

DOCKETED

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To: docket@energy.ca.gov
Docket Unit California Energy Commission
Docket No. 15-AAER-6
1516 9th Street, MS-4
Sacramento, CA 95814

Subject: Comments on Proposed Amendments To Appliance Efficiency Regulations Involving Small Diameter Directional LED Lamps and Other LED Lamps – 45-Day Express Terms 10/15/15.

Thank you to the Commission for reviewing comments below from MaxLite.

Small Diameter Directional Lamps - General Comments

CEC's analysis document of the SDDL market indicates that 95% of SDDL are MR types and 5% are PAR types. Also 80% are 12V and 20% are 120V. Therefore, instead of such a broad definition of SDDL lamps, we feel the Commission should more narrowly focus on the high usage MR product types instead of the current definition in the 10/15/15 CEC proposal (which shows SDDL includes directional lamps with a diameter of less than or equal to 2.25 inches and a GU10, GU11, GU5.3, GUX5.3, GU8, GU4, or E26 base).

The specification should limit bases types for SDDLs to include GU10, GU5.3, GUX5.3. This will be the majority lamp types that contribute to the state's SDDL energy usage.

We also feel the Commission should limit the SDDL scope to include only lamps that are greater than equal to 200lm and less than 750lm.

This scope roughly aligns with current ENERGY STAR® max/min INC equiv of 20W to 75W INC for 2" diameter lamps (www.energystar.gov/LampsCBCP) . Any lamps below and above these flux levels are likely for specialized applications and shouldn't be included in this generalized scope

Additionally, we would propose the Commission sets minimum center beam candle power (CBCP) requirements for beam angle classifications for all SDDLs. Such requirements should align with the current ENERGY STAR requirements for CBCP (same link to CBCP tool referenced above). Doing so would follow a specification that has already been in use in the industry, and would ensure that lumens are distributed where they should be. The CEC analysis document also indicated that most beams are 20-40 Degrees, but note that without a CBCP requirement, the lumens could be emitted anywhere which could lead to underperforming products and customer dissatisfaction.

Lastly, the way the specification document is currently arranged, it is not clear what other performance parameters the SDDLs are required to meet. Do the requirements of Table K-13 apply to SDDL as well as "State-regulated LED lamps?" If not, what are the other performance requirements for SDDL?

General Purpose LED lamps - General Comments

LED filament lamps are a new category to the LED lamp market, but one that is poised to have a major impact to the industry within the coming months. Designed to look just like incandescent filament lamps, these LED filament lamps are more efficacious than standard LED omni lamps (LED filaments will hit levels up to 140lpw very soon) and have better aesthetics in certain fixtures. Given the choice of “frosted-look” LED omni lamps vs. LED filament-style lamps, many consumers will opt for the LED filament lamps as they become more widely available and pricing becomes competitive with low cost omni LED lamps. LED filament lamps are also designed with ultra-warm CCTs such as 2200K and 2500K to mimic the look of incandescent filament lamps.

CEC should be sure to create a path for adoption of these LED filament lamps in the state. By following the ENERGY STAR beam guidelines, the current proposals for Title 20 do not adequately address the LED filament technology. MaxLite has provided the Commission with confidential test reports showing the beam patterns from typical LED filament lamps, and we would urge CEC to include language in Title 20 that recognizes the distribution of a LED filament lamp may not necessarily be the same as a standard omni LED lamp.

Since these are so new to the USA market, the best approach at this time would be to include language in Title 20 that exempts LED filament lamps from these general purpose LED lamps at this time.

Table K-13. (C)

Color Point

We support the American Lighting Association stance in not feeling a need for more stringent and more complicated, Duv requirements considering the absence of consumer complaints about lamp color variation and the success that Energy Star continues to have using simpler and broader Duv values.

CRI

82CRI with a R1-R8 value of 72 or greater does not align with the way LED chips are manufactured, and the combination of requirements as spelled out essentially means 90CRI chips would need to be used. We support a simple 80CRI requirement for all products.

Light Distribution requirements

As per mentioned above regarding a path for LED filament lamps. The popular LED filament shapes include B, BA, G, ST and T shapes which all can meet “decorative” beam requirements, but not necessarily “omnidirectional” beam requirements as defined by ENERGY STAR.

Standby Mode

0.2W does not take into account many popular features of connected lamps that is now being requested by customers, and will grow in popularity in the future. We support an increase to 0.5W.

Portable Luminaires

The standards now state portable luminaire must “be an LED Luminaire or a portable luminaire with an LED light engine with integral heat sink.” The use of the word integral is unnecessary in this sentence and could cause confusion. The IES RP16 definition of a LED light engine already includes by definition a heat sink (along with LED module and driver).



Table N-2

As referenced above, the use of the term “Integral Heat Sink” is not necessary here.

Correlated color temperature

Should allow for the use of warmer CCTs, such as the new ANSI standard 2200K and 2500K

Table K-15 (C)

Due to many federal and state-regulated labeling requirements that already exist for lamps, manufacturers are already extremely challenged when it comes to adding more text to lamp labels. We don't support any extra labeling to lamps that are less than 150lm to show “for decorative purposes.”

Regards,

A handwritten signature in black ink, appearing to read 'Chris Primous', with a stylized flourish at the end.

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