

# Solid-State Lighting (SSL) Manufacturer and Industry Guidance Version 6.0

Final Version

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# **Table of Contents**

Introduction	3
Implementation Timelines and Grace Periods	
Transition and Manufacturer Impact Notifications	3
New Policy for Updating Reported Data of V5.1 Products	5
V6.0 Impact to Product Qualification	5
Updating V5.1 Listed Products to V6.0	5
Application Submission Process	14
Private Label Submission Process	15
Testing Requirements for V6.0	16
Mogul Screw Base Omnidirectional/Directional Lamp Testing	18
Qualifying New Products Under V6.0	19
Updating V6.0 Products after Qualification	19
Special Considerations for Unique Product Types	19
Application Fee Changes	19

# Introduction

This document explains how the SSL V6.0 and LUNA V2.0 requirements are implemented and offers comprehensive information for manufacturers who wish to update their product listings during the grace periods.

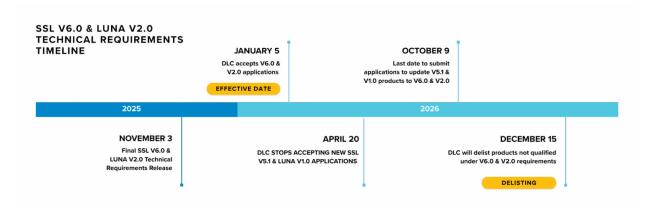
# **Implementation Timelines and Grace Periods**

The DLC recognizes that updating to the SSL V6.0 and LUNA V2.0 Technical Requirements results in the need to provide additional product information and potentially perform new testing and/or product design changes to maintain DLC qualification.

All products must be submitted in update applications to upgrade from V5.1 to V6.0.

As such, grace periods are in place to allow manufacturers time to demonstrate compliance and update products to the new requirements.

A high-level timeline overview is shown below.



The grace period has the submission deadlines, as noted above. At the end of the grace period, the DLC will remove from the Qualified Product List (QPL) any product that does not comply with the SSL V6.0 and LUNA V2.0 technical requirements.

Manufacturers are encouraged to voluntarily <u>delist products</u> that they do not plan to update or that are no longer available. Products that have been delisted will still be searchable on the DLC SSL QPL by changing the "Listed Products" drop down to "Delisted Products" on the QPL.

# **Transition and Manufacturer Impact Notifications**

The DLC supports manufacturers transitioning to V6.0 by providing updates on their qualified V5.1 products. These communications will indicate which currently qualified products meet the new photometric threshold requirements in V6.0 (efficacy, chromaticity, and wall pack distribution) based on



reported data. Products not included may require a design update or additional testing to demonstrate compliance with the technical requirements.

The first round of individual outreach to manufacturers that communicates how their V5.1 listed products are impacted by V6.0 will take place on December 5th, 2025 and will continue in periodic subsequent rounds throughout 2026. The DLC will strive to notify manufacturers of all impacted products, however, manufacturers are expected to understand their product listings and to update listings as needed.

Manufacturers can keep the contact information for their account administrator(s) up-to-date in the DLC Application Portal so the appropriate party receives these notifications. Contact information can be updated after logging in on www.designlights.org and adjusting the users and/or user permissions under user management within the company settings module on the myDLC Dashboard. Company Super Admins and Admins can adjust these settings and will receive the manufacturer notifications.

Table 1: Summary of SSL V6.0 and LUNA V2.0 Implementation Timeline

Milestone	Date
Final SSL V6.0 and LUNA V2.0 Released	Nov 3, 2025
Initial individual outreach sent to manufacturers including status of V5.1 listed products relative to V6.0, and families eligible for simplified update pathway	Dec 5, 2025
V6.0 New Product Applications Accepted	Jan 5, 2026
V6.0 Update Product Applications Accepted; Update products from V5.1 to V6.0	Jan 5, 2026
Deadline to submit V5.1 applications; Products qualified as V5.1	Apr 20, 2026
Secondary Individual Outreach	May 11, 2026
Final Individual Outreach	Sept 9, 2026
Deadline to submit V5.1 to V6.0 Update Applications;	Oct 9, 2026
Applications submitted afterwards will be charged as if it were a new application instead of an update application	
Products that are not listed to SSL V6.0 or LUNA V2.0 are delisted	Dec 15, 2026

