

Report of Test

LLIA001646-003

Integrating Sphere Report

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

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

144 white LEDs; 72 CW, 72 WW on three circuit boards with 48 LEDs each
Internal LED driver



Performance Summary

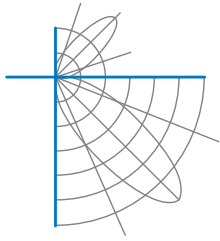
Voltage	120.0 Vac
Current	0.1627 A
Power	19.33 W
Frequency	59.99 Hz
Power Factor	0.990
Current THD	8.3 %
Total Luminous Flux	2806.7 lm
Efficacy	145.2 lm/W
Chromaticity (x,y)	(0.3401, 0.3513)
(u',v')	(0.2082, 0.4838)
Duv	0.0019
CCT	5193 K
CRI (Ra)	85
R9	17
TM-30: Rf	82
TM-30: Rg	94
TM-30: Rcs,h1	-12

Prepared For:

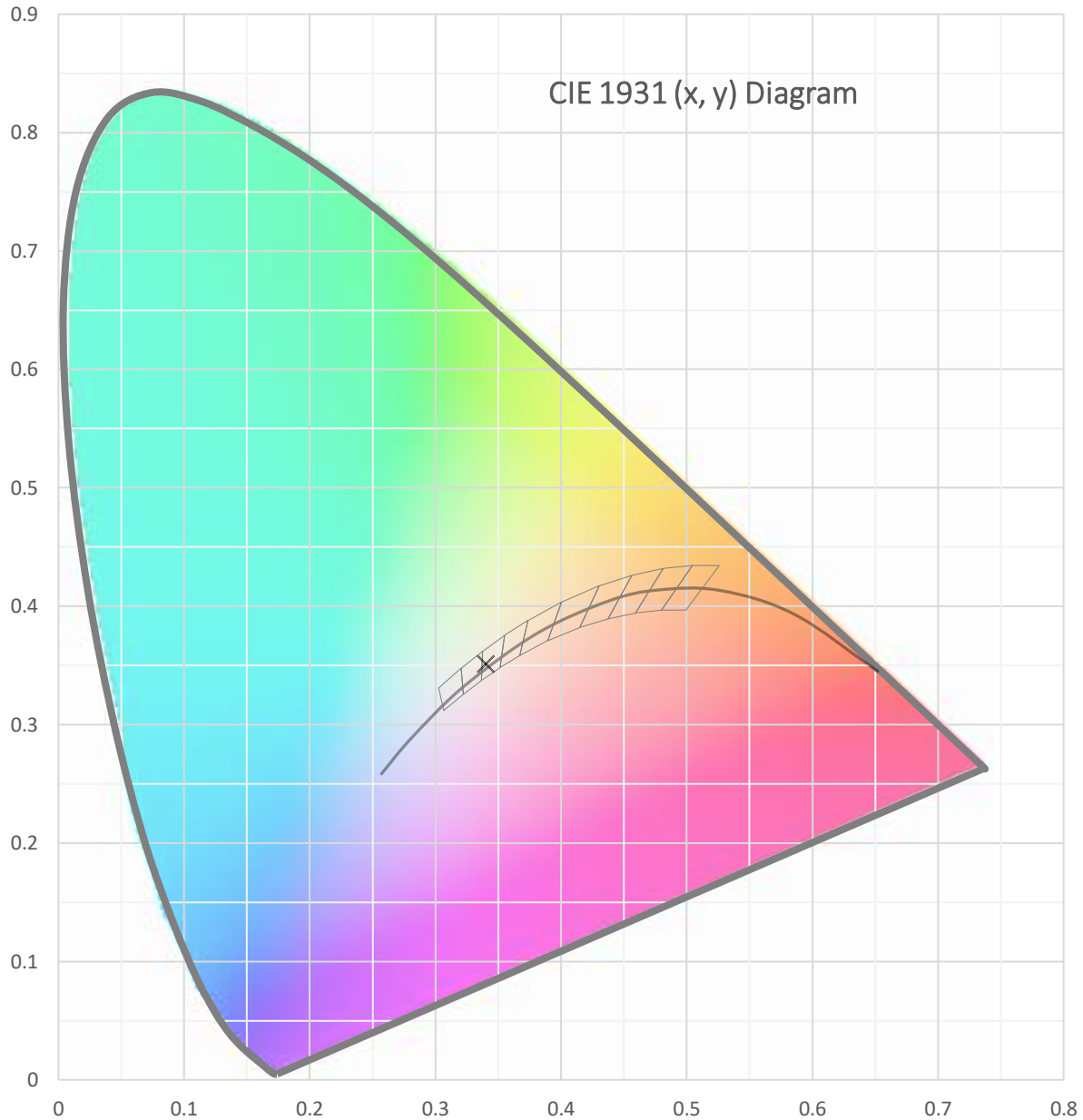
Topaz Lighting Corp
925 Waverly Avenue
Holtsville, NY 11742, USA

