Postings: from the desk of Jim Brodrick

Greetings from sunny Santa Clara, CA, where I joined an expert panel of speakers at this year's Strategies in Light conference, to explore manufacturing issues and strategies for LEDs. I'll be talking more about this topic in an upcoming *Posting,* as we get closer to the U.S. Department of Energy's (DOE) SSL Manufacturing R&D workshop. But this week's buzz is about Next Generation Luminaires™ (NGL) Design Competition. Yesterday, the 2010 winners of the NGL were announced here. For a complete listing of the winning products along with their descriptions, visit the NGL website.

The traction NGL has gained as a major lighting competition is reflected in an increase in the number of products that were proposed for submission in 2010–328, compared with 265 in 2009. But there wasn't a corresponding increase in the number of winners, and for a very good reason. Even though the NGL documentation requirements were already pretty tough, they were made even tougher for 2010. In order for a product to even be accepted for judging, manufacturers had to provide thorough documentation to help make sure that it performed as claimed.

It wasn't enough to provide LM-79 photometric reports; to support the emerging methodology for evaluating and rating LED products for life, NGL required data for each entry based on current industry standards and best practices. Manufacturers had to supply data for the LED drive current used for the product, the LED manufacturer's estimated LED life (L70), IES-LM-80 test data from the chip manufacturer, a photo or schematic of the temperature

measurement point, and in-situ temperature measurement in UL 1598 environment for 7 hours. On top of that, NGL required driver spec sheets, end-of-life policy statements, and an installation/serviceability instruction sheet to help the judges screen out those products that were likely to give contractors major headaches.

As a result of this raising of the documentation bar, only 138 out of the 328 products that had been proposed as NGL submissions in 2010 actually made it to the judging phase. The rest were flat-out rejected–either because they weren't deemed ready for market or because they lacked the required documentation.

DOE launched the NGL in 2008 in partnership with International Association of Lighting Designers and the Illuminating Engineering Society of North America. Why? To recognize and promote excellence in the design of energy-efficient LED commercial lighting luminaires that use much less electricity than traditional fixtures. Recognition by NGL means that the judges consider the product to be truly specifiable–and since most of the judges are lighting designers and specifiers whose reputations depend on the performance of the products they specify, that kind of recognition can go a long way toward helping interested parties sort through a confusing marketplace and mitigating the risk of purchasing solid-state lighting products.

All told, there were 42 products recognized by the 2010 NGL competition. Among them were 33 recognized as specifiable, covering accent track lighting, recessed accent lighting, wall washing, wall grazing, recessed downlighting, decorative pendant lighting, decorative wall lighting, general illumination, industrial lighting, in-grade lighting, and street and area lighting.

Another four products were awarded Best in Class, because the judges felt they stood out significantly above the other recognized products in their categories (cove lighting, facade lighting, task

lighting, and recessed accent lighting). An additional five products were designated as "Notable"–a brand-new category that was added for the 2010 competition to acknowledge products that might not be fully specifiable at this point in time but had at least one outstanding characteristic the judges felt was worthy of recognition.

Because the NGL is a design competition, aesthetics is an important criterion–just as it is for lighting designers and specifiers. But the NGL is about a lot more than looks. The 12 judges evaluated each entry across a whole host of parameters in addition to appearance including dimmability, color appearance and rendering, serviceability and replacement, appropriate luminance and illuminance, cost, product depreciation data, and energy efficiency.

That last parameter, of course, is the one that's most important to DOE. But we recognize that products that don't measure up in other ways simply won't get purchased and used, no matter how energy-efficient they are. That's why competitions such as NGL are so important, because they not only promote the design of high-performing LED lighting products, but they also help increase consumer awareness and market acceptance–without which very little energy can be saved.

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