

ASSIST: 10 Years of Industry Partnership to Advance SSL

Solid-state lighting has advanced to become a promising light source because of its ability to save energy, reduce environmental pollutants, and provide custom, quality lighting. This advancement could not have been achieved without industry collaboration.



Since 2002, the Alliance for Solid-State Illumination Systems and Technologies (ASSIST) has brought together a global group of lighting manufacturers, academia, public benefit organizations, and government to become an

international resource for research, education, and demonstration of solid-state lighting. In the last decade, those with a stake in LED lighting have committed their time and resources to ASSIST because of the group's focus on tackling industry issues and concerns; the collaborative model employed in which members meet to formulate questions and guide research; and the benefits from drawing on the LRC's holistic knowledge of lighting.



Research and Education Translates to Quality Products and Applications

ASSIST's research follows the complete path from definition to metric to data and



validation of design, enabling the selection of quality products. As a first step, ASSIST devotes its efforts to **defining performance**. ASSIST's first industry recommendation, released in 2005, defined and provided an estimation method for the "useful" life of LED lighting at L70, which eventually became the basis for the IES LM-80 standard.

Definitions then become the foundation for test procedures, metrics and other tools designed to more **realistically characterize performance and energy efficiency**.



The first aspect of this research is specific to light source performance, for which ASSIST has developed definitions and calculation tools. The second aspect involves the lighting application. ASSIST has led the development of technology-neutral metrics based on the application's typical requirements and environment, which have redefined the energy efficiency of numerous applications. These tools and metrics are published in a series called **ASSIST recommends**.

On behalf of ASSIST, the LRC has demonstrated innovative uses of LED lighting and was the first to offer an independent, research-based **LED Lighting Institute**, sponsored by ASSIST, which is presented globally.