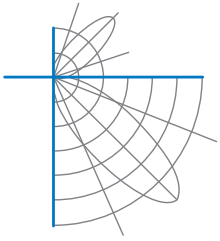
Test date: 01/27/2022
Report date: 02/01/2022

Signed: _____

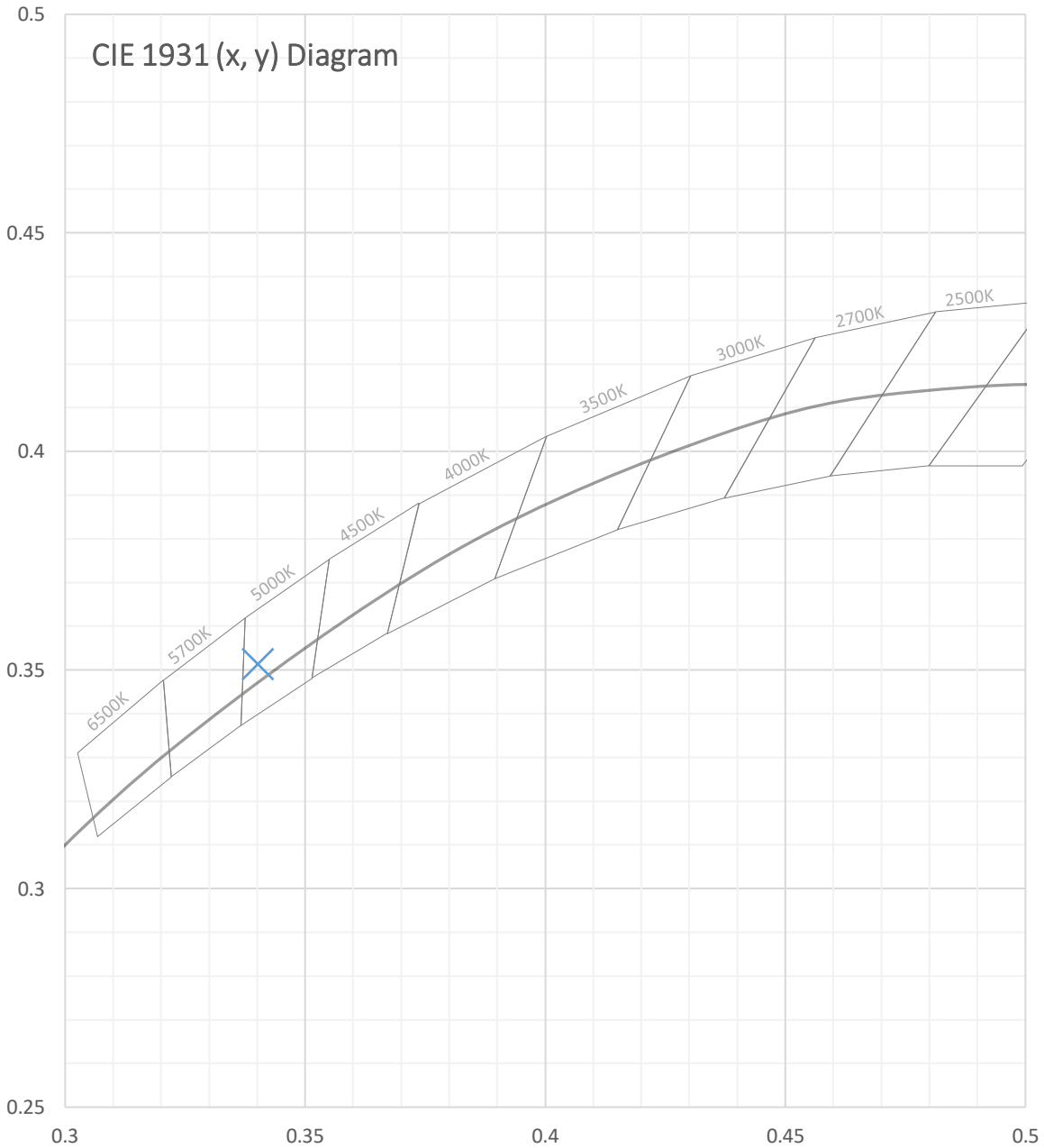


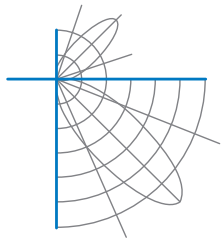
Test Report Number: LLIA001646-003





Test Report Number: LLIA001646-003



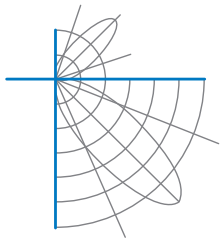


Test Report Number: LLIA001646-003

Total Radiant Flux	8.998 W
Total Luminous Flux	2806.7 Lm
Chromaticity CIE 1931 (x, y)	(0.3401, 0.3513)
Chromaticity CIE 1976 (u', v')	(0.2082, 0.4838)
Correlated Color Temperature (CCT)	5193 K
Color Rendering Index (Ra)	85
R1	84
R2	92
R3	95
R4	83
R5	84
R6	87
R7	87
R8	70
R9	17
R10	79
R11	81
R12	63
R13	86
R14	98
TM-30: Rf	82
TM-30: Rg	94
TM-30: Rcs,h1	-12
Distance from Planckian Locus (Duv)	0.0019
Scotopic/Photopic Ratio ‡	2.047

