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Submitted via email: lighting@energystar.gov

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Comments of the Proposed Revisions to Energy Star Program Requirements Product Specification for Luminaires, Version 2.0, Draft 2

Thank you for the opportunity to comment on this proposal and your consideration of these comments. If you have any questions on these comments, please contact Larry Carmody of Juno Lighting at 847-813-8305 or lcarmody@junolightinggroup.com.

8.1 Shipping with Energy Star Certified Lamps: We would like to restate that we object to the program which allows for providing an Energy Star qualified lamp with a non-qualified luminaire and identifying it as Energy Star qualified. Consumers always have a choice to select that path if they find it desirable. LED lamp manufacturers are not open to sharing with luminaire manufacturers critical information relative to acceptable Tc point limits and locations. If luminaire manufactures are coupling fixtures and lamps together, there's an implied endorsement that the system is sound. When that lamp fails it's the reputation of the luminaire manufacture that is tarnished. This leaves the consumer with negative experience with LED technology. Integrated products offer most reliable and predictable results.

8.1, 9.1, 9.2; Future Tiers: We oppose future requirement without factual data and cost implications supporting the increase. The future tier efficacy numbers are believed to come from projections which are not guaranteed. The requirement should be dropped as the Program Requirements should be updated as the facts for efficacy are realized. It should also be noted that, although the lamp Program Requirements are updated more frequently, this has no impact on the requirement reported for source efficacy under 8.1 Luminaires Shipped with Energy Star Lamps. If future Tiers are ever used in the Luminaire Program Requirements (and they should not), they must also be included with the Luminaires Shipped with Energy Star Lamps.

9.1, 9.2; Source Efficacy: JLG supports raising efficacy requirements to match current technology, but consideration should be given to support designs for quality of light; such as, but not limited to, high CRI and cut off angle provided by optical control and source regression. Considering only efficacy without a balanced view will only encourage less desirable lighting solutions. One reason that downlight retrofits has a higher efficacy than recessed downlights is that the improvements cited above are often incorporated into recessed downlights and not into retrofits. There is a definite tradeoff between quality of light (including aesthetics) that these improvements provide and efficacy. It was reported that only 29% of currently certified downlights meet the proposed efficacy levels. This is very low compared to the other categories; therefore it is recommended that the Luminaire efficacy for the Downlight luminaire type be reduced from 60 lm/W to 50 lm/W.

11.1 Source 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: Increase Source Start Time from “500 milliseconds” to “1 second”. We also recommend exclusion of a start time requirement from smart drivers. If smart drivers and standard drivers must be treated equally, we recommend eliminating the requirement.

15.2.2 Open-standards & Open-access: This section should be removed. Existing standards, testing procedures, and certifications exist for various open protocols (DALI, ZigBee, EnOcean, WiFi and Bluetooth for example). Proprietary protocols should be allowed and not governed by the EPA / Energy Star. Open standards do not equal interoperability. For example; ZigBee (HA profile), Z-Wave are open protocols but do not guarantee interoperability.

15.2.4 Operational Status Reporting: On/off should be the only minimum required operational status reported. Others such as luminous flux and color will add cost, potential system latency, and potential increases in standby power.