
From: Pete Strasser [mailto:Pete@darksky.org]
Sent: Monday, July 27, 2009 2:08 PM
To: SSL
Subject: Comments on new SSL Street light criteria

Hello, Pete Strasser here. What follows is a recap of a meeting held with Marc Ledbetter, Jason Tuenge and Kelly Gordon on July 15, during the Chicago LED conference.

July 24, 2009

To: Marc Ledbetter, Kelly Gordon, and Jason Tuenge

Re: Recap of Discussion with Pete Strasser, on proposed SSL Street light specifications, July 15, 2009

I genuinely appreciate your taking time to discuss the proposed changes for Energy Star certification of SSL Street and area lights. Several points were made, and this is the document you requested summarizing them. I will also submit this letter in the formal comments section on the DOE Website.

First and foremost was the mutual misunderstanding of our respective positions regarding the restriction of light shining above 90 degrees. My principle contact with the PNNL has been Jeff McCullough. Our initial contact was in Portland of '08. There we discussed the merits of Full Cut Off design (as it was called) vs. allowable uplight for LED streetlights. I argued the rationale and afterward he felt comfortable with recommending FCO design. This was part of the original recommendation in the September '08 DOE SSL specification. The street and area light section was to be given further review owing to the comments received. I had a very long discussion with Jeff while at the San Antonio DOE meeting in March where he reiterated the FCO spec was still very much part of the deal. We met again in New York at Lightfair last May, and the same reassurances were conveyed. In New York I was introduced to Jason Tuenge, another PNNL engineer and colleague of Jeff's. Here, Jason had mentioned putting some of the IESNA BUG (TM-15) applications into a new calculation to be called FTE and asked how I felt about it. I misunderstood this and thought "full cut off and even more stringent guidelines on top? This is icing on the cake." The concept sounded reasonable to me. Jason misunderstood my approval of including BUG parameters into a new metric as approving an uplight component to the entire DOE SSL recommendations. This was not the case at all to which Jeff McCullough can attest. At our meeting in Chicago, we all acknowledged the misunderstanding.

The reference to the incomplete Model Light Ordinance should not have been made, in that is very much a work in progress, as half has been conceived but not written, and may not be ratified at all. The entire performance metric program has not been written and to this point remains a dream. More importantly, even if the MLO were to be written and ratified, streetlights are exempted from the ordinance. This is clearly stated in the beginning of the draft document available on the IDA website.

Another point raised was the hot spot-non uniformity seen with poorly designed FCO products. Together, we noted that every speaker thus far at the DOE conference praised the uniformity and lack of hot spots with the test SSL products. The uniformity is better than HID designs, so this old argument can finally be put to rest.

There was discussion if the FCO design was really a practicality. I pointed out that the darlings of all the Gateway projects thus far are all FCO, and that the industry has stepped up to the plate, gone back to the drawing board, and have responded to the DOE raising the bar (enough of the clichés).

The topic of acorn/antique luminaires was raised. The criteria change was evidently more than just me and a misunderstanding, but some lighting folks had indeed put in their 2 cents. As I said, and the IDA still holds firm to the fact, that waste sanctioned by design can't be part of an energy efficiency certified compliant product. Light not directed to the task is wasted, as is the energy used to create it.

Luminaires should not shine light into buildings or onto the undersides of airplanes. Energy Star certified products are products of distinction, not the norm, the commonplace, or such that harkens back to the ways of inefficient design. The acorn by design is inefficient, and an energy certification body can't make concessions to bad design, even if it beloved by mayors and chambers of commerce (and some lighting professionals). The very purpose is to promote the opposite, to specify values with the purpose of removing inefficiency from the grid and marketplace. See: the incandescent bulb.

Let market forces and consumer demand coupled with energy guidelines drive manufacturers to create products that fulfill design and efficiency specifications. Such is not impossible, as Beacon Lighting has done this very thing and makes a FCO "antique/nostalgia" luminaire. The role of The PNNL, DOE and Energy Star is to mandate efficiency guidelines. That is what the whole project is about and nothing more.

Thank you for the opportunity to let us speak to you about the proposed changes.

Sincerely,

Pete Strasser,
Managing Director

Board of Directors, et al

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