Electrical Data

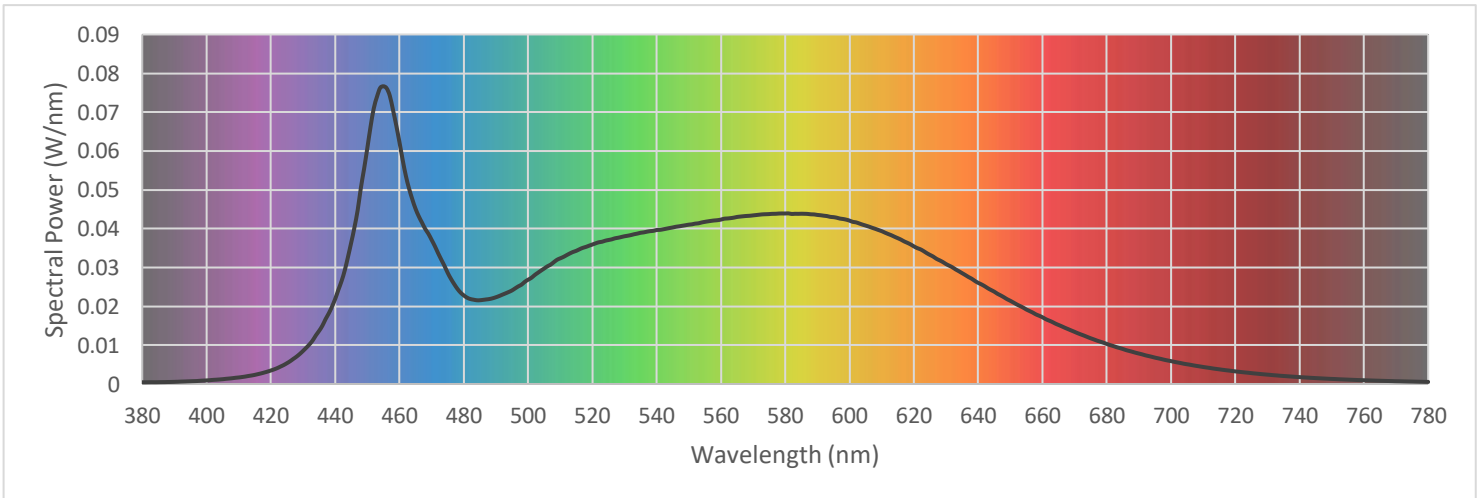
Voltage	120.0 Vac
Current	0.1627 A
Power	19.33 W
Frequency	59.99 Hz
Power Factor	0.990
Current THD	8.3 %

