

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



OFFICE OF  
AIR AND RADIATION

September 13, 2004

Dear ENERGY STAR<sup>®</sup> Residential Light Fixture Partner or Other Interested Party:

EPA welcomes your input on the attached **Draft 1** for ENERGY STAR<sup>®</sup> qualified Residential Light Fixtures Eligibility Criteria Version 4.0 (aka Draft 1 V4.0 Specification). This document represents EPA's Draft proposal for the criteria and testing procedures that manufacturers will need to abide by in order to qualify products as ENERGY STAR.

As you may recall, EPA distributed a memo dated June 21, 2004 to industry stakeholders stating its intention to begin the review process for the Residential Light Fixture specification. EPA has since conducted research on a number of performance characteristics not addressed in the Version 3.2 specification and reviewed existing requirements for needed clarifications in order to develop this Draft 1 specification.

Throughout the document, note boxes have been inserted to explain the proposed revisions and provide EPA's rationale. The Draft 1 V4.0 Specification incorporates the following key changes:

- Magnetic ballasts may no longer be used in qualified products, with the exception of outdoor fixtures that employ High Intensity Discharge (HID) lamps such as high pressure sodium and metal halide.
- In place of the Correlated Color Temperature performance characteristic, EPA is proposing a method that in part uses ANSI standardized color ovals to reduce unintended lamp color variance among ENERGY STAR qualified fixtures in the marketplace.
- A new requirement has been added that ballasts used in fixtures must be replaceable without destruction to the fixture or surrounding carpentry.
- A new performance characteristic and supporting documentation requirement has been added that lamps shall have an average rated lumen maintenance of at least 80% of initial lamp lumens at 40% rated lamp life.
- When an applicable ANSI-IEC lamp standard (electrical and dimensional parameters) is available for the lamp being shipped with a fixture, it now must be used in order to qualify for ENERGY STAR. Custom lamp types may only be used where no standard exists (i.e., for a spiral CFL lamp).
- All fixtures must continue to use a lamp socket that accepts ANSI standardized lamp bases.
- The lowest efficacy tier for indoor fixtures has been increased from 46 to 50 lumens per watt.
- The efficacy tiers for outdoor fixtures using an efficient light source have been increased. The revised efficacy levels remain less stringent than the requirements for indoor fixtures so that a variety of efficient lighting technologies (i.e., metal halide and high pressure sodium lamps) may continue to be used.
- A set of quality assurance protocols has been included for implementation at a later date.
- ENERGY STAR qualification of a fixture will automatically expire 3 years after the date of qualification. Manufacturers that wish to maintain the ENERGY STAR qualification will be required to re-qualify the fixture using current test data.

- Supporting documentation demonstrating compliance with the existing lamp life requirement is now required for all fixtures at the time of submittal.
- Testing is now required to demonstrate that end of life protection is present in ballasts that operate T4 or T5 lamps.
- A new requirement has been added that indoor fixtures must be shipped with a qualifying lamp (with the exception of recessed downlights, recessed downlight retrofit kits, and fixtures using linear lamps).
- For fixtures that ship without a lamp, packaging requirements have been clarified to ensure that the consumer purchases a lamp that will comply with ENERGY STAR.

Other minor changes to the specification include: organization and reformatting of various sections, additional clarifications to existing requirements, revisions to packaging requirements, new documentation requirements for controls on outdoor fixtures, and new documentation requirements for noise.

Please review the Draft 1 V4.0 specification and provide comments via e-mail to Nick Germana, ICF Consulting, at [ngermana@icfconsulting.com](mailto:ngermana@icfconsulting.com). All written comments will be posted on the ENERGY STAR Web site for review, unless the submitter indicates otherwise. If you support/concur with the Draft 1 Version 4.0 specification, or do not wish to comment, please state this in writing. It is equally important that EPA understands which portions of the draft specification meet with stakeholder approval, in addition to identifying the sections that may need further revision and/or explanation.

**All stakeholder comments must be received by Monday, October 4, 2004.** At the end of the comment period, EPA will carefully review and consider all comments submitted and distribute subsequent drafts, as necessary. It is EPA's intention to finalize the specification by January 1, 2005, with an effective date of October 1, 2005.

The exchange of ideas and information among EPA, industry, and other interested parties is critical to the success of ENERGY STAR. If you have any questions or concerns, please feel free to contact me at (202) 343-9397 or [shiller.david@epa.gov](mailto:shiller.david@epa.gov).

To track the progress of ENERGY STAR for Residential Light Fixtures, go to [www.energystar.gov/productdevelopment](http://www.energystar.gov/productdevelopment) and click on "Revisions to Existing Specifications".

Sincerely,



David Shiller, Product Manager  
ENERGY STAR for Residential Lighting Fixtures