## **New Policy for Updating Reported Data of V5.1 Products**

Starting on November 3rd, 2025, any request to change reported efficacy data that improves the reported efficacy performance of listed products must include both 1) an explanation of what has changed in the product from the time of original listing that results in improved efficacy, and 2) a new LM-79 for the worst-case efficacy model that the manufacturer is seeking to update within a given product family. Existing rules regarding limitations of relatable products within family groups and LM-79 accredited lab testing apply. These applications require a fee consistent with the number of LM-79 test reports per the Independent Test Report (ITRs) provision in the family grouping fee schedule. The DLC reserves the right to require additional information from applicants seeking to update their reported data throughout the transition to the V6.0 Technical Requirements.

# **V6.0 Impact to Product Qualification**

# **Updating V5.1 Listed Products to V6.0**

All V5.1 Listed Products must be included in an update application to be updated to V6.0.

The testing and documentations needs within the update applications will depend on; a) if the products have had any changes since their last qualification, b) if the products have not had any changes since their last qualification and the update application is purely to upgrade to the V6.0 technical requirements. These types of applications will be referred to as conventional and simplified respectively. The simplified update process considers previously provided testing as sufficient to demonstrate compliance for many metrics, however, additional specific and detailed product information will still need to be submitted with these applications to provide all information needed for V6 qualification.

#### Conventional V5.1 to V6.0 Update Details

Testing and documentation will need to be provided to demonstrate compliance based on the extent of the product design changes. Manufacturers should evaluate the product changes and determine if previous testing and performance information is still applicable and representative of the latest product design. In application submission, submitters have an opportunity to describe the product changes which will be evaluated by a reviewer.

The application requirements may range from a specification sheet, safety documentation, and completed application form (e.g., model number changes only), to requiring all new testing and documentation (e.g., when a new LED and driver are now used with the product).

If necessary, testing provided to demonstrate compliance with the technical requirements will need to be conducted to the ANSI/IES LM-79(-19 or -24) standard.

Some example scenarios of product design changes are listed on the update applications page.



If you'd like DLC staff to review your product family and design changes for testing and documentation impact, please email <a href="mailto:applications@designlights.org">applications@designlights.org</a>.

#### Simplified V5.1 to V6.0 Update Details

The update pathway and requirements for products that have not changed since their last submission is intended to minimize disruption for manufacturers during this Technical Requirements transition.

Reported (nominal) performance is sufficient to demonstrate compliance with the V6.0 technical requirements regarding the following threshold metrics;

#### **Efficacy**

- In a typical DLC product family, the product(s) with the minimum reported efficacy must be tested and the submitter must provide the accompanying full LM-79/color report in product submissions.
- During the SSL V6.0 and LUNA V2.0 transition, product families may be updated where some products in the family meet the new efficacy threshold and some products do not.
  - Within update applications, products can demonstrate compliance with the minimum efficacy threshold requirement via reported data only.
- After V6.0 qualification, these product families will appear on the QPL with the updated V6.0 products as listed, and the non-updated products as V5.1 and listed until the V5.1 delisting date. This may result in listed product families missing a tested product for minimum reported efficacy. The minimum reported efficacy tested product will be visible under that product family as V5.1 and listed until the V5.1 delisting date.
- Similarly, products previously qualified as V5.1 premium can demonstrate compliance to V6.0 premium efficacy requirement through reported data.
  - V5.1 premium listed products that do not meet the V6.0 premium efficacy threshold requirements can be transitioned to V6.0 standard. Testing is not required if this introduces a new minimum efficacy standard product within the family.

#### Chromaticity

- In a typical DLC product family, the product(s) with the highest reported Correlated Color Temperature (CCT) must be tested and the submitter must provide the accompanying full LM-79/color report in product submissions.
  - During the SSL V6.0 and LUNA V2.0 transition, product families will be updated where some products in the family meet the new maximum CCT threshold and some products do not.
  - For those applications, the product with the highest reported CCT below and closest to the new CCT threshold does not need to be tested.
    - Within update applications, products can demonstrate compliance with the maximum CCT threshold requirement via reported data only.
- After V6.0 qualification, these product families will appear on the QPL with the updated V6.0 products as listed, and the non-updated products as V5.1 and listed until the V5.1 delisting date.
   This may result in listed product families missing a tested product for maximum CCT. The



maximum CCT tested product will be visible under that product family as V5.1 and listed until the V5.1 delisting date.

