



Report of Test

LLIA000965-011

Integrating Sphere Report

Catalog Number: KT-RKIT-2AG22-3000-850-VDIM

LED retrofit kit installed in a Lithonia 2GT8 lensed 2X2 reference troffer.

White enamel steel housing , clear prismatic plastic lens.

160 white LEDs, two KTAG-22L-700-30-850-RJ modules with 80 LEDs each.

One Keystone Technologies KTLD-20-UV-650-VDIM-LA1 LED driver



Performance Summary

Voltage	120.0 Vac
Current	0.1758 A
Power	20.93 W
Frequency	59.97 Hz
Power Factor	0.992
Current THD	5.3 %

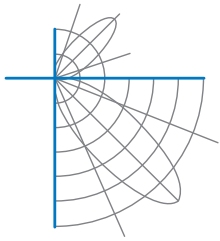
Total Luminous Flux	2702.7 lm
Efficacy	129.1 lm/W
Chromaticity (x,y)	(0.3403, 0.3506)
(u',v')	(0.2085, 0.4835)
Duv	0.0015
CCT	5187 K
CRI (Ra)	84
R9	9
TM-30: Rf	82
TM-30: Rg	94

Prepared For:

Keystone Technologies
1390 Welsh Road
North Wales, PA 19454, USA

Test date: 03/26/2018
Report date: 04/03/2018

Signed: _____



