Welcome!

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Agenda

1. Background
2. Policy
3. Timeline
4. FAQ
5. Questions
   – Please use the question pane
Background
Background – Why?

• **Brand integrity**: Help preserve the value of the SSL QPL for all stakeholders by ensuring that product data is accurate
  - *Manufacturers*: Competitors attempting to game the system are removed, raising the value of all other DLC qualified products.
  - *DLC Members*: Assurance that product data can be trusted and incentives/rebates are only making it to products that meet the technical requirements.
  - *Others*: When utilizing the QPL, search and source accurate product data.
Background – How?

• Policy is the culmination of over two years of policy development
  – Over 100 comments and many interviews

- Draft Product Verification Performance Testing (July 2014)
- Draft Surveillance Testing Policy (November 2015)
- Final Surveillance Testing Policy released (December 2016)

• This policy release is final. Comments are welcome but will not be considered for revisions until a future policy development cycle.
DLC Policy Development

The DLC continually strives to identify products that will deliver significant energy savings via luminaire-level performance specifications. The evolution of LED technology, market transformation, efficiency regulations, and consumer incentives are shaping agents in DLC’s progressive policy development. Learn more about the DLC’s development process.

Policy Development

Based on industry and Member feedback, the DLC regularly evaluates the need for new Primary Use designations and new policies and procedures for products to be tested and included on the DLC QPL. These efforts are conducted through the Policy Development Process.

Revisions to Technical Requirements

The DLC regularly evaluates the efficacy and performance requirements for qualifying products on the Solid-State Lighting QPL. These updates are released with two grace periods, resulting in delisting of products that do not comply with the updated Requirements at the end of the grace period. Revision efforts are conducted through the Technical Requirements Revision Process. The current Technical Requirements
Policy
Policy - Overview

• Based on a system of targeted random sampling.
• Product testing done at labs who went through competitive RFP process.
• Procurement is expected to be happen in a timely manner. The DLC does recognize the supply chain/distribution process.
• Two tolerance tables.
• Consequences for declining to participate or falling outside of established tolerances.
Policy – Surveillance Process

1. Product Selection
2. Procurment
3. Testing
4. Results
5. Appeals (if applicable)
Policy – Selection: Targeted Random Sampling

- Performance close to meeting the tolerance of Technical Requirements qualified to. (E.g. Standard or Premium)
- Performance greatly exceeds the Technical Requirements.
- Products listed, but had past application issues.
- Complaints from industry, including members.
- Previously selected product, declined to participate in the Surveillance Testing investigation.
- Products of manufacturers that have had a history of failing results from previous Surveillance Testing rounds.
Policy – Selection

- The DLC retains sole discretion over how frequently, and how many products are selected through the surveillance testing process.
  - Selection may focus on one or multiple criteria
  - Metrics reported in testing will remain constant

- Manufacturers may voluntarily de-list prior to being chosen for surveillance testing without consequence.
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- Products are not subject to “double jeopardy”.
Policy – Procurement and Testing

**Procurement**

- Manufacturer has 10 business days to accept or decline the selection and 5 business days to provide a list of locations where product(s) can be purchased.

- Amount of samples equivalent to the number needed in original qualification.

- Invoice will be sent to the manufacturer by DLC once procurement arrangements have been made.

**Testing**

- Predetermined independent NVLAP laboratory will conduct testing.
Policy – Test Results

**Table 1**: Product Does NOT Meet Requirements

<table>
<thead>
<tr>
<th>Metric</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light output</td>
<td>- 10%</td>
</tr>
<tr>
<td>Efficacy</td>
<td>- 3%</td>
</tr>
<tr>
<td>Allowable CCT</td>
<td>Defined by ANSI C78.377-2015*</td>
</tr>
<tr>
<td>CRI</td>
<td>- 2 points</td>
</tr>
<tr>
<td>Power Factor</td>
<td>- 3%</td>
</tr>
<tr>
<td>THD</td>
<td>+ 5%</td>
</tr>
<tr>
<td>Zonal Lumens</td>
<td>Refer to Table 4 of the Technical Requirements Table</td>
</tr>
<tr>
<td>NEMA Classification</td>
<td>No tolerance</td>
</tr>
</tbody>
</table>

*ANSI C78.377-2015 also referred to for Duv and (x,y) chromaticity coordinates tolerances for indoor categories.

**Table 2**: Product MEETS Requirements

<table>
<thead>
<tr>
<th>Metric</th>
<th>Limit Type*</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light output</td>
<td>LCV</td>
<td>- 9.6%</td>
</tr>
<tr>
<td>System Wattage</td>
<td>UCV</td>
<td>+ 12.7%</td>
</tr>
<tr>
<td>Allowable CCT</td>
<td>UCV &amp; LCV</td>
<td>+/- 8.1%</td>
</tr>
<tr>
<td>CRI</td>
<td>LCV</td>
<td>- 5.9%</td>
</tr>
<tr>
<td>Power Factor</td>
<td>LCV</td>
<td>- 5%</td>
</tr>
<tr>
<td>THD</td>
<td>UCV</td>
<td>+ 10%</td>
</tr>
<tr>
<td>Zonal Lumens</td>
<td>UCV &amp; LCV</td>
<td>+/- 9.6%</td>
</tr>
<tr>
<td>NEMA Classification</td>
<td>UCV &amp; LCV</td>
<td>+/- 1 Type</td>
</tr>
</tbody>
</table>

*ANSI C78.377-2015 also referred to for Duv and (x,y) chromaticity coordinates tolerances for indoor categories.