#### **Distribution for all products except Wall-Mounted Area Luminaires**

- In a typical DLC product family, for each primary use designation and optical variation, a product within the family must be tested and the submitter must provide the accompanying full LM-79/distribution in product submissions.
  - During the SSL V6.0 and LUNA V2.0 transition, product families will be updated where some products in the family are updated while others are no longer eligible or are not intended to be updated to V6.0.
  - For applications qualifying any primary use designations except Wall-Mounted Area Luminaires, a distribution test for each unique optical variation per primary use designation within the V6.0 qualifying family is not needed.
  - After V6.0 qualification, these product families will appear on the QPL with the updated V6.0 products as listed, and the non-updated products as V5.1 and listed until the V5.1 delisting date. This may result in listed product families without tested distribution metrics. The tested distribution metrics will be visible on a product under that product family as V5.1 and listed until the V5.1 delisting date.

#### **Distribution for Outdoor Wall-Mounted Area Luminaires**

- During the SSL V6.0 and LUNA V2.0 transition, product families will be updated where some products in the family meet the new Outdoor Wall-Mounted Area distribution requirements and some products do not.
  - For those applications updating V5.1 products qualified as Outdoor Full-Cutoff Wall-Mounted Area Luminaires to V6.0, the following will be used to evaluate distribution:
    - Previously submitted distribution data will be used to determine if products meet the new distribution requirements in the Outdoor Zero-Uplight Wall-Mounted Area primary use designation.
      - If products do not meet the new distribution requirements, products can be updated to V6.0 as Outdoor Uplight-Emitting Wall-Mounted Area Luminaires without additional testing.
  - For those applications updating V5.1 products qualified as Outdoor Non-Cutoff and Semi-Cutoff Wall-Mounted Area Luminaires to V6.0, the following will be used to evaluate distribution:
    - Previously submitted distribution data will be used to determine if products meet the new distribution requirements in the Outdoor Uplight-Emitting Wall-Mounted Area Luminaires primary use designation.
      - If products do not meet the new distribution requirements, a product design change may be necessary.
  - After V6.0 qualification, these product families will appear on the QPL with the updated V6.0 products as listed, and the non-updated products as V5.1 and listed until the V5.1 delisting date. This may result in listed product families without tested distribution metrics. The tested distribution metrics will be visible on a product under that product family as V5.1 and listed until the V5.1 delisting date.



# Documentation Requirements for the SSL V6.0 and LUNA V2.0 Technical requirements

The SSL V6.0 and LUNA V2.0 Technical Requirements include requirements to document different types and specific information on product capabilities.

Documenting controls capabilities through a controls options table will better support energy efficiency programs and align energy savings claims associated with specific lighting control strategies.

Other non-performance information will make it easier to find product listings and match them to information submitted on incentive applications, as well as support demand for sustainable lifecycle practices.

To update a V5.1 qualified product family to V6.0 or qualify a new V6.0 product family, documentation must be provided to demonstrate compliance with the following topics in the technical requirements;

#### **Product Images**

- All V6.0 qualified products must be associated with a product image
- Within new and update applications
  - Submitters can either elect to use their own image for products or select from a limited set of DLC-created representative line art images
    - Submitter uploaded images can be;
      - Uploaded into the portal directly as image files
      - Uploaded via a public URL
      - Taken as a screenshot from the uploaded specification sheets
  - Images are associated within the product qualification process and can be associated in the system through;
    - Product by Product
    - One image for the entire family
    - Bulk association process to link many products to many images.

#### **Product Specification Sheets**

- All V6.0 qualified products must be associated with a product specification sheet or product webpage
- Within new and update applications
  - Submitters can either elect to link to a product specification sheet or a product webpage for each product within an application.
    - If electing to associate a product specification sheet to products, the document used can be;
      - The same specification sheets submitted for product qualification
      - Uploaded via a public URL
    - If electing to associate a product webpage to products, the link can be entered in the application.
  - Specification sheets, or product webpages, are associated within the product qualification process and can be associated;



- Product by Product
- One specification sheet for the entire family
- Bulk association process to link many products to many specification sheets.

