

**Email received on October 18, 2010 from Mike Fusco.**

To EPA staff:

I have reviewed Draft 2 of the Energy Star Luminaire program requirements and have the following questions/comments:

1. An outdoor landscape spotlight that is mounted using a short inground "spike" (close to ground) is not classified. Would it be correct to assume that it would fall within the "non-directional" category?

2. Page 32, Operating Frequency, besides requiring operation greater than or equal to 120Hz, now has requirement for "modulation depth <50%". I assume this means that during modulated operation, the amplitude of the emitted light cannot be less than 50% of its normal/maximum output. Is this correct?

As I am sure you are aware and have debated, this requires that energy be available (stored) during the input power phase zero crossing, which generally means large capacitors (possibly aluminum electrolytic), increased component cost and possibly reduced product reliability.

In thinking about outdoor security lighting and landscape spotlights (Consumer is generally not trying to read or work), I find this requirement hard to justify.

Perhaps you can reconsider for which applications this "modulation depth" requirement need apply and perhaps it is not as relevant for certain outdoor applications.

3. Page 33, Ballast/Driver Replaceability Requirements: Directional and Non-Directional Luminaires

For "Solid State: Non-directional" spec says "See Source Replaceability Requirements on Page 26.

Does this mean that the driver/ballast shall make use of electrical interconnects which allow consumer replacement without cutting of wires or use of solder?

Thank you in advance for your reply on these questions and consideration of my comments.

Regards,  
Mike Fusco  
LED Specialists