



Report of Test

LLIA001646-007

Integrating Sphere Report

Catalog Number: LWP-40WPCTS-EX39-G 20W, 5000K

Mogul-base retrofit lamp mounted horizontal and aimed down, formed plastic housing, formed aluminum heatsink, three clear plastic enclosures.

288 white LEDs; 144 CW, 144 WW on three circuit boards with 96 LEDs each

Internal LED driver



Performance Summary

Voltage	120.0 Vac
Current	0.1715 A
Power	20.15 W
Frequency	59.99 Hz
Power Factor	0.979
Current THD	8.0 %
Total Luminous Flux	3366.2 lm
Efficacy	167.1 lm/W
Chromaticity (x,y)	(0.3427, 0.3559)
(u',v')	(0.2082, 0.4864)
Duv	0.0031
CCT	5105 K
CRI (Ra)	83
R9	11
TM-30: Rf	82
TM-30: Rg	95
TM-30: Rcs,h1	-12

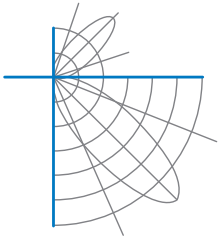
Prepared For:

Topaz Lighting Corp
925 Waverly Avenue
Holtsville, NY 11742, USA

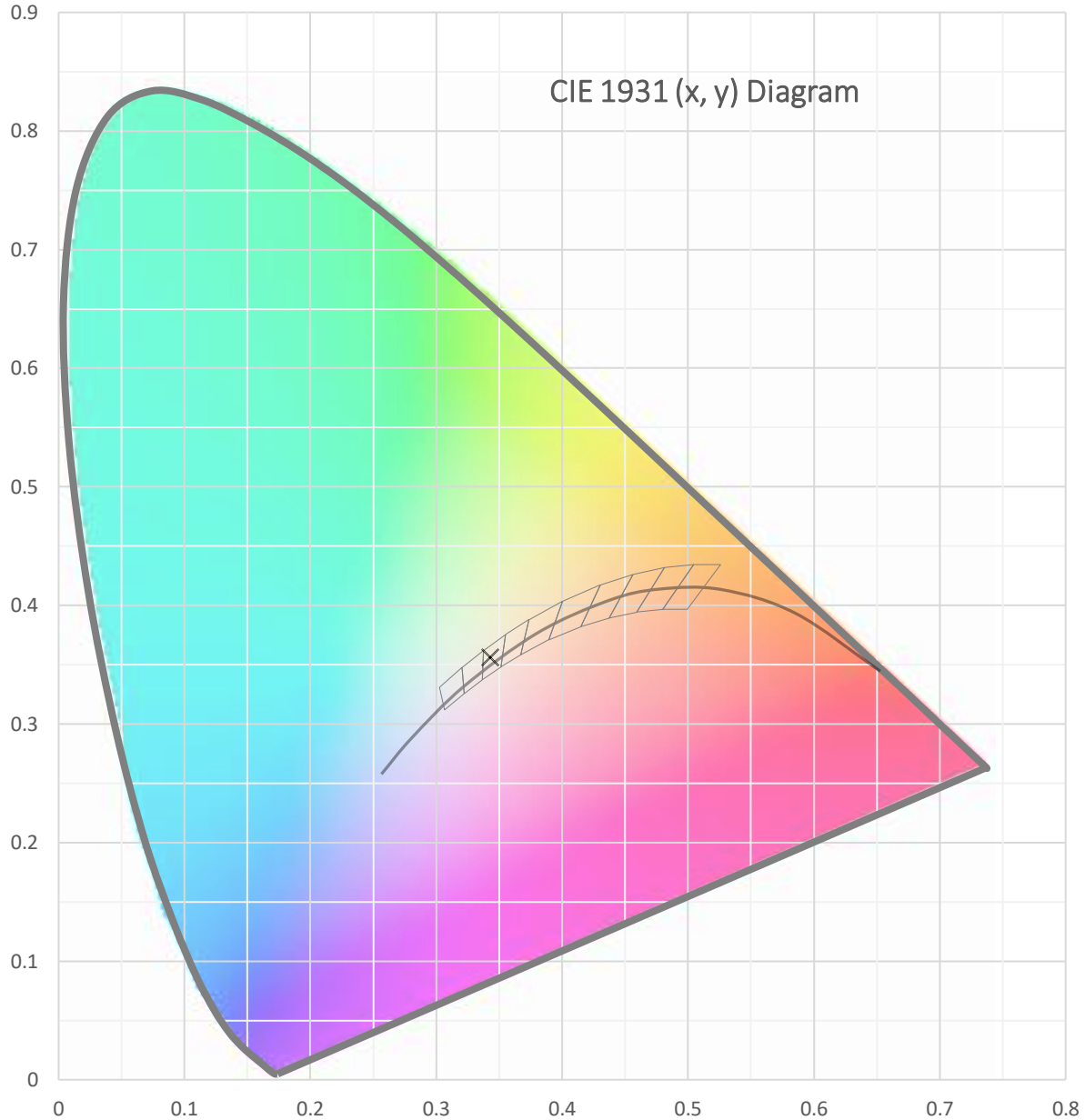
Test date: 01/31/2022

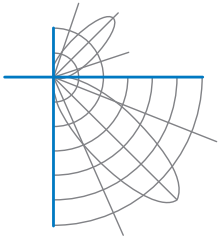
Report date: 02/01/2022

Signed: _____

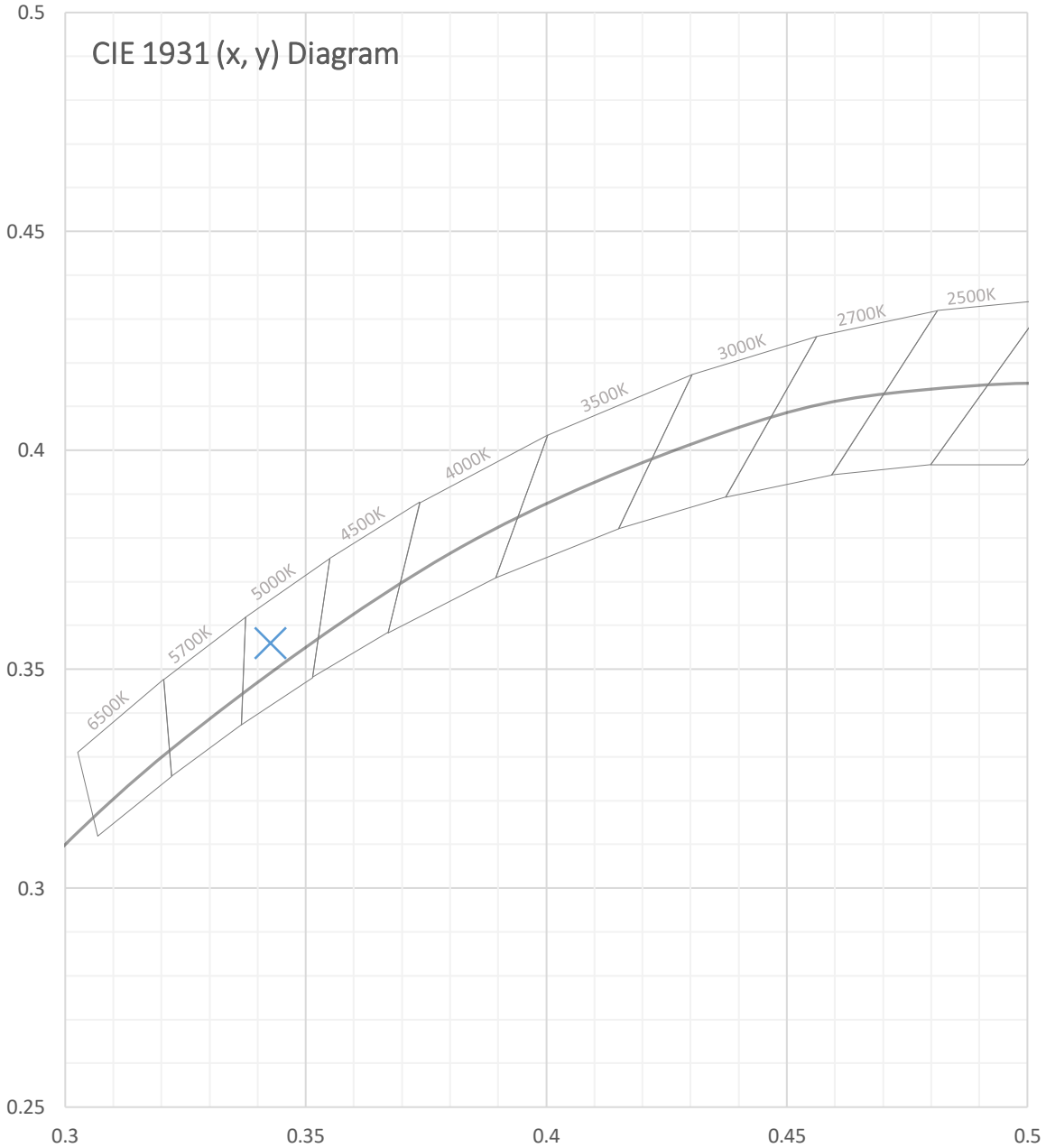


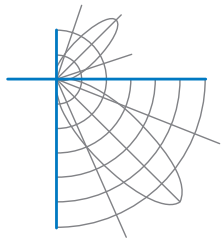
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Total Radiant Flux	10.62 W
Total Luminous Flux	3366.2 Lm