#### Controllability

- All V6.0 listed products must be associated to applicable control option codes.
- Controls option codes have performance and capabilities described in Table 11 of the V6.0 Technical Requirements. Based on the performance and capabilities, each controls option code leads directly to a controls category (0-6).
  - o Products with 3-Pin Receptacles are not eligible for qualification to the DLC SSL QPL.
  - Model numbers that include options for 3-Pin receptacles must be updated or will be updated during the review process to exclude that option in the model number.
  - However, 3-Pin Receptacle controls options should still be included on the controls options table and noted on the reported performance table which products have that receptacle option. This will be shown on the QPL as not qualified if searched.
- The DLC understands the controllability reporting requirements are detailed and contain some concepts that may be new to manufacturers. For ease of submission and review of this information, the DLC is conducting outreach and is eager to work with manufacturers to prepare controls information prior to submitting an application to qualify products to V6.0.
  - To provide controls information prior to submitting an application
    - Please include the following documentation along with your manufacturer name to controls@designlights.org.
      - A completed brand level controls options table as described in Table 11
        of the Technical Requirements. This table should include all unique
        controls option codes available for all products within this brand.
      - All product specification sheets, or instructions on how to find product information online should be provided.
      - A download of the QPL for the products that are applicable for the included control option codes.
    - If controls options are claiming association to an NLC system, the SSL and NLC manufacturer must have an on-going business relationship agreement in place.
      - Please see the SSL NLC Manufacturer Agreement Section below for more details
    - Staff will review provided information within 90 business days to provide an update if any clarifications or changes are needed.
    - Approved Controls Options codes should be included with applications to qualify products once submitted to associate the controls options codes with V6.0 qualified products.
      - This may require models that were previously qualified as Premium to separate into different models that meet the threshold controllability requirement for Premium listings and those that do not meet the threshold and may only be qualified as Standard.
      - Products with a controls category of 0, "A luminaire, lamp, or retrofit with no integral control capabilities", are ineligible for Premium qualification.



- To provide controls information within an application, the submitter must include a completed application excel form with the controls options code column on the reported performance tab to indicate the control options available for each model, as well as the Control Options tab. This table should include all unique control options available with the models in the application along with pertinent information as described in Table 9 of the V6.0 Technical Requirements.
  - DLC staff will evaluate the product for qualification and publishing outside of the controls option table details according to the published review timeframes.
     Products may be qualified prior to the complete review of control option codes.
    - This will include the evaluation of controllability requirements for the determination of product eligibility as well as classification (Standard or Premium).
    - This may require models that were previously qualified as Premium to separate into different models that meet the threshold Controls Category for Premium listings and those that do not meet the threshold and may only be qualified as Standard.
    - Products with a controls category of 0, "A luminaire, lamp, or retrofit with no integral control capabilities", are ineligible for Premium qualification.
  - If a controls options code claims an association to an NLC system, the SSL and NLC manufacturer must have an on-going business relationship agreement in place.
    - Please see the SSL NLC Manufacturer Agreement Section below for more details
  - DLC staff will evaluate the controls options codes to ensure accuracy against the requirements detailed in Table 11 of the technical requirements. Controls options review will occur within 90 business days to provide an update if any clarifications or changes are needed. After the 90 business day period, applications without a successful controls review will have products delisted.

#### **Field Adjustable Color Temperature (FACT)**

- Field Adjustable Color Temperature (FACT) products enable the user to make changes to the correlated color temperature (CCT), through either physical or electronic means, while the user is physically located at the luminaire at the time of installation. Field adjustable parameters are not intended to be changed in the normal course of luminaire operation.
- Submitters must provide the performance information at available color temperature set points for all FACT products in their application.
  - Within the application process, a single Field Adjustable Color Temperature Table indicating the CCT at each FACT set point will need to be provided. Please check application instructions pages soon for the Field Adjustable Color Temperature Template
  - Product documentation must clearly indicate the minimum, maximum and default CCT.
- FACT capabilities are distinct from Color-Tunable capabilities, whose output spectrum can be
  adjusted via an input control of any type and which is intended to be tuned/adjusted over the
  course of normal operation. Please see the Color-Tunable Section for additional details



