

Alex Baker
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United Environmental Protection Agency
Washington, D.C. 20460

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Dear Mr. Baker

Thank you for providing us with the opportunity to comment on the current draft of the Lamps 1.0 ENERGY STAR specifications. Please find our comments below:

General Points:

As argued in our submission of April 2011, and as also argued in the submission by Philips, we believe the current ENERGY STAR Lamps 1.0 draft specifications specify too many parameters that have nothing to do with energy savings. As such, they dilute the ENERGY STAR brand, as the customer expects ENERGY STAR first and foremost to be a mark of energy efficiency; in its (well intentioned) quest to guess "customer expectations", ENERGY STAR is overreaching. Worse, since a lamp without ENERGY STAR will not be eligible for rebates, this may have the unintended consequence of either distorting the market, or to actually slow adoption of energy efficient alternatives. Overall, ENERGY STAR should focus first and foremost on energy efficiency; secondly, on providing the customer a wide range of choices; thirdly, on ensuring that some narrow quality standards are met, and lastly, on labeling, rather than mandating product attributes. For clarification, by "narrow" quality standards we mean those that are application independent (e.g. color shift over time, deterioration in light output over time), and which are hence uncontroversial, as opposed to attributes that may be desirable for some applications, but not others, and which would thus require for ENERGY STAR to guess at consumer preferences and applications (examples include luminous intensity distribution, dimensional limits, etc)

Specific points:

Objection to parameters unrelated to energy efficiency or quality

We reiterate the points we made in our previous submissions, specifically, that
- dimensional limits should be relaxed, similarly to what has been in force with CFLs

- that luminous intensity distribution requirements are application-specific and that ENERGY STAR should hence focus on *labeling* luminous intensity distribution, rather than *mandating* it (or rely on a confusing set of application icons that again makes unsupported assumptions about application), and
- power factor requirements above 0.5 are broadly unnecessary, as also argued in an earlier submission by Philips

Objection to exclusion from consideration for lamps with target CCTs below 2700K

In this submission, we want to focus on the exclusion of CCT targets below 2700K. We are not expressing an opinion about the tolerances around the targets; we generally applaud ENERGY STAR's efforts to set high quality standards that further the adoption of efficient lighting. However, the exclusion of CCT targets below 2700K deprives the consumer of choice, and in addition, distorts the market and slows the adoption of efficient lighting.

Specifically, by way of example, Lemnis Lighting has been selling a 2200K LED lamp line, which is branded as the "Flame", and which has met with great market success. We have found that many buyers of the Flame use it in accent lighting; specifically, the 2200K CCT of the Flame mimics the CCT of a 2700K incandescent lamp dimmed to a low level. We have found that one of the applications for the Flame is to replace permanently dimmed incandescent lamps in accent lighting. For instance, a national restaurant chain currently uses 60W incandescents, permanently dimmed, as a table top accent light in all of their restaurants. A 5W, 200 lumen, 2200K Pharox Flame achieves the same effect; there is no other energy-efficient substitute (and LEDs don't shift CCT when dimmed).

The exclusion of CCT targets below 2700K is effectively depriving this restaurant chain from moving to a drastically more energy-efficient alternative: since rebates are tied to ENERGY STAR, this customer is faced with two bad choices: buy an energy-efficient LED product at a significant rebate, but sacrifice the previous color temperature, or stick with the existing highly inefficient arrangement. Current ENERGY STAR guidelines deprive the customer of choice, and slow down the adoption of energy efficient lighting, by allowing only arbitrarily defined "white" light. It dilutes the ENERGY STAR brand, as a customer who sees the (ENERGY STAR) regular 2700/3000K lamp on a shelf next to the 2200K Flame version which cannot qualify for ENERGY STAR will falsely assume that one is more energy efficient than the other. We hope that ENERGY STAR will reconsider its position, and provide the consumer with choice, rather than enforcing arbitrary lighting industry reference sets which have no meaning to the consumer.

Support for 10,000 hour minimum lifetime requirement

We applaud ENERGY STARs decision to require a minimum of 10,000 hours lifetime. We agree that customers should be offered a choice between long lifetimes at higher price points, and shorter lifetimes at lower price points. Again, the application will determine which product is most suitable: for a residential application 10,000 hours equal more than 9 years of use, and exceed the time the average homeowner owns their house; for a commercial 24 hour application, a 35,000 hour/ 4 year lifetime may be desirable.

In summary, we realize that the task of combining standards between CFLs and LEDs is complicated, and we applaud the EPA for consolidating the CFL and LED specifications. Overall, we support a focus on energy efficiency, quality, and standardized labeling, which we believe will accelerate the adoption of efficient lighting.

At the same time, we hope that ENERGY STAR will move away from specifying parameters which are not directly related to energy efficiency or universally supported quality standards.

ENERGY STAR should not make assumptions around applications: the customer should be informed, and offered choice, about luminous intensity distribution, color temperature, deviations from standard dimensions, and expected lamp lifetime, rather than arbitrarily mandating certain references.

With best regards,

Alex Nigg
Lemnis, Inc.