Chromaticity CIE 1931 (x, y)	(0.3427, 0.3559)
Chromaticity CIE 1976 (u', v')	(0.2082, 0.4864)
Correlated Color Temperature (CCT)	5105 K
Color Rendering Index (Ra)	83
R1	82
R2	89
R3	93
R4	82
R5	82
R6	84
R7	88
R8	68
R9	11
R10	73
R11	81
R12	60
R13	84
R14	96
TM-30: Rf	82
TM-30: Rg	95
TM-30: Rcs,h1	-12
Distance from Planckian Locus (Duv)	0.0031
Scotopic/Photopic Ratio ‡	1.985

Electrical Data

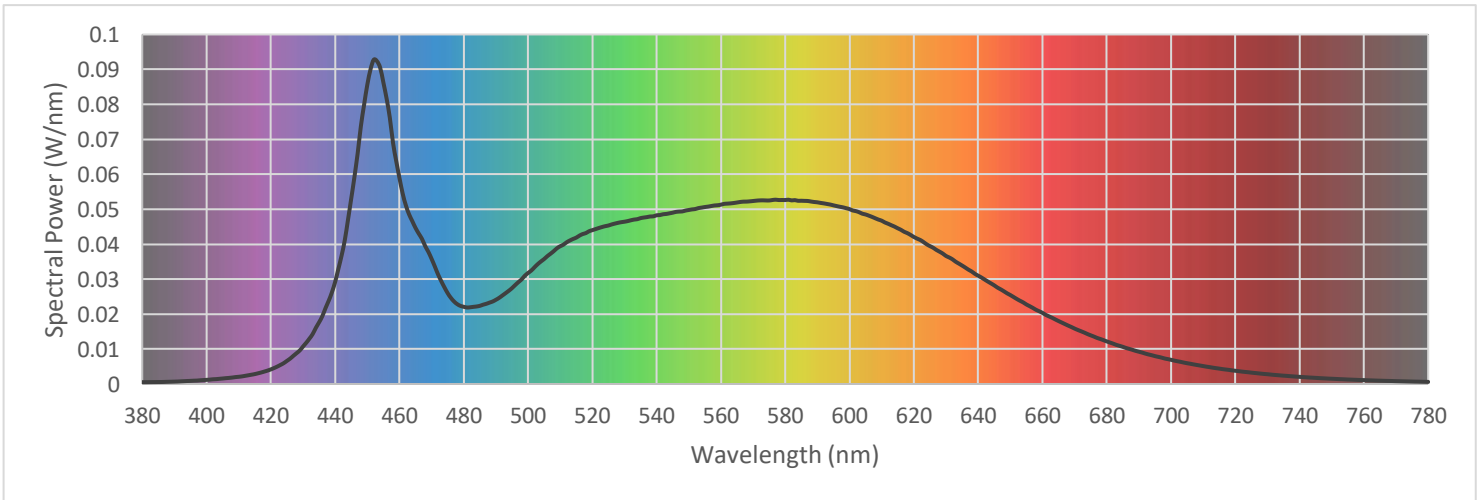
Voltage	120.0 Vac
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Summary Spectral Power Distribution (wavelength - nm, spectral power - W/nm)

