

Application Instructions

Product Submittal

This manufacturer electronic application form is to be used by manufacturers who wish to submit their solid-state lighting (SSL) products to be considered for the DesignLights™ Consortium Qualified Products List (DLC QPL). The submission form requires the manufacturer to provide the product's rated and measured data for various properties including photometric, electrical, and lumen depreciation. Measured values are those that are provided on a test report, such as LM-79 and rated values are those that the manufacturer specifies on a product data sheet.

Please review the DLC QPL [categories and requirements](#)¹ before applying
Please review our [Independent Testing Lab Requirements](#)² before applying

Application Instructions

I. Create a Manufacturer Log-in

We recommend that the application be filled out by a person with sufficient technical knowledge of lighting products and testing such as a lighting engineer.

II. Upload Files

- a. **Manufacturer's product sheet**
- b. **LED package specification sheet**
- c. **IESNA LM-79-08 test report(s)** (from approved labs specified in DOE Manufacturers' Guide) containing:
 - i. Photometric measurements (i.e. light output and efficacy)
 - ii. Colorimetry report (i.e. CCT and CRI)
 - iii. Electrical measurements (i.e. input voltage and current, power, power factor, etc.)
- d. **Lumen maintenance report** (select one of the two options and submit all of its corresponding required documents):
 - i. Option 1: Compliance through component performance (for the corresponding LED package)
 - o IESNA LM-80 test report
 - o In-situ temperature measurements test (ISTMT) report.
 - o Schematic/photograph from LED package manufacturer that shows the specified temperature measurement point (TMP)
 - o Photograph of temperature measurement (i.e. attached thermocouple) showing that the temperature is being measured at the TMP specified by the LED package manufacturer.
 - ii. Option 2: Compliance through luminaire performance
 - o IESNA LM-79-08 report at 0 hours (same file as point c)

¹ <http://designlights.org/solidstate.manufacturer.requirements.php>

² <http://designlights.org/solidstate.manufacturer.before.php>



- o IESNA LM-79-08 report at 6000 hours after continuous operation in the appropriate ANSI/UL 1598 environment (**use ANSI/UL 1574 for track lighting systems**).

- e. **IES photometric file**. This should be sent in the IES file format with the file name extension “.ies”.
- f. **Declaration of Warranty**-(applies to refrigerator case lighting and display case lighting)

All supporting documentation must include a specific, relevant model or part number. (Please see section III. #1 below on acceptable part and model numbers).

Documents and files related to the luminaire, (e.g., LM-79-08, ISTMT, etc.) must include the specific unique model number of the luminaire that is included on the application. Documentation related to the LED package, e.g. the LM-80 report, must include the part number of the specific LED package that is named in the application. Further clarification regarding these individual test reports can be obtained on our FAQ page. Please communicate with any independent laboratory the exact luminaire model number that they should include in their test reports.

Acknowledge our file naming scheme:

Our online application process renames the attached files for you. Below is a visual display of what applicants will see when they upload their files during the application process. If you plan to upload more files please follow these instructions below:

File to upload	Document	Standard file name
<i>All of the following files are required:</i>		
Browse Button	Manufacturer's Product Sheet	2a_Product_Sheet.pdf
Browse Button	LM-79 report/intensity	3a_LM79_Intensity.pdf
Browse Button	LM-79 report/color	3b_LM79_Color.pdf
If your test lab combines both intensity & color LM-79 report use 3c_LM79_Color.pdf instead		
Browse Button	LM-79 report/intensity&color	3c_LM79_intensity_color.pdf
Browse Button	IES photometric file	4a_IES.ies
If more LM-79 reports or other files relating to the above please follow the same format. Ex: LM-79 report- "3d_LM79.pdf", "3e_LM79.pdf", etc., and upload as additional files below.		
<i>All of the following files are required for Option 1:</i>		
Browse Button	Option 1 LM-80 report	5a_LM80.pdf
Browse Button	Option 1 In-situ LED case temp	5b_In_situ.pdf
Browse Button	Option 1 Schematic from manufacturer showing the location of the TMP	5c_TMP_schematic.pdf
Browse Button	Option 1 Photograph of temperature measurement being made at the specified	5d_TMP_photo.pdf
<i>All of the following files are required for Option 2:</i>		
Browse Button	Option 2 LM-79-08 at 6000 hours	6a_LM79_6000hrs.pdf
Depending on which option you decide to use, please name your lumen maintenance reports, following the same format. Ex: Option 1 "5e_LumenMaintenance.pdf"...etc or Option 2 "6b_LumenMaintenance.pdf", etc., and upload as additional files below.		
Please upload the Warranty Statement if applying to a category that requires it (see technical requirements):		
Browse Button	Warranty Statement	7a_warranty_statement.pdf
<i>Upload additional files here:</i>		
Please be patient while your files are uploaded. It may take quite a few minutes, depending on the size of your files. Do not leave this page until your file upload has been confirmed.		
<input type="button" value="UPLOAD FILES"/>		

III. Fill Out the Online Application Form

After uploading your files you may proceed to the online application form. Will be able to go back and add more files at any point in time. On the online application form you will be able to select from the drop down menu, the specific files that pertain to each section of the application.

