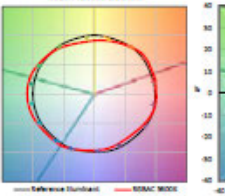
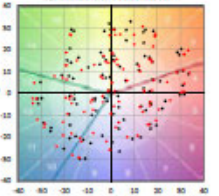
COLOR DISTORTION GRAPHIC

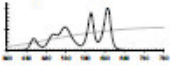
COLOR VECTOR GRAPHIC

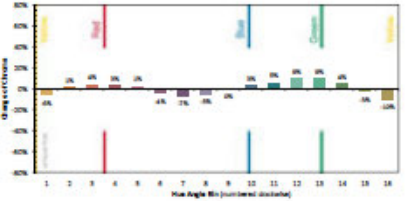


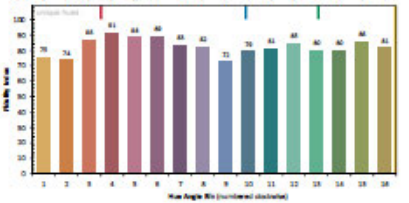
CIE CHROMATICITY COMPARISON



Light source	5000AC 5000K	
	LED	
IES TM-30-15 Fidelity Index		
R_f	82	
IES TM-30-15 Gamut Index		
R_g	99	
CIE Test Color Method		
CIE R_a	87	
R_9	99	
Average of CRI13 and CRI14 (ANSI)		
$R_{13/14}$	91	
Luminous Efficacy of Radiation		
LER	91	
Correlated Color Temperature		
CCT	5072 K	
Distance from the blackbody locus		
D_{uv}	0.0091	
CIE 1931 chromaticity coordinate		
x	0.4158	
y	0.4190	
CIE 1976 chromaticity coordinate		
u'	0.2268	
v'	0.5018	







R_f Analogous to CIE Ra (CRI). Characterizes the average color shift of the 99 CRI to characterize the overall level of similarity between the test source and reference Illuminant. Values range from 0 to 100.

R_g Compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference Illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values gives an fidelity decrease.

$R_{13/14}$ Characterizes the similarity of skin tones (CRI13 and CRI14) as rendered by the test source compared to the reference source. Values range from 0 to 100. If skin can be used to supplement other values when skin is an important consideration.

Color Vector graphic

Provides a visual representation of hue and saturation changes based on the average rendering in each hue bin, relative to the reference. The graphic provides a quick understanding of how different hues are rendered in different ways.

Chroma Change by Hue Indices

Provides numerical values for relative chroma change in each of 16 hue bins, which can be used to evaluate saturation (positive values) or desaturation (negative values) of yellow, reds, blues, greens, and in-between hues compared to the reference.

Hue fidelity Indices

Provides a numerical characterization of color fidelity in each of 16 hue bins, which can be used to evaluate how similarly the test source renders yellow, reds, blues,greens, or in-between hues compared to the reference. Values range from 0 to 100. Specific values may be used to supplement average value if one hue type is of particular concern. These scores are analogous to the special indices of the CRI system (e.g., R9), but are more robust because they combine several samples with different spectral features.

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