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



OFFICE OF AIR AND RADIATION

August 28, 2013

Dear ENERGY STAR® Lighting Partner, Stakeholder or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) announces the release of the final ENERGY STAR Lamps V1.0 specification. Lamps V1.0 will replace the Compact Fluorescent Lamps V4.3 and Integral LED Lamps V1.4 specifications on September 30, 2014.

EPA would like to thank partners and stakeholders for the thoughtful participation in this specification development process. The data and input shared have been invaluable informing the final outcome. Despite many challenges, the Lamps V1.0 specification reflects a successful collaboration, combining two technology specific specifications into one, with balanced new criteria for high quality ENERGY STAR certified lamps. This specification raises the bar for CFL performance, reduces testing burden while maintaining performance integrity, and establishes the first set of testing and baseline requirements for dimmable lamps.

Comments received in response to the final draft specification raised a limited number of new issues, as discussed below. A more comprehensive summary and response to comments, along with all materials related to the Agency's development of the Lamps V1.0 specification can be found at www.energystar.gov/lamps. Additional resources will be posted to assist partners, including a guide to recertification for currently certified lamps and searchable frequently asked questions which will be updated regularly at www.energystar.gov/lightingfaqs.

Guidance Related to DOE Standards

In an effort to clarify the relationship between ENERGY STAR testing and testing for purposes of the U.S. Department of Energy (DOE) standards, EPA and DOE worked together to incorporate guidance into the Lamps V1.0 specification directing manufacturers to relevant references, clarifying where data should be shared and highlighting where testing may differ. In response to ongoing stakeholder questions, some guidance was been removed in favor of a general statement encouraging partners to consult with DOE when reporting for DOE standards.

Shape Dimension Tolerances

EPA received multiple comments supporting removal of the proposed 5% tolerance on maximum overall length measurements for omnidirectional LED lamps. While EPA believes that standardized lamp sizes are important, referenced standards acknowledge that manufacturing variations occur and allow for 3% of yield to fall outside of the maximum overall length. Because only one randomly selected unit is tested for ENERGY STAR, the Agency has maintained the 5% tolerance to avoid unintended consequences undermining the advancement of new energy efficient technologies.

Effective Date

Due to the longer testing time frames associated with ENERGY STAR certification for lamps, EPA has allowed just over a year for transition to the new Lamps V1.0 specification. Based on the number of lamps that can currently meet the new requirements, EPA anticipates that this timeframe is sufficient to allow for a good selection of certified lamps for consumers to choose from when the specification goes into effect. The Agency recognizes that manufacturers may have an interest in redesigning lamps in order to meet the new requirements, which will require additional time, and these can be added to the program as they become available and certified.

The following additional changes are reflected in the final specification document as a result of stakeholder feedback and follow up discussions on the final draft:

- Included color maintenance as an additional test that is not required to be performed on each variation for products utilizing the allowable variation of color temperature.
- Updated ambient temperature range for LED lamps to "between 20°C and 35°C", rather than the 25° ±10°C proposed in the final draft. This change is consistent with the 5 degree lower bound that is currently allowed, while permitting a slightly higher upper bound due to challenges for labs in maintaining tight temperature ranges.
- Included a tolerance for CFLs not covered by DOE standards that may be applied to light output measurements taken for lumen maintenance.
- Clarified sample size for lamps covered by DOE's regulatory program that require elevated temperature life testing for ENERGY STAR.
- Removed specified orientation for rapid cycle stress testing.
- Updated frequency requirement language for CFLs to align with CFL V4.3.
- Included a reminder that lamps within the scope of ENERGY STAR are covered by U.S. federal laws governed by other federal agencies, and that compliance with these laws is mandatory to sell products in the U.S. with the appropriate references and web site addresses for partners with questions regarding those regulations.
- Included an additional exemption for leaded glass.

