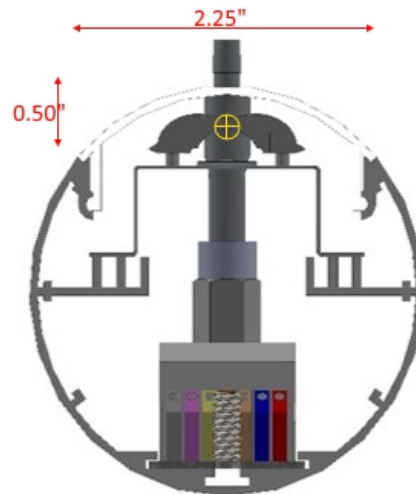




# Report of Test

## LLIA000930-004A

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120  
 Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.  
 90 White LEDs with clear, lightly frosted plastic optics above.  
 One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.  
 120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)



### Performance Summary

Total Light Output	3590 lm
Luminaire Power	27.9 W
Luminous Efficacy	128.7 lm/W

**PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX 77017**



**Test Report No. LLIA000930-004A**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

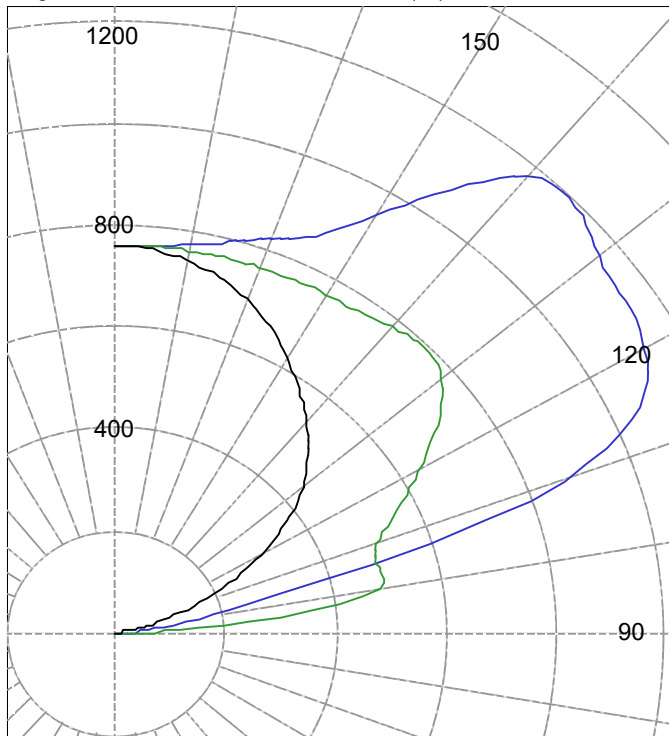
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90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)

Legend: C0-Black, C45-Green, C90-Blue (cd)



**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
90.0	0	16	68	31	28	
95.0	12	39	245	79	59	119
100.0	41	80	484	202	155	
105.0	88	131	494	616	383	395
110.0	151	201	506	956	869	
115.0	225	283	563	1035	1054	619
120.0	304	365	635	1038	1112	
125.0	379	438	713	1041	1134	660
130.0	442	503	774	1073	1150	
135.0	494	556	793	1100	1185	632
140.0	540	597	782	1064	1168	
145.0	583	630	769	972	1063	503
150.0	624	660	767	887	945	
155.0	663	687	766	834	863	354
160.0	697	711	764	808	824	
165.0	723	729	763	786	795	215
170.0	743	741	763	772	775	
175.0	756	751	761	762	761	72
180.0	759	759	759	759	759	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
180-150	642	N / A	17.9
180-140	1144	N / A	31.9
180-120	2437	N / A	67.9
180-90	3569	N / A	99.4
140-90	2425	N / A	67.5
120-90	1132	N / A	31.5
90-0	21	N / A	0.6
180-0	3590	N / A	100.0

