

Cooper Industries
Cooper Lighting Division
1121 Highway 74 South
Peachtree City, GA 30269
Phone: +1 (770) 486-4800
Fax: +1 (770) 486-4302



October 22, 2010

Alex Baker
United States Environmental Protection Agency
Office of Air and Radiation
Washington, DC 20460

VIA Email: luminaires@energystar.gov

**SUBJECT: Comments on First Draft of Energy Star Luminaire Specification
Version 1.0, Draft 2**

Dear Mr. Baker,

Cooper Lighting thanks the Environmental Protection Agency for the opportunity to submit comments on the second draft of Version 1 of the Energy Star luminaire specification. Our input follows this cover letter.

Cooper Lighting, a division of Cooper Industries, is a large manufacturer of luminaires, lighting ballasts, control systems and flexible wiring systems. Cooper Industries has supplied leading edge technology products to United States markets for over 175 years, and electrical products since the beginning of the 20th century. Cooper products span the entire electrical network from power generation to the wall switches, outlets and lighting in homes and businesses. This view of the entire electrical system gives Cooper a unique perspective of power usage and the overall impact of energy conservation activities.

Thank you for the consideration of these comments. We can see from Draft 2 that many of our issues have been addressed following Draft 1. We look forward to working with you as an individual company and as a NEMA member on this new specification. If you have any questions or comments, please do not hesitate to contact me as indicated below.

A handwritten signature in black ink that reads "John D. Green". The signature is written in a cursive style with a large, looped "G" at the end.

John D. Green, P.E., LC
Principle Engineer - Codes and Standards
Cooper Lighting
1121 Highway 74 South
Peachtree City, GA 30269
(770) 486-4107
john.green@cooperindustries.com

Cooper Lighting

Comments on First Draft of Energy Star Luminaire Specification, Version 1.0, Draft 2

October 22, 2010

John D. Green, P.E., LC

[Since the document has no reference numbering, items are referenced by page number]

1. Photometric Performance Requirements

Page 11 -- Efficiency and Output Requirements (Non-Directional Residential)

Under the Halogen Incandescent source requirements (outdoor), the first item lists a number of socket types that would allow qualification of halogen incandescent sources, including E11, E26, G4, GX5.3 and GY6.35.

Cooper believes that there are other socket types that should allow consideration for these sources. Cooper would urge the EPA to also allow luminaires with lamp socket types of R7 and GY8.6 to be available for qualification. Lamp socket types themselves do not address energy efficiency but are restricted so as not to allow less efficient sources to be inserted. There is no doubt that Edison-base medium screw sockets cannot be used, but other socket types should be allowed. The minimal addition of these two socket types should not jeopardize efficiency goals.

In the second bullet point under the second paragraph, the requirement states that the integral motion sensor shall automatically reset to sensing mode within 6 hours of a manual or testing override.

Since it is not possible to know why a customer forced a manual override to the motion sensor, the time period for a return to normal operation cannot be established. An override initiated because of a safety or security issue may become a larger problem if the motion sensor turns the lights off unexpectedly. Cooper would suggest erring on the side of safety and have the motion sensor return to normal operation at the end of darkness, as determined by the integral photocell. This solution would offer the highest security while not allowing a permanent motion sensor override.

2. Light Source Life Requirements: All Luminaires

Page 16 -- Lamp life testing requirements for fluorescent and HID sources

This section outlines the requirements and testing guidance for determining the life rating of lamps, including applicable industry standards. However, the origin of acceptable data is unclear. It could be implied that the luminaire manufacturer is responsible for conducting lamp life testing for each lamp and lamp manufacturer. However, current industry convention is to rely upon the testing and rating from the lamp manufacturer, who can conduct one evaluation whose life results can be referenced by everyone utilizing the lamp.

Cooper urges the EPA to clarify the acceptable sources of lamp life information:

- a. If the intent is to have luminaire manufacturers conduct lamp life testing of each lamp model and supplier used in fixtures, we would urge the EPA to reconsider. Such a requirement would result in huge financial and time investments by all luminaire manufacturers, with no tangible benefits over utilizing lamp manufacturer's ratings. Data generated by lamp manufacturers conducting life testing per the applicable standards should be acceptable to meet the life requirements of this section.
- b. If published lamp manufacturer data is acceptable, then this should be so stated in this section for clarity.

3. Product Labeling and Packaging Requirements

Page 40 -- Note: for luminaires shipped with GU24 based integrated lamps

The requirements state that the language for mercury content be on the luminaire and the luminaire packaging to include URLs for lamp disposal.

It is understandable that the mercury language needs to be present on the luminaire packaging, but requiring it to be on the luminaire is excessive, and may be misleading. Since the lamps are required to have the presence of mercury on the product, placing similar language on the luminaire is an unnecessary burden. Having a label on the luminaire could also be misleading to the consumer, who may think the luminaire itself contains mercury and is therefore hazardous, drawing attention away from the actual component of concern. We therefore support labeling of the packaging, but believe mercury labeling on the luminaire is problematic and unwarranted.

4. Lighting Toxins Reduction Requirements

Page 41 -- Reference Standards

For all source types, the requirements state that luminaires must meet the EU Restrictions of the Use of Certain Hazardous Substances (RoHS) Directive, 2003.

This issue received comments from Cooper on Draft 1, and we continue to believe the suggested alternative is the correct approach. Reiterating, the United States electroindustry, through NEMA, has submitted a hazardous substances bill similar to the European RoHS requirements. Although HR 2420 has the same basic stipulations as its European counterpart, there are a number of important modifications in the bill that tailors it to the US marketplace.

Although HR 2420 has not yet become law, NEMA and Cooper are hopeful its passage will occur soon. Cooper would recommend that the Energy Star luminaire specification be changed to reference the US legislation rather than the European Directive. Cooper would also encourage the EPA and DOE to promote the passage of HR 2420 whenever possible.

5. Warranty Requirements

Page 42 -- All Source Types

The requirements state that the luminaire shall carry a warranty with a minimum term of three years from the date of purchase.

The three year term is an increase from two years in the previous Energy Star requirements. This increase appears to be arbitrary and does not necessarily address the longevity of the lighting equipment. Warranty is a financial risk issue of the manufacturer. The cost established by a manufacturer must, in the long term, include any expenditures to honor warranty issues. To arbitrarily increase the warranty period by 50% will most likely increase the cost of warranty administration, which will eventually increase the price of these products. Such a price increase may negatively impact the goals of the EPA to promote adoption of Energy Star products by the marketplace.

This section also is not clear about how lamp warranties are to be administered. Lamps are not specifically included, but one lamp is specifically excluded. The warranting of replaceable lamps by the luminaire manufacturer can be a quite onerous task. Because customers can claim a lamp has failed and request replacement even though the lamp may have actually come from a non-Energy Star luminaire, the manufacturer can easily face a huge number of false warranty claims involving the lamp. From the luminaire manufacturer's viewpoint, warranting a commonly available lamp cannot be fairly administered or enforced.

Cooper urges the EPA to:

- a. Retain its previous warranty period of two years for Energy Star lighting products.
- b. Remove lamps from the materials warranted by the luminaire manufacturer