Packaging & Lamp labeling:

- Clarified the flexibility in the requirement for model identifying information provided on the lamp and packaging to match EPA lists, so that listed products can be matched to packaging and to lamps after the packaging has been discarded.
- Clarified the connection between application exceptions and testing conditions for lamp markings.
- Updated restricted position language for consistency with previous specification.

Dimmable lamps:

- Outlined the Agency's intent for a diverse selection of dimmers for testing.
- Clarified the measurements to be reported for flicker and noise.
- Updated the recommended practices for clarity and consistency.

Going forward, EPA will continue to follow the development of new industry standards and other relevant trends. The Agency will continue work and stakeholder engagement in areas that might allow for further streamlining of the certification process and more consumer choice without compromising performance integrity. One key priority is further examination of requirements for LED A lamps, to explore opportunities that could allow for even more cost effective options that can effectively replace general purpose incandescent lamps without compromise. Stakeholders are encouraged to remain engaged.

In addition, EPA intends to monitor implementation of certain aspects of the Lamps V1.0 specification, such as the form factors of LED lamps submitted through the decorative category, the availability of lamps intended for use in recessed or enclosed fixtures, and the selection of dimmers used for testing. If it becomes evident that the intent of the specification is not being met, EPA may open up the specification to address any issues.

Transition Timeline and Next Steps:

EPA shares its partners' desire for a smooth transition from one ENERGY STAR specification version to the next; so that consumers can expect ENERGY STAR labeled products to fully meet the latest requirements upon their effective date. With this in mind, EPA has established the following timeline:

- Effective immediately, manufacturers may elect to have their certification body (CB) certify their eligible products to the Lamps Version 1.0 requirements.
- After May 30, 2014, CBs will be instructed to stop certifying new product submittals to CFL V4.3 and ILL V1.4. Note, however, that models already certified to CFL V4.3 and ILL V1.4 will maintain their certification status until September 30, 2014.
- Any lamp manufactured as of September 30, 2014 must be certified to Lamps V1.0 to bear the ENERGY STAR mark. All certifications of products to the old specifications will be invalid for purposes of ENERGY STAR certification, and CBs will only submit to EPA product models certified to Lamps Version 1.0.

Upon satisfactory completion of all certification requirements, a CB will notify the partner that the product is ENERGY STAR certified and will submit certified product data to EPA for listing on the ENERGY STAR website. For more information on the Third-Party Certification program please visit www.energystar.gov/testingandverification.

As a reminder, ENERGY STAR manufacturer partnership is limited to organizations that own and/or license a brand name under which they sell eligible products in the United States and/or Canada. Partnership is not available to original equipment manufacturers (OEMs) that do not sell directly to consumers or end users in the United States. OEMs may certify products on behalf of the ENERGY STAR brand owners/licensees; however the brand owner must be the ENERGY STAR partner associated directly with the certified product models, since only partners are authorized to use the ENERGY STAR certification mark.

EPA looks forward to working with you to bring high quality, energy efficient lamps to the market carrying the ENERGY STAR certification mark. Please feel free to contact me with questions or concerns at (202) 343-9042 or jantz-sell.taylor@epa.gov, or Tanya Hernandez at ICF International at (919) 294-9004 or jantz-sell.taylor@epa.gov, or Tanya Hernandez at ICF International at (919) 294-9004 or jantz-sell.taylor@epa.gov, or Tanya Hernandez at ICF International at (919) 294-9004 or jantz-sell.taylor@epa.gov, or Tanya Hernandez at ICF International at (919) 294-9004 or jantz-sell.taylor@epa.gov, or Tanya Hernandez at ICF International at (919) 294-9004 or jantz-sell.taylor@epa.gov.

Thank you for your contributions towards the development of this new specification, and for your continued support of ENERGY STAR.

Sincerely,

Taylor Jantz-Sell

A. Just tell

Lighting Program Manager, ENERGY STAR

U.S. Environmental Protection Agency