This application has five main parts:

1. **Application contact**
2. **Model information**
3. **Photometric and electrical data**
4. **Lumen maintenance**
5. **Document checklist.**

1. Application Contact section:

The person filling out the Application Contact section is the same person who has sufficient technical knowledge of lighting products and testing. This section asks for the product manufacturer's company name, the brand name which the product falls under (if applicable), applicant's contact name and information. Make sure this section is completely filled in case the contractor needs to get in contact with the applicant for any reason.

2. Model Information

Enter the luminaire model number, accessories, and select from the drop down menu the intended application under which the manufacturer is requesting the submitted product be evaluated. If applicable the applicant should describe in detail what accessories (reflector, trim, or diffuser) are used for this product model. The model number must specify a unique product including one set of options and trim.

The LED package part number is also entered in this section. Manufacturer should use an identifier or combination of identifiers that indicate a single LED package and this should be used consistently within an application and within an LM-80 or lumen maintenance report. The identifier can include a model number, part number, product code, ordering code, stock number, etc.

If submitting a luminaire family, enter the family model number, led package part number and the rated CCT in the provided spaces. Make sure on the application is for the model within the family that is the most difficult to meet the technical criteria, for example, the one that produces the least light output with the greatest input power. For example, if the models within the family have different CCTs, then apply to have the model with the lowest CCT included on the QPL. Clarification on what differences are allowed within a family can be found on the [Product Families page](#).

3. Photometric and Electrical Data

In this section manufacturers need to provide various photometric and electrical data of the submitted product. For each photometric and electrical data manufacturers need to provide the rated and measured values and enter these numbers under the data value column. Rated data is from the product sheet and measured data is from the LM-79 report. Adjacent to the data value column, there is a column that contains the unit of the value that is being requested. Next there are two other columns in

which manufacturers are asked to include the data source (uploaded file name) and page number on which the data value is located. Preferably, page numbers are marked on each page of the report and the application should reference these page numbers. If no page numbers are marked, refer to the page number of the PDF document, and note this in the manufacturer's comment field on the application.

4. Lumen maintenance data

The manufacturer has to choose one of the two options in order to support its lumen maintenance data.

Option 1: Compliance through Component Performance

Under *option one* the manufacturer will need to provide three documents:

- A complete LM-80 report of the same LED package that is used in the luminaire. Therefore the LED package part number of the submitted luminaire must appear on this report. A complete LM-80 test report will include the relative light output over time, for at least 6000 hours of continuous operation at three different temperatures measured at the LED package manufacturer-specified TMP. Following the IESNA LM-80 standard, the three TMP temperatures are 55C, 85C and a third temperature selected by the manufacturer. This data needs to be presented in a table format and in graph form. The graph must have time in hours on the x-axis, at least ranging from 0 to 6,000, and the lumen maintenance in percent on the y-axis ranging from 0 to 100. **Applicants must create the graph showing three lumen depreciation curves, one for each temperature using the data provided by the LED manufacturer. Each curve must have data points at least every 1000 hours. The lumen maintenance at the in situ temperature must be marked on the graph at 6000 hours.** To maintain the validity of this test report, the current at which the LEDs were tested must be included in the report and has to be greater or equal to the measured current on the LED package, array, or module used in the submitted SSL product.
- The ISTMT report of the submitted luminaire including the measured temperature at the TMP of the hottest LED in the luminaire. The luminaire must have been tested under ANSI/UL 1598 and the report must contain the same model number of the submitted luminaire. **For track lighting systems, luminaires must be tested in compliance with ANSI/UL 1574.**
- A photograph documenting the actual temperature measurement location such as a photograph of the luminaire with a thermo couple attached at the TMP point). For the validity of this document, it must contain the same model number of the submitted luminaire. This photograph can be incorporated in the ISTMT document.
- A document with a schematic or photograph from the LED package manufacturer showing the specified TMP location. For the validity of this document, it must contain the same part number of the LED package used in the submitted luminaire.

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Option 2: Compliance through Luminaire Performance



Under *option two* the manufacturer will need to provide two documents:

- The first is an LM-79-08 test report at 0 hours of operation. In order for this document to be valid the model number of the submitted luminaire must appear on this document.
- The second is an LM-79-08 test report of the submitted luminaire after being continuously operated for a period of 6000 hours under the appropriate ANSI/UL 1598 environment. In order for this document to be valid, the model number of the submitted luminaire must appear on this document.

For track lighting systems, luminaires must be tested under the appropriate ANSI/UL 1574 environment.

The LED package data subsection asks for information about the LED package used in the submitted product. This information can be obtained from the LED package manufacturer's literature.

5. Product Sheet and Test Reports Checklist

The **DOCUMENT CHECKLIST** is a product sheet and test reports checklist. With a "yes" or "No" checklist the applicant will indicate if all the required documents have been uploaded. By entering the model or part number for each uploaded file the applicant will verify that the documents correspond to the submitted SSL product or to the LED package used in the SSL product.