

Surveillance Testing Policy Proposal

Objective

The proposed Surveillance Testing Policy outlines a process for targeted random sampling of the DLC SSL QPL. This policy represents an initial effort by DLC to monitor the validity of data submitted to the DLC SSL QPL pre- and post-qualification. DLC may seek to implement additional efforts toward this objective in future policy development cycles.

Surveillance Testing Process

a. Surveillance Testing Funding

The Surveillance Testing process will be funded by manufacturers participating in the DLC program in the following ways:

- Per-application fee: DLC is proposing a slight increase, between .5% and 1.25%, to current application fees, for each application submitted for qualification. The additional revenue obtained through the proposed increase in each application fee will be used to fund the administrative aspect of Surveillance Testing activities.
- Pay at time of selection: Manufacturers selected for Surveillance Testing will be required to pay all fees associated with the process (i.e. procurement and testing) at the time they are selected for testing.

b. Surveillance Testing Selection

In order to maximize the use of limited resources, surveillance will focus on identifying products with higher than average risk of non-compliance. In order to identify these products, the following criteria will be considered during the selection process:

- Products whose performance is close to meeting the tolerance of the Technical Requirements.
- Products whose performance greatly exceeds the Technical Requirements.
- Products listed with past application issues including, but not limited to, test reports with reporting issues that question the validity of the test data, supplemental documentation with issues that question the validity of the documentation, and product misrepresentation.
- Complaints from industry, including members.
- Products of manufacturers that have chosen not to participate in the Surveillance Testing investigation after being selected in previous Surveillance Testing rounds (see section C.II).
- Products of manufacturers that have had a history of failing results from previous Surveillance Testing rounds.

It will be at the sole discretion of the DLC how frequently, and how many products are selected through the Surveillance Testing process. Selection of products may focus on only one of the criteria above (for example, a round of testing may only focus on product performance that is close to meeting the tolerance of the efficacy requirements) or several criteria. DLC will announce which criterion or criteria will be the focus of the Surveillance Testing selection before the selection process begins. The focus of the selection criteria will help determine the metrics required for testing in order to review the selected product's performance.

c. Notification to Selected Manufacturer

DLC will notify the selected manufacturer by email using the contact information available from the Manufacturer Portal. If a given manufacturer account has multiple users, all users registered to the account will be notified. The selected manufacturer will have 10 business days from the date of notification to respond to the selection. Selected manufacturers have two options in responding: accept the selection and continue with the Surveillance Testing process, or decline the selection which will result in the selected product, and associated products (additional family members and private labels), being removed from the QPL. If no response is received within 10 business days, or there is no anticipated action being made on behalf of the manufacturer as determined by the DLC, the product will be removed from the QPL. Selected manufacturers can seek additional information about the selection during this 10 day period, however, action will be taken on the 10th day of the period.

I. Accepting the Selection

1. If the selected manufacturer agrees to move forward, the investigation will begin.
2. The selected manufacturer will be required to provide a list of as many locations as possible where the selected product can be purchased, including lot numbers, within 5 business days of agreeing to continue with the Surveillance Testing process. If the selected manufacturer indicates the product is only available at one location, sufficient documentation will need to be provided to support the claim of limited availability.

II. Declining the Selection

1. The selected manufacturer will have the option to decline the selection which will result in the product, and associated products being removed from the QPL with designation.
2. Declined selections will be tracked by DLC and DLC reserves the right to implement consequences when a selection is declined.

d. Investigation

Products undergoing investigation will remain confidential between the selected manufacturer and the DLC. Outside parties including members, other manufacturers, end users, etc. will not have access to investigation information until results are final.

I. Product Procurement

One sample will be procured through DLC designated procurement agents. Procurement agents reserve the right to procure products from locations not provided by the manufacturer. Once the product is procured, the procurement agent will work with a Surveillance Testing approved lab to ship products to the lab location.

II. Product Testing

1. Testing will be conducted only by pre-approved labs. Approved laboratories will be determined by responding to a Request for Proposal (RFP) issued by the DLC. Labs will be chosen for any individual investigation at DLC's discretion.
2. The metrics to be tested will be dependent on the individual criteria used to select the products during the Surveillance Testing selection process. For example, if the criteria is aimed at products that are close to meeting the CCT and CRI tolerance, Section 12 color measurements of the LM-79 standard will be required. If the criteria is aimed at products that are close to meeting the zonal lumen tolerances, Section 10 of the LM-79 standard will be required. The specific testing required will be determined after the initial selection is made.

III. Review of Testing Results

1. DLC will review the results of the testing upon completion. Established tolerances will be applied to the test data dependent on the outcome of the testing. The tolerances tables below will be used for each of the following situations:
 - a. Table 1 will be used to evaluate test results that do not meet the DLC Technical Requirements.
 - b. Table 2 will be used to evaluate test results that do meet the DLC Technical Requirements, but are substantially (as determined by the tolerances) different than the results originally listed with the product.

