



LM-79 Test Report

Standards

IES LM-79-2008

IES TM-30-2015

CIE 13.3-1995

Product SKU

XFL-SW-244.4-24022-4195

Test Conditions

Test Temperature: 24°C

Test Sample: 300mm

Power Supply: HP

Voltage: 24V

Power Consumption: 4.8W

Test Date

7/9/2020

Prepared By

Approved By

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Director of Engineering

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The results contained in this report pertain only to the tested sample.
Photometric & Colorimetry data measured in accordance to IES LM-79-2008 standards, at Xicato.

Summary of Results

SKU: XFL-SW-244.4-24022-4195

Luminous Flux: 491lm

CCT: 4037K

mDUV: 2.8

Voltage: 24V

Current: 200mA

Power Consumption: 4.8W

Efficacy: 101.6LPW

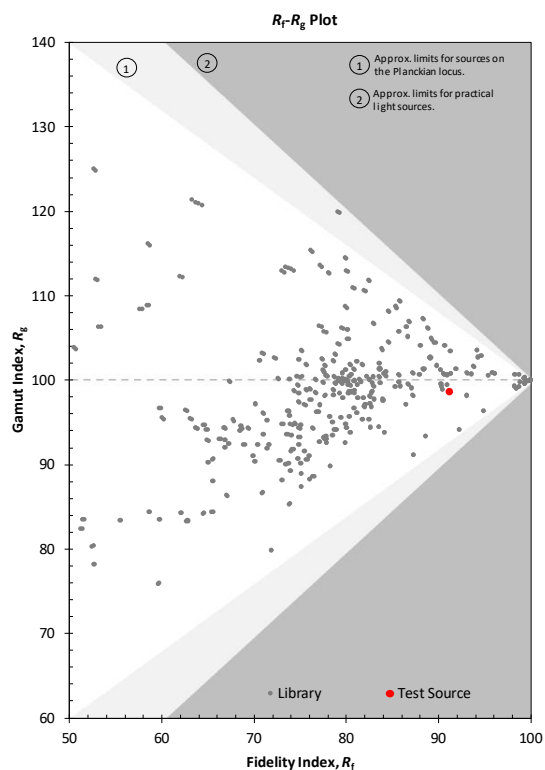
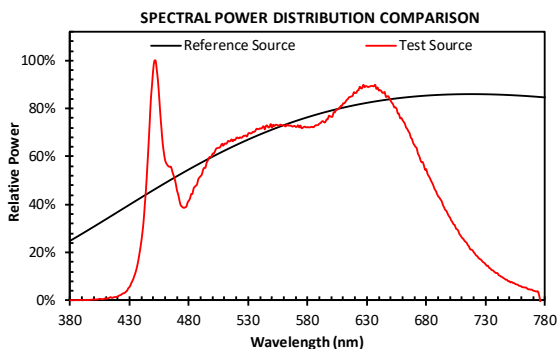
BASIC RESULTS

Source:

