Lamps V2.0 Proposal Discussion (2 of 4)

November 13, 2015
1-2:30pm EST

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Today’s Agenda

- Recap discussion from previous call
- Open Discussion

This meeting is being recorded. EPA intends to post recordings of the four scheduled meetings to inform stakeholders unable to attend.
Welcome

• Questions/comments welcome
  – For everyone’s benefit, please state name and organization before commenting
  – Can ask questions via the webinar chat at any time
Top-Level Re-Cap of 11/12 Discussion

Rated Life:
- Support was shared by multiple stakeholders for the proposed 15,000 hour life requirement for Omnidirectional lamps
- One manufacturer suggested EPA consider a 15,000 for directional lamps as well (for residential customers)
- Several efficiency advocates suggested EPA maintain 25,000 hour life requirement for directional lamps
- Testing would be the same as for decorative lamps, 86.7% lumen maintenance at 6,000 hours (93.1% at 3,000 hours for initial cert)

Power Factor:
- No strong support or opposition
- Some cautionary comments were shared and one proposal to require 0.7 for directional products
Top-Level Re-Cap of 11/12 Discussion

Omnidirectional Proposal:
• One manufacturer expressed concern that the proposed change was not as generous as they had hoped but has since submitted written comments in support of this proposal.

Efficacy Proposal
• One efficiency advocate expressed concern about 61 LPW requirement for directional lamps with CRI $\geq 90$
• EPA explained that the level would allow for the specification to accommodate a wide range of performance for these products that would be necessary to accommodate a variety of markets and customers.
Top-Level Re-Cap of 11/12 Discussion

Misc Topics

Effective Date/Transition Period:

- One efficiency advocate recommended a more gradual transition time (18 months rather than 12 month) to give CFLs more time in the market.
- EPA reminded partners that the program provides an archive QPL for reference that utility programs can reference for ongoing rebates past the effective date.
Specification Development Process Overview

- **Draft 1**
  - Draft 1 released February 13, 2015
- **Draft 2**
  - Released April 10, 2015
- **Draft 3**
  - Released August 6, 2015
- **Final Specification**
  - **Estimated** completion January 2016
- **Effective date**
  - **Estimated** January 2017
Omnidirectional lamp in base-up position

Measurements repeated in vertical planes about the lamp (polar) axis in maximum increments of 22.5° from 0° to 180°

Luminous intensity (cd) is measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 135°. 90% of the measured intensity values may vary by no more than 25% from the average of all measured values in all planes.

At least 5% of total flux (lm) in 135° to 180° zone.

Drawing not to scale
Omnidirectionality (proposed)

Luminous intensity (cd) measurements repeated in vertical planes about the lamp (polar) axis in maximum increments of 22.5° from 0° to 180°.

Luminous intensity (cd) is measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 180°.

At least 5% of total flux (lm) shall be produced in the 130° to 180° zone.

80% of the measured luminous intensity values may vary by no more than 35% from the average of all measured values in all planes in the 0° to 130° zone.

Drawing not to scale
Efficacy (proposed for 2017)

<table>
<thead>
<tr>
<th>Lamp Type</th>
<th>ENERGY STAR Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reported values for each lamp model shall meet the applicable requirement in the table below. Additionally eight or more units individually shall meet the requirement.</td>
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<tr>
<td></td>
<td><strong>Minimum Lamp Efficacy</strong></td>
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<tr>
<td></td>
<td><em>(initial lm/W)</em></td>
</tr>
<tr>
<td>CRI ≥ 90</td>
<td></td>
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<tr>
<td>Omnidirectional</td>
<td>70</td>
</tr>
<tr>
<td>Directional</td>
<td>61</td>
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<tr>
<td>Decorative</td>
<td></td>
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</tbody>
</table>
Discussion Time

• Questions?

• Send comments and questions after the meeting to:

lighting@energystar.gov