Table 1: For test results that do not meet the DLC Technical Requirements

Metric	Tolerance
Light output	-9.6%
Efficacy	-3%
Allowable CCT	Defined by ANSI C78.377-2011*
CRI	-2 points
Power Factor	-3%
THD	+5%
Zonal Lumens	Refer to Table 5
NEMA Classification	No tolerance
Lumen maintenance	No tolerance**

*ANSI C78.377-2011 also referred to for D_{uv} and (x,y) chromaticity coordinates tolerances for indoor categories.

**Lumen maintenance will be evaluated by whether or not the product meets the lumen maintenance requirements with the testing results

Table 2: For test results that meet the DLC Technical Requirements, but are substantially different than the original listing

Metric	Limit Type*	Tolerance
Light output	LCV	-9.6%
Wattage	UCV	+12.7%
Allowable CCT	UCV & LCV	+/-8.1%
CRI	LCV	-5.9%
Power Factor	LCV	-5%
THD	UCV	+10%
Zonal Lumens	UCV & LCV	+/-9.6%
NEMA Classification	UCV & LCV	+/- 1 Type
Lumen maintenance	N/A**	N/A**

*These tolerances use limits (LCV = lower critical value, UCV = upper critical value), which are expressed as a percentage below and above the listed values on the DLC QPL.

**LCV and UCV values are limited based on DLC requirements; i.e. an UCV CCT value cannot exceed maximum CCT requirements.

***Lumen maintenance will only be evaluated by whether or not the product meets the lumen maintenance requirements with the testing results

2. Upon review of the test results, DLC will notify the manufacturer of the results with a final ruling on the outcome of the testing. The outcomes are as follows:
 - a. The sample procured failed to meet DLC Technical Requirements when using Table 1 tolerances: the product is considered non-compliant.
 - b. The sample procured meets DLC Technical Requirements, but falls outside Table 2 tolerances: the product is considered non-compliant.
 - c. The sample procured meets the DLC Technical Requirements and tests within Table 2 tolerances: the product is considered compliant.
 - d. The sample procured meets the DLC Technical Requirements and outperforms current listing: the product is considered compliant.

IV. Appeals Process

1. The selected manufacturer will have the option to dispute the results. Any fees required to investigate the appeal will be at the sole responsibility of the manufacturer requesting the appeal. Appeals are only applicable to the results of testing; there is no appeals process for the consequence enforced.
2. The appeal must include:
 - a. Sufficient detail that addresses the reason for questioning the validity of the test results, and a remedy to the situation.
 - b. Agreement to pay the fees associated with the appeal. Fees will be based on administrative cost of the appeal and the fees associated with any additional required testing or product procurement to resolve appeal.
3. DLC will review the appeal, and reserves the right to ask for additional information or reject the appeal if sufficient information to explain the situation cannot be provided. Appeals will either be:
 - a. Accepted: An accepted appeal may require additional product testing. If so, the procedures listed above will be repeated. Any new test results will be used to make a final determination of the tested product's performance.
 - b. Rejected: If an appeal is rejected, the original failure ruling will stand and the product(s) will be removed from the QPL.
4. The manufacturer will be notified at the end of the appeals process as to the final results of the appeal. Appeal results are final.

V. Consequences

The following consequences can occur based upon the final determination of the investigation. DLC reserves the right to enforce additional consequences at any level of offense.

1. The product fails to meet DLC Technical Requirements using Table 1 tolerances:
 - a. First offense: A product that fails Surveillance Testing for the first time will be removed from the QPL. Products associated with the failed product will also be removed; this includes family members and private labels. DLC members will have access to information regarding failed products.
 - b. Second offense: A product from the same manufacturer that fails Surveillance Testing for the second time will be removed from the QPL. Products associated with the selected product will also be removed; this includes family members and private labels. DLC members will have access to information regarding failed products. The manufacturer may lose family grouping privileges for a period of up to 12 months.

- c. Third offense: A product from the same manufacturer that fails verification testing for the third time will be removed from the QPL. Products associated with the product will also be removed; this includes family members and private labels. DLC members will have access to information regarding failed products. The manufacturer loses family grouping privileges, and/or is subject to suspension from the DLC program for a period of up to 12 months.
2. Selected product falls outside tolerances, but still meets DLC Technical Requirements using Table 2 tolerances:
 - a. First offense: The manufacturer is required to update the product listing, at the full application fee.
 - b. Second offense: The manufacturer is required to update the product listing, at the full application fee. Selected manufacturer may lose family grouping privileges for a period of up to 12 months.
 - c. Third offense: The manufacturer is required to update product listing, at the full application fee. Family grouping privileges will be suspended, and/or the manufacturer is subject to suspension from the DLC program for a period of up to 12 months.
3. Selected product meets DLC requirements, and tests within tolerances listed in Table 2 above: Product receives special designation on QPL that indicates product's performance was verified.
4. Selected product meets DLC requirements, and outperforms current listing by tolerances listed in Table 2: Product receives special designation on QPL that indicates product's performance was verified, and the selected manufacturer has the option to update the listing to better performing data from the Surveillance testing results. Outperforming the current listing will be determined by evaluating being above/below the LCV and UCV specified in Table 2, whichever value indicates better performance for the specified metric. If both a LCV and UCV are specified in tolerance Table 2, the product must test between these percentages.