

Outdoor

The cover letter states that the Program is “committed to giving consumers energy saving options while honoring their preferences for product features and functionality” and that “many fixture types intended for residential installation are designed first and foremost for their appearance.”

Changing all outdoor to directional luminaires with requirement for no uplight will eliminate most of the offering for energy saving lanterns.

Allow manufacturers and CBs to choose whether the product falls into a directional or non-directional product scope because of their aesthetic design and test accordingly. There are applications for both types in this and several other categories including post lanterns (non-Dark Sky). Use example of uplit with reflective top. And clear top.

Non-Directional Category

Source Photometry for achieving energy savings in highly decorative products is necessary. Do not add complexity to how the energy savings is achieved. With/without secondary optics

Instead work on flexibility at the LM-82 level would open up more avenues for manufacturers to offer cost efficient SSL products across a broad range of decorative products.

Light source change to allow screw base

This would vastly change current marketing strategy and need for GU24 sockets/lamps would be eliminated. If adopted, this change would warrant a much longer time to V2.0 effective date.

Recertifying of all Energy Star products

ALL products will have to be reviewed and recertified to the new V2.0.

How much is this going to cost us even with zero re-testing?

CB load alone to go back through additional testing and/or review and re-upload to EPA database will take time and an effective date should not be set until this impact and timing is reviewed.

R9>0

This should not be required for the same reasons that 90 CRI is not required. 80 CRI is deemed adequate and allows manufacturers to differentiate in the market. How many end users would understand 80 CRI with R9>0 vs. 90 CRI ?

Replaceability

“Wirenuts are not acceptable.”

Many of the luminaires have components that are replaceable but are intended to be replaced by an electrician and not a home owner. With the life expectancy of the product, there should not be a need for spending more money to achieve energy savings. Wirenuts are widely acceptable and the economical choice for connection. Energy Star should not limit connection type and leave the spec to no

cutting of wires or solder to help manufacturers offer energy saving products without unnecessary cost adders.

Distribution graphics

Most directional products have photometric reports. Leave the reporting of products to manufacturer’s discretion.

Require Packaging to say “30K - Soft White”

While this may sound like a helpful idea, adding this requirement at this point will cause unnecessary CB review and manufacturing burden and costs to scrap full color labels and update marketing materials. Most manufacturers make efforts to add other Kelvin scales such as Lighting Facts that would do a better job visually to help end users select Kelvin temperature. Unlike lamps, many luminaire purchasing decisions are not made on a retail shelf.

- Leave this up to the manufacturer based on the end user market of the product.

All new proposed efficacy Levels are set too high

Increase by a percentage. This will limit product offering available on recessed to white trim only in many cases.

Non-Directional

Source Photometry for achieving energy savings in highly decorative products is necessary. Do not add complexity to how the energy savings is achieved. With/without secondary optics

Work on flexibility at the LM-82 level would open up more avenues for manufacturers to offer cost efficient SSL “source” products across a broad range of decorative products.

Secondary optics	>65 lpw	
Without secondary optics	>90 lpw	800 lumen, 450 lm, 250 lumen

Leave as is at >65 lpw just like CFL lamps.

Otherwise, there will be debate over what constitutes secondary optic?
(Look at our light engine with clear lens.) Is our clear lens a secondary optic?
Designs with any with secondary protective optic are penalized because both have the same lumen “source” output requirement.

As long as the minimum lumen output is still achieved for the “source”, the requirement of >65 lpw should be sufficient no matter how many optic layers there might be.
This changes marketing strategies in place for economical, user friendly light engine and replacement, and places more testing burden on manufacturers.

Retrofits

Keep lpw requirements consistent when similar to a “source” approach. If it functions the same as a lamp source then keep at 65 lpw. If directional, the lpw needs to be reviewed for only modest increase over time.

SSL Retrofits (wall sconce)	was N/A	now >80 lpw	250 lumen
SSL retrofits (ceiling)		now >100 lpw	800 lumen
SSL Retrofits (recessed)	was >42 lpw	now >70 lpw	800 lumen
Downlights	was >42 lpw	now >60 lpw	345/575 lumen

****To achieve higher lpw, must increase glare cutoff angle for recessed. Higher wattages.

Cove	was > 45 lpw	now >55 lpw	200 per linear ft
Accent	was > 35 lpw	now >60 lpw	200 per head
Undercabinet	was >29 lpw	now >60 lpw	
Outdoor	was >35 lpw	now > 60 lpw	
Inseperable		still >70 lpw	

Noise

Requiring noise testing while dimmed opens a whole new set of test methods not yet established. Will it be checked at 20% or published percentage? What if that varies by dimmer control? Which dimmer will be tested since most have a variety deemed acceptable?

- This is best performed on the LED driver by the driver manufacturers.
- If easing manufacturing burden and recertification costs, leave noise req as is or remove altogether
- Table this for a future rev when more thorough investigation of dimming can be made

Allowable variation chart should be viewed as “guidance” for possible additional testing, not requirements for such.

As written, it requires more testing than usually needed if reviewed by CB with understanding of the product variation. Just as testing lowest CCT has been presumed “worst case” and therefore representative of all higher without LM-79 testing, the evaluation of negative effect should be up to the CB on an individual product review basis.

Example: CCT section now states that a sphere test should be added to confirm that lowest CCT is in fact “worst case”. Change language to “guidance” and “may be required”.

Examples:

What about LED Series that becomes more efficacious? Do we have to retest?

What about an LED driver with a constant current the same as the existing driver with only slight variations in wattage?

Zonal lumens should not be required for Energy Star performance especially if the distribution is in some way communicated in spec sheets or packaging. Let consumer preference and manufacturer marketing drive product design and Energy Star program focus on energy savings. Energy Star should simply “expect luminaire manufacturers to market products that will have the widest appeal”.

Relaxing of CAU is a good idea

All electrical tests reduced from 3 to 1 is great as long as all the tests stay at 1