



## Report of Test

LLIA001753-001A

Indoor Distribution Photometry Test Report

Catalog Number: C-10725 Loop Sconce Single

Wall mounted, white painted steel mounting plate/reflector, formed gold anodized aluminum housing.

Formed aluminum LED board mounting bracket, frosted glass enclosure with diffuse white interior.

Twelve white LEDs, two Boyd Lighting 500-036B LED boards with six LEDs each.

One ERP ESS010W-0350-24 LED driver



Prepared For:

Boyd Lighting

1455 Vapor Trail

Colorado Springs, CO 80916, USA

### Performance Summary

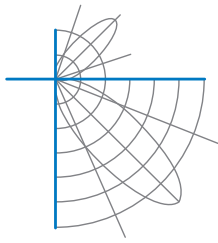
Input Voltage	120.0 Vac	Luminous Flux	302.5 Lumens
Input Current	0.0645 A	Total Efficacy	40.7 Lm/W
Input Power	7.43 W	Downward Flux	161.9 Lumens
Frequency	60.00 Hz	Downward Flux	53.5 % of Total
Power Factor	0.959		
Current THD	15.5 %		

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

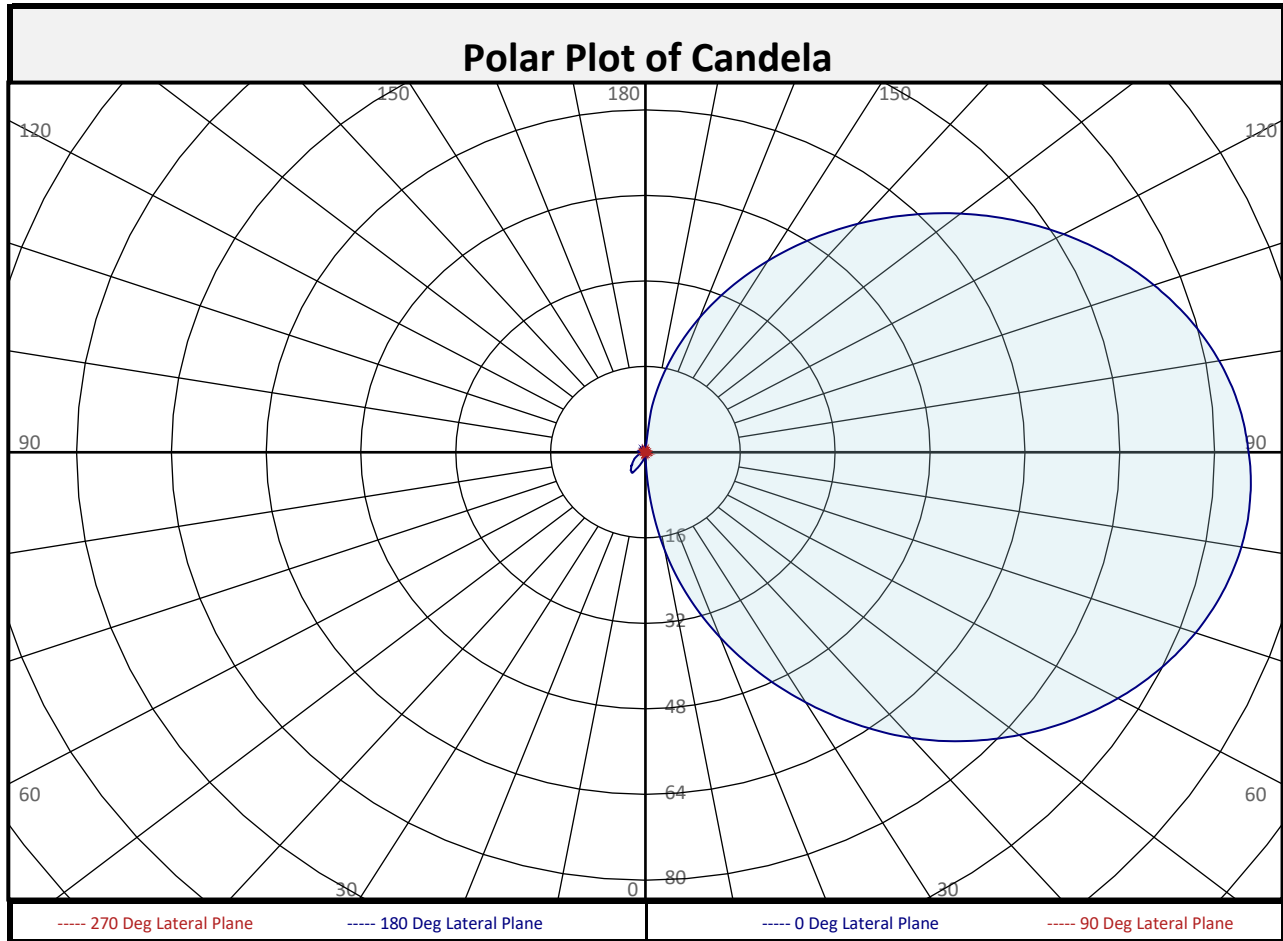
Test date: 05/13/2022

Report date: 05/16/2022

Signed: \_\_\_\_\_

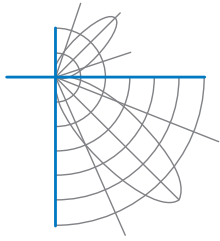


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**Zonal Flux Summary**

Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	0.3	0.1%	90-100	32.9	10.9%	0-20	3.0	1.0%
10-20	2.6	0.9%	100-110	30.2	10.0%	0-30	9.9	3.3%
20-30	6.9	2.3%	110-120	25.9	8.6%	0-40	22.6	7.5%
30-40	12.7	4.2%	120-130	20.5	6.8%	0-60	66.2	21.9%
40-50	18.9	6.2%	130-140	14.8	4.9%	0-80	128.1	42.4%
50-60	24.7	8.2%	140-150	9.4	3.1%	10-90	161.5	53.4%
