

## **Juno Lighting Comments on ENERGY STAR Program Requirements for Residential Light Fixtures Draft 2 Eligibility Criteria – Version 4.0**

Based on our experience with the design and testing of recessed compact fluorescent downlights, Juno strongly believes that additional requirements should be established for this category of products, as was done for recessed CFL retrofit kits, to ensure that their performance ultimately meets the expectations of homeowners, specifiers and power companies. Specifically we put forth the following information and recommendations:

### **1) Lamp Lumen Loss in IC Rated Recessed CFL Luminaires**

Significant loss of light output can occur with IC rated recessed luminaires after as little as 1-3 hours of operation, especially with non-amalgam lamps 26-watts and higher, even though required ballast temperature and UL housing temperature requirements are met. Using non-amalgam CFL lamps, lumen loss in excess of 50% is typical. Using premium amalgam lamps the loss is typically closer to 20%.

Since the Energy Star definition of efficacy is based solely on Lamp Lumens divided by Measured Input Power, it does not take into consideration this loss of lamp lumens caused by lamps operating above their optimum temperature range, as often is the case with IC rated CFL luminaires covered by insulation.

We therefore recommend that recessed lighting manufacturers work together to construct a requirement that ensures Energy Star IC rated recessed CFL luminaires perform at a minimum acceptable level when covered with insulation.

### **2) Dimming Label**

The same requirement set forth for recessed retrofit kits that requires it to state on the product whether or not it is dimmable, and if so, what type of dimmer circuit is required should also apply to recessed CFL downlights.

Thank you for your consideration.

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