
From: Randy Abernathy
Sent: Friday, March 13, 2015 4:59 PM
To: lighting@energystar.gov
Subject: Suggestions/Comments for Lamps 2.0 Draft 1 specification

Dear EPA,

Thank you for the opportunity to provide feedback in regards to the Lamps 2.0 Draft 1 specification.

The following comments refer to sections of the specification by section number.

5.1 – in regards to Testing Color Tunable Lamps. The last sentence reads:

When testing a color tunable lamp, photometric performance testing (per section 9) shall be performed at:

1. the default setting from the factory.

2. the least efficient setting within ANSI white light CCT ranges (if different from the default and/or most consumptive) selected by the manufacturer.

As this is written it can be interpreted that if the lamp is not set to the least efficient setting by default, then the lamp must be tested two times, one at default settings and the other at the least efficient setting. Is this the intended requirement?

If the intent is to test at the least efficient setting even if the draft setting is not the least efficient, then we would suggest rewording this as follows:

When testing a color tunable lamp, photometric performance testing (per section 9) shall be performed at the default setting from the factory or the least efficient setting within ANSI white light CCT ranges (if different from the default and/or most consumptive) selected by the manufacturer.

This is just removing the numbered list in an effort to reduce confusion.

6.1 U.S. Department of Energy (DOE)

The following sentence is in the latter part of the first paragraph:

“Partners are reminded that testing for DOE regulatory metrics must be conducted by a NVLAP laboratory, and not all EPA-recognized laboratories have been accredited by NVLAP.”

We suggest removing this reminder as DOE may relax that rule and allow labs accredited by other AB’s such as A2LA to participate. This would then make this reminder incorrect. We believe just identifying the CFR is sufficient.

7.1 Product Variations

The last statement in 7.1 is:

The following shall be satisfied for product variations listed below:

We suggest identifying the location of the product variations (Table 2) and also making it clear that 7.1.1 thru 7.1.5 must be satisfied even if there are no additional tests required in Table 2. We suggest changing this statement to:

The following shall be satisfied for ALL product variations listed in Table 2:

Section 7, Table 2 We would like to see a footnote added under Table 2 that states:

¹All variations listed in Table 2 shall satisfy the requirements in 7.1.1 through 7.1.5 in addition to the additional test data required in Table 2.

This footnote should be referenced in the heading for column 3 in Table 2. This will help make it clear that all of section 7 is required for the variations listed in Table 2.

9.2 Light Output

Footnote 1 under the Decorative table states:

¹ *Includes all candelabra base (E12) lamps.*

It is our understanding that this does not include Globe shapes and Covered CFL with a candelabra base. We suggest amending footnote 1 as follows:

¹ *Includes all candelabra base (E12) lamps except globe and covered CFL.*

9.3. Elevated Temperature Light Output Ratio: All Directional Lamps

We suggest rewording the exemption as follows to more closely align the label statements in Lumen Maintenance and lamp label/packaging requirements:

(Exemption: Omnidirectional and decorative lamps, and directional lamps labeled “not for use in recessed fixtures”)

10 Lumen Maintenance and Rated Life

The last sentence above 10.1 currently reads:

“The highest wattage, be it the measured wattage of a single unit sample or the partner-reported wattage for the model, should be used to determine the testing temperature.”

We suggest changing “*partner-reported*” to “*partner-rated*” to more closely align with the terminology used in section 15 for packaging and labeling.

10.1 In the Compact Fluorescent sections Supplemental Testing Guidance we suggest changing the ambient and elevated temperature requirements as follows:

The following shall be tested in an ambient temperature condition in accordance with IES LM-65-10, referring to IES LM-66-11 for photometric measurements:

- *Decorative lamps, Omnidirectional lamps < 10W, and Omnidirectional lamps labeled “not for use in totally enclosed or recessed fixtures” on the lamp and lamp packaging*
- *Directional lamps labeled “not for use in recessed fixtures” on the lamp and lamp packaging*

The following shall be tested in accordance with the ENERGY STAR Elevated Temperature Life Test using the Option A test method or using test methods Option B or C with an operating temperature of 45°C ±5°C:

- *Directional lamps ≤ 20 watts*
- *Omnidirectional lamps ≥ 10 watts not restricted against use in totally enclosed or recessed fixtures.*

The following shall be tested in accordance with the ENERGY STAR Elevated Temperature Life Test using the Option A test method or using test methods Option B, or C with an operating temperature of 55°C ± 5°C:

- *Directional lamps > 20 watts*

In the Solid-State sections Supplemental Testing Guidance we suggest changing the ambient and elevated temperature requirements as follows:

The following shall be tested in accordance with the ENERGY STAR Ambient Temperature Life Test in an ambient temperature condition between 20°C and 35°C:

- *Omnidirectional and decorative lamps labeled “not for use in totally enclosed or recessed fixtures” on the lamp and lamp packaging*
- *Directional lamps labeled “not for use in recessed fixtures” on the lamp and lamp packaging*

The following shall be tested in accordance with the ENERGY STAR Elevated Temperature Life Test using the Option A test method or using test methods Option B or C with an operating temperature of 45°C ±5°C:

- *Directional lamps ≤ 20 watts*
- *All Omnidirectional and Decorative Lamps not restricted against use in totally enclosed or recessed fixtures.*

The following shall be tested in accordance with the ENERGY STAR Elevated Temperature Life Test using the Option A test method or using test methods Option B or C with an operating temperature of 55°C ± 5°C:

- *Directional lamps > 20 watts*

Note: Our goal here is to make the references to lamp labels and lamp types consistent between CFL and LED lamps and to make the lamp label requirements align with ETLOR and label/packaging sections. We are not sure of EPA’s intention for the elevated temperature requirement for some lamp types and sizes so we made the statements as close as we could between CFL and LED. This still needs some additional work.

11.1 Electrical Safety: All Lamps

In the supplemental testing guidance, it currently reads:

“... - the addition of the functionality described below shall not override existing safety protections and functions.”

We suggest changing “described below” to “described in section 12.7 Connected Product Criteria”.

15. LAMP LABELING, PACKAGING & WARRANTY REQUIREMENTS

We suggest that application exception language should be consistent throughout the specification. ETLOR, Lumen Maintenance, and labeling/packaging should all read the same.

15.1 Lamp labeling

We suggest changing the last bullet to:

- *Application exception language such as “not for use in totally enclosed or recessed fixtures” or “not for use in recessed fixtures” for lamps leveraging application exemption for elevated temperature testing. (See Section 10: Lumen Maintenance and/or Section 9.3 Elevated Temperature Light Output Ratio)*

15.2 Lamp Packaging

We suggest changing the third sentence in “Application Exceptions” to:

Examples include totally enclosed fixtures, recessed fixtures, insulated ceiling air-tight (ICAT) recessed downlights, damp locations, and any other application restrictions.

We also suggest adding a statement to “Application Exceptions” as follows:

All exceptions listed on the lamp label shall also be listed on the lamp package.

Thank you again for allowing ACS to participate in the development of Lamps V2.0. Please feel free to contact ACS to discuss any suggestions that we have made.

*Best Regards,
Randy*

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