

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



OFFICE OF
AIR AND RADIATION

April 9, 2015

Dear ENERGY STAR® Lighting Stakeholders:

This letter announces the Environmental Protection Agency's (EPA) release of the second draft of the ENERGY STAR Lamps specification version 2.0. The specification development process, including subsequent specification drafts and stakeholder comment periods, is anticipated to conclude in June 2015 with an effective date of June 2016. Until the Lamps V2.0 Specification is effective, Version 1.1 specification remains in effect.

The Agency thanks partners and stakeholders for their review of Draft 1, and for the comments submitted. Comments received have been posted to the ENERGY STAR Lamps Specification Development website at www.energystar.gov/lamps.

Following the release of Draft 1, EPA held a round table discussion and webinar providing further details and addressing questions about the Agency's rationale for the content of the first draft. Slides from that meeting are available at the above website address. EPA also hosted two stakeholder discussions on key topics: connected lighting criteria and product packaging. This second draft reflects changes resulting from EPA's review and consideration of all submitted comments and industry discussions.

The primary goals for Lamps V2.0 include:

1. Increase efficacy levels.
2. Broaden the scope and the features.
3. Provide for use of DOE's pending LED lamp test method.
4. Improve harmonization between ENERGY STAR lighting specifications.

The proposed changes for version 2.0 are intended to avoid the need for partners to retest products, however they do reflect updated industry standards and alignment with a final DOE test procedure for integrated LED lamps. The following summarizes proposed changes in draft 2; more information on EPA's rationale for these changes is detailed in note boxes located throughout the specification.

Overview of Key Changes Made in Draft 2

Efficacy

Adjustments were made to efficacy for omnidirectional lamps and low wattage decorative lamps. EPA received comments from a variety of stakeholders to maintain a larger selection of the most popular bulbs in the market, allowing consumers a wider variety of affordable options and to support plans and investments made by partners for the next five years..

EPA adjusted the efficacy requirement for omnidirectional lamps from the initial proposal of 70 lumens per watt to 65 lumens per watt. This adjustment results in a passing rate of 78% of currently certified lamps based on rated performance, and more than 90% based on measured performance.

EPA has maintained the efficacy requirement proposed in draft 1 for decorative lamps greater than 7 watts at 65 lumens per watt, and lowered the requirement for lamps 7 watts or less to 55 lumens per watt. This is based on information received from partners about challenges unique to decorative products, and is intended to facilitate design features that will advance adoption of these lamp types, such as dimming and improved aesthetics.

LED testing and reporting to align with DOE's pending test method & updated references

EPA has added references to the upcoming DOE Test Procedure so that the test procedure can be used for ENERGY STAR certification, once it is finalized. EPA has adjustments throughout the specification in anticipation of the DOE final test method, including reporting guidance and passing rate requirements for rated lifetime. EPA has maintained lumen maintenance tolerances for LED lamps to permit continued use of any existing long term test data until the DOE test procedure is final.

Packaging requirements

Based on stakeholder feedback, EPA has removed the requirement to use standardized color terms on product packaging, but has included them as recommended descriptions. EPA believes consistent terminology across brands will help facilitate consumer selection and adoption of ENERGY STAR lighting, but recognizes that additional work is needed to develop industry consensus around terms.

EPA received comment to make the application exception language clearer to consumers, and seeks stakeholders input on how to address this concern. This language is often difficult to find and can result in misapplication of replacement lamps. Making this language more prominent and including an additional reminder on the front of product packaging has the potential to reduce misapplications the result in lamps failing to meet the consumers' expectations. Stakeholder discussion on this topic should continue as it is in all stakeholders' best interest for consumers to have a positive experience with ENERGY STAR certified bulbs.

Clarifications and Other Items

- **Color tunable lamps:** EPA has clarified that full testing for color tunable lamps must be performed at the least efficient white light setting and that only input power, lumens, and color must be tested and reported for default and most consumptive settings.
- **Restricted use language and testing:** EPA has further clarified which lamps are subject to which temperature testing environments based on lamp type and restricted use labeling and clarified the use of restricted language that applies throughout the specification.
- **R9:** To maintain product availability, EPA has removed the requirement for CFLs to have a positive R9 value but maintained that the R9 value be reported.
- **Start time:** Based on stakeholder feedback, the start time requirement in draft 2 is proposed to 750 milliseconds for most lamps and 1 second for lamps meeting the connected criteria.
- **Run up time:** In recognition of stakeholder comments that run-up time has a higher consumer dissatisfaction than start time, the run up time has been proposed to be reduced

to 45 seconds or less. 88% of lamps that are able to meet the other requirements in draft 2 can meet the faster run up time requirement.

- **Connected Criteria:** Based on feedback from the connected webinar discussion EPA has removed the requirement for operational status reporting to include luminous intensity and color so only on/off status at minimum shall be reported.

Partners and stakeholders are encouraged to submit comments on the second draft to lighting@energystar.gov by **Friday May 8, 2015**. Please indicate “ENERGY STAR Lamps 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 **Monday, April 20, 2015**, EPA will host a webinar and in-person meeting in Washington, DC providing a more detailed discussion of the proposed changes, a call in line will also be made available. Stakeholders will have the opportunity to ask questions via phone, web or in person. To register for this webinar please click to [RSVP for the Lamps Webinar](#).

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. For questions pertaining to the U.S. Department of Energy test procedures, contact Lucy Debutts, DOE, at lucy.debutts@ee.doe.gov or (202) 287-1604. As always, thank you for your support of ENERGY STAR.

Sincerely,



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