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## The use of CRI in energy regulations

The Illuminating Engineering Society has recently published a Position Statement, PS-8-15, Color Rendering Index (see http://www.ies.org/PDF/PositionStatements/PS-8-15.pdf, attached).

The statement reads, in part, "The IES recognizes that while color rendering is important for consideration in energy regulations on the basis of maintaining lighting quality, the IES does not endorse any mandatory color rendering measures in energy regulations until there is a national or international consensus regarding an appropriate metric and range of values."

This position is pertinent to this Docket and represents the view of the IES on issues of lighting color and energy efficiency regulations.

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Additional submitted attachment is included below.



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## PS-8-15 Color Rendering Index

The IES recognizes that the CIE Color Rendering Index (CRI), used to determine the accuracy of a light source's rendering of color compared to a reference, has shortcomings that limit its ability to fully represent how humans perceive color.

Since its adoption in 1964, several light source technologies have been introduced and commonly adopted for architectural lighting that yield a different visual experience than the CRI metric can describe.

As a substantial step toward solving this problem, IES TM-30-15, *IES Method for Evaluating Light Source Color Rendition*, has been developed for the benefit of the lighting community to provide: (a) a more accurate assessment of color fidelity; (b) an additional, complementary assessment of the influence of the preferred color appearance of objects (related to color gamut); and (c) more detailed information about the rendition of specific colors. As with any IES Technical Memorandum, TM-30-15 is not a required standard, and it does not provide design guidance or criteria for best practices. However, the issuance of TM-30-15 will enable the international lighting community to carefully evaluate it, providing a path leading to improved standards and design guidance. Technical analysis and feedback regarding the method described in TM-30 will be critical to continued development and standardization of color quality metrics.

The IES recognizes that while color rendering is important for consideration in energy regulations on the basis of maintaining lighting quality, the IES does not endorse any mandatory color rendering measures in energy regulations until there is a national or international consensus regarding an appropriate metric and range of values.