#### Field Adjustable Light Distribution (FALD)

- Field adjustable light distribution (FALD) products can intentionally change their light
  distribution from the default factory "as-shipped" configuration, through either physical or
  electronic means, only while the user is physically located at the individual luminaire. Typically,
  field adjustable light distribution settings are not occupant facing and are not intended to be
  changed in the normal course of luminaire operation.
- All models must indicate on the application excel form on the reported performance table if the products have FALD, Aimable, and/or Leveling capabilities.
  - Historically, aimable products were considered eligible under the field-adjustable light distribution policy and levelable products could be considered either as having FALD capabilities or lacking those capabilities at the discretion of the manufacturer. Within the V6.0 Technical Requirements, FALD, Aimable, and Levelable are distinct product capabilities. Please review the field adjustable distribution section of the TR for additional details.
    - Products currently listed as Field-Adjustable Light Distribution under V5.1 will remain until the products are submitted in an update application to V6.0.
  - Aimable: These are products capable of in-field adjustment to change the direction of the light distribution (both pan and tilt) in relation to nadir.
    - For products such as Flood and Spot Luminaires and Track or Monopoint Luminaires, where aimable capabilities are the norm, products maybe noted by the reviewers as aimable if not included on the application excel form.
  - Levelable: These are products capable of an in-field tilt-only adjustment of 10 degrees or less.
  - Product documentation will be used to evaluate FALD and Aimable capabilities.
     Levelability is based on manufacturer claims, the DLC reserve the right to request additional information on leveling capabilities of claimed products.
    - For products qualifying under the LUNA designation, product specification sheet pr supplemental documentation must clearly show the available leveling capabilities to evaluate against the levelable definition.
- Submitters must provide the performance information at available distribution set points for all FALD products in their application.
  - Within each application for products with FALD capabilities, a completed Field
     Adjustable Light Distribution table to indicate the distribution at each FALD set point will
     need to be provided.
    - Submitters can select distribution metrics for adjustment, i.e. Degree Range, IES
       Distribution Type, or NEMA Flood Types as well as indicate the adjustment
       performance for each set point
    - Please check application instructions pages soon for Field Adjustable Light Distribution Template
    - Product documentation must clearly indicate the minimum, maximum and default FALD set points and performance.

#### Field Adjustable Light output (FALO)



- Field Adjustable Light Output (FALO) products are capable of being adjusted to decrease or increase lumen output and wattage from the default setting, through either physical or electronic means, while the user is physically located at the individual luminaire.
  - This capability is reported separately from the required dimming capability. As per the
     Dimming Requirements, lamps must be capable of either FALO or continuous dimming.
- For each model with Field Adjustable Light Output performance, field adjustable capabilities (light output and wattage) at available light output set points must be included on the reported performance tab within the application excel form.
  - Product documentation must clearly indicate the minimum, maximum and default FALO settings and performance.

#### **Color-Tunable**

- Color-Tunable products are distinct from FACT products and classified as CCT-Tunable, Warm-Dimming, or Full Color-Tunable.
  - CCT-Tunable products have a control signal specifically for adjusting CCT while maintaining nominally constant lumen output.
  - Warm-Dimming products have a single input that controls both CCT and lumen output, lowering the values of both concurrently.
  - Full Color-Tunable products have a control signal specifically for adjusting spectral output while maintaining nominally constant lumen output.
  - Documentation must be submitted in the application including
    - Description of the method of input control
    - Reference to any control standards or protocols utilized
    - Clear instructions for how to achieve the setting

