Luminaires](#) that the Consortium produced. Drafted in response to demand from members and others, fine-tuned with the help of feedback from a series of manufacturer workshops, and beta-tested before its formal release in October, it provides a template users can customize and adapt to their own unique needs and has been downloaded more than 2,100 times so far.

The Consortium also hosted a series of six workshops across the country to help cities, utilities, and other purchasers make informed decisions about LED street lighting. A second series of educational SSL workshops, co-sponsored by DOE and the International Association of Lighting Designers, was held as well. Aimed at a lighting designer audience, it was so successful that a fourth workshop was added to the original three.

The growth of DOE's [LED Lighting Facts](#)[®] program stands out as another highlight of the past year. There are now more than 3,950 products registered with LED Lighting Facts, and over 310 manufacturers have signed on as partners, along with 225 retailers and distributors and 220 lighting professionals, as well as 50 utilities and energy efficiency programs. The LED Lighting Facts website was upgraded in 2011 to make it an even more useful tool. The products page now features a real-time breakdown of the various product types that have been registered, and the search function was enhanced to generate any slice of the product list that's desired. The functionality of the product list was expanded to allow manufacturers to provide additional information, and the Residential Product Performance Scale was joined by a Commercial Product Performance Scale to help users compare LED lighting product performance to standard lighting sources. In addition, LED Lighting Facts began an ongoing verification program to ensure that registered products continue to perform as claimed, and the second in a series of "Product Snapshots," which analyze the database of registered products to monitor the state of the SSL market, was released, with a third Snapshot due out soon.

On the standards front, 2011 saw the publication of the much-anticipated IES TM-21, an approved method for extrapolating the lumen maintenance of LED products well beyond the LM-80 test period, to come up with an estimate of LED lumen maintenance over time. Whereas LM-80 only defines how to collect LED lumen maintenance data over a relatively short testing period of at least 6,000 hours, TM-21 spells out a way to use that data to project the lumen maintenance performance of LEDs well past the testing period.

Although it's an important step, TM-21 only focuses on the package, module, or array and not the other components of an LED luminaire that can affect its lifetime. Those other components are covered in an updated version of the guide [*LED Luminaire Lifetime: Recommendations for Testing and Reporting*](#), published in 2011 by a working group under the auspices of DOE and the Next Generation Lighting Industry Alliance. The latest edition in a series of publications on LED performance and lifetime, the recommendations are an important step toward consistent, industry-wide understanding of LED luminaire lifetime and are intended to support the LED Lighting Facts program and assist standards organizations in their work.

These are just some of the SSL highlights for 2011. We're looking forward to more solid-state lighting advances in 2012 and will fill you in soon on some of DOE's plans for the coming year, including our [*ninth annual SSL R&D workshop*](#), to be held in Atlanta January 31 to February 2.

The success of our efforts depends to a large extent on our partners, so we thank all of you for your continued commitment and support. Happy Holidays!

As always, if you have questions or comments, you can reach us at postings@lightingfacts.com.