60-70	29.4	9.7%	150-160	4.9	1.6%	20-50	38.5	12.7%
70-80	32.5	10.7%	160-170	1.7	0.6%	40-90	139.3	46.1%
80-90	33.7	11.1%	170-180	0.2	0.1%	60-90	95.7	31.6%
0-90	161.9	53.5%	90-180	140.6	46.5%	0-180	302.5	100.0%



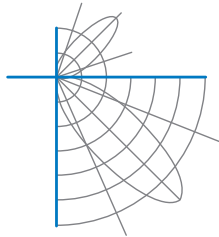
## Report of Test

### LLIA001753-001A

Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles									
	0	22.5	45	67.5	90	112.5	135	157.5	180	
0	0	0	0	0	0	0	0	0	0	0
2.5	3	3	2	1	0	0	0	0	0	0
5	8	7	5	2	0	0	0	0	0	0
7.5	13	12	9	4	0	0	0	1	1	1
10	18	17	12	5	0	0	1	1	1	1
12.5	23	21	16	7	0	0	1	1	1	1
15	28	26	19	9	0	0	1	1	2	2
17.5	32	30	22	11	0	0	1	2	2	2
20	37	34	25	13	0	1	1	2	2	2
22.5	41	38	28	14	0	1	2	2	3	3
25	46	42	31	16	0	1	2	3	3	3
27.5	50	46	34	17	0	1	2	3	4	4
30	54	49	37	19	0	1	2	4	4	4
32.5	58	53	40	20	0	1	2	4	4	4
35	62	57	42	21	0	1	3	4	4	4
37.5	66	60	45	23	0	1	3	4	4	4
40	70	64	47	24	0	1	3	4	4	4
42.5	73	67	49	25	0	1	3	3	3	3
45	76	70	52	26	0	1	3	3	3	3
47.5	79	73	54	27	0	1	3	3	3	3
50	82	75	56	28	0	1	3	3	3	3
52.5	85	78	58	29	0	1	2	3	2	2
55	88	80	59	30	0	1	2	2	2	2
57.5	90	82	61	30	0	1	2	2	2	2
60	92	84	62	31	0	1	2	2	2	2
62.5	94	86	64	32	0	1	2	2	2	2
65	96	88	65	32	0	1	2	1	1	1
67.5	97	89	66	32	0	1	1	1	1	1
70	99	90	66	33	0	1	1	1	1	1
72.5	100	91	67	33	0	1	1	1	1	1
75	101	92	67	33	0	1	1	1	1	1
77.5	102	93	68	33	0	1	1	1	1	1
80	102	93	68	33	0	1	1	0	1	1
82.5	102	94	68	33	0	1	1	0	0	0
85	102	94	68	33	0	1	0	0	0	0
87.5	102	93	68	33	0	1	0	0	0	0
90	102	93	67	33	0	1	0	0	0	0

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.



