

Hello Lighting Team,

Thank you for the opportunity to provide comments and feedback on the ENERGY STAR® Luminaires V2.0 discussion document. Please find our comments below.

- 1) Streamlining Requirements, Testing, and Certification.
 - a. We support revising the Color Angular Uniformity requirement to 0.006.
 - b. As a test lab we have also seen very little failures in the start time testing we have done. The testing however is typically done concurrently with the other testing we do for an ENERGY STAR project and wouldn't necessarily save time or money. We would ask that if Start Time is kept in the standard, that a testing method/procedure is written that could be followed by all labs.
 - c. We support removing the requirement of Current Crest Factor.
 - d. We feel that Zonal Lumen Density requirements should be retained.
 - e. In regards to Scaling – In addition to integrating sphere tests for similar directional products an in-situ test at the different light output and wattage levels should also be evaluated for lifetime claims and driver maximum case temperature.

- 2) Changes to Efficacy Levels
 - a. We support raising efficacy levels for all product categories.

- 3) Changes to Product Category Scope:
 - a. We support expanding SSL retrofit categories which would include retrofits for Non-Directional luminaires like wall sconces and flushmount ceiling fixtures.
 - b. We support including luminaires with communication control gear into the specification. Testing requirements could be as simple as off state power requirements to something more robust which verifies the functionality of the specific control system.
 - c. We support removing fixtures that do not ship with light sources from the specification.
 - d. We fully support changing the definition of an LED Light Engine. The typical use of LEDs that manufactures have taken does not fit the current definition of a Light Engine. Something like the Zhaga definition would work or adding more clarification to the existing ANSI RP-16 definition.
 - e. We are in support of allowing products to be certified that utilize a screw in lamp base and ship with an ENERGY STAR qualified light source.
 - f. We feel that the inseparable SSL category still would be needed as not all luminaires could be “easily” tested per LM-82 even if the definition were changed.

Thanks,
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