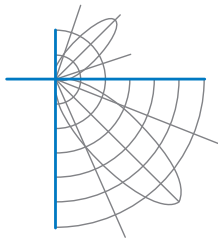


Test Report Number: LLIA001646-003

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

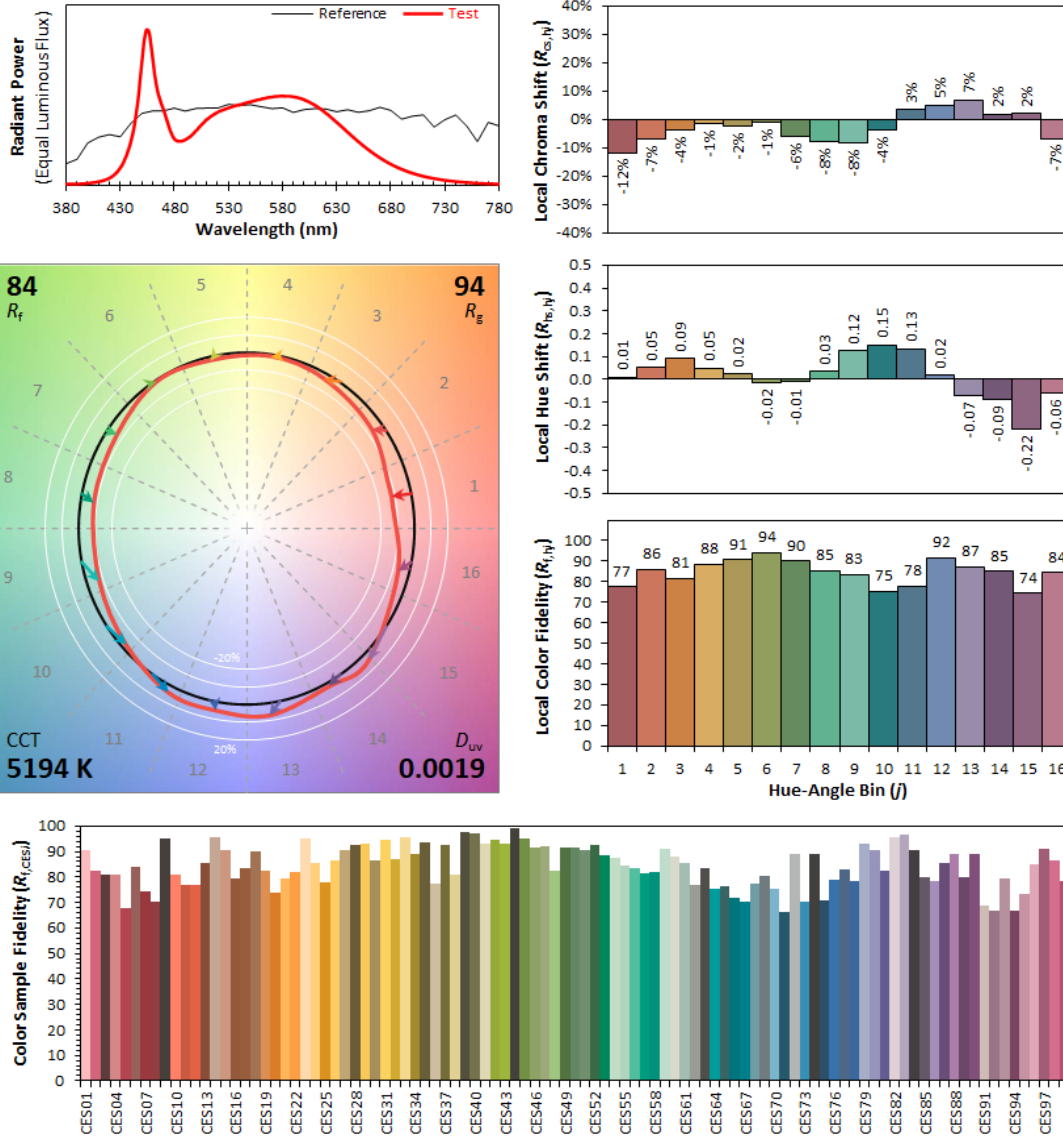
380	0.000436	480	0.022816	580	0.043899	680	0.010316
385	0.000465	485	0.021562	585	0.043835	685	0.009016
390	0.000550	490	0.022332	590	0.043530	690	0.007840
395	0.000708	495	0.024087	595	0.042956	695	0.006786
400	0.000920	500	0.026845	600	0.042062	700	0.005890
405	0.001234	505	0.029726	605	0.040795	705	0.005080
410	0.001679	510	0.032350	610	0.039353	710	0.004380
415	0.002347	515	0.034288	615	0.037547	715	0.003774
420	0.003471	520	0.035907	620	0.035443	720	0.003247
425	0.005355	525	0.037071	625	0.033245	725	0.002797
430	0.008505	530	0.038035	630	0.030890	730	0.002409
435	0.013672	535	0.038928	635	0.028548	735	0.002061
440	0.021878	540	0.039646	640	0.026051	740	0.001768
