

February 5, 2014

US Environmental Protection Agency
ENERGY STAR Lighting Program
Attention: Taylor Jantz-Sell, Program Manager
Re: ENERGY STAR Luminaires V2.0 Specification Draft 1

Submitted via email: jantz-sell.taylor@epa.gov

Acuity Brands Comments on ENERGY STAR Luminaires V2.0 Specification Draft 1

Dear Ms. Jantz-Sell,

Thank you for the opportunity to participate in the development of the ENERGY STAR Luminaires Specification and for holding the stakeholder meeting on January 21, 2015 in Washington, DC, in response to the release of Draft 1 of the Luminaires v2.0 specification. Acuity Brands offers the following comments regarding the specification proposals:

Allowable Variation – Product Wattage: Acuity Brands supports the product wattage proposal allowing higher wattage luminaires to represent lower wattage luminaires in the same family, and appreciates EPA's effort to reduce sample sizes and the testing burden for Energy Star certified luminaires.

Increase in Efficacy Levels for Directional Luminaires: As the efficacy of LEDs continues to increase, it is expected that the reported efficacy values of currently Energy Star certified luminaires would trend up as well. However, we would caution the Agency against using the upward trend in efficacy values of certified products as the only basis for the proposed increased in efficacy levels. There is the potential for skewed data if a manufacturer has certified multiple model numbers of essentially the same construction and other manufacturers have not, resulting in a large number of products at higher efficacy levels.

The average proposed efficacy levels for directional luminaires is approximately 60 LPW while the non-directional "bulb in a box" proposal has a minimum 65 LPW requirement. With the exception of a few open lamp luminaire constructions, the efficacy, at the luminaire level, of these non-directional products will be much lower than 60 LPW due to the additional lensing and shades.

Also an increase in efficacy levels for directional luminaires does not necessarily guarantee energy savings. Two luminaires that are identical electrically (same driver, same LED light engine) will have the same wattage consumption, but can differ significantly in luminaire efficacy if one luminaire is designed for appropriate cut-off angles, and the other is not. Depending on the application, the quality of light (i.e. target efficacy, visual appearance and diffusion to mitigate glare) may be more important than the quantity of lumens.

Recommendation: Increase efficacy levels moderately, 25% to 33% and allow manufacturers to differentiate their products by price, light quality, light distribution and target efficacy.

Start Time: We agree that shorter start times are preferable to users, but also contend that a consumer's idea of "instant on" is based on the milliseconds experience from incandescent sources. A reduced start time requirement of 500 ms maximum will not ensure consumers are satisfied with how quickly the luminaire turns on after activating the lighting control device. Furthermore, the circuitry of the control device may also affect the start time experienced by the user. Even incandescent sources can experience a short delay in starting when paired with certain dimmers. Also, luminaires enabled with dimming and other connected or control strategies may require more than 500 ms to turn on, and since the new test method for start time has been introduced in the draft, it has yet to be determined how products will fare using the newly defined method.

Recommendation: Maintain the Start Time requirement at the maximum value of 1 second, allowing manufacturers to differentiate their products with shorter start times.

Thank you for the opportunity to provide this input. Acuity Brands is anxious to help promote solutions to achieve greater energy savings with high quality lighting solutions. Please feel free to contact me with any questions.



Tanya Hernandez, PE, LC
Manager, Energy and Environmental Standards
Acuity Brands
Tanya.Hernandez@AcuityBrands.com
770-860-2793