

SSL V6.0 & LUNA V2.0

TALKING POINTS

The lighting industry is rapidly transforming, and the DLC continues to play a vital role in helping our members and partners lead that evolution toward smarter, more efficient, and more sustainable solutions. The <u>Technical Requirements for LED Lighting: SSL V6.0 and LUNA V2.0</u> mark a pivotal step forward, that reflects the latest technology, market needs, and environmental priorities.

This update goes beyond increasing efficacy. It helps utilities, energy efficiency programs, and other stakeholders capture deeper savings, enhance lighting quality, and support sustainability goals. SSL V6.0 refines the foundation for all lighting performance with stronger efficacy, controllability, and quality of light metrics, while LUNA V2.0 expands these principles for outdoor products, addressing light pollution, spectral impact, and community well-being. Developed with extensive stakeholder input and market data, SSL V6.0 and LUNA V2.0 provide members and programs with a clear path toward a more efficient future.

Updated Requirements for a More Connected and Sustainable Future:

The updates recognize that today's lighting is part of a connected ecosystem that saves energy, supports building performance, and contributes to healthier, more sustainable communities. These new requirements reflect how lighting now plays a role in the broader energy landscape: systems that communicate, respond, and adapt. They are designed to make it easier for utilities and energy efficiency programs to promote products that do more, delivering value through performance, controllability, and environmental responsibility. Updated requirements are focused on:

1. Deeper Energy Savings with Standard and Premium products:

SSL V6.0 increases the minimum efficacy requirements across nearly all categories, Standard efficacy thresholds are approximately 14% higher across all categories. These increases allow programs to:

- ✓ Introduce tiered incentives based on higher efficacy performance for deeper savings opportunities.
- Support early replacement programs for existing LED products, since higher predicted wattage reductions improve cost-effectiveness and payback timelines.

2. Driving Greater Energy Savings with SSL V6 Control Capabilities:

 SSL V6.0 advances controllability and reporting framework, making it easier for efficiency programs to verify and incentivize advanced control functionality. By providing



more granular data on dimming and control options and expanding reporting of field adjustable settings, SSLV6.0 enables programs to:

- Accurately assess control capabilities for each luminaire model and match them to appropriate incentive tiers
- Provide more streamlined evaluation and verification processes

3. Introduction of Control Categories Allows Increased Energy Savings Opportunities:

SSL V6.0 provides a clear connection between measures and control savings factors by introducing control categories clearly noted on the QPL that can be aligned with program lighting control measures to allow:

- ✓ Tiered incentive design: programs can align incentive levels with the control category, offering base incentive for simple control installations and higher incentive for advanced control strategies, analytics or commissioning systems
- Streamlines TRM integration by easily identifying controls capabilities for each model number

4. Broader Product Choices While Prioritizing Efficiency:

SSL V6.0 broadens the range of products eligible for listing on the Qualified Products List (QPL). Newly included categories and Product Use Designations (PUDs) include:

- ✓ Low-CCT and Amber LED products
- ✓ Solar-powered luminaires
- Medium screw-base HID replacement lamps
- ✓ Turtle lighting

5. Optimized Verification Processes to Support Incentive Programs:

SSL V6.0 enhances QPL documentation and verification features to streamline program administration speeding up simplifying reviews and QA. New QPL listing elements include:

- ✓ QPL images
- Specification sheets
- ✓ Control options table

6. Improved Outdoor Compliance and Community Outcomes via LUNA:

LUNA V2.0 continues to provide more choices for communities looking for energy efficient outdoor lighting that can meet ordinance/bylaw requirements for light pollution mitigation and is eligible for rebates. Key enhancements include:

- Non-White Light (NWL) and Amber LED
- Screw-base/retrofit options
- Advanced Control strategies to reduce light when appropriate



Key Updates Summary:

Standard Requirements	Policy updates	Benefit
Efficacy	Baseline efficacy levels raised across all categories. On average, the efficacy thresholds in SSL V6.0 are 14% higher than SSL V5.1.	Higher minimum efficacies ensure incented products are top-tier performers, providing a strong basis for savings claims/TRMs. Improves energy savings per fixture and keeps programs aligned with advancing technology.
Dimming Capability	SSL V6.0 (Standard): continuous dimming to ≤20% of max output; Premium: ≤10%. Lamps/luminaires must disclose controls	Enables deeper savings with sensors/controls. Improves comfort via tuning. Supports NLC/LLLC integration
Premium Classification	Premium requires continuous dimming to ≤10%, L90 ≥ 36,000 hours, and driver life ≥ 50,000 hours	Longer product life & reduced maintenance. Supports whole-building energy strategies. Highest performance with lower failure risk
Quality of Light	Indoor CCT eligible range expanded to 1800K–6500K; adopts updated chromaticity standard; maintains CRI/TM-30 reporting.	Adds product reporting for CCT, light output and light distribution, allowing faster and more accurate product verification.
Controls Categories (0–6)	New 7-level framework from "No Controls" (0) to "LLLC" (6). Controls categories are organized by control measure type, allowing programs to more easily connect controls savings factors used in TRMs with controls measures	Allows programs to target deeper savings based on accurate controls capability reporting. Simplifies incentive tiers and aligns with TRM savings.
Networked Lighting Controls Integration	Reporting fields for communication protocol and controls-ready accessories are required.	Simplifies identifying NLC/LLLC-compatible products and enables combined incentives.
Required Non- performance Reporting	Specification sheets are required to be displayed or linked from QPL	Support an enhanced application review speed and QA for utility program
Controls & Communication Reporting	All dimmable products report control communication (wired/wireless protocols) and integral sensor capabilities	Easier to select controls-ready products. Enables future upgrades. Ensures interoperability with smart buildings
LUNA Efficacy Allowances	Recognize lower luminaire efficacy caused by optics/baffles while improving trespass control and neighborhood acceptance	Supports better product adoption. Encourages responsible specs without sacrificing savings
LUNA new product eligibility	New product eligibility including medium screw base and mogul screw base replacement lamps and retrofit kits. Low CCT products and Amber LED products	Provides more choices for communities looking for energy-efficient outdoor lighting that can meet ordinance/bylaw requirements and is eligible for rebates.



Member Resource Hub: Transitioning to SSL V6.0 & LUNA 2.0

Members can access comprehensive transition support by signing into their MyDLC account and visiting the Member Dashboard Resources page:

In the Transitioning to SSL V6.0 & LUNA 2.0 Member Resource Hub, you will find:

- 1. Member Guidance:
 - o General guidance for transitioning to SSLV6.0 and LUNA 2.0
- 2. Controls Category guidance: (to be released by November 30)
 - o Overview of the controls category and implementation guidance
- 3. Email Templates:
 - Ready-to-use communications for notifying customers, staff, and trade allies of updates to DLC requirements.
- 4. QPL Updates: (to be released in January 2026)
 - o The latest information on Qualified Products List (QPL) downloads.
- 5. Requirements Overview: (to be released by November 30)
 - o Detailed comparison of SSL V5.1 vs. V6.0 and LUNA V1.0 vs. V2.0 requirements.
- 6. Program Planning Working Group (Series: SSLV6.0 Control Categories implementation):
 - The group will focus on developing and sharing strategies to effectively integrate these categories into energy efficiency programs
- 7. Webinars:
 - o Technical Requirements for LED Lighting: SSL V6.0 & LUNA V2.0
 - o SSL V6.0 & LUNA V2.0 Application Submission Overview
 - o Member meetings will also provide guidance throughout 2026

If you need additional information, materials or resources, please contact Karla Winter at Kwinter@designlights.org