Total Light Output = 3,590 lm

Signed:

Authorized Signatory

Date of test

19-Jan-2018

Date of report

25-Jan-2018



**Test Report No. LLIA000930-004A**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	0	0	0	0	0
2.5	0	0	0	0	0
5.0	0	0	0	0	0
7.5	0	0	0	0	0
10.0	0	0	0	0	0
12.5	0	0	0	0	0
15.0	0	0	0	0	0
17.5	0	0	0	0	0
20.0	0	0	0	0	0
22.5	0	0	0	0	0
25.0	0	0	0	0	0
27.5	0	0	0	0	0
30.0	0	0	0	0	0
32.5	0	0	0	0	0
35.0	0	0	0	0	0
37.5	0	0	0	0	0
40.0	0	0	0	0	0
42.5	0	0	0	0	0
45.0	0	0	0	0	0
47.5	0	0	0	0	0
50.0	0	0	0	0	0
52.5	0	0	0	0	0
55.0	0	0	0	0	0
57.5	0	0	0	0	0
60.0	0	0	0	0	0
62.5	0	0	0	0	0
65.0	0	0	0	0	4
67.5	0	0	0	4	5
70.0	0	0	0	5	6
72.5	0	0	4	6	7
75.0	0	0	5	8	8
77.5	0	0	7	9	10
80.0	0	0	9	11	11
82.5	0	0	13	13	13
85.0	0	6	20	16	16
87.5	0	9	35	21	20
90.0	0	16	68	31	28



**Test Report No. LLIA000930-004A**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	16	68	31	28
92.5	0	25	135	49	39
95.0	12	39	245	79	59
97.5	24	58	384	127	96
100.0	41	80	484	202	155
102.5	62	104	501	355	225
105.0	88	131	494	616	383
107.5	118	163	498	845	653
110.0	151	201	506	956	869
112.5	187	241	529	1017	978
115.0	225	283	563	1035	1054
117.5	264	324	598	1035	1093
120.0	304	365	635	1038	1112
122.5	343	403	675	1039	1127
125.0	379	438	713	1041	1134
127.5	412	471	747	1055	1137
130.0	442	503	774	1073	1150
132.5	469	531	789	1091	1169
135.0	494	556	793	1100	1185
137.5	517	578	789	1092	1189
140.0	540	597	782	1064	1168
142.5	562	614	776	1021	1123
145.0	583	630	769	972	1063
147.5	604	645	766	926	1001
150.0	624	660	767	887	945
152.5	644	674	767	855	899
155.0	663	687	766	834	863
157.5	681	700	765	820	840
160.0	697	711	764	808	824
162.5	711	721	763	796	808
165.0	723	729	763	786	795
167.5	734	735	762	779	784
170.0	743	741	763	772	775
172.5	750	747	761	768	768
175.0	756	751	761	762	761
177.5	759	754	762	760	757
180.0	759	759	759	759	759



**Test Number: LLIA000930-004A**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

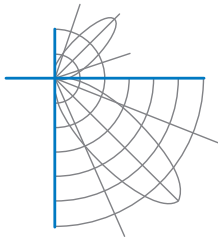
90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)

Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	95	95	95	95	82	82	82	82	56	56	56	32	32	32	11	11	11	1
1	87	82	79	76	74	71	68	65	48	47	45	28	27	26	9	9	9	0
2	79	72	66	61	67	62	57	53	42	39	37	24	23	22	8	8	7	0
3	72	63	56	51	61	54	49	44	37	34	31	22	20	18	7	6	6	0
4	65	55	48	43	56	48	42	37	33	29	26	19	17	15	6	6	5	0
5	60	49	42	36	51	42	36	31	29	25	22	17	15	13	6	5	4	0
6	55	44	36	31	47	38	31	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	2	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.