#### **Alternate LEDs and Drivers**

- Alternate LEDs and drivers refer to components that can be used as substitutes for standard options in lighting products. These alternatives can vary in terms as described in Section 26.2 of the Technical Requirements.
  - Manufacturers often explore alternate LEDs and drivers to manage supply chain challenges. By selecting different components, they can ensure that their products meet specific requirements for energy efficiency, longevity, and user preferences while maintaining consistent delivery and performance in the field.
- SSL V6.0 adds a new reporting option for alternate, equivalent LEDs and drivers, to demonstrate that these alternate subcomponents meet lifetime requirements, along with manufacturer attestation that LM-79 tests are conducted with worst-case alternate LED and driver options.
- Within application submissions;
  - Alternate LED and/or drivers should be included, as appropriate, for each model on the reported performance tab on the application excel form.
  - o Similarly, alternate LEDs should be included on the components tab
  - Product specification sheets for alternate LEDs and drivers should be submitted within the application
  - ISTMT, TM-21, and LM-80 reports should be submitted within the application to demonstrate compliance with the lumen maintenance requirement for each alternate LED.



o ISTMT Report(s) should be submitted within the application to demonstrate compliance with the driver lifetime requirement, if premium, for each unique alternative driver.

#### Sustainability

- Manufacturer may indicate which, if any, sustainability options are available on each product within an application.
  - Specification sheets must include sustainability labels or application must provide appropriate documentation as described in the technical requirements

#### **Tolerances**

- Tolerances are established to account for minor, acceptable deviations between measured test data and minimum threshold values for qualifications.
- Reported (or nominal) data on the application excel form can not utilize tolerances to meet the threshold requirements
- In SSL V6.0 and LUNA V2.0, tolerances can only be applied to tested data

#### Safety (unchanged from V5.1)

- Products must be certified to the applicable safety standard by a safety certification organization relevant in the United States or Canada. Additional details can be found in Section 9 in the V6.0 Technical Requirements
- A compliance document from the safety certification organization should be submitted within applications. This document shall bear the manufacturer's name and will be proof that the products listed have been investigated by the safety organization and found to be in compliance with the standards listed on the certificate.

#### Hazardous (unchanged from V5.1)

- Products noted for hazardous environments must be certified to the UL 844 standard, Luminaires for Use in Hazardous (Classified) locations
  - Safety documentation must include references to UL 844, bear the manufacturer's name and will be proof that the products listed have been investigated by the safety organization and found to be in compliance with UL 844

#### Warranty (unchanged from V5.1)

- Products must have a minimum warranty period of five years. Please see section 10 of the V6.0 technical requirements.
- A warranty document should be submitted within applications that includes clear terms and conditions noting the five year warranty period.



#### **Updating previously Qualified Private Label Products to V6.0**

Private label products must be submitted in an update application to update to V6.0. OEM product updates must be completed prior to the submission of a V6.0 Private Label Application. Private Labelers are encouraged to coordinate with their OEM supplier to prevent delays.

# **Application Submission Process**

Products listed on the DLC SSL QPL undergo a stringent review to ensure products meet the technical requirements and testing/documentation is sufficient to demonstrate that all products within an application meet the technical requirements. Products are submitted within applications for qualification on the DLC SSL QPL.

This process is conducted on the DLC Application Portal, accessible via designlights.org after creating a user and manufacturer organization account.

Within the DLC Application Portal, applications to qualify new products or update qualified products can be created.

Applications to update products from V5.1 to V6.0 must contain only one family. This is true for both OEM and Private Label Update applications to upgrade products to V6.0. Historically, update applications could contain multiple families

During the V5.1 to V6.0 Transition, a simplified V6.0 Update application can be submitted. These applications are only available to update products to the new technical requirements with no other product changes. Product changes identified during the review of these applications may require additional application fees and extended review timeframe.

In this application type, the product family to be updated will be selected during the beginning of the application. This will generate a pre-built application excel form with V5.1 qualified models that meet the V6.0 technical requirements for efficacy, chromaticity, and wall pack distribution, if applicable, thresholds. Other required columns, including the controls options codes and controls options table, must be filled out prior to submission.

The V6.0 application submission process begins with the submission of the Application Excel Form. This form is divided into four tabs:

- On the Reported Performance Table tab, all products and model numbers to be qualified are listed in separate rows. Columns are provided to capture the performance characteristics and capabilities associated with each product.
- Within the Components tab, information is provided for all unique drivers and LEDs included in the product family.



- For products submitted under the Solar Luminaire category, an additional Solar Luminaire tab is made available, where supplementary data specific to solar luminaires is entered to document their unique performance and energy characteristics.
- The Controls Options Table tab is used to align control option codes with their corresponding control properties, ensuring accurate representation of available control functionalities.

