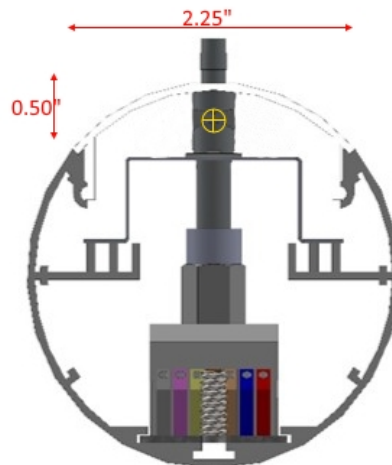




# Report of Test

## LLIA000930-006A

Catalog Number: AR300-I-HO-K40-80--4-XX-LOH-XXXX-120  
 Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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, 0.2339A, 27.94W, 0.995PF, 5.4%THD(i)



### Performance Summary

Total Light Output	3796 lm
Luminaire Power	27.9 W
Luminous Efficacy	136.1 lm/W

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



**Test Report No. LLIA000930-006A**

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

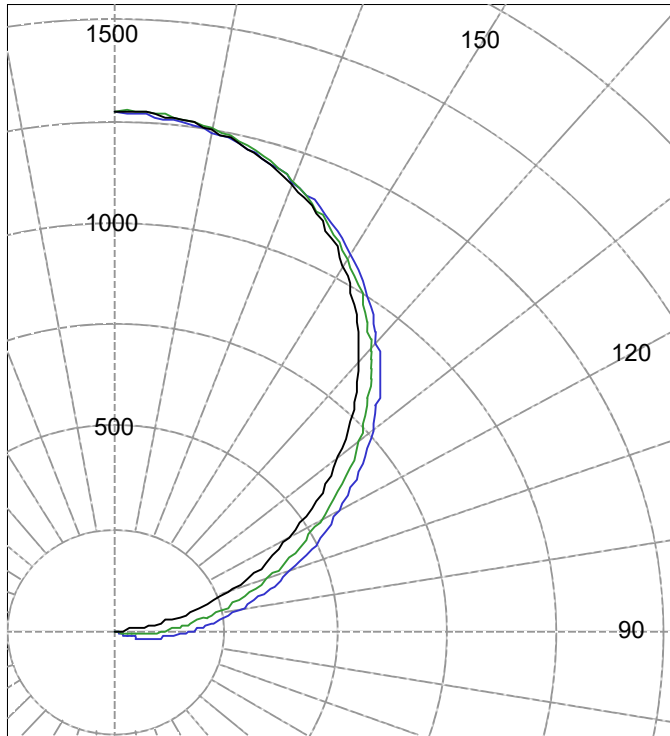
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One Osram Optotronic OT30W/PRG1050C/UNV/DIM/L LED driver.

120.0Vac, 60.00Hz, 0.2339A, 27.94W, 0.995PF, 5.4%THD(i)

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



(Two plane symmetry) C0-C90

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
90.0	0	47	117	162	176	
95.0	39	89	164	211	225	165
100.0	101	147	221	269	282	
105.0	180	218	288	334	348	293
110.0	268	301	364	408	422	
115.0	361	391	447	488	502	436
120.0	458	484	536	573	587	
125.0	558	578	628	660	674	555
130.0	660	674	721	749	761	
135.0	761	770	812	835	845	621
140.0	859	864	899	918	925	
145.0	952	951	980	996	1000	610
150.0	1035	1030	1055	1066	1067	
155.0	1108	1101	1121	1128	1126	514
160.0	1168	1159	1176	1179	1176	
165.0	1215	1205	1221	1221	1216	343
170.0	1248	1239	1252	1250	1245	
175.0	1269	1259	1272	1269	1263	120
180.0	1273	1273	1273	1273	1273	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
180-150	977	N / A	25.7
180-140	1587	N / A	41.8
180-120	2763	N / A	72.8
180-90	3657	N / A	96.3
140-90	2070	N / A	54.5
120-90	894	N / A	23.5
90-0	139	N / A	3.7
180-0	3796	N / A	100.0

Total Light Output = 3,796 lm

Signed:

