

Appliance Standards Awareness Project  
American Council for an Energy-Efficient Economy  
Natural Resources Defense Council

February 28, 2011

Ms. Brenda Edwards  
U.S. Department of Energy  
Building Technologies Program  
1000 Independence Avenue, SW  
Mailstop EE-2J  
Washington, DC 20585

**RE: Docket Number EERE–2010–BT–TP–0044/ RIN 1904-AC37: Notice of Proposed Rulemaking for Test Procedures for High-Intensity Discharge Lamps**

Dear Ms. Edwards:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), and Natural Resources Defense Council (NRDC) in response to the notice of proposed rulemaking for test procedures for high-intensity discharge lamps. 76 Fed. Reg. 77914. We appreciate the opportunity to provide input to the Department.

**We support a separate test procedure for directional lamps.** Since directional lamps are intended to focus light in a beam, a metric describing efficacy based on the light provided in a beam would better reflect the performance of directional lamps than a metric of lumens per watt.

**We support including a measurement of lumen maintenance in the test procedures.** Most lighting systems are designed based on the mean or “average” light output of the lamps, which can be significantly lower than initial light output for some HID lamps. A lighting system using lamps with poor lumen maintenance requires either more fixtures or higher wattage lamps to be installed to obtain the same mean lumens as a similar system using lamps with improved lumen maintenance. This means that improved lumen maintenance can result in energy savings in the field. We encourage DOE to include a measurement of lumen maintenance in the test procedures to allow for the option of incorporating lumen maintenance in the development of standards.

**We encourage DOE to ensure that all types of HID lamps can be tested using the DOE test procedures including self-ballasted lamps, dual start lamps, lamps that can only be operated with electronic ballasts, and lamps with dual arc tubes.** We recognize that some of these lamp types may currently represent a relatively small portion of the market. However, the market share of some of these lamp types may increase significantly in the future. For example, we understand that many ceramic metal halide lamps, which are gaining market share, are designed for operation with electronic ballasts only. If for some of these lamp types there are currently no reference ballast specifications, we encourage DOE to develop reference ballast specifications as part of this test procedure rulemaking.

**We encourage DOE to require testing of “universal” lamps in more than one operating position.** In the test procedures NOPR, DOE proposed to test “universal” lamps in the base up position. 76 Fed. Reg. 77923. We encourage DOE to examine the range of efficacy levels of “universal” lamps when operated in the horizontal position. We are concerned that the performance of a “universal” lamp when operated in the base up position may not provide a good indication of its efficacy when operated in a different position. In addition, we understand that “universal” lamps are generally less expensive than lamps designed to operate in a particular orientation. We believe that it is important to ensure that “universal” lamps, which represent a low-cost option in the market, perform adequately in operating positions other than base up to prevent these lamps from becoming a loophole.

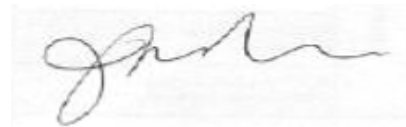
**We encourage DOE to include a measurement of lamp performance in a dimmed state.** Dimming provides a means to achieve significant energy savings in the field. However, we understand that some HID lamps achieve significantly greater efficacies than others when operated in a dimmed state. We encourage DOE to include a measurement of lamp performance in a dimmed state in the test procedures to allow for the option of incorporating dimming performance in the development of standards.

Thank you for considering these comments.

Sincerely,



Joanna Mauer  
Technical Advocacy Coordinator  
Appliance Standards Awareness Project



Jennifer Amann  
Buildings Program Director  
American Council for an Energy-Efficient Economy



Meg Waltner  
Energy Efficiency Advocate  
Natural Resources Defense Council