

#### Dear DLC Members and Stakeholders:

The DLC is pleased to release the first draft of combined Technical Requirements for Solid-State Lighting Version 6.0 (SSL V6.0 Draft 1) and LUNA Version 2.0 (LUNA V2.0) for LED lighting products. This is the first major update to the SSL program since SSL V5.0 and V5.1 were released in 2020.

The DLC requests feedback on this draft during a 6-week public comment period beginning on Monday, April 7, 2025 and ending on Friday, May 16, 2025. Please submit all feedback using the comment form linked below to <u>comments@designlights.org</u>. This comment period will be followed by a second comment period Monday, July 21, 2025 to Friday, August 29, 2025 before the final release of SSL V6.0 on Monday, October 13, 2025 to support product application acceptance and qualification to SSL V6.0 and LUNA V2.0 on January 5, 2026.

View Proposed Requirements for SSL V6.0 and LUNA V2.0 Draft 1

#### Download the SSL V6.0 and LUNA V2.0 Draft 1 Comment Form

## **Draft 1 Release Webinars**

The DLC will host an informational webinar on Tuesday, April 15, 2025 at 3:00 PM Eastern Time. The webinar will focus on the main changes in SSL V6.0 and LUNA V2.0 and will include a Q&A session. Two additional webinars will follow to go into more detail on proposals for new Controls Categories and Field Adjustability April 30, 2025 2:00 PM ET and expanded product types for LUNA qualification April 23, 2025 2:00 PM ET.

Click here to register for the 4/15 Draft 1 Release Webinar

### **Combined Document**

Previously, the SSL Technical Requirements consisted of one main document supported by over a dozen supplementary policies in separate documents, which were updated independently. To better serve applicants seeking SSL qualification for LED products, this update combines all SSL-specific policies as well as LUNA V2.0 requirements into one comprehensive Technical Requirements document.

## Goals of SSL V6.0 and LUNA V2.0



Advance energy efficiency and support decarbonization through increased efficacy thresholds and controls requirements.



Strengthen the SSL QPL by expanding eligibility to support sustainability, lighting innovation, and flexible installation practices.



Drive greater adoption of controls through compatibility-based product selection from SSL and NLC QPLs.



Mitigate light pollution by creating more responsible outdoor lighting options.

# High-Level Changes from SSL V5.1 and LUNA V1.0

Topic Area	Summary of Proposed Changes
Efficacy	<ul> <li>Increase efficacy thresholds for Standard, Premium, and introduce outdoor efficacy thresholds by Primary Use Designation (PUD) rather than using one General Application efficacy threshold for all outdoor products.</li> <li>Update efficacy allowances against proposed V6 efficacy thresholds to continue to support higher quality performance.</li> </ul>
Controllability	<ul> <li>Categorize all SSL QPL listed products by their level of controllability to support the development and adoption of controlled LED solutions.</li> <li>Introduce the ability to link compatible SSL and NLC listed products on their respective QPLs.</li> <li>Clarify definitions for field adjustable and controlled products.</li> <li>Support increased energy savings and installation flexibility by expanding options for field adjustable products.</li> <li>Enhance baseline controllability requirements by proposing minimum dim percentages and removing stepped dim eligibility for outdoor products.</li> </ul>

Topic Area	Summary of Proposed Changes
Quality	<ul> <li>Support responsible outdoor lighting that mitigates light pollution by proposing maximum CCT limits and introducing low CCT and amber product eligibility.</li> <li>Introduce required reporting of CS4 and CS7 color maintenance values per ANSI/IES TM-35-19 are proposed.</li> <li>Maximum UGR thresholds are no longer proposed for linear ambient, high-bay and low-bay luminaires and integrated retrofit kits.</li> </ul>
New Product Eligibility	<ul> <li>New product eligibility has been proposed including:</li> <li>Solar</li> <li>Amber LED products that support appropriate illumination in outdoor environments and indoor healthcare, industrial and cleanroom environments.</li> <li>Low CCTs (1800K, 2000K)</li> <li>Turtle Lighting products</li> <li>Segmentation within Linear Ambient</li> <li>Full Color-Tunable products.</li> </ul>
Premium	<ul> <li>Premium requirements changes are focused on:</li> <li>increasing the efficacy levels over Standard listings,</li> <li>limiting eligibility to specific controls categories,</li> <li>and requiring digital drivers.</li> </ul>
Lumen Maintenance & Driver Lifetime	<ul> <li>Driver lifetime is proposed to become a requirement for all listings (Standard and Premium), rather than just Premium, to ensure lifetime of listed products provides persistent energy savings.</li> <li>Amber LED product requirements have also been proposed.</li> </ul>
Sustainability	• Sustainability certifications are proposed as an option to support the use of sustainable lifecycle practices.
LUNA V2.0	<ul> <li>The LUNA V2.0 Technical Requirements include proposals to:</li> <li>Minimize testing burden</li> <li>Remove LUNA specific controls requirements and align with V6.0 controls requirements</li> <li>Allow more product types to qualify</li> <li>New LUNA -specific options for outdoor lighting in sensitive environments are also proposed, including pc-Amber and de-Amber LEDs, amber-filtered LEDs, lower CCTs, and Turtle Lighting product types.</li> </ul>

Topic Area	Summary of Proposed Changes
	<ul> <li>SSL V6.0, LUNA V2.0, and all SSL-specific standalone policies are being combined to create a single, comprehensive Technical Requirements policy.</li> <li>Required reporting of product features and information useful for identifying the intended end-use of the product is proposed including:</li> </ul>
General Improvements for QPL Users and Qualifying Manufacturers	<ul> <li>Form factor</li> <li>Mounting options</li> <li>Environmental protection</li> <li>Product images</li> <li>Specification sheets</li> </ul>
	<ul> <li>A pathway for reporting equivalently performing alternate LEDs and drivers is proposed to better support and address manufacturers' and QPL users' concerns regarding variations of listed products.</li> </ul>

Please submit all questions and <u>comment forms</u> to <u>comments@designlights.org</u>. We look forward to engaging with you to increase the value of the SSL and LUNA Technical Requirements and QPL.

Best regards,

The DLC Team