**Test Report No. LLIA000930-004A**

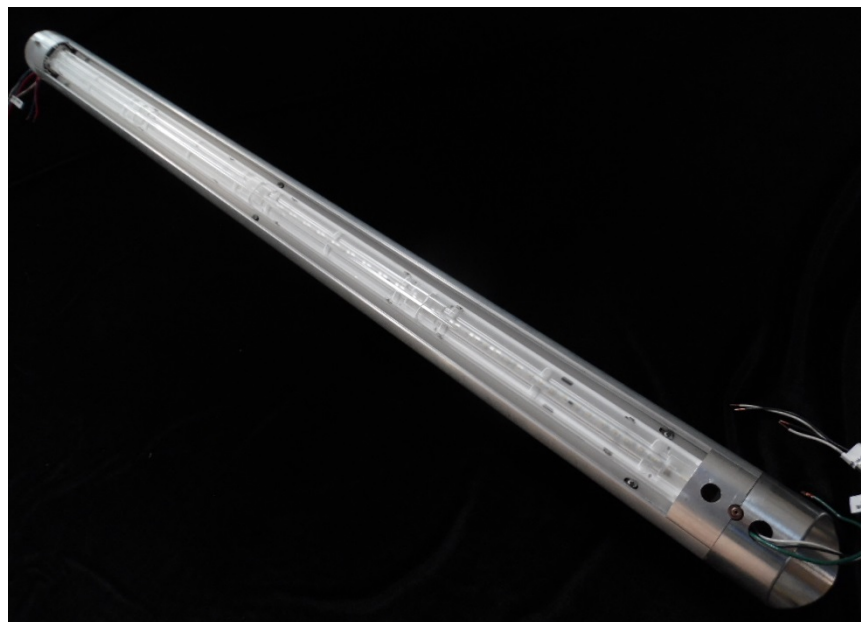
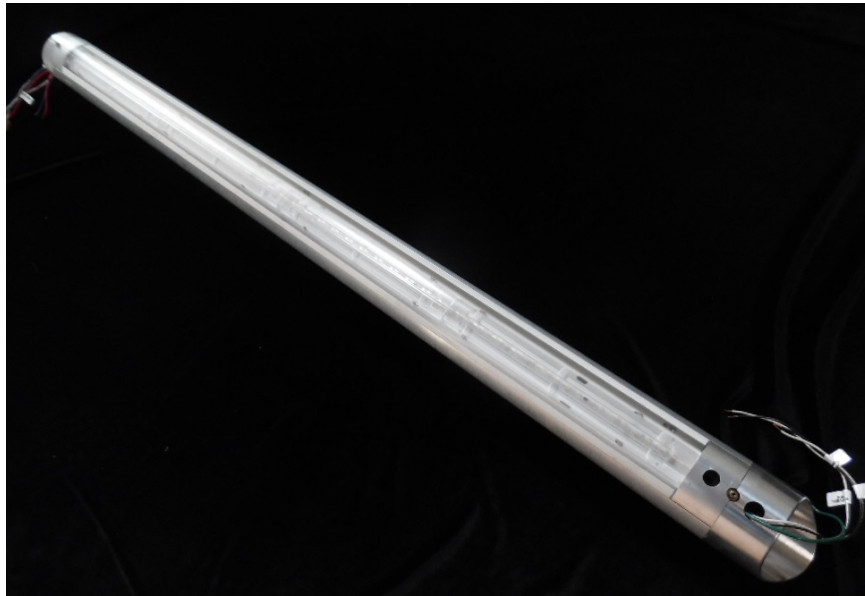
Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)





## Test Report No. LLIA000930-004A

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120  
Pendant mounted, extruded aluminum housing, formed  
white aluminum reflector tray, clear plastic enclosure.  
90 White LEDs with clear, lightly frosted plastic optics above.  
One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.  
120.0Vac, 60.00Hz, 0.2337A, 27.92W, 0.995PF, 5.4%THD(i)

**Test Distance** 9.5 m  
**Test Temperature** 25.2 °C

### Notes

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.