445	0.036429	545	0.040303	645	0.023782	745	0.001518
450	0.060695	550	0.041023	650	0.021429	750	0.001302
455	0.076649	555	0.041747	655	0.019183	755	0.001121
460	0.062252	560	0.042331	660	0.017186	760	0.000966
465	0.045113	565	0.043007	665	0.015205	765	0.000831
470	0.037120	570	0.043414	670	0.013429	770	0.000714
475	0.028631	575	0.043752	675	0.011770	775	0.000620
						780	0.000536



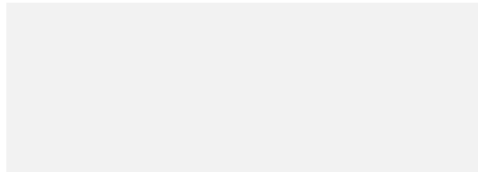


Test Report Number: LLIA001646-003

IES TM-30 Details

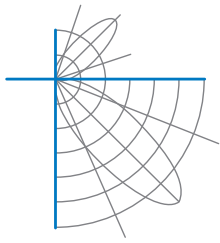


Notes:



x **0.3401**
y **0.3512**
u' **0.2082**
v' **0.4837**

CIE 13.3-1995
(CRI)
 R_a 85
 R_g 17



Test Report Number: LLIA001646-003

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: 25.7 °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

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.