

Postings: from the desk of Jim Brodrick

Any technology that's evolving as quickly as solid-state lighting is bound to generate a fair amount of confusion, as people struggle to keep up with a fast-moving target clouded at times by hype and misunderstanding. One way to stay on top of things is by attending the U.S. Department of Energy's (DOE) [sixth annual SSL Market Introduction Workshop](#), which will be held in Seattle July 12-14. The event offers an unbiased, vendor-neutral forum for lighting industry leaders of all stripes – representing government, industry, energy efficiency organizations, utilities, municipalities, designers, specifiers, retailers, distributors, and others – to share the latest updates and insights on a market that often seems to be moving at warp speed.

One of the hot topics in Seattle will be the overhead ambient lighting of large interior commercial office spaces, and whether LED products intended for that application are ready to compete with the incumbent technology. In this country there are, quite literally, tens of millions of recessed troffer fixtures that use 4' fluorescent lamps. So it's not surprising that a host of manufacturers have come out with LED products that are touted as being energy-efficient replacements for those fluorescent T8s. A workshop panel will explore the question of whether the LED T8 replacements currently available on the market can match the performance of their fluorescent counterparts, not only in terms of light output and quality but also in terms of cost-effectiveness. The short answer to that is still "no," although performance continues to improve on all fronts.

But the panel will also look beyond replacement lamps to consider

some integral LED luminaires that have recently come on the market to replace fluorescent troffers and have been generating a fair amount of buzz. I've mentioned before that such products – whose fixtures are designed specifically for SSL – have the potential to work much more efficiently than LED replacement lamps put into fixtures intended for other lighting technologies.

Speaking of LED replacement lamps, the screw-in variety will be the subject of another panel at the Seattle workshop. With the Energy Independence and Security Act of 2007 calling for a phase-out of the least-efficient light bulbs beginning next year, more and more LED screw-in replacement lamps are entering the marketplace. The good news is that we're seeing an increase in their overall output. But the bad news is that some of them still fall short of the products they're intended to replace – in terms of distribution and color quality as well as output. The panel will give you the latest on the LED replacement lamp market, drawing from the most recent [Lighting Facts](#)[®] Product Snapshot and a new [CALIPER](#) study, as well as the experiences of a major retailer.

There'll be lots of other subjects covered at the Seattle workshop – such as updates on driver performance, reliability and lifetime, and improvements in the quality of LED light. We'll also look at ways in which LED lighting products are being reengineered to bring cost down and lessons learned from real-world installations.

In addition, attendees will have a chance to mingle at an evening reception and poster session featuring not only DOE's various SSL programs, but also our partners, who are so important to everything we do. Partners like the International Association of Lighting Designers, the Illuminating Engineering Society of North America (IES), and the Next Generation Lighting Industry Alliance, who support DOE efforts as well as LED education and outreach in many different ways. This will be a chance to learn more about the various opportunities offered by partnering with DOE, by talking with [L Prize](#) partners, Lighting Facts partners, [Technical Information Network for](#)

[Solid-State Lighting](#) partners, [GATEWAY](#) partners, members of the [Municipal Solid-State Street Lighting Consortium](#), and others. You'll be able to find out why they take the trouble to partner with DOE, and what they're getting out of it in terms of the SSL learning curve and other advantages. An added attraction at the reception will be several OLED products on display.

The workshop is preceded by a half-day of optional, beginner-level tutorials on July 12. These will cover the SSL basics – from LED fundamentals; to the status of OLED technology; to understanding IES test methods LM-79, LM-80, and TM-21; to using the Lighting Facts label. That night there will be an optional guided walking tour of nearby indoor SSL installations.

The workshop itself – portions of which will be eligible for CEUs and credits in accordance with IES, American Institute of Architects, and U.S. Green Building Council guidelines – runs July 13 and 14. On the last night, an optional guided bus tour will provide a chance to see some of Seattle's LED street and area lighting installations at close range. That tour is sponsored by the Municipal Solid-State Street Lighting Consortium, which will hold [its own one-day workshop](#) in Seattle the following day (July 15) to share updates on such topics as adaptive lighting controls, the Consortium's LED fixture specification, and calculating light loss factors for LED street lights. Municipal and utility employees, as well as designers, consultants, and those from energy efficiency organizations, are encouraged to attend.

DOE's Solid-State Lighting Market Introduction Workshops offer an enjoyable way to keep up with a technology and marketplace that are in constant motion. I hope to see many of you there in Seattle. For more information, or to register, visit www.ssl.energy.gov/seattle2011.html.

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

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