\_\_\_\_\_  
Authorized Signatory

Date of test 19-Jan-2018  
Date of report 25-Jan-2018



**Test Report No. LLIA000930-006A**

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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, 0.2339A, 27.94W, 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	5
42.5	0	0	0	4	5
45.0	0	0	0	5	7
47.5	0	0	0	6	8
50.0	0	0	0	7	10
52.5	0	0	0	9	12
55.0	0	0	4	11	15
57.5	0	0	5	14	19
60.0	0	0	7	18	24
62.5	0	0	9	23	29
65.0	0	0	12	28	36
67.5	0	0	15	35	44
70.0	0	0	20	43	53
72.5	0	0	25	52	63
75.0	0	4	32	63	74
77.5	0	6	41	75	87
80.0	0	10	52	89	102
82.5	0	15	64	105	117
85.0	0	22	79	122	135
87.5	0	33	97	141	155
90.0	0	47	117	162	176



**Test Report No. LLIA000930-006A**

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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, 0.2339A, 27.94W, 0.995PF, 5.4%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	47	117	162	176
92.5	16	66	139	186	199
95.0	39	89	164	211	225
97.5	68	116	191	239	252
100.0	101	147	221	269	282
102.5	139	181	253	300	314
105.0	180	218	288	334	348
107.5	225	258	325	370	384
110.0	268	301	364	408	422
112.5	314	346	404	447	461
115.0	361	391	447	488	502
117.5	409	437	491	529	544
120.0	458	484	536	573	587
122.5	508	530	582	616	630
125.0	558	578	628	660	674
127.5	608	626	674	704	717
130.0	660	674	721	749	761
132.5	711	722	767	792	803
135.0	761	770	812	835	845
137.5	811	818	856	877	886
140.0	859	864	899	918	925
142.5	907	908	940	958	963
145.0	952	951	980	996	1000
147.5	995	992	1019	1032	1034
150.0	1035	1030	1055	1066	1067
152.5	1073	1067	1089	1098	1098
155.0	1108	1101	1121	1128	1126
157.5	1139	1131	1150	1155	1152
160.0	1168	1159	1176	1179	1176
162.5	1193	1184	1200	1201	1197
165.0	1215	1205	1221	1221	1216
167.5	1233	1224	1238	1237	1232
170.0	1248	1239	1252	1250	1245
172.5	1260	1250	1264	1261	1256
175.0	1269	1259	1272	1269	1263
177.5	1274	1264	1277	1273	1267
180.0	1273	1273	1273	1273	1273



**Test Number: LLIA000930-006A**

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

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

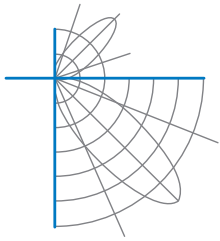
90 White LEDs with clear, lightly frosted plastic optics above.

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

120.0Vac, 60.00Hz, 0.2339A, 27.94W, 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	96	96	96	96	83	83	83	83	58	58	58	35	35	35	14	14	14	4
1	87	82	78	75	74	70	67	64	49	47	45	29	28	27	10	10	10	1
2	78	71	65	60	67	61	56	52	42	39	37	25	23	22	9	8	8	1
3	71	62	55	50	61	54	48	43	37	33	30	22	20	18	8	7	6	0
4	65	55	47	42	55	47	41	36	33	29	26	19	17	15	7	6	5	0
5	59	49	41	35	51	42	35	31	29	25	22	17	15	13	6	5	4	0
6	55	43	36	30	47	37	31	26	26	22	19	15	13	11	5	5	4	0
7	50	39	31	26	43	33	27	23	23	19	16	14	11	10	5	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	8	4	4	3	0
9	43	31	25	20	37	27	21	17	19	15	12	11	9	7	4	3	3	0
10	40	29	22	17	34	25	19	15	17	13	11	10	8	6	4	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. LLIA000930-006A**

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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, 0.2339A, 27.94W, 0.995PF, 5.4%THD(i)





## Test Report No. LLIA000930-006A

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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, 0.2339A, 27.94W, 0.995PF, 5.4%THD(i)

**Test Distance** 9.5 m  
**Test Temperature** 25.4 °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

**LLIA000930-006B**

Integrating Sphere Report

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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	27.96 W
Frequency	59.97 Hz
Power Factor	0.994
Current THD	5.4 %

Total Luminous Flux	3934.4 lm
Efficacy	140.7 lm/W
Chromaticity (x,y)	(0.3794, 0.3756)
(u',v')	(0.2249, 0.5009)
Duv	-0.0003
CCT	4019 K
CRI (Ra)	84
R9	18
TM-30: Rf	83
TM-30: Rg	95

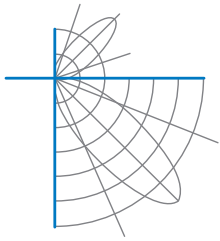
Prepared For:

