

Re docket number 14-BSTD-01

Comments on proposed 2016 update of building codes regarding lighting

July 17, 2015

Context: Dr. James Norman Bardsley, of Bardsley Consulting, is one of the technical advisers to the Solid State Lighting Program of the US Department of Energy, edits the Global Industry Report for the International Solid State Association and is Vice-chairman of the Energy Committee of the San Francisco Bay Area Chapter of the Illuminating Engineering Society. Although these comments are aligned with the goals of these organizations, they should not be construed as official recommendations from any of these bodies.

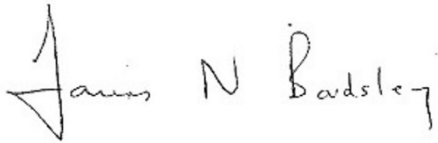
Comments: The CEC is to be commended on promoting the adoption of energy-efficient lighting, but should take care that this remains the focus of the program. The actions that are proposed seem to involve an inappropriate imposition of subjective judgments regarding the quality of light and personal preferences. For example, although there may be few who dispute that lamps with CRI over 90 are of higher quality than those with lower CRI, the specification of low CCT values seems to limit the choice of customers with no justification. It is indeed true that the CCT of most incandescent lamps was around 3000K, but imposing properties of obsolescent technologies without rational justification is retrogressive. One might well have imposed conditions on digital phones that they produced the same dial tones or tactile experience. Many users may prefer a CCT of 4000K in some environments. Since this may lead to energy savings with respect to a lower CCT, there seems to be no justification for making such an option more difficult. Unnecessary restrictions also increase the disrespect that many feel for governmental regulations that do not have a clear objective.

The same applies to the requirement that Duv be less than 0.002 from the black body locus. Daylight does not follow the black body locus, or always have a CCT of 3000K, so why should artificial lighting? There is growing evidence that, for lights with low CCT, consumers prefer color points that are substantially below the black body curve. So once again, I urge that the CEC remains focused on energy savings and does not venture into controversial issues regarding personal taste.

On the positive side, I applaud the move to make Appendix JA8 and other measures technology independent. Now that the industry has been encouraged to improve the color rendering of LEDs, I see no reason to allow other technologies, such as halogen lamps, to fall short of the agreed minimum standards on efficacy.

In summary, I congratulate the CEC for its pioneering efforts to encourage energy efficiency in lighting, especially at this time at which the US seems to be lagging other nations in this regard, but I urge the Commission to avoid adding extra frills that will make its recommendations less palatable to discerning customers and unnecessarily restrict the options of consumers and lighting designers.

Submitted with respect,

A handwritten signature in black ink that reads "James N Bardsley". The signature is written in a cursive style with a large, stylized initial 'J'.

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