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California Energy Commission

15-BSTD-01

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Submitted via email: docket@energy.ca.gov

Mr. Andrew McAllister Commissioner California Energy Commission 1516 Ninth Street Sacramento, California 95814

Proposed Revisions to the California Building Energy Efficiency Standards California Code of Regulations, Title 24, Part 6 and Appendices; 45-Day Language

Dear Commissioner McAllister.

Please find our comments below. If you have any questions on these comments, please contact Larry Carmody of Juno Lighting at 847-813-8305 or <a href="mailto:lcarmody@junolightinggroup.com">lcarmody@junolightinggroup.com</a>.

of Juno Lighting at 847-813-8305 or <a href="mailto:learnedy@junolightinggroup.com">learnedy@junolightinggroup.com</a>.

JA8.4.3 Start time: A Source Start time of 0.5 seconds can place undue stress on drivers while not providing the user with any greater perception of quality. No documented evidence that users find a 1 second delay problematic. The quicker start time will create higher ripple on the outputs, faster switching times, and compromised EMI. This results in a negative cost impact and compromised life of electrolytic capacitors. There are performance tradeoffs that will be objectionable to users. Limiting the source start time will exclude the smart drivers which perform checks of various control options.

Recommendation: JA8.4.3 and Table JA-8. Increase Start Time from "no greater than 0.5 seconds to "no greater than 1 second". It would also be ideal to include an exclusion of smart driver from this requirement.

JA8.4.4 Color Temperature: CCT is a consumer preference which is provided for when using a GU-24 base lamp according to Table JA-8. There should be no preferential acceptance of a GU-24 base lamp over a complete fixture. Restrictions for complete fixtures should be opened up to allow for an equivalent CCT range as found for GU-24 base lamps. Additionally, this should not be more restrictive than Energy Star. Recommendation: JA8.4.4 and Table JA-8. Change "3000 Kelvin or less" to "5000 Kelvin or less".

JA8.4.5 Color Rendering: CRI and R9 are consumer preferences which have efficacy tradeoffs. These should not be more restrictive than Energy Star.

Recommendation: JA8.4.5 and Table JA-8. Change "(CRI) of 90 or higher and color rendering R9 value of 50 or higher" to "(CRI) of 80 or higher and color rendering R9 value of 0 or higher"

JA8.4.7 Lumen Maintenance and Rated Life: Under section (c), survival rate is defined as 90% after 6000 hours of operation. In Table JA-8, this survival rate is inaccurately identified as a "3,000 hour survival rate"

Recommendation: Table JA-8. Change "3,000 hour survival rate" to "6,000 hour survival rate"

Marking: Aside from the physical constraints of any additional markings; total luminous flux is not something that should be marked on the product. Recessed downlights for example are not typically shipped with a trim and the luminous flux varies with trim and a trim can be used on a variety of housings. This should remain as part of the manufacturer's specification. Manufacturer's data code can vary in format. The UL standards which are already required have a date code or serial number requirement; therefore it is unclear what the purpose behind requiring a specific date code format. If data code must be on the product, the formatting should be flexible to accommodate general practices of the manufacturer of these products. Recommendation: JA8.5 and Table JA-8. Remove total luminous flux and date code from the list of markings. Alternatively: Do not specify the date code format or include a multitude of formats (WW/YYYY, WW/YY, DD/MM/YY, MM/DD/YY, MM/YYYY, MM/YY where "/" is optional)