## Report of Test

### LLIA001753-001A

Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles									
	0	22.5	45	67.5	90	112.5	135	157.5	180	
90	102	93	67	33	0	1	0	0	0	0
92.5	101	93	67	32	0	0	0	0	0	0
95	100	92	66	32	0	0	0	0	0	0
97.5	99	91	66	31	0	0	0	0	0	0
100	98	90	65	31	0	0	0	0	0	0
102.5	97	88	64	31	0	0	0	0	0	0
105	95	87	63	30	0	1	1	0	0	0
107.5	93	85	61	29	0	1	1	0	0	0
110	91	83	60	29	0	1	1	0	1	1
112.5	89	81	59	28	0	1	1	0	1	1
115	87	79	57	27	0	1	1	1	1	1
117.5	84	77	55	27	0	1	1	1	1	1
120	81	74	54	26	0	1	1	1	1	1
122.5	79	72	52	25	0	1	1	1	1	1
125	76	69	50	24	0	1	1	1	1	1
127.5	73	66	48	23	0	1	1	1	1	1
130	69	63	46	22	0	1	1	1	1	1
132.5	66	60	44	21	0	0	1	1	1	1
135	63	57	42	20	0	0	1	1	1	1
137.5	59	54	39	19	0	0	1	1	1	1
140	56	51	37	18	0	0	1	1	1	1
142.5	52	48	35	17	0	0	1	1	1	1
145	48	44	32	16	0	0	1	1	1	1
147.5	45	41	30	15	0	0	1	1	1	1
150	41	38	28	14	0	0	1	1	1	1
152.5	38	34	25	12	0	0	0	0	0	0
155	34	31	23	11	0	0	0	0	0	0
157.5	30	28	20	10	0	0	0	0	0	0
160	27	24	18	9	0	0	0	0	0	0
162.5	23	21	16	7	0	0	0	0	0	0
165	20	18	13	6	0	0	0	0	0	0
167.5	16	15	11	5	0	0	0	0	0	0
170	12	11	8	3	0	0	0	0	0	0
172.5	9	8	5	2	0	0	0	0	0	0
175	1	1	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.



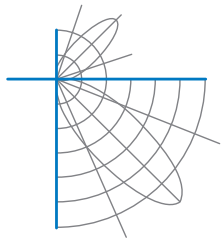
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Coefficients of Utilization/Room Utilization - Zonal Cavity Method																						
Effective Floor Cavity Reflectance 0.20																						
RC	80					70					50				30				10			0
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10	0
RCR																						
0	108	108	108	108		100	100	100	100		85	85	85		72	72	72		59	59	59	54
1	93	86	80	74		85	79	74	69		66	62	58		54	51	48		43	41	39	33
2	82	72	63	56		75	66	58	52		55	49	44		44	40	36		35	31	28	23
3	74	61	52	44		67	56	48	41		46	40	34		37	32	28		29	25	22	17
4	66	53	43	36		60	49	40	33		40	33	27		32	27	22		25	21	17	13
5	60	46	37	29		55	42	34	27		35	28	23		28	23	18		22	17	14	10
6	55	41	31	25		50	38	29	23		31	24	19		25	19	15		19	15	11	8
7	51	37	27	21		46	34	25	19		28	21	16		22	17	13		17	13	10	7
8	47	33	24	18		43	30	22	17		25	18	14		20	15	11		16	11	8	6
9	44	30	21	16		40	27	20	14		23	16	12		18	13	9		14	10	7	5
10	41	27	19	14		37	25	18	13		21	15	10		17	12	8		13	9	6	4

For absolute test reports, RUs are expressed as a percentage of total lumen output. For relative test reports, CUs are expressed as a percentage of total lamp 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.

Average Luminance (cd/m <sup>2</sup> )			
	0 deg Plane	45 deg Plane	90 deg Plane
0	0	0	0
45	3200	2778	0
55	3422	3043	0
65	3614	3263	0
75	3786	3465	0
85	3945	3661	0