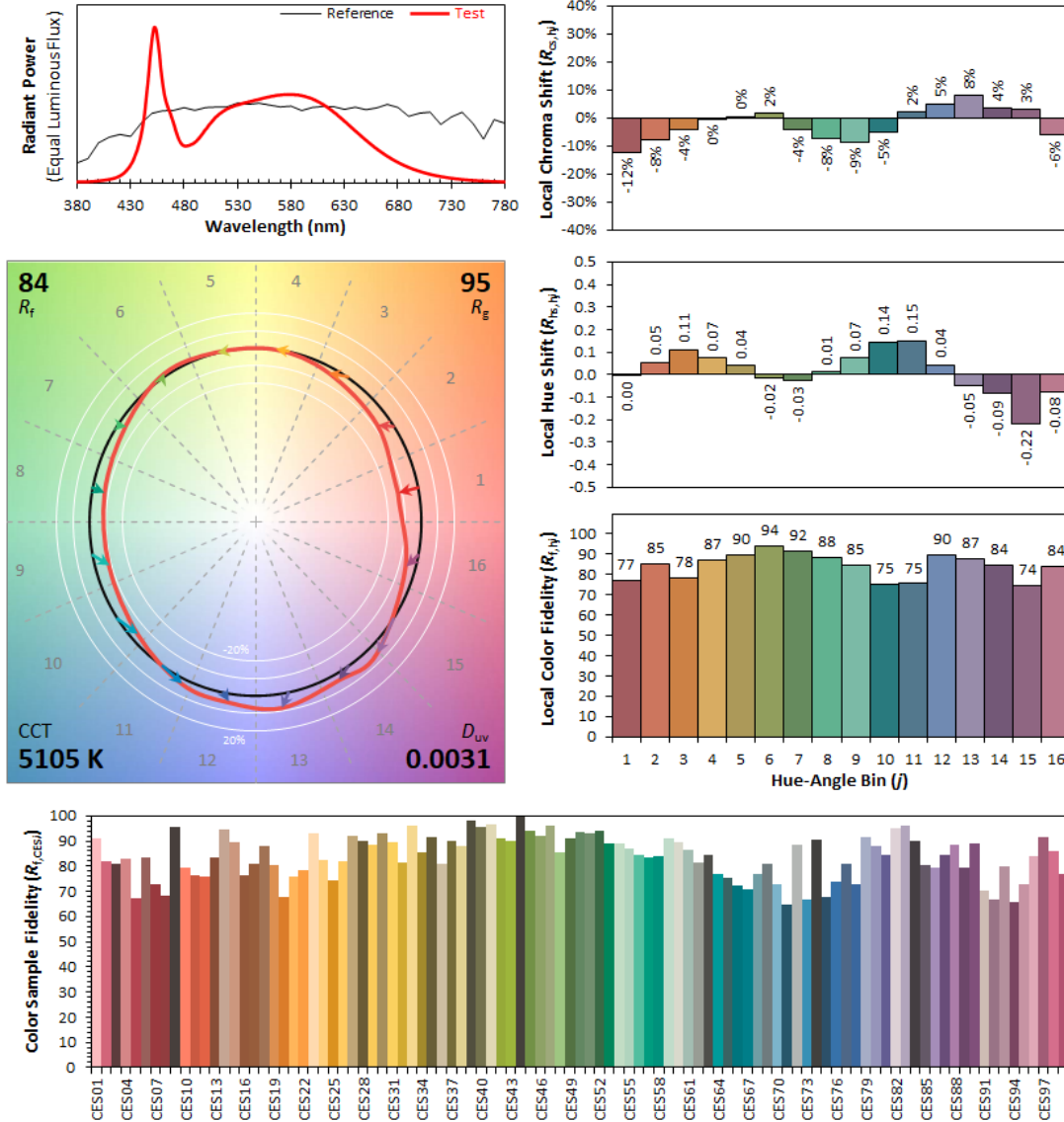
380	0.000516	480	0.022083	580	0.052624	680	0.012186
385	0.000560	485	0.022358	585	0.052424	685	0.010629
390	0.000677	490	0.024087	590	0.051974	690	0.009235
395	0.000890	495	0.027418	595	0.051105	695	0.007981
400	0.001179	500	0.031755	600	0.050029	700	0.006914
405	0.001567	505	0.035747	605	0.048499	705	0.005952
410	0.002060	510	0.039404	610	0.046719	710	0.005124
415	0.002833	515	0.041873	615	0.044541	715	0.004400
420	0.004179	520	0.044011	620	0.042074	720	0.003779
425	0.006615	525	0.045337	625	0.039450	725	0.003251
430	0.010716	530	0.046428	630	0.036633	730	0.002794
435	0.017645	535	0.047453	635	0.033896	735	0.002381
440	0.029222	540	0.048270	640	0.030987	740	0.002038
445	0.053043	545	0.049007	645	0.028222	745	0.001751
450	0.085601	550	0.049778	650	0.025456	750	0.001499
455	0.086240	555	0.050627	655	0.022763	755	0.001282
460	0.058927	560	0.051301	660	0.020359	760	0.001108
465	0.044639	565	0.051922	665	0.018016	765	0.000945
470	0.035796	570	0.052350	670	0.015861	770	0.000812
475	0.025973	575	0.052499	675	0.013925	775	0.000701
						780	0.000603





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IES TM-30 Details

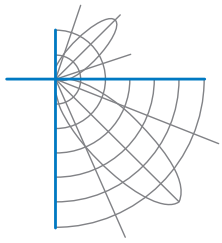


Notes:

x **0.3427**
y **0.3558**
u' **0.2082**
v' **0.4864**

CIE 13.3-1995
(CRI)

R_a 83
 R_g 11



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Test Equipment Configuration: LightLab International Allentown 2m Integrating Sphere
Measurements acquired using a Labsphere CDS 2600 spectroradiometer
Testing was performed using 4π geometry

Test Temperature: 24.9 °C

Test Procedure: Tested in accordance with the applicable sections of:
LM-79-19, LM-78-20, LM-58-20, ANSI_ANSLG C78.377-2017, TM-30-20

Significance: The laboratory has not participated in the selection of samples to be tested.
All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Notes: The measurements and other derived quantities contained in this report are based on the absolute data as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections

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