

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

March 6, 2015

Dear ENERGY STAR[®] Lighting Stakeholders:

With this letter, the Environmental Protection Agency (EPA) is releasing the second draft of the ENERGY STAR Luminaires Specification Version 2.0. The specification development process, including subsequent drafts and comment periods, is anticipated to conclude in the spring of 2015. Until the version 2.0 specification is finalized, version 1.2 specification remains in effect.

The primary goals for Luminaires V2.0 remain as follows:

1. Streamlining and simplifying the specification requirements, testing and certification.
2. Increasing efficacy levels to keep pace with the technology and increase energy savings.
3. Adjusting scope and increasing flexibility to broaden the selection, customization and availability of a wide variety of ENERGY STAR certified luminaires.

EPA wants to thank all the stakeholders who contributed comments and constructive feedback. A limited number of substantive changes were made from draft 1 to draft 2, as well as minor clarifications and refinements, largely based on the feedback EPA received from stakeholders. Changes are outlined in note boxes throughout draft 2, with highlights provided below. For a summary of stakeholder comments on draft 1 and the Agency response, in addition to materials related to draft 1 please visit www.energystar.gov/luminaires.

Overview of Changes from Draft 1 to Draft 2

Streamlining and Simplifying

- A new section 5.2 has been included on the Certified Lighting Subcomponent Database to describe its use in supporting certification of luminaires.

Efficacy

In this draft EPA adjusted proposed efficacy levels for the following product types based on specific stakeholder feedback.

- For NON-DIRECTIONAL Luminaires, the source efficacy requirement for SSL Surface Mounted Retrofits was revised to be consistent with the requirement for LED light engines due to stakeholder feedback on the similarity of construction and use.
- For DIRECTIONAL Luminaires, luminaire efficacy was adjusted for SSL Downlight Retrofits (from 70 to 65 lm/W), and accent lights and undercabinet luminaires (from 60 to 55 lm/W) based on feedback that in order to achieve the proposed efficacies cost effectiveness and light quality would suffer and slightly lower efficacy levels would be more appropriate.

- Additional guidance on the evaluation of asymmetrical distributions (cove and undercabinet) has also been included based on stakeholder feedback.
- A future efficacy tier for 2018, an increase of 20 percent across the board for all product types, has been included, largely based on DOE research that shows an annual increase in solid state lighting luminaire efficacy of 9 percent.

Scope

- In section 8, Shipping with ENERGY STAR Certified Lamps, additional temperature testing for enclosed fixtures has been proposed to ensure that the lamp(s) selected operate within the lamp manufacturer specified temperature range.
- The optional criteria for products with connected functionality have been simplified.

Other Items

- In section 7 Methods of Measurement and Reference Documents, two reference documents were added, 1598C and IEEE PAR1789.
- In 9.5 Color Angular Uniformity, the area of interest for measurement was clarified.
- In 10.3 Color Maintenance requirements were modified to include any and all test points.
- In section 11.6 Operating frequency, a reference to IEEE P1789 was added along with additional guidance on the measurement of the waveform for frequency.
- In section 16 explicit language was included to be clear that packaging and marketing claims shall represent the product consistent with its certification.
- In section 13 draft two includes guidance on testing retrofits in worst case recessed cans.

Partners and stakeholders are encouraged to submit comments on the second draft to lighting@energystar.gov by **Friday April 3, 2015**. Please indicate “ENERGY STAR Luminaires 2.0 Draft 2 Comments” in the email subject line. **Please note that comments received will be posted to the ENERGY STAR website unless otherwise requested.**

On **Tuesday March 17, 2015**, EPA will host a webinar and in-person meeting providing an overview of the V2.0 Draft 2 specification, and allow for detailed discussion. Stakeholders will have the opportunity to ask questions via phone, web or in person. Registration information will be posted to www.energystar.gov/luminaires.

The strength of the ENERGY STAR program is derived in large part from the active interest and participation of our partners. EPA appreciates your contribution to the development of this specification and welcomes individual inquiries; please contact me with questions, comments or concerns any time at (202) 343-9042 or jantz-sell.taylor@epa.gov or lighting@energystar.gov. As always, thank you for your support of ENERGY STAR.

Sincerely,



Taylor Jantz-Sell
ENERGY STAR Lighting Program Manager
U.S. Environmental Protection Agency