Following the submission of the application excel form are a series of Questionnaire Pages in the application portal. On the first page, information about the product and submission is collected, and most required supporting documents are uploaded.

On the second page, specification sheets are uploaded or selected. Submitters may choose to select the specification sheet submitted on the first questionnaire page or upload a link to a product website or online specification sheet. A single specification sheet may be associated with all products in an application, or associated individually with each product. These can be updated at any time via the Upload/Update Specification Sheet Module within the application portal.

On the third page, product images are uploaded or selected. Images may be uploaded via URL (if externally hosted), direct upload, taken as a screenshot from the previously uploaded specification sheet or selected from the image library provided by the DLC. Similar to specification sheets on the previous page, a single image may be associated with all products in an application, or associated individually with each product. These can be updated at any time via the Upload/Update Product Image Module within the application portal.

Optionally, a fourth page is available to populate information necessary to claim a DLC NLC system is available with a submitted controls options.

- This is only required for control options that have not yet been reviewed and there is no agreement yet between the SSL and NLC Manufacturer.
  - SSL NLC Manufacturer Agreements can be created at any time via the Manage SSL -NLC Manufacturer Agreements Module within the application portal
- Contact information will be submitted on this page, and similarly to private label process, an agreement form will be sent for signature
- Once signed by both parties the application will be submitted

#### **Private Label Submission Process**

Similar to the OEM submission process, the private label submission process begins with the submission of an application excel form.

This form is divided into two tabs:

 On the Application form tab, all products and model numbers to be qualified are listed in separate rows. Columns are provided to capture the correlation of private label model number to OEM model as well as the brand for the private labeled products and available controls options codes.



- Private labeled products may have a subset of controls options of their OEM equivalent, however, they cannot contain control capabilities beyond their OEM equivalent.
- The Controls Options Table tab is used to align control option codes with their corresponding control properties, ensuring accurate representation of available control functionalities.

Following the submission of the application excel form are a series of Questionnaire Pages. On the first page, information about the product and submission is collected, most required supporting documents are uploaded, as well as contact information to send a private label agreement form to Private Label and OEM representatives.

On the second page, specification sheets are uploaded or selected. Submitters may choose to select the specification sheet submitted on the first questionnaire page or upload a link to a product website or online specification sheet. A single specification sheet may be associated with all products in an application, or associated individually with each product. These can be updated at any time via the Upload/Update Specification Sheet Module within the application portal.

On the third page, product images are uploaded or selected. Images from the OEM products can be utilized on the Private Label products and indicated in the application. Otherwise, images may be uploaded via URL (if externally hosted), direct upload, taken as a screenshot from the previously uploaded specification sheet or selected from the image library provided by the DLC. Similar to specification sheets on the previous page, a single image may be associated with all products in an application, or associated individually with each product. These can be updated at any time via the Upload/Update Product Image Module within the application portal.

Optionally, a fourth page is available to populate information necessary to claim a DLC NLC system is available with a submitted controls options.

- This is only required for control options that have not yet been reviewed and there is no agreement yet between the SSL and NLC Manufacturer.
  - SSL NLC Manufacturer Agreements can be created at any time via the Manage SSL -NLC Manufacturer Agreements Module within the application portal
- Contact information will be submitted on this page, and similarly to private label process, an agreement form will be sent for signature
- Once signed by both parties the application will be submitted

# **Testing Requirements for V6.0**

An example of the typical testing required under V6.0 for a family of products is provided below. Specific testing and reporting requirements for each of the criterion can be found in the corresponding section of the V6.0 policy.