Tested in accordance with the applicable sections of publications: IES LM-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

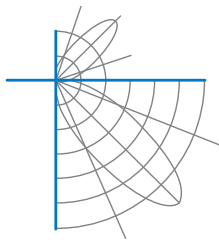
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE Gamma coordinate system as defined in CIE publication number 121.

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.



## Report of Test

**LLIA000930-004B**

Integrating Sphere Report

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.



### Performance Summary

Voltage	120.0 Vac
Current	0.2343 A
Power	27.97 W
Frequency	59.97 Hz
Power Factor	0.995
Current THD	5.4 %

Total Luminous Flux	3735.4 lm
Efficacy	133.6 lm/W
Chromaticity (x,y)	(0.3788, 0.3754)
(u',v')	(0.2246, 0.5007)
Duv	-0.0002
CCT	4034 K
CRI (Ra)	84
R9	17
TM-30: Rf	83
TM-30: Rg	95

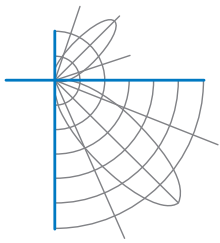
Prepared For:

Precision Architectural Lighting  
4830 Timber Creek Drive  
Houston, TX 77017, USA

Test date: 01/18/2018

Report date: 01/24/2018





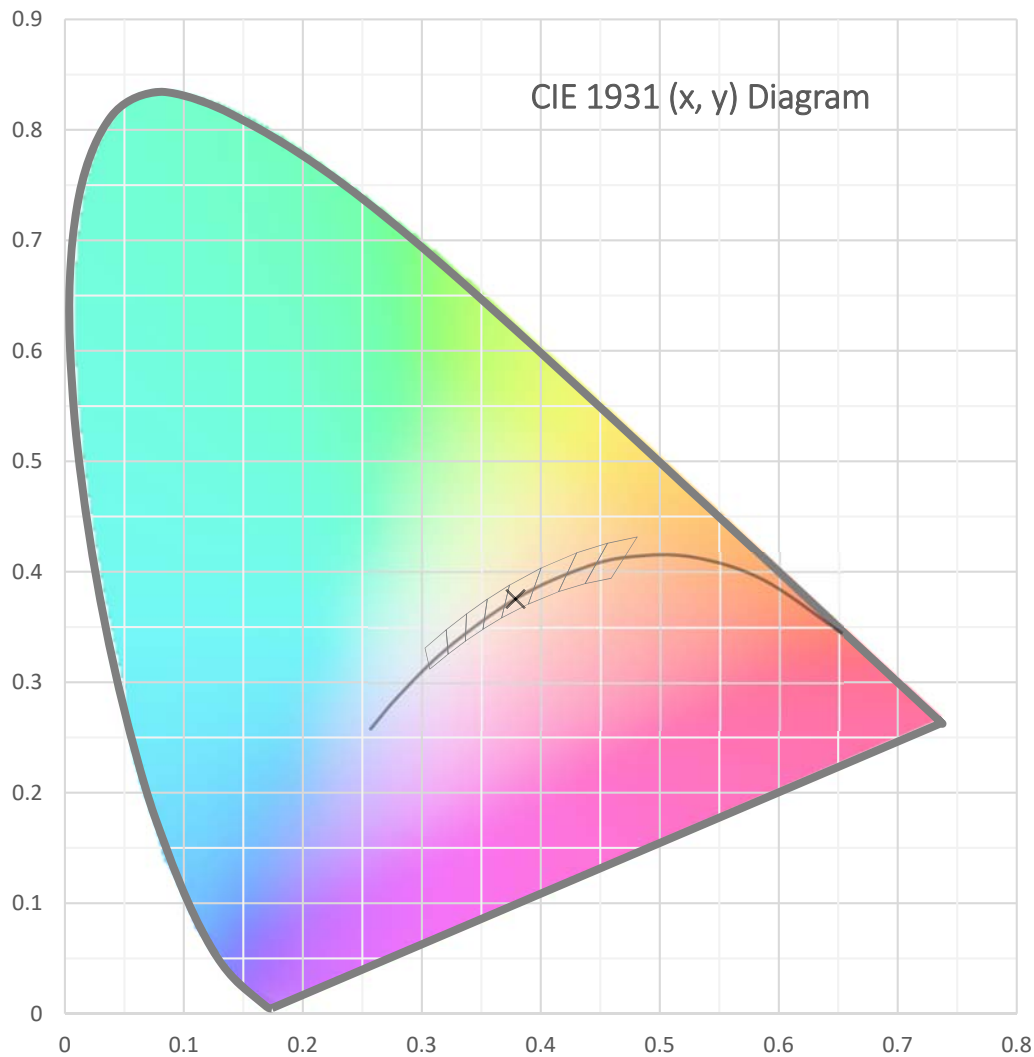
**Test Report Number: LLIA000930-004B**

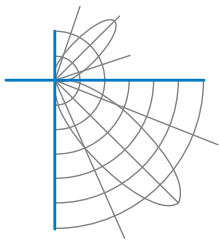
Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed  
white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.





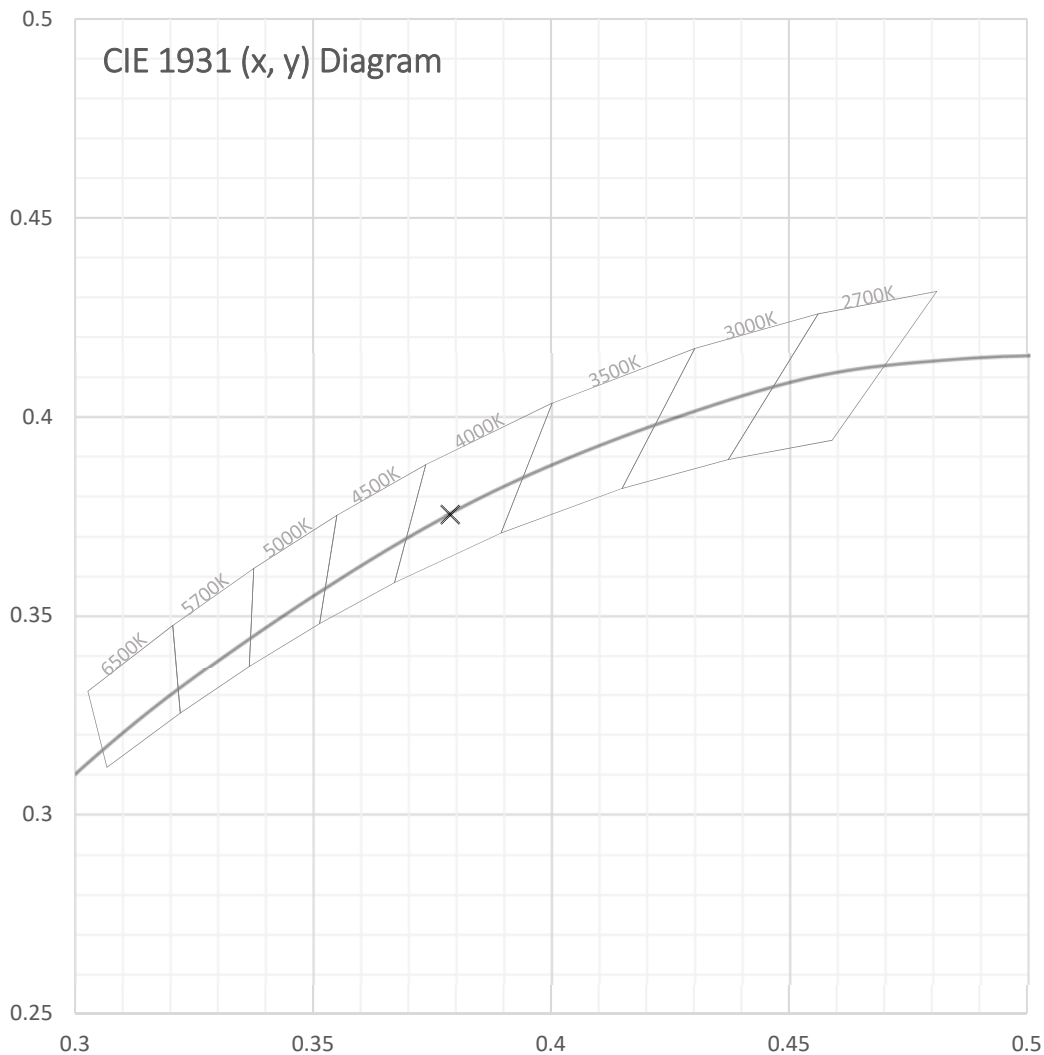
**Test Report Number: LLIA000930-004B**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

