
From: Kevin Givens [mailto:KGivens@relume.com]
Sent: Friday, July 31, 2009 10:09 PM
To: SSL
Cc: Michael Mcclear; Peter Hochstein aol
Subject: Comments On Second Draft ENERGY STAR Performance Criteria

Dear Mr. Karney,

We have reviewed the second draft ENERGY STAR performance criteria for lighting applications to be added to Category A: outdoor area pole-mounted and roadway luminaires, outdoor wall-mounted area luminaires ("wall packs"), and parking garage/canopy luminaires.

The proposed increases in lumens per watt for wall packs and parking garage/canopy luminaires would effectively raise the first cost of higher quality LED fixtures and impede SSL adoption in the marketplace.

Makers of the highest quality LED fixtures offer superior thermal management and the lowest junction temperatures at a given drive current. They are able to meet lumen output requirements and keep fixture pricing low by using considerably fewer LEDs per fixture and driving them harder. By setting lumen per watt requirements relatively high at this point in time, ENERGY STAR will force makers to significantly increase the number of LEDs they use in their fixtures and to drive them at an unnecessarily low level.

For example, one high quality parking fixtures has 56 LED lamps and delivers 8180 lumens at 60 lumens per watt. It also runs the lowest LED junction temperatures in the industry and offers extremely long life. In order to deliver more than 70 lumens per watt, as many as 25 LED lamps will need to be added to the fixture. This will likely add between \$50 and \$75 to the cost of the fixture.

Once the price points of LEDs drop considerably, as we all expect them to do, the quantity of LEDs in a fixture can be increased without the unfavorable first cost impact we will experience today. Until then we suggest a lower lumen per watt criteria in order to speed SSL adoption in the marketplace.

Best regards,

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