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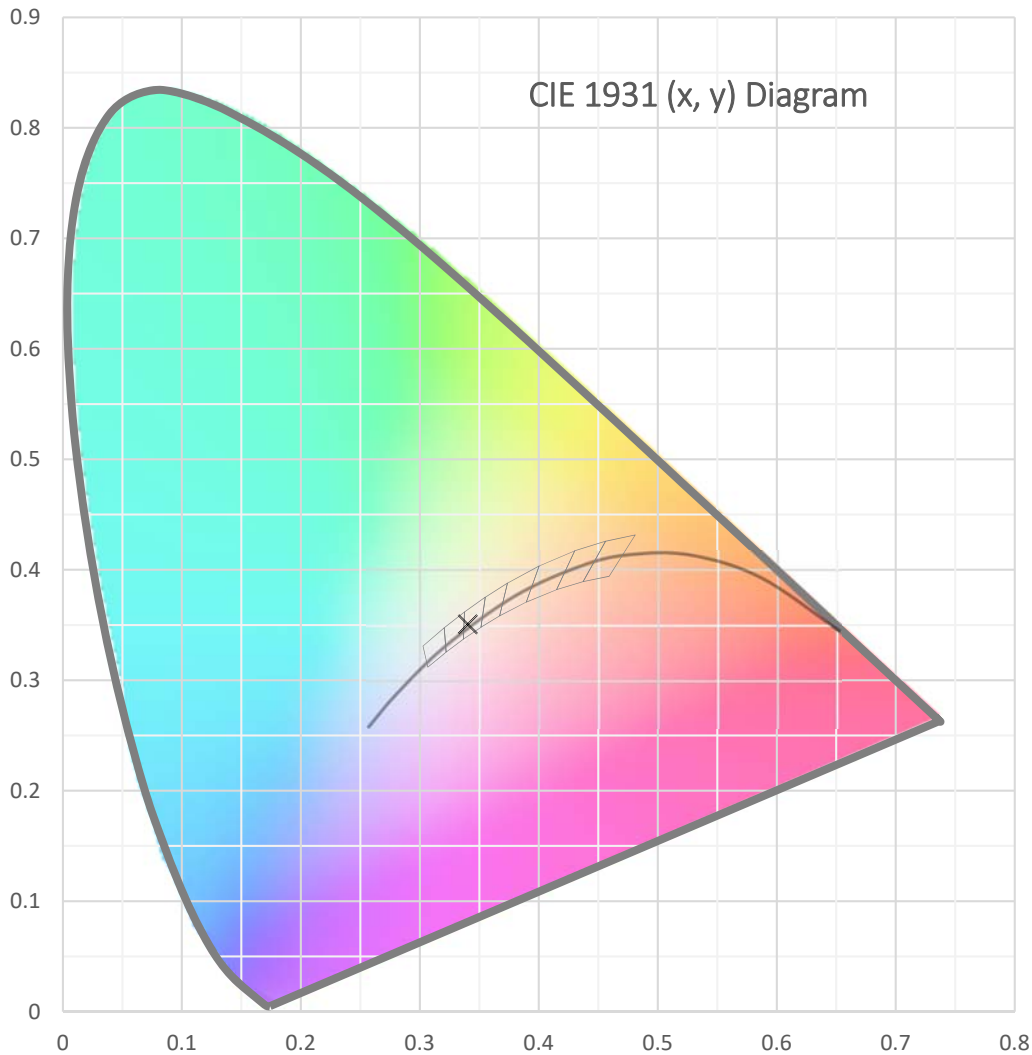
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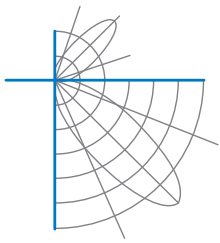
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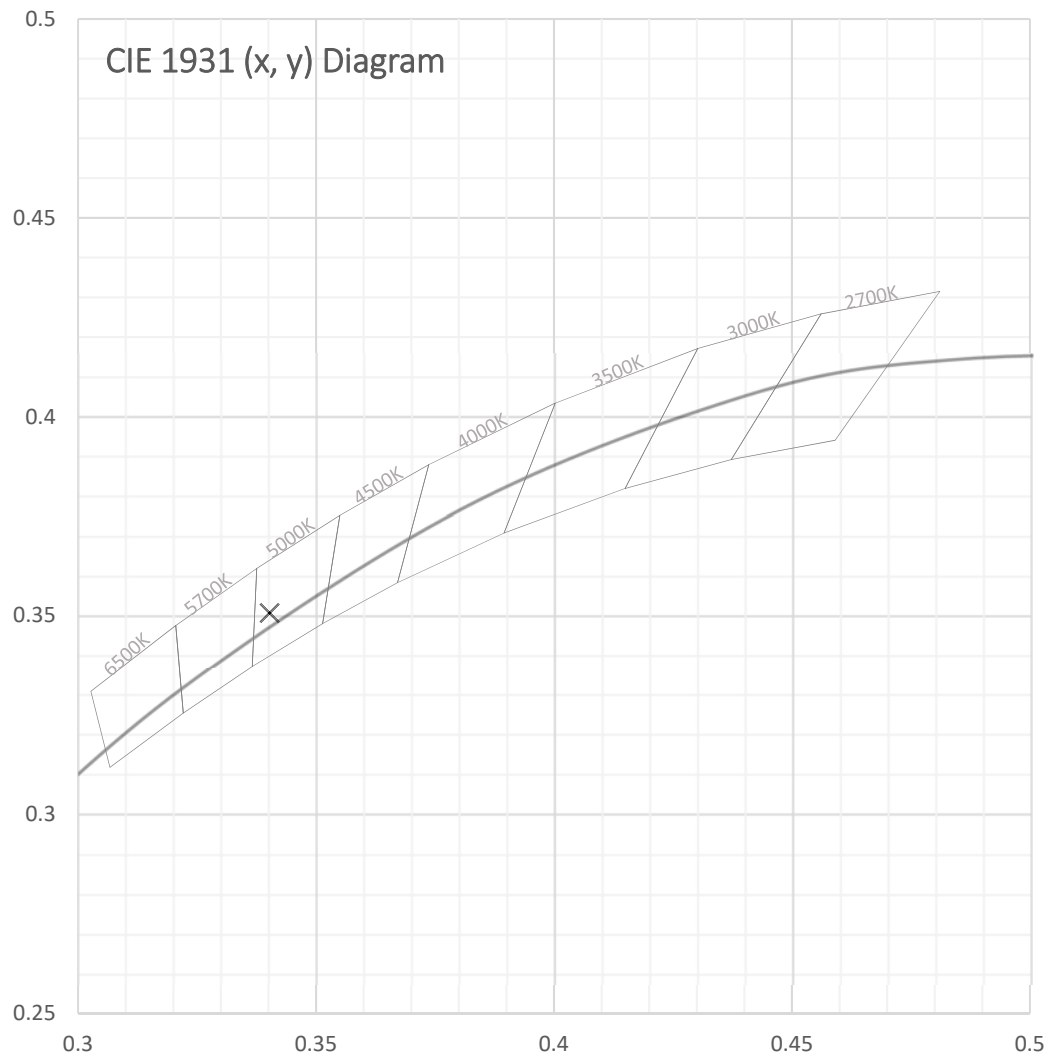
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Spectral Data

Total Radiant Flux	8.531 W
Total Luminous Flux	2702.7 Lm
Chromaticity CIE 1931 (x, y)	(0.3403, 0.3506)
Chromaticity CIE 1976 (u', v')	(0.2085, 0.4835)
Correlated Color Temperature (CCT)	5187 K
Color Rendering Index (Ra)	84
R1	83
R2	91
R3	95
R4	83
R5	83
R6	86
R7	87
R8	67
R9	9
R10	77
R11	83
R12	64
R13	85
R14	97
TM-30: Rf	82
TM-30: Rg	94
Distance from Planckian Locus (Duv)	0.0015
Scotopic/Photopic Ratio *	2.031

Electrical Data

Voltage	120.0 Vac
Current	0.1758 A
Power	20.93 W
Frequency	59.97 Hz
Power Factor	0.992
Current THD	5.3 %



