



August 13, 2007

Mr. Alex Baker
Energy Star Lighting Program Manager
U.S. Environmental Protection Agency
1310 L Street, NW
Washington, DC

Sent electronically to baker.alex@epa.gov

Dear Mr. Baker,

We appreciate the opportunity to provide comments on the proposed final draft of revisions to the Energy Star Residential Light Fixture (RLF) specification circulated on July 23. Many NEMA member company lighting equipment manufacturers are active participants in the Energy Star lighting programs.

We recognize Energy Star's interest in proposing to update the current version of the RLF program requirements to account for the growth in product offerings that utilize the GU24 base. However, we remain very concerned that the Energy Star programs for RLFs and compact fluorescent lamps (CFLs) are proposing differing test procedures and requirements for GU24 lamps. It is not clear to us why the same lamp should have to be tested twice to qualify as Energy Star; once to be sold with a fixture as part of the RLF labeling program and again as a stand-alone product under the CFL program.

As stated in our February 16 comments on Draft 1 of proposed changes to the RLF specification, EPA and DOE should cooperate and harmonize treatment of integrated CFLs, regardless of base type. NEMA Lamp Section members worked closely with DOE to develop a practical accelerated life test procedure and document, yet the EPA seems determined to use a test procedure that was developed by LRC for fluorescent ballasts used in fixtures, not integrated lamps, with specialized apparatus not available in most labs. We believe EPA needs much more formal justification than we have seen for imposing this redundant set of testing requirements on manufacturers.

We are also troubled by EPA's simultaneous concern for and lack of attention to the consumer. The Note above the draft Table 3 states that the specifications are for GU-24 Based Integrated Lamps *intended* for use with Energy Star qualified fixtures. When a consumer goes to purchase a GU-24 based integrated CFL in a store, how will he or she tell the difference between lamps

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qualified for the RLF and DOE protocols? Will a RLF 4.1 lamp have a different Energy Star logo than a non-RLF (but Energy Star-qualified through the CFL specification) lamp? Is it intended that an RLF 4.1 product will have any unique identification to distinguish it from a non-RLF 4.1 integrated product?

It is abundantly clear that EPA and DOE must overcome any bureaucratic disagreements and agree on consistent treatment for integrated CFLs. The marketplace and manufacturers demand it.

In the *unfortunate* event that EPA insists on proceeding on its current path, we offer the following comments and corrections on Table 3.

Required Documentation

The proposed requirements are introduced as intended for GU-24 based integrated fluorescent lamps, but some of the required documentation options seem to have been written around a standard for fixtures with separate lamps and ballast, not an integrated lamp.

Accordingly, we recommend paring down the options for required documentation to those that apply to integrated lamps and modifying others, as follows:

The required documentation for most characteristics should be your option 1, a test report from a laboratory accredited by NVLAP or one of its MRA signatories as it is for other integrated lamps for Energy Star qualification. Required documentation options 2, 3 and sometimes 4 seem to be aimed at fixtures (with separate lamps and ballasts) not integrated lamps. Option 2 reads "an EPA approved Platform Letter of Approval that lists the lamp/ballast combination used in the fixture and the test for this performance characteristic" and option 3 reads "EPA-approved documentation from an industry association, such as the NEMA/ALA matrices". Both of these refer to lists of separate lamps and ballasts that, when used together, allow a fixture to qualify. Integrated lamps are not included in these lists.

In the case of lamp start time, options 1 (NVLAP) and 4 (a test report from an OSHA NRTL laboratory) are appropriate for an integrated lamp. For end-of- life protection (EOL), we recommend referencing the upcoming 2nd edition of UL 1993 as appropriate for integrated lamps. UL 1993 is being revised to include end-of -life (EOL) requirements. The current required documentation for EOL discusses the ballast, and the ballast of an integrated lamp cannot be tested separately. The complete integrated lamp must be tested as a unit.

The requirement for safety should be that the product is listed to UL 1993. This can be performed by UL, CSA, or another NRTL. The documentation required should be the file number for the appropriate agency that shows the products have been tested to the UL 1993 standard.

As for EMI for an integrated lamp, manufacturers self-certify other integrated fluorescent lamps and are allowed to provide a letter regarding the outcome of their own EMI testing. This would seem appropriate for the GU-24 based integrated lamp as well. This is the current option 4.

System Efficacy

The system efficacy requirement (presumably the same as the lamp efficacy requirement for the integrated lamp) is the same for bare and covered product. This does not reflect the obvious fact that covers absorb some of the light, and the specification in this sense has a bias toward bare lamps. We think the specification should reflect known trade-offs between size, covered versus bare lamps, lifetimes, and efficacies. For covered lamps, we propose that for the lower wattages (15 watts and below) the efficacy limits be lowered to 45 LPW, and to 35 LPW for wattages below 8 watts.

Average Rated Lamp Life

The Average Rated Lamp Life values, while achievable, represent a cost-performance trade-off that we do not think promotes optimum energy savings due to reduced market penetration. We ask you to reconsider these values in this light. We believe that neither lamp efficacy nor lamp lifetime are strong consumer dissatisfiers today.

Mercury Content Limits

While we welcome the Energy Star's recognition of the NEMA voluntary initiative on medium screw base (incandescent replacement) integrally ballasted compact fluorescent lamps (CFLs) and the RLF program's proposal to adopt the 5 mg and 6 mg limits, we are concerned that the precise language proposed for Version 4.1 was not provided for review. NEMA is moving to formalize the March 13 voluntary commitment in a NEMA Standard, LL-8.

For reasons of precedence, the statement on mercury content should not be included in the RLF specification at this time.

Effective Date

Given that the details for accelerated life testing will be rolled out in a fall 2007 workshop, and given that no one has the necessary apparatus today, the August 2008 implementation date seems too early. An effective date of January 1, 2009 would seem more appropriate, especially for those manufacturers that still prefer to test their products with a 10,000-hour life rating to 10,000 hours.

Under that timeline, when would manufacturers be allowed to submit products for qualification under Version 4.1?

Conclusion

Due to the short turnaround time allowed for comments on this draft, numerous technical errors and inconsistencies in the table (too numerous to mention here), the lack of details available at this time on the ALT, and the proposal for double testing of products, we strongly recommend Energy Star to reassess its direction, to review closely and correct the draft table, to refrain from finalizing any proposed changes to the RLF program and to issue another revised draft for industry comments following the planned ALT workshop.

Sincerely,

A handwritten signature in black ink, appearing to be 'C. Updyke', with a long horizontal line extending to the right.

Craig Updyke
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cc: Peter Banwell, Energy Star
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