



**Lumen LED**  
**We Define Lighting!**

Sheldon Norberg  
CEO

Taylor Jantz-Sell  
Energy Star Lighting

Re: Energy Star LED Lamps V1- 0 Draft 3 Specifications

Ms. Jantz-Sell,

Having just finished reading the proposed Energy Star SSL specs, I would very much like to weigh in on the proposed elimination of non-standard LED lamps.

My company, Lumen LED, is focused on producing only Energy Star certified products, and to exceed those standards to the highest degree possible. Our NRTL LM-79s have us at over 82 lpw, and CRI above 85, and our own labs indicate that across 3 product lines. Our lighting pattern, however, is a hair off of omnidirectional, as defined.

We understand this prohibits our definition as an A lamp, and despite meeting all the other standards, have accepted being relegated to the *non-standard* classification. You can imagine our concern with the proposed elimination of this category, which would wipe our product line off the map, as far as Energy Star plays a role.

After attending October's conference, however, I am certain that you and the stakeholders know how much of a role it does play in product acceptance *and* sales, which in many jurisdictions are dependent on rebates. Without Energy Star, products simply cannot compete on anything but a race to the bottom. Consequently, we feel that this unexpected change runs counter to achieving the EPA's goal of LED adoption, or actually meeting consumer's *needs*.

Energy Star must understand that the basic laws of physics and electronic design make it impossible to manufacture an LED lamp that is omnidirectional within the definition as applied from incandescent lights, as LEDs themselves *are* directional, and the dodecahedronal mounting has been abandoned for numerous reasons (although some naïf has one on KickStarter right now). But with the world eliminating incandescent lights, can we not define our standards based on the tools we are working with?

Only in a top down mounting does emission in the 0-5° have any real value, in an up mounted position it is lighting the ceiling. The real problem you should address is in unidirectionals with A bodies, which have no side or down light. These *should* be eliminated from Energy Star, if they even make it into the non-standard class. For those who want down light, pars are the recommended choice anyway, and have well-defined and robust Energy Star categories.



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Obviously, there are manufacturers who will attempt to bend any rule to their favor, but Lumen has taken the opposite approach. We have made it a rule to post our LM-79s on our website, along with educational platforms as to how to read them. Having achieved high product quality and customer education standards, we would prefer not to be punished for the failings of others. Perhaps Energy Star could require manufacturers to post educational documents such as our – [How to Read an LM-79](#) – along with their actual LM-79 data, as we do here <http://www.lumenled.net/products/test-reports/>.

The fact that the proposed standards allow CFLs to fall to a pitiful 0.5 Power Factor (in this age, when my utility has installed 10 million smart meters -which charge the consumer for pf loss) is truly astonishing. But to think that an entire class of rigorously tested LED lamps will be eliminated in favor of these toxic energy wasters, is appalling!

Who on earth benefits from these rule adjustments?  
Certainly not consumers, or taxpayers.

I hope that the panel take this input seriously, reforms the standards with input from the manufacturing and other sectors, and comes back with a proposal that will win for all Energy Star stakeholders, and producers of qualified non-standard bulbs.

Respectfully Yours,

Sheldon Norberg, CEO, Lumen LED Incorporated