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

Test date: 01/22/2018

Report date: 01/24/2018





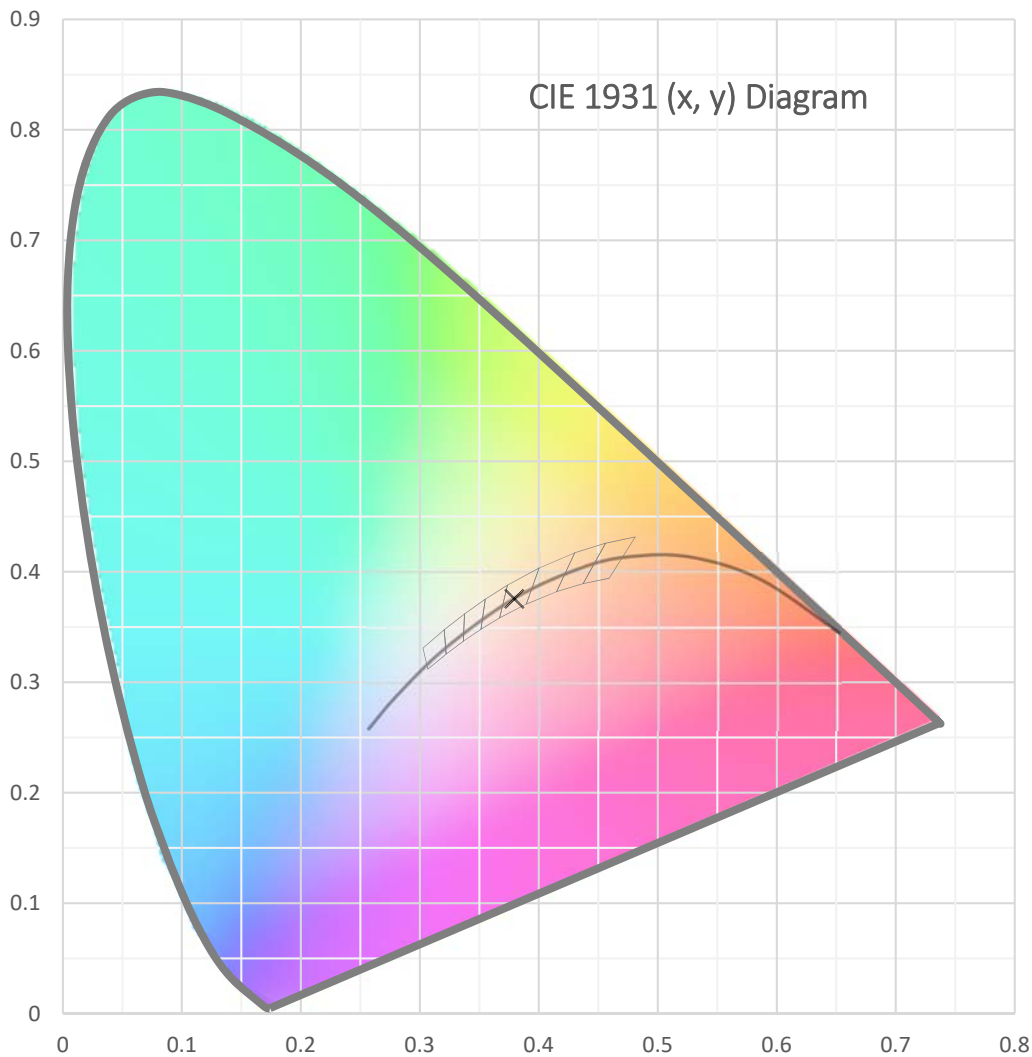
**Test Report Number: LLIA000930-006B**

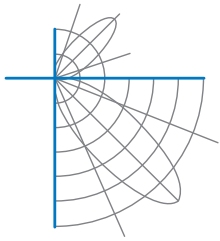
Catalog Number: AR300-I-HO-K40-80--4-XX-LOH-XXXX-120