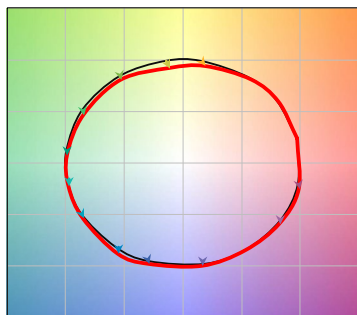
Test Source

R_f	91
R_g	99
CCT (K)	4037
D_{uv}	0.0028
x	0.3808
y	0.3830
CIE R_a	98

0

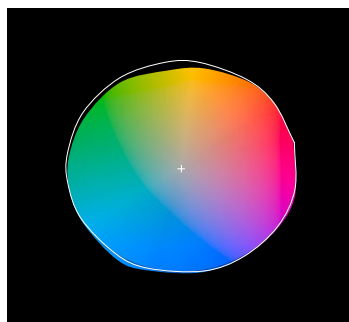


COLOR VECTOR GRAPHIC



— Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC

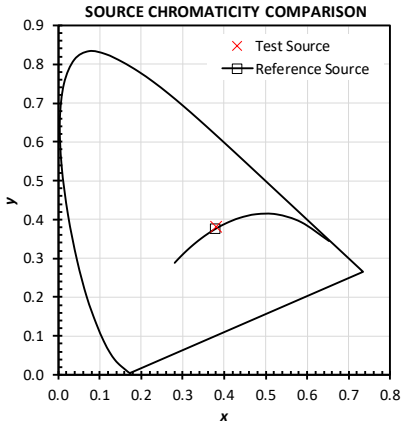


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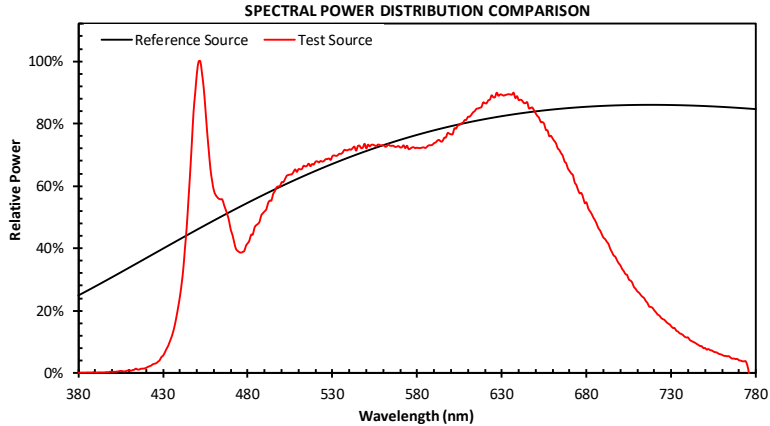
Summary Results

Metric	Test	Reference	Notes	Metric	Test	Reference	Notes
R_f	91	100	IES TM-30-15 Fidelity Index	CCT	4037	4037	Correlated Color Temperature
R_g	99	100	IES TM-30-15 Gamut Index	D_{uv}	0.0028	0.0000	Distance from the blackbody locus
$CIE R_a$	98	100	CIE Test Color Method General Index	x	0.3808	0.3788	CIE 1931 chromaticity coordinate
R_9	98	100	CIE Test Color Method Sample Nine Score	y	0.3830	0.3758	CIE 1931 chromaticity coordinate
LER	278	191	Luminous Efficacy of Radiation	u	0.2228	0.2245	CIE 1960 chromaticity coordinate
$R_{f,skin}$	90	100	Average of CES15 and CES18 (skin)	v	0.3362	0.3339	CIE 1960 chromaticity coordinate
				u'	0.2228	0.2245	CIE 1976 chromaticity coordinate
				v'	0.5044	0.5009	CIE 1976 chromaticity coordinate

Source Properties

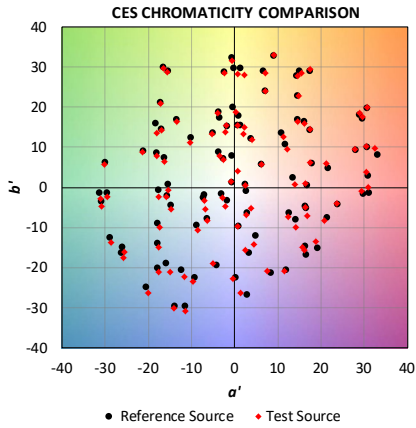


This chart plots the chromaticity of the test and reference sources in the CIE 1931 chromaticity diagram.

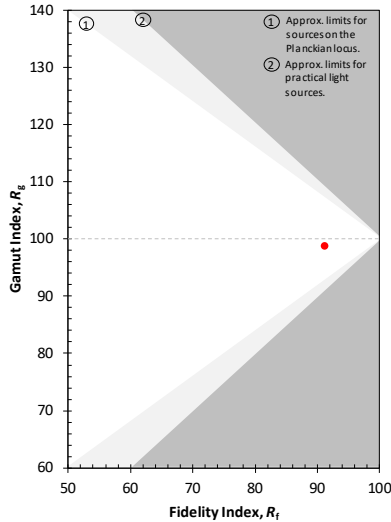


This chart displays the spectral power distributions for the test and reference source. Each SPD has been normalized so that the maximum values is 100%.

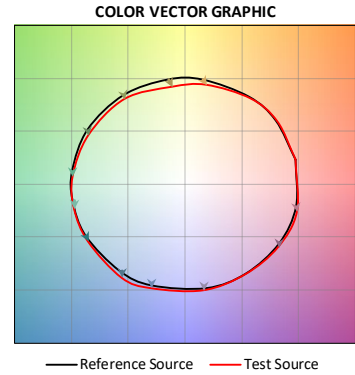
General Color Rendition



This plot shows the shift in chromaticity for each individual CES.



