

Email received on January 5, 2010 from Chris Andrews.

I would like to provide a few comments in response to the publication **ENERGY STAR Qualified Lighting - An Integration Proposal**. My comments may not specifically address topics highlighted in the document, but I feel need to be addressed and now is a great time.

First, I remember sitting in a room in Washington DC several years ago at an ENERGY STAR event with a group irate to learn that the escalation of CFL standards would not be as accelerated as those for SSL products. The discussion, as I remember it, was over the lower ENERGY STAR qualification standards for CFL's as opposed to the much higher SSL standards moving forward. I recall the rationale being that SSL technology stood a better chance at achieving more efficacious performance in the long term while CFL's were near their performance limits. The point of the tension was that there would not be *level playing field* for the competing technologies.

A comment is made under the heading Residential Light Fixture Integration Proposal that makes me believe the frustration felt that day is understood, "Because consumers shop for light fixtures, rather than lighting technologies, it is important for the ENERGY STAR label to mean the same thing in terms of energy savings, regardless of technology." The bottom line is that consumers most likely do not care what technology produces the light; rather what is the performance, cost, lifetime, and environmental impact of the product. I urge you to create standards for product performance (a replacement lamp, for example) as opposed to technology performance (a CFL standard or LED standard, for example) as consumers purchase *products* not *technologies*. If all ENERGY STAR qualified PAR lamps are CFL because they meet the requirements while no LED products meet the requirement, so be it. In this example, the LED products will just have to catch up, but they should not have a different standard just so that they can be represented in the ENERGY STAR group.

Second, as a degreed engineer, I am accustomed to a requirement being a requirement. In the case of the ENERGY STAR requirements, that is not necessarily the case. For example, the minimum efficacy requirement for a SSL recessed downlight is 35 Lm/W. There is a tolerance accepted with this requirement of 3%. It is my opinion that all qualified product be required to provide a test report meeting or exceeding the requirement and not the requirement with the tolerance applied (33.95 Lm/W). I believe that the spirit of the tolerance was intended for the verification testing program to account for product to product variations.

Third, the requirements for commercial and residential qualifications are not equivalent yet there is no differentiation from the consumer's perspective as to which ENERGY STAR qualified product they are purchasing. For example, two luminaires (each 3500K CCT) carry the ENERGY STAR qualified label and appear to be the same to the customer however; one luminaire has a power factor of 0.99 meeting the commercial standard while the other has a power factor of 0.75 meeting the residential standard. It would appear, on the surface that the commercial standard would be the "better" of the two (higher power factor requirement). Why not identify the commercial qualification with a different mark (perhaps this is part of the Super Star mark) or make the commercial and residential standards the same?

Outside of the scope of this review are several other modifications I think would be of benefit to the spirit of the program that I would love to discuss when the time is

appropriate. I have shared many of these ideas with the DOE contractor D&R International.

Best Regards,

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