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

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

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





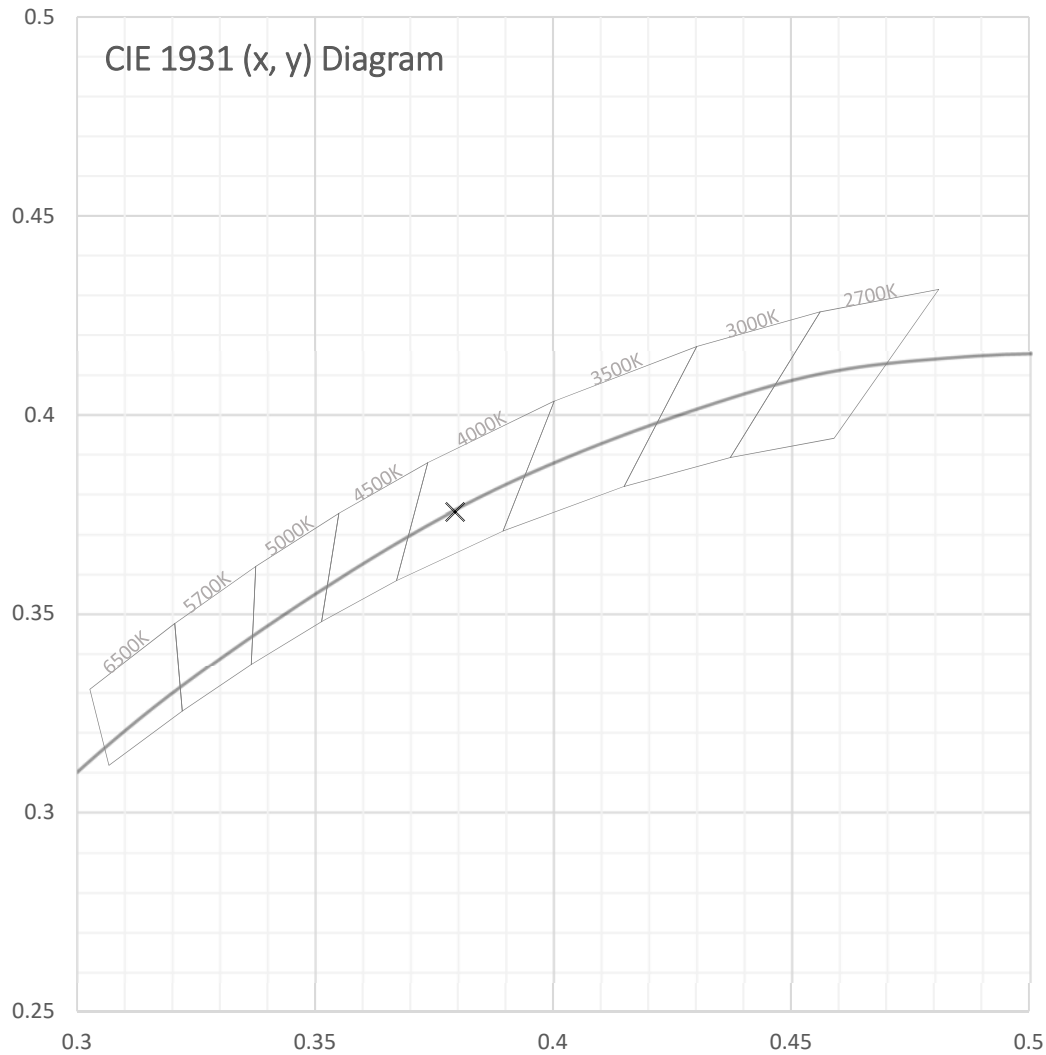
**Test Report Number: LLIA000930-006B**

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





**Test Report Number: LLIA000930-006B**

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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	12.25 W
Total Luminous Flux	3934.4 Lm
Chromaticity CIE 1931 (x, y)	(0.3794, 0.3756)
Chromaticity CIE 1976 (u', v')	(0.2249, 0.5009)
Correlated Color Temperature (CCT)	4019 K
Color Rendering Index (Ra)	84
R1	83
R2	91
R3	95
R4	83
R5	83
R6	86
R7	87
R8	68
R9	18
R10	77
R11	81
R12	62
R13	85
R14	98
TM-30: Rf	83
TM-30: Rg	95
Distance from Planckian Locus (Duv)	-0.0003
Scotopic/Photopic Ratio *	1.714

**Electrical Data**

Voltage	120.0 Vac
Current	0.2343 A
Power	27.96 W
Frequency	59.97 Hz
Power Factor	0.994
Current THD	5.4 %