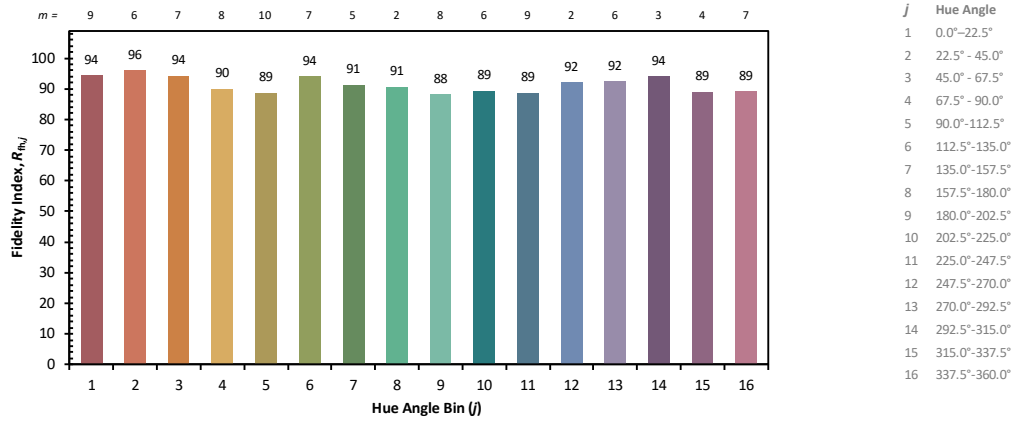
This plot shows a comparison of the R_f and R_g values relative to the range of possible values.



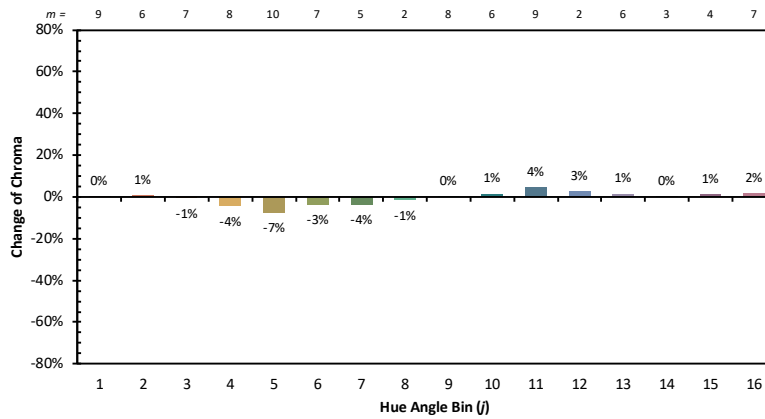
This plot shows the average chromaticity shift for the samples within each of 16 hue bins. The values are normalized so that the reference is a circle.

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Color Rendition by Hue

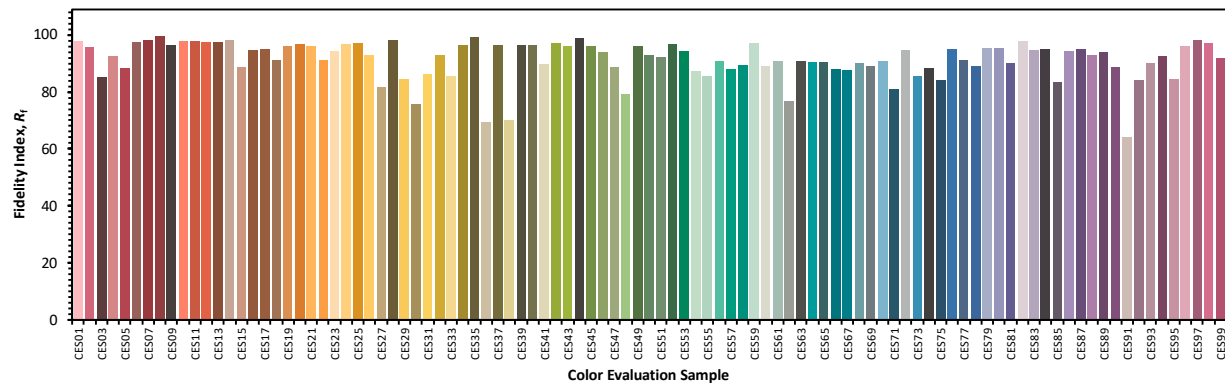


This chart displays the average Fidelity Index for all samples within the hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.



This chart displays the change in chroma for the average sample within each hue bin. The number of samples per bin, which can vary based on the CCT used for the calculation, is shown at the top. The color of the bar is based on the average chromaticity under the 5000 K reference illuminant; the colors may not display accurately depending on the calibration of the monitor, and should be used for orientation only.

Color Fidelity by Sample



This chart displays the Fidelity Index for each of the 99 CES. The CES are arranged by their hue angle under the 5000 K reference source, which was also used to determine the color of each bar. The colors are approximate and depend on proper monitor calibration. Some colors may be outside of the gamut of the monitor, and will not be displayed accurately.

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