Table 2: Required Testing to Demonstrate Compliance with SSL V6.0 and LUNA V2.0

Metric	Tested Models	Required Test
Minimum Light Output	Worst-case light output	
Minimum Efficacy	Worst-case efficacy	
Maximum CCT	Highest CCT in family at lowest color rendition option	
Minimum CCT	Lowest CCT in family at lowest color rendition option	Full LM-79/Color report, including accompanying SPDX document
Minimum Color Rendering	Lowest color rendition option in family	
Chromaticity	<ul> <li>Lowest CCT at lowest color rendition option</li> <li>Highest CCT at lowest color rendition option</li> <li>Lowest CCT at highest color rendition option (Premium only)</li> </ul>	
Minimum L <sub>70</sub> Lumen Maintenance for Standard and L <sub>90</sub> for Premium)	<ul> <li>ISTMT at worst-case thermal conditions of LED</li> <li>LM-80 for single LED package/module/array as required for lumen maintenance projection</li> </ul>	ISTMT, LM-80, LM-84, TM-21, TM-28
Color Maintenance	LM-80 for single LED package/module/array that is evaluated for color shift	LM-80, LM-84

Driver Lifetime (Premium only)	Worst-case driver temperature for each unique driver	Driver spec, ISTMT
Zonal Lumen Distribution (ZLD), Spacing Criteria (SC)	Each unique optical and distribution pattern	Tested LM-79/Distribution report, including accompanying IES file
BUG Ratings (outdoor only)	Each unique optical and distribution pattern	Tested LM-79/Distribution report, including accompanying IES file
UGR (Specific Indoor PUDs and Premium Only)	Each unique optical and distribution pattern at the highest lumen output without consideration of the effect of color properties	Tested LM-79/Distribution report, including accompanying IES file
THD, PF	Worst-case performing driver in family	Benchtop Electrical Testing

# Mogul Screw Base Omnidirectional/Directional Lamp Testing

Within DLC SSL V6.0 and LUNA V2.0, manufacturers can qualify products or update products to the new Omnidirectional/Directional Lamp primary use designation under the Mogul Screw-Base (E39/E40) category.

- This new primary use designation does not require the use of a reference housing for testing and, similar to linear replacement lamps, bare lamp testing is sufficient for photometric testing.
- As desired, manufacturers can transition existing lamps or qualify new lamps to this new primary use designation along with appropriate bare lamp testing.
  - Manufacturers can elect to list one product under multiple primary use designations, if the products meet all of the technical requirements and are eligible in those primary use designations.
  - For these lamp types, manufactures can list the same model under different primary use designations for the bare lamp PUD (# 32) or the existing primary use designations with host housing testing requirements, PUDs (#26 – #31).



# **Qualifying New Products Under V6.0**

Applications to qualify new products to V6.0 must include the required test reports and documentation to demonstrate compliance with the technical requirements. DLC staff are on hand to assist with the preparation of these applications. Please reach out to applications@designlights.org for assistance.

## **Updating V6.0 Products after Qualification**

Applications to update V6.0 products or families after qualification can be completed via a V6.0 Update application.

Families that updated utilizing the simplified update pathway must include all necessary testing for all criterion if products tested to meet specific criterion were delisted in the transition within the V6.0 update applications. This includes all update application types including nomenclature or other non-performance affecting updates

# **Special Considerations for Unique Product Types**

Specific guidance will be provided that details the submission process and requirements for LUNA V2.0, Amber, and Turtle Lighting Primary Use Designations

# **Application Fee Changes**

The following changes to application fees will be effective for all V6.0 applications. Please refer to the <u>DLC</u> <u>application fees webpage</u> for the complete list of fee categories.

Applications to qualify new V6.0 products will be charged a \$100 V6 Application Fee in addition to the existing fee structure for new product applications.

Simplified update applications to update products from V5.1 to V6.0 will be assessed a \$400 update fee per family.

- Applications to upgrade products to V6.0 and demonstrate compliance with the technical requirements may require, and/or manufacturers may elect, to submit new products and new Independent Test Reports (ITRs) in that update application.
- Applicable fees for additional family members and ITRs as shown in the fees table above will apply to V6.0 Simplified Update Applications in addition to the \$400 V5.1 to V6.0 update fee.
  - Additional family members as a result of separating currently listed models into two models to represent standard and premium classification due to the new V6.0 requirements will not be charged additional fees.

Beginning in 2027, an annual renewal fee of \$100 will be assessed for all V6.0 families to support ongoing V6 listing maintenance and ensure the Qualified Products List remains accurate and current. The fee mitigates some of the cost for V6 filing and will be applied each year on the anniversary of the original V6 filing and will continue until the manufacturer opts to remove the family from the list.