**Test Report Number: LLIA000930-006B**

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

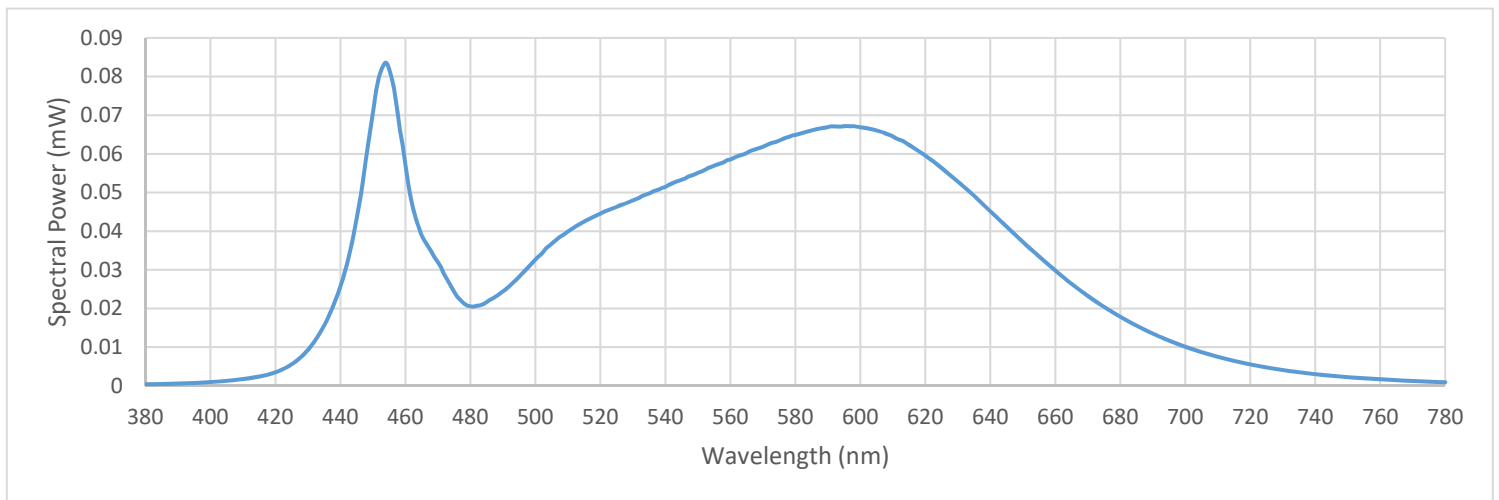
Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted plastic enclosure.

