

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



OFFICE OF  
AIR AND RADIATION

January 15, 2007

Dear Residential Light Fixture Manufacturer or Other Interested Party:

On April 6, 2006, the US Environmental Protection Agency (EPA) distributed a letter to stakeholders announcing, among other things, EPA's intent to amend the ENERGY STAR Eligibility Criteria for Residential Light Fixtures (RLF) to make self-ballasted GU-24 based lamps (GU-24 lamps) eligible for the ENERGY STAR. On May 16<sup>th</sup>, EPA released draft requirements for GU-24 lamps that would have been eligible for sale as ENERGY STAR qualified products at retail outlets. While EPA and DOE continue to work on the appropriate requirements for labeling GU-24 lamps with the ENERGY STAR and because the majority of GU-24 lamps are currently entering the market in conjunction with the sale of a fixture, we are, today, proposing modifications to the ENERGY STAR Eligibility Criteria for Residential Light Fixtures to continue to ensure that consumers receive high quality product when they choose ENERGY STAR. At this time, the **DRAFT 1 ENERGY STAR Version 4.1 Residential Light Fixture specification** only addresses requirements for GU-24 products qualified as part of a fixture (i.e. for GU-24 lamps shipped with a qualifying ENERGY STAR RLF).

GU-24 lamps are a rapidly growing technological approach used to qualify products under the ENERGY STAR Residential Light Fixtures Program. To date, over 700 fixture models use the GU-24 as their primary technology for compliance. It is critical to the ongoing success of the ENERGY STAR program for residential fixtures and for the ultimate success of this new technology that these products meet or exceed consumer expectations. To ensure high quality performance in support of an expanded market for these products, EPA recognizes that some adjustments to the ENERGY STAR program requirements are warranted.

As is generally well recognized, heat, lamp cycling and voltage variations are key factors affecting lighting technology performance and are used by industry to test lamps and ballasts in an accelerated fashion. Given technological advances in this area, it is time for the ENERGY STAR program to more effectively distinguish between those products that successfully meet these challenges and those that do not. To this end, ENERGY STAR program requirements and test procedures must be more reflective of real-world conditions, particularly relating to the heated conditions (as opposed to "open air") encountered by many lamps and ballasts. Accordingly, EPA has devoted significant time and resources in support of the development of more representative but accelerated life tests for fixtures. As part of this revision, EPA is seeking comment on a draft accelerated life test (ALT) for GU-24 products. To further ensure product quality, RLF Version 4.1 includes the following additional proposed changes:

- The addition of a 1,000 hour lumen maintenance test requirement for GU-24 lamps so that performance problems will be identified earlier in the qualification process.
- Amendment of the Quality Assurance Program (QA 4) requirements as they relate to GU-24 platforms to include a sample size of 10 and lamp configuration of base-up and base-down.
- The addition of performance requirements for GU-24 lamp/ballast designs that include diffusers (aka covered lamps) in support of the growing market for the use of these products with ceiling fans.

EPA is proposing that RLF Version 4.1 be effective November 1, 2007.

**Please send all comments on Draft 1 ENERGY STAR Version 4.1 Residential Light Fixture specification in writing to [RLF@icfi.com](mailto:RLF@icfi.com) by February 16, 2007.**

On behalf of EPA, we appreciate your participation in this revision process and look forward to working with you to develop program requirements that balance the needs of consumers with the abilities of our manufacturing partners. If you have any questions or concerns, please feel free to contact Peter Banwell at [banwell.peter@epa.gov](mailto:banwell.peter@epa.gov) or (202) 343-9408. Thank you for your continued support of ENERGY STAR.

Respectfully,



Peter Banwell  
ENERGY STAR Marketing Team Manager  
US EPA



Andrew Fanara  
EPA Program Manager  
Specification Development