ASSIST *recommends…*
Application-specific Evaluation Methods

The Alliance for Solid-State Illumination Systems and Technologies (ASSIST), a program of the Lighting Research Center, was established in 2002 with its major goal being to facilitate the broad adoption of reliable, energy-efficient LED technology.

Research, education, and industry collaboration have been key activities of the program, which seeks to reduce many of the technical hurdles standing between LEDs and their acceptance. As part of these activities, ASSIST has developed a publication program called *ASSIST recommends* to provide a set of formal recommendations to the LED and lighting communities about issues important for the reliable performance of LED lighting and its comparison to other light source technologies. The publications include recommendations for LED life definition, testing and measurement, best practice guides for different lighting applications, and recommendations for selecting LED lighting.

A different view of LED and lighting evaluation

Unlike traditional procedures that require products to be tested under standardized, ideal conditions, *ASSIST recommends* methods call for evaluating products under conditions similar to those found in the application environment, where the light source could experience much different temperatures and may perform poorly as a result. Testing products by intended application also allows for apples-to-apples comparisons of product performance because test methods have been developed from a technology-neutral standpoint. In addition, *ASSIST recommends* considers application efficacy (useful lumens on the task divided by luminaire input power) for comparing the effectiveness of a luminaire. In many instances, ASSIST's recommendations are applicable to all light source technologies, not just LEDs. This allows LEDs to be compared on a level playing field with other lighting technologies.

ASSIST recommends publications are developed under the guidance of ASSIST sponsors using research conducted by the LRC.

All *ASSIST recommends* documents are available for free download from the LRC Web site.

ASSIST *recommends* publications

ASSIST has published the following guidelines:

- LED Life for General Lighting (2005; rev. 2007)
- Under-cabinet Lighting (2007)
- Directional Lighting (2007)
- LED Light Engines for Decorative Lighting (2008; rev. 2009)
- Refrigerated/Freezer Display Case Lighting (2008)
- Outdoor Lighting and Visual Efficacy (2009)
- Parking Lot Lighting (2009)

ASSIST Sponsors

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ASSIST Program
www.lrc.rpi.edu/programs/solidstate/assist

View LRC Project Sheets at
www.lrc.rpi.edu/resources/newsroom/projectsheets.asp

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