

From: Frankiewicz, Greg [mailto:gfrankiewicz@efoi.com]

Sent: Thursday, February 19, 2009 10:21 AM

To: richard.karney@ee.doe.gov; SSL

Subject: Energy Star Program Requirements for Integral Lamps Draft 1-16-09 feedback

Good Morning Mr. Karney,

I am excited that the DOE is looking to include integrated SSL lamps in the Energy Star spec. It will go a long way towards helping the industry and end-users successfully navigate away from inferior products. As part of your request for feedback from stakeholders I do have a few comments for your consideration.

One thing I notice the draft does not cover is how these lamps are to mechanically fit within existing fixtures. My experience is with MR-16 type replacements. Often a SSL "replacement" MR-16 will not fit into many MR-16 fixtures.

I have seen several common problems with retrofitting a fixture with an SSL MR-16:

- 1- the diameter is slightly larger than 2" and therefore will not fit into the fixture,
- 2- the "lip" of the SSL lamp (to mimic the rim of a halogen MR-16 reflector) is either too thick or does not exist. Fixtures which use springs or clips to grab onto that rim cannot grab onto the SSL lamp and as a result the lamp either does not install or is held very loosely and falls out
- 3- the heat sink or optics of the SSL replacement extends beyond what would be the front flat face of the halogen MR-16. In this case the SSL replacement does not fit into any fixture that holds the lamp in place via a cover plate or louvre

I think an important requirement in the energy star spec is to address some dimensional requirements to ensure the SSL integral lamp will not only fit in the socket but the fixture itself.

How are the photometry performance levels to be met, in-situ or alone in open air? Many of the SSL replacements I have seen include a disclaimer that the lamp must be installed in a fixture which allows the free flow of air. Obviously many fixtures do not do this and the performance of a SSL lamp will vary greatly from fixture to fixture. I feel a replacement SSL will need to operate in enclosed fixtures and as a result perhaps a defined test fixture or standard setup (ie a replacement MR-16 is to be tested in a 4" long, 20 gauge uncoated steel cylinder with 1/8" glass cover plate and enclosed back end with 8 1/8 holes drilled into the back) needs to be defined.

Finally I know these specs are not applied to fluorescent SSL tubes, but I wanted to ask if it is something the DOE is considering adding?

Thank you for your time and the opportunity to provide feedback on this important draft,

Greg

--

Greg Frankiewicz
North American Product Manager
Energy Focus Inc.
32000 Aurora Road
Solon, OH 44139
440-715-1268 - desk
440-715-0159 - mobile
440-715-1313 - fax
www.efoi.com | gfrankiewicz@efoi.com