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

• Manufacturers have 5 business days to dispute the results.
  - All fees will be paid by manufacturer.
  - Only results may be disputed, not consequences.

• Appeals require sufficient detail to address what is seen as invalid test results as well as a remedy.

• Appeal results are final.
Policy – Consequences

• Declining participation
  1. Increased likelihood of selection moving forward.
  2. #1, plus a possible suspension of up to 12 months and delisting of all products.

• Failing Table 1 (meeting the Technical Requirements)
  1. Failing product, and all associated products, removed from QPL
  2. #1, plus a possible suspension of up to 12 months.
  3. #1, #2, plus possible delisting of all products
Policy – Consequences

• Failing Table 2 (meets the Technical Requirements but fails tolerance)
  1. Manufacturer is required to update the product listing at the full fee (or opt to have the product de-listed)
  2. #1, plus a possible suspension of up to 12 months.
  3. #1, #2, plus possible delisting of all products

• Meets both table 1 and table 2
  – No Action

• Outperforms current listing by table 2 tolerances
  – Option to update that specific listing at no additional fee
Timeline
Timeline

January ‘17
- Selection of first products

Feb-May ‘17
- Procurement and Testing

End of Q2 ‘17
- Results of first round (not public)
- Selection of second round

Beg. Of Q3 ‘17
- Changes to internal processes
- Selection of second round
FAQs
FAQs

• Are there any categories/general applications that will not be included in the first round of surveillance testing (such as newer general applications like U-Bend Replacement Lamps)?

  – In order to prevent gaming, the DLC will not be announcing ahead of time which criteria will be targeted.
FAQs

• By what date should manufacturers have their product listings updated before product selection begins?

  – Product selection for the entire program will start in January 2017. Manufacturers may, at any time prior to being selected, de-list or update products with no consequence. When individual manufacturers choose to make those changes is entirely at their discretion.
FAQs

• Are products that have been identified as not meeting the Table 4.1 requirements eligible for surveillance testing?

  – Given the forthcoming de-listing of products not meeting the current requirements on April 1st and the goal of maximizing the use of limited resources, there are no plans to test products which will be de-listed in the near future.
FAQs

• With what frequency will products be selected for surveillance testing?

  - Product selection frequency will be based on capacity, particularly as the program gets started. In its inaugural year (2017) the program aims to select up to 250 products. This number will increase in subsequent years.
FAQs

• We are a private labeler. Are we responsible for our products, or is the Original Equipment Manufacturer (OEM)?

  – The principle behind Private Label applications is that products are identical in design and performance to the originally qualified versions, and all OEMs and Private Labelers sign a document stating that this is the case.

  – All products on the QPL are eligible for selection during the surveillance testing process. As always, Private Labelers must assume responsibility for the products they are selling in the market regardless of who submitted the test data to the DLC. If a Private Labeler’s product fails surveillance testing, that product will be delisted along with the identical product from the OEM and all other Private Labelers.
FAQs

• Who will information about surveillance testing be shared with? And what information will be shared?

  – No information will be publicly shared except for aggregate/anonymized data for general reporting purposes (webinars, stakeholders meeting, etc.)
  – Members will be informed of the models that fail surveillance testing. Members will not be given information during the process about products that have been selected.
FAQs

• What needs to be provided as “sufficient detail” for an appeal?

  – All appeals are unique, there is no singular formula. It is solely the DLC’s discretion for acceptance of an appeal.
  – The DLC will need in depth technical (or other) documentation to demonstrate that the tested product is not representative of the intended performance.
FAQs

When the tolerances in Table 2 are applied, what are they being applied against? Tested or rated data?

- For any product that has tested data on the QPL, the tables will be evaluated against those values. For products that have only rated data on the QPL, the tables will be evaluated against the rated data.
FAQs

• How will testing be conducted on products that require an external device between the mains and the product being tested?

  – A ballast, or any other device to be used for testing, will align with the make and model noted in the original test report provided by the manufacturer during the qualification process. Obtaining the ballast or other device will be part of the procurement process.
FAQs

- Is the NEMA Classification requirement for Architectural Flood and Spot Luminaires only? Or for all Luminaires?

  - The technical requirement for NEMA Beam Classifications is only applicable to Architectural and Landscape/Accent Flood and Spot Luminaires, therefore the +/- 1 Type tolerance in Table 2 is only applicable to those same products.
Questions from the webinar
Thank you!