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June 2, 2010

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

VIA Email: [luminaires@energystar.gov](mailto:luminaires@energystar.gov)

**SUBJECT: Comments on First Draft of Energy Star Luminaire Specification  
Version 1.0, Draft 1**

Dear Mr. Baker,

Cooper Lighting appreciates the opportunity to submit comments and provide input on the Environmental Protection Agency's (EPA) first draft of Version 1 of the Energy Star luminaire specification. Our comments are outlined on the following pages.

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 20<sup>th</sup> 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, and 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, stylized "G" at the end.

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## **Cooper Lighting**

### **Comments on First Draft of Energy Star Luminaire Specification, Version 1.0, Draft 1**

May 27, 2010

John D. Green, P.E., LC

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

#### 1. Photometric Performance Requirements

Page 11 -- Efficiency and Output Requirements

Under the Halogen Incandescent requirements, the last item includes the statement that “Luminaires may not offer any form of motion sensor override.”

Cooper believes this restriction would eliminate a feature that is required in some situations related to safety and security. Some outdoor motion sensor products have the ability to be triggered into a mode that allows them to energize the load for up to 24 hours when signaled by the power switch controlling the circuit. After a maximum of 24 hours, the sensor returns to normal operation. This mode is of particular importance when the owner is aware of a potential safety problem in the area that may not be triggered by the sensing of motion. The lights can be turned on manually (and off) to help secure the area or allow the owner to assess a potentially dangerous situation. Allowance of this temporary override is similar to that specified under the photosensor controls on page 24. Cooper would urge the EPA to allow luminaires with motion sensors to have the option of a temporary override mode with an automatic return to normal mode within 24 hours.

#### 2. Electrical Performance Requirements

Page 24 -- Photosensor Controls: Outdoor Luminaires Only

In the note block at the bottom of the page, comments are requested on the potential to remove photosensors for outdoor luminaires, citing a number of factors cited by partners.

Cooper believes this requirement should remain in the specification for Energy Star outdoor luminaires. Controls provide the greatest potential for energy savings, exceeding the gains provided by higher efficiency components. California has already mandated such controls and having this capability definitely segregates out energy saving products. To further enhance energy savings and product functionality, Cooper also suggests that the EPA expand the photocontrol requirements to include capabilities already required by California Title 24. These features require that the photocontrol ...”must have an indicator that visibly or audibly informs the operator that the controls are operating properly, or that they have failed or malfunctioned. A light emitting diode (LED) status signal is typically used to meet this requirement. Another option is to use the lamp in the luminaire as the status signal, as long as the lamp fails in the off position.” We believe adding a protective/informative signaling system will save additional energy, especially for consumer products where the owner may not notice their light may not be functioning properly.

### 3. Thermal Performance Requirements

Page 30 -- Maximum Measured Ballast or Driver Case Temperature during Normal Operation Inside Luminaire

Under the Fluorescent Source Type, two exceptions are listed under the requirement that ballast case temperatures are not to exceed manufacturer's recommendations for indoor portable luminaires using GU24 bases, and outdoor luminaires.

Cooper believes that the maximum rated temperature of any component of a luminaire should not be exceeded under normal use. To allow such an exemption for an Energy Star product seems contradictory to the efforts to identify top performing equipment. Cooper urges the EPA to remove the outdoor exemption from the requirements to maintain at least minimum life expectancies and performance for this upper tier of products.

### 4. Lighting Toxins Reduction Requirements

Page 35 -- Reference Standards

For all source types, the requirements state that luminaires must meet the EU Directive 2002/95/EC.

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 HR2420 has not yet become law, NEMA and Cooper are hopeful its passage will occur this year. Cooper would recommend that the Energy Star luminaire specification be changed to reference the US legislation rather than the European requirements. Cooper would also encourage the EPA and DOE to promote the passage of HR 2420.