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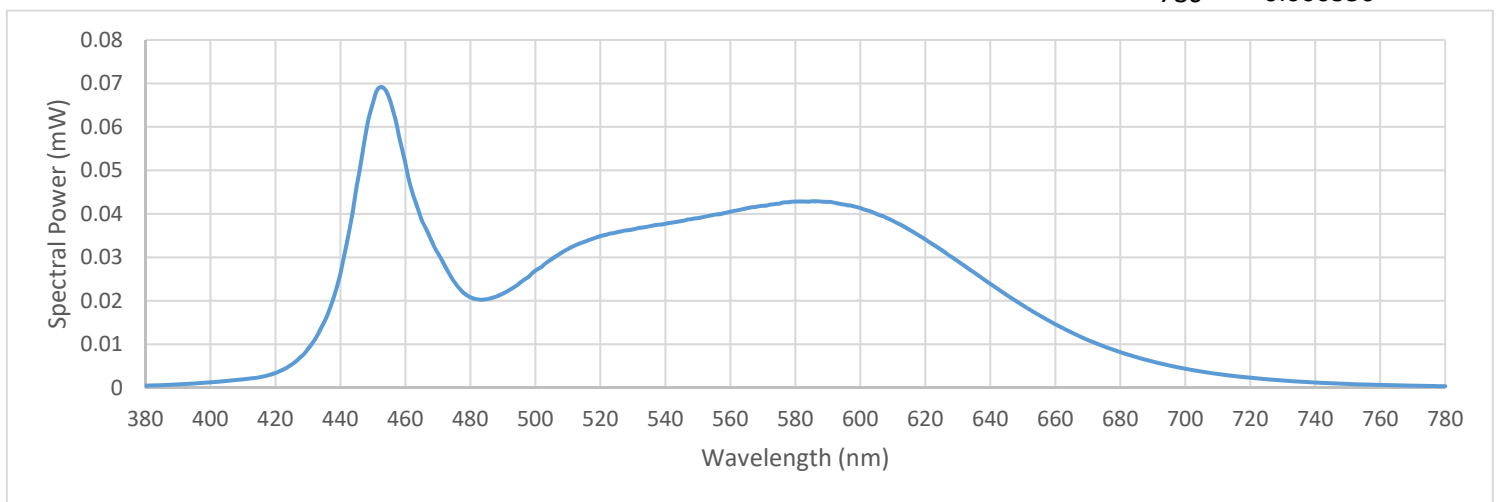
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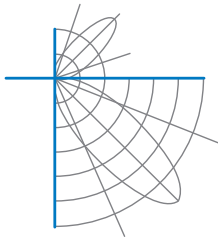
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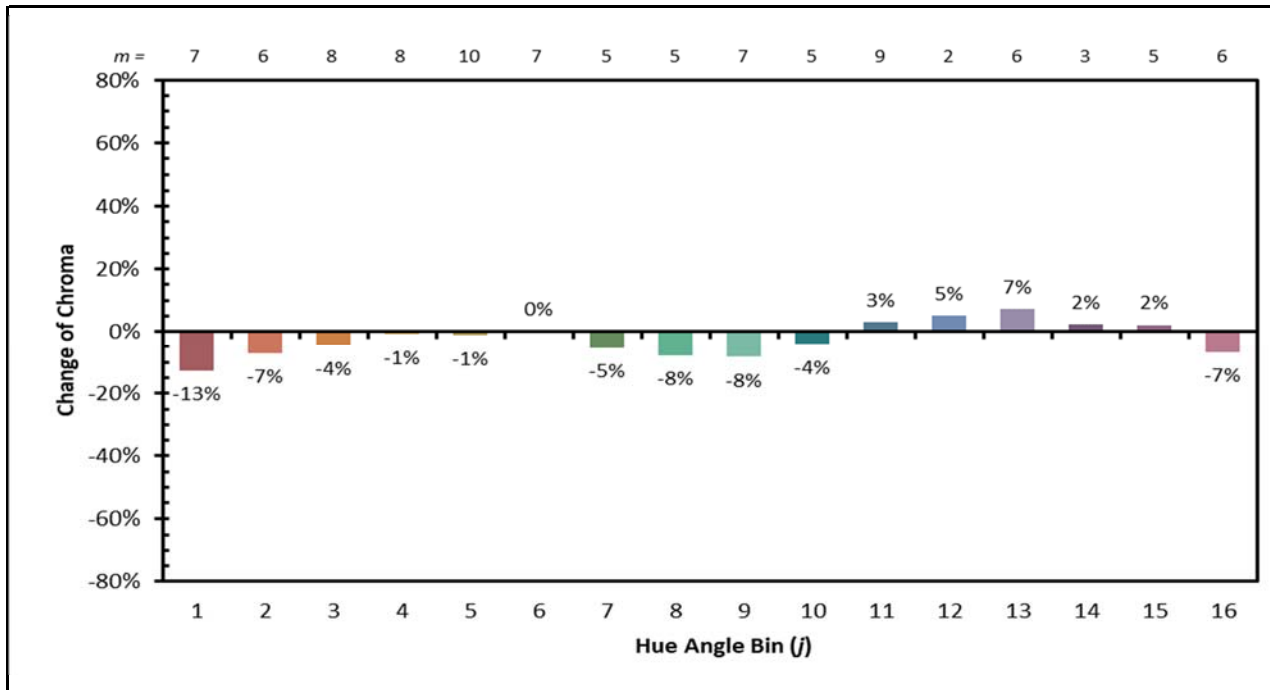
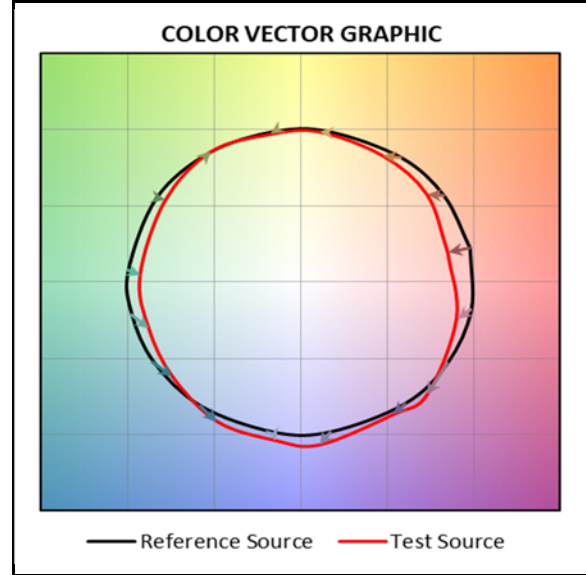
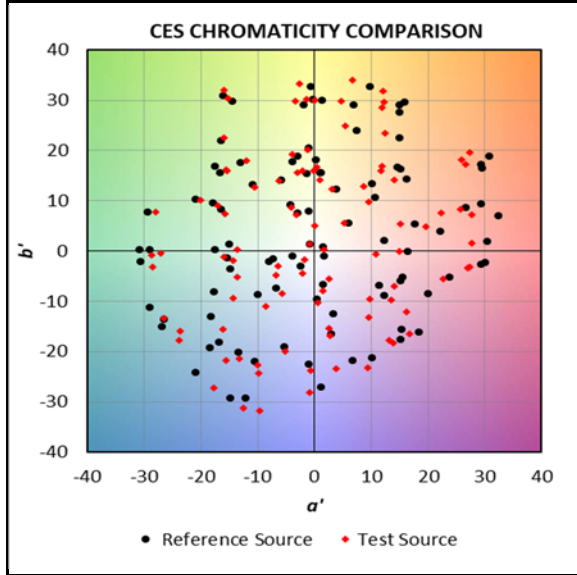
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000522	480	0.020828	580	0.042832	680	0.008183
385	0.000581	485	0.020411	585	0.042901	685	0.007039
390	0.000752	490	0.021670	590	0.042745	690	0.006024
395	0.000989	495	0.023969	595	0.042159	695	0.005116
400	0.001276	500	0.026928	600	0.041326	700	0.004393
405	0.001573	505	0.029541	605	0.040006	705	0.003725
410	0.001894	510	0.031873	610	0.038348	710	0.003167
415	0.002404	515	0.033560	615	0.036406	715	0.002700
420	0.003390	520	0.034876	620	0.034130	720	0.002300
425	0.005321	525	0.035752	625	0.031672	725	0.001960
430	0.008936	530	0.036430	630	0.029098	730	0.001672
435	0.015118	535	0.037102	635	0.026534	735	0.001421
440	0.026267	540	0.037696	640	0.023888	740	0.001205
445	0.046299	545	0.038354	645	0.021389	745	0.001030
450	0.065439	550	0.038995	650	0.018977	750	0.000879
455	0.066692	555	0.039804	655	0.016657	755	0.000755
460	0.051662	560	0.040486	660	0.014654	760	0.000651
465	0.038583	565	0.041292	665	0.012708	765	0.000555
470	0.030942	570	0.041852	670	0.011008	770	0.000479
475	0.024324	575	0.042324	675	0.009542	775	0.000412
						780	0.000356





IES TM-30 Summary





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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 4 π geometry

Test Temperature: 24.9 °C

Test Procedure: Tested in accordance with the applicable sections of:
LM-79-08, LM-78-07, LM-58-13, ANSI_ANSLG C78.377-2015,
ANSI C82-77-10:2014, TM-30-15

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.