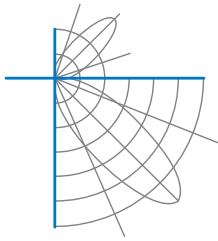
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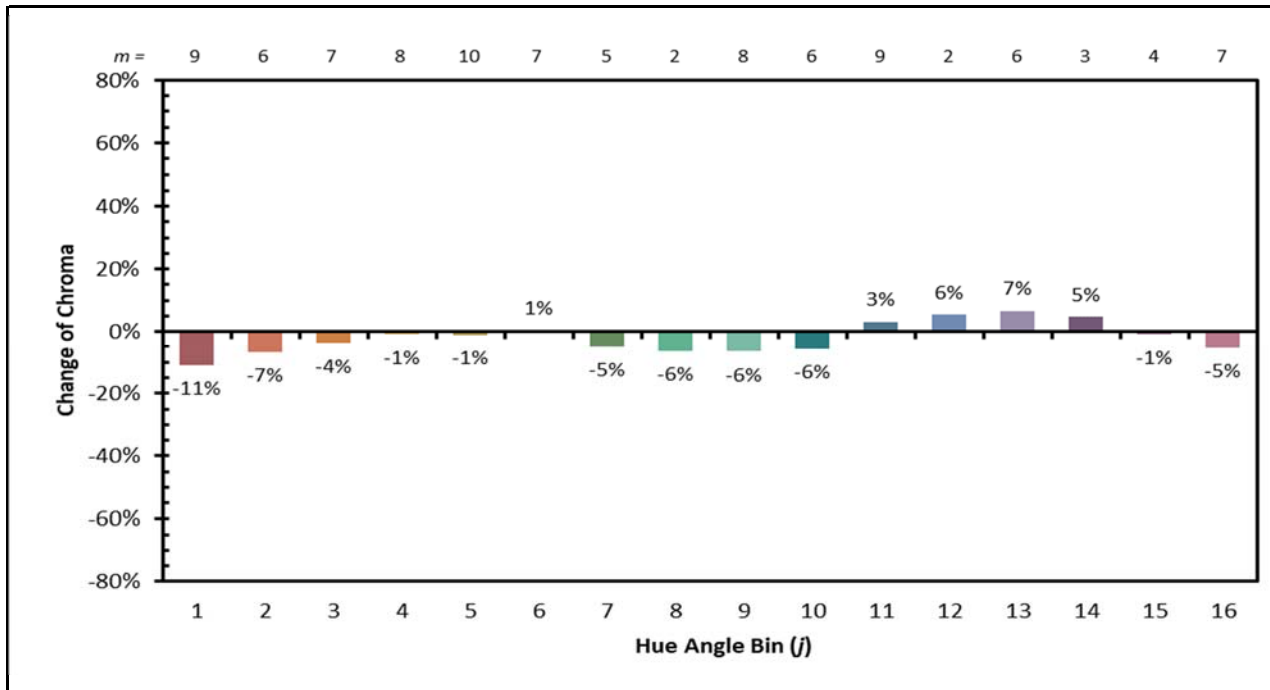
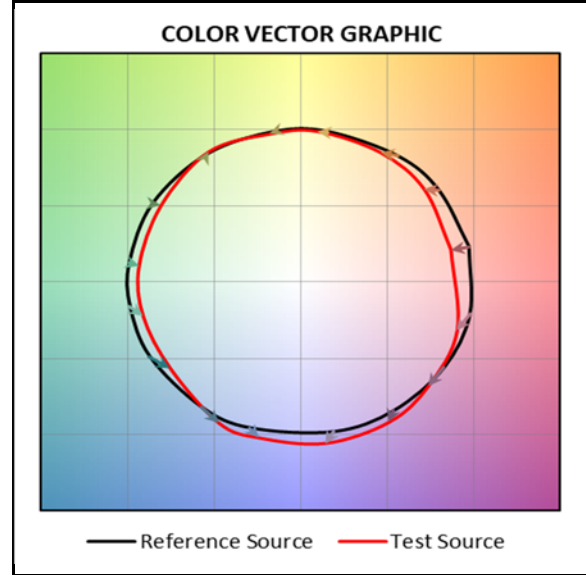
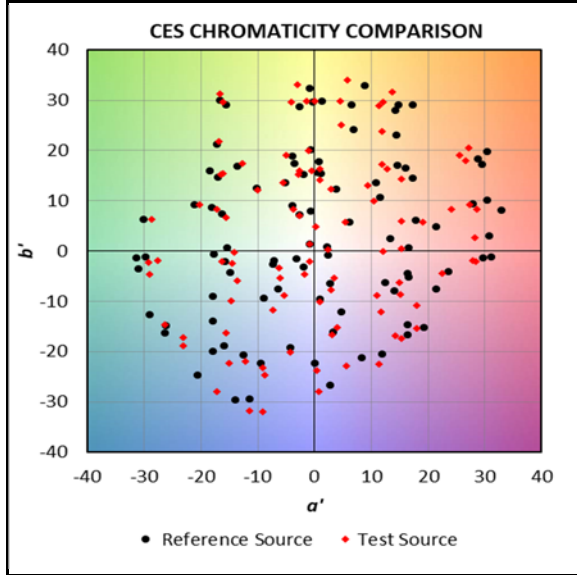
**Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)**

380	0.000404	480	0.020560	580	0.064892	680	0.017834
385	0.000437	485	0.021659	585	0.066103	685	0.015559
390	0.000558	490	0.024428	590	0.066921	690	0.013475
395	0.000711	495	0.028211	595	0.067171	695	0.011666
400	0.000968	500	0.032648	600	0.066913	700	0.010108
405	0.001293	505	0.036726	605	0.066027	705	0.008701
410	0.001725	510	0.039933	610	0.064511	710	0.007467
415	0.002355	515	0.042488	615	0.062303	715	0.006444
420	0.003488	520	0.044527	620	0.059565	720	0.005543
425	0.005533	525	0.046264	625	0.056392	725	0.004750
430	0.009314	530	0.047989	630	0.052871	730	0.004086
435	0.015623	535	0.049750	635	0.049191	735	0.003504
440	0.025747	540	0.051453	640	0.045130	740	0.003001
445	0.043300	545	0.053327	645	0.041200	745	0.002581
450	0.070595	550	0.055089	650	0.037254	750	0.002221
455	0.081964	555	0.056969	655	0.033393	755	0.001918
460	0.057243	560	0.058541	660	0.029837	760	0.001664
465	0.038899	565	0.060208	665	0.026381	765	0.001426
470	0.031993	570	0.061860	670	0.023238	770	0.001232
475	0.024244	575	0.063438	675	0.020438	775	0.001065
						780	0.000917





IES TM-30 Summary





**Test Report Number: LLIA000930-006B**

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

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted 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:** 24.2 °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

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