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One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.





**Test Report Number: LLIA000930-004B**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

**Spectral Data**

Total Radiant Flux	11.63 W
Total Luminous Flux	3735.4 Lm
Chromaticity CIE 1931 (x, y)	(0.3788, 0.3754)
Chromaticity CIE 1976 (u', v')	(0.2246, 0.5007)
Correlated Color Temperature (CCT)	4034 K
Color Rendering Index (Ra)	84
R1	83
R2	91
R3	95
R4	82
R5	83
R6	86
R7	87
R8	68
R9	17
R10	77
R11	81
R12	62
R13	85
R14	98
TM-30: Rf	83
TM-30: Rg	95
Distance from Planckian Locus (Duv)	-0.0002
Scotopic/Photopic Ratio *	1.718

**Electrical Data**

Voltage	120.0 Vac
Current	0.2343 A
Power	27.97 W
Frequency	59.97 Hz
Power Factor	0.995
Current THD	5.4 %



**Test Report Number: LLIA000930-004B**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

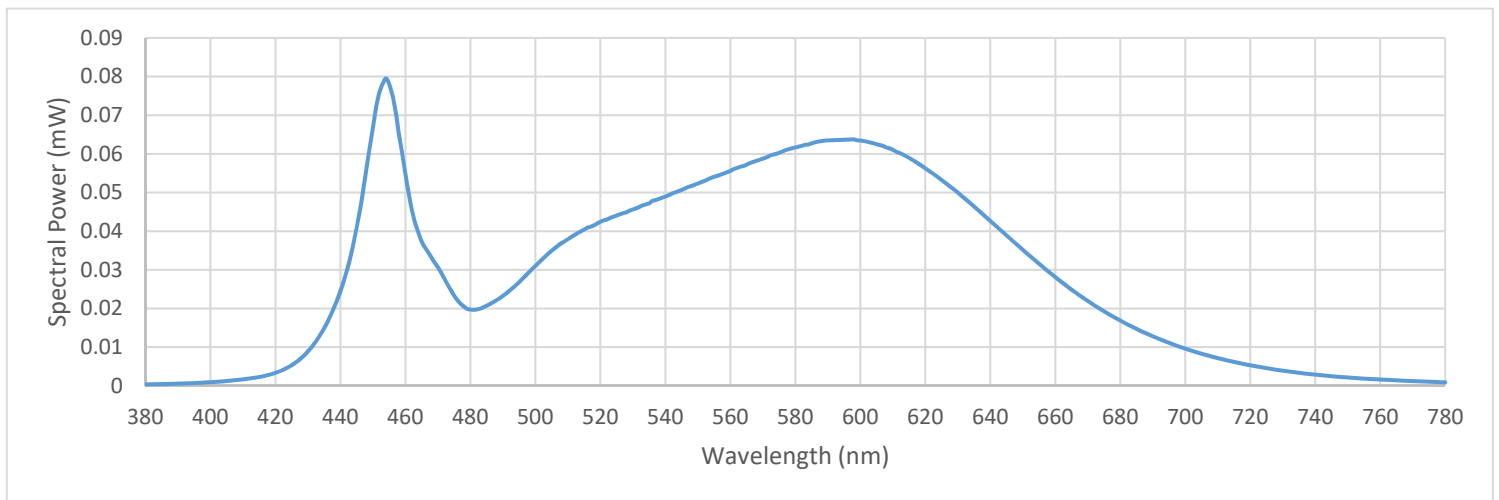
Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

