

June 14, 2010

Alex Baker
Lighting Program Manager, ENERGY STAR

RE: ENERGY STAR Program Requirements – Version 1.0, DRAFT 1

Mr. Baker,

As you are aware, Brownlee Lighting has had concerns about the testing requirements for qualification in the upcoming ENERGY STAR program changes. When you were at our booth during Lightfair, you answered those questions somewhat, although the requirements have as yet to directly address the original concerns.

In reading through the draft, it states on page 6 that the use of an approved platform negates the necessity of certain test requirements. If the only required test is a case temperature test, will a third party lab still be required for a basic calibrated test? This is a very simple test to run that we do 2 or 3 times a week for other purposes. It would be a shame to incur the expense to go to an outside lab!

Beyond the testing issues that have not been decided, there is a major change that will lead to the delisting of most of our ENERGY STAR offerings. I am referring to the change in the efficacy requirement from 50 to 70 lm/w.

After checking our current submissions, we will lose 64 of 70 lamp/ballast combinations that we are currently utilizing. The reasons for this problem are obvious.

For most lamp manufacturers, a 13w compact fluorescent lamp has an initial output of 900 lumens. If it is paired with a ballast that requires only 13w total input, and has a ballast factor of 1.00, the efficacy of this system is 69 lm/w. As we all know, the ballast loss is generally an extra watt or two, so 100% efficiency is not expected. Using the standard output of the 18w and 26w lamps yields similar results.

Furthermore, this calculation is based on the *initial* lumens. The average lumen output over the life of the lamp is approximately 14% less, regardless of wattage. Of the few combinations that do pass, they all use lower input wattages, i.e. a 26w with an input of 24w. These fixtures do not use the lamp to its maximum ability, and therefore are not giving full lumen output.

Also, the verification testing has a required 4000 hour lumen maintenance test. If a unit meets the 70 lm/w efficacy standard, it will likely degrade over the 5+ months the test is in progress. The lamp life is rated at 10,000 to 12,000 hours, so a test that covers 33%-40% of the life will include lower lumen output over time. Were the lamps were tested and listed with these points in mind?

I believe the standard, in attempting to combine the SSL and CFL specs, is confusing the operating characteristics of the lamp types. On several occasions during the webinar, you stated that the CCT was held to a max of 4100K. This was done to keep lamp manufacturers from increasing the CCT in order to increase the lumens. However, CFLs all have the same lumen output, regardless of CCT. It is the LED market that has differing lumens based on the CCT.

We are of the opinion that increasing the efficacy is a good way to enhance the product quality, but it should not be set at a value that is not attainable. If the standard were set at 60-62 lm/w, you would be able to weed out the lower quality ballasts. Otherwise, this standard will lead to fewer products available, due to the lack of lamps and ballasts meeting the criteria. With fewer products, the cost will rise, which will directly impact the units sold. As it stands, the elimination of a majority of currently qualified products under the old standards will lead to fewer offerings due to the expense and difficulty involved in re-qualifying fixtures.

The more difficult it is to list luminaires with ENERGY STAR, the fewer companies will wish to get involved, or stay involved in the program. This is a sales driven initiative for many companies. Adding expense is liable to turn it into a cost prohibitive venture.

Respectfully Submitted,

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