



California Energy Commission

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14-AAER-01

TN 73976

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Re: Docket No. 14-AAER-1

Dear California Energy Commissioner:

We would like to take this opportunity to comment on California Energy Commission Draft Staff Report (CEC-400-2014-020-SD) Chapter 13: Staff Proposal, Labeling Standards paragraph two on page 50 of the on-line report:

“To make claims of being “dimmable,” lamps must pass a flicker test and must be dimmable to 10 percent. Further, they must not exceed a threshold of audible noise. Lamps may claim to be dimmable if the lamp can pass the test using a standard phase---cut dimmer. Alternatively, lamps may claim to be “dimmable with LED dimmer” if the lamp cannot be dimmed using a standard phase---cut dimmer but can be dimmed with another dimmer such as one that complies with NEMA SSL7. Lamps that are “dimmable with LED dimmer” must include instructions with the lamp describing the compatible/recommended dimmers.”

Because there is a wide variety of phase-cut dimmers in the present landscape and not just one standard version, we strongly believe that it is not acceptable for a lamp to claim to be dimmable, when it passes with just a standard dimmer. It should pass with the vast majority (if not all) dimmers that work with traditional incandescent lighting, including analog dimmers, digital dimmers, those including occupancy sensors, and those with light level indicators. If not, these LED lamps will not truly be retrofit products and will impede the mass adoption of LED lamps due to poor user experiences (as we have already learned from the poor adoption of CFLs). We have already observed that labeling options and fine print will only confuse consumers. Listing compatible dimmers is not effective, because typical users at the store do not know their dimmer model numbers. Model numbers, moreover, are typically hidden behind faceplates, even if a user were so motivated to find out. The goal is to make the transition to LED lighting easy, and the approaches described above hinder that effort, especially when driver technologies such as ours already make excellent dimming and dimmer compatibility a reality today with no added cost to the manufacturers.

1. When selecting dimmers to test against, the sample set must include at least one common digital-type dimmer (e.g. Lutron Maestro MAW-600), one traditional analog rotary dimmer (e.g. Leviton RPI-06), and one occupancy sensor dimmer (Cooper OS106D1-C1-K). Even just by adding a few distinctly different dimmer *types*, much better overall coverage can be insured.
2. Rather than getting bogged down in ripple and flicker definitions, let us first work on explicitly specifying the basic requirements of operation. For example, in the dimmer standby state, there should be no light output from the main lighting source. With a dimmer attached, the light should turn on, when switched on. With a dimmer attached, the light should turn off, when switched off. To judge what is reasonable behavior for expected on/off states, one can use an incandescent light bulb as a reference for comparison.

Thank you again for this opportunity to provide comment, and we look forward to future collaboration.

Sincerely,

A handwritten signature in purple ink, appearing to be 'Rebecca Liao', with a stylized, flowing script.

Rebecca Liao
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