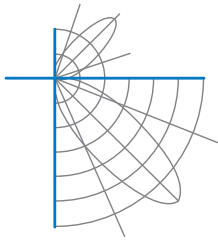
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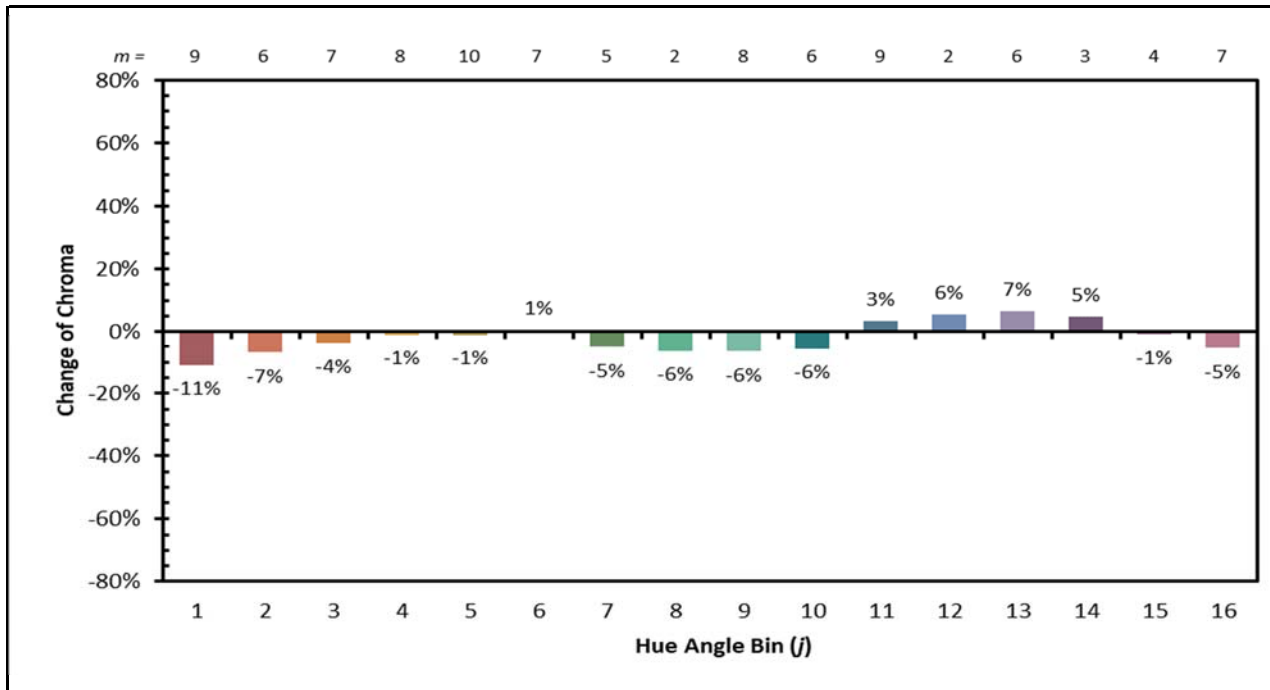
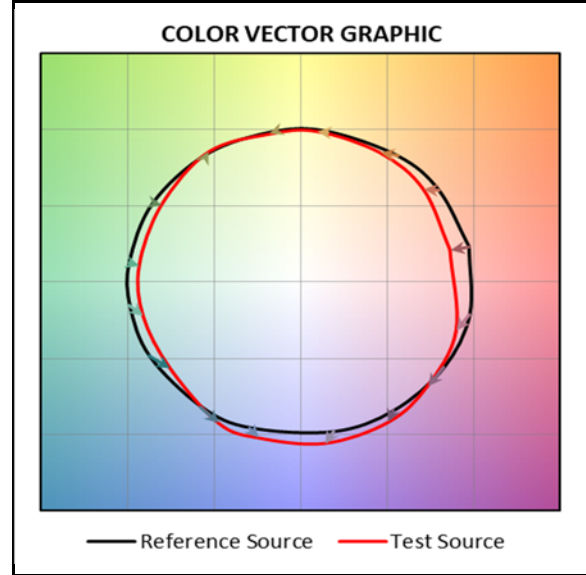
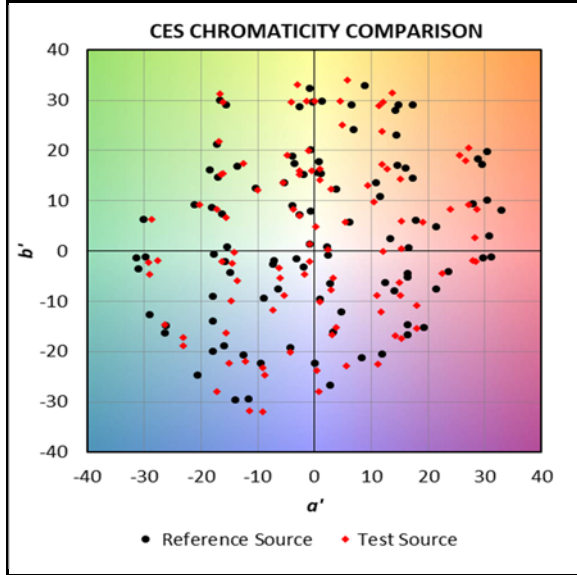
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000390	480	0.019720	580	0.061620	680	0.016857
385	0.000422	485	0.020673	585	0.062772	685	0.014732
390	0.000532	490	0.023281	590	0.063514	690	0.012774
395	0.000694	495	0.026784	595	0.063661	695	0.011076
400	0.000923	500	0.031080	600	0.063439	700	0.009625
405	0.001231	505	0.034925	605	0.062495	705	0.008287
410	0.001658	510	0.037872	610	0.061079	710	0.007134
415	0.002244	515	0.040396	615	0.058979	715	0.006166
420	0.003331	520	0.042401	620	0.056250	720	0.005289
425	0.005294	525	0.044047	625	0.053302	725	0.004537
430	0.008903	530	0.045651	630	0.049965	730	0.003910
435	0.014939	535	0.047197	635	0.046438	735	0.003347
440	0.024424	540	0.048953	640	0.042628	740	0.002879
445	0.041020	545	0.050694	645	0.038896	745	0.002480
450	0.066712	550	0.052358	650	0.035183	750	0.002136
455	0.078074	555	0.054086	655	0.031544	755	0.001851
460	0.054983	560	0.055571	660	0.028153	760	0.001604
465	0.037319	565	0.057215	665	0.024878	765	0.001383
470	0.030649	570	0.058786	670	0.021894	770	0.001196
475	0.023289	575	0.060299	675	0.019253	775	0.001030
						780	0.000894





IES TM-30 Summary





**Test Report Number: LLIA000930-004B**

Catalog Number: AR300-I-HO-K40-80--4-XX-WSCL-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, clear plastic enclosure.

90 White LEDs with clear, lightly frosted plastic optics above.

One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

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

Test Temperature: 25.8 °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.

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