## Report of Test

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#### UGR Table - Corrected

##### Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

##### Room Size

##### UGR Viewed Crosswise

##### UGR Viewed Endwise

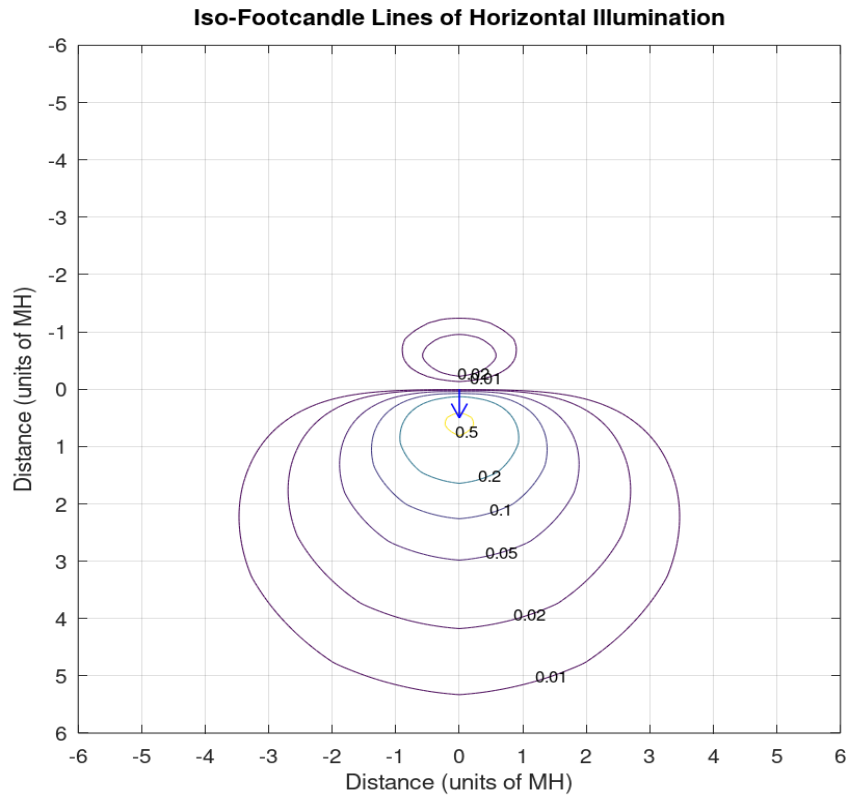
X=2H	Y=2H	21.2	22.3	22.1	23.2	24.4	6.6	7.6	7.4	8.6	9.8
	3H	25.3	26.3	26.2	27.2	28.4	7.8	8.8	8.7	9.7	10.9
	4H	27.4	28.4	28.3	29.3	30.5	8.2	9.1	9.1	10.1	11.3
	6H	29.7	30.6	30.6	31.6	32.8	8.4	9.3	9.3	10.3	11.5
	8H	31.0	31.8	31.9	32.8	34.0	8.5	9.3	9.4	10.3	11.5
	12H	32.4	33.2	33.3	34.2	35.4	8.5	9.3	9.4	10.3	11.6
4H	2H	21.2	22.2	22.2	23.2	24.4	11.2	12.2	12.1	13.1	14.4
	3H	25.4	26.3	26.4	27.3	28.5	12.9	13.7	13.8	14.7	15.9
	4H	27.7	28.5	28.6	29.4	30.7	13.5	14.3	14.4	15.2	16.5
	6H	30.1	30.8	31.1	31.8	33.1	13.9	14.6	14.8	15.6	16.8
	8H	31.4	32.1	32.4	33.1	34.3	14.0	14.7	14.9	15.6	16.9
	12H	32.9	33.5	33.8	34.5	35.8	14.0	14.7	15.0	15.7	16.9
8H	4H	27.7	28.4	28.6	29.3	30.6	16.3	17.0	17.3	18.0	19.3
	6H	30.2	30.8	31.2	31.8	33.1	17.1	17.7	18.1	18.7	20.0
	8H	31.6	32.1	32.6	33.1	34.4	17.4	17.9	18.4	18.9	20.2
	12H	33.2	33.6	34.1	34.6	36.0	17.6	18.0	18.5	19.0	20.4
12H	4H	27.7	28.3	28.6	29.3	30.6	17.2	17.8	18.2	18.8	20.1
	6H	30.2	30.7	31.2	31.7	33.0	18.2	18.7	19.2	19.7	21.1
	8H	31.6	32.1	32.6	33.1	34.4	18.6	19.1	19.6	20.1	21.5

Maximum UGR = 36.0

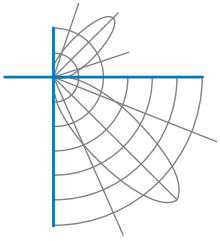


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**Iso-Illuminance Plot**



The isofootcandle values shown in the plot above are based on a mounting height of  $h = 8.0$  feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.



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**Additional Pictures of Test Subject**







## Report of Test

### LLIA001753-001A

Test Distance                    9.5 m  
Ambient 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 IES LM-79-19. Format of reports and angular increments based on IES LM-41-20 and LM-46-20.

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

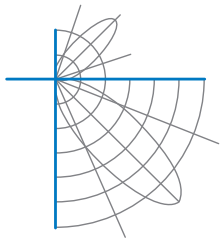
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE C-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

**LLIA001753-001B**

Integrating Sphere Report

Catalog Number: C-10725 Loop Sconce Single

Wall mounted, white painted steel mounting plate/reflector, formed gold anodized aluminum housing.

Formed aluminum LED board mounting bracket, frosted glass enclosure with diffuse white interior.

Twelve white LEDs, two Boyd Lighting 500-036B LED boards with six LEDs each.

One ERP ESS010W-0350-24 LED driver



### Performance Summary

Voltage	120.0 Vac
Current	0.0644 A
Power	7.43 W
Frequency	59.99 Hz
Power Factor	0.962
Current THD	15.2 %
Total Luminous Flux	307.3 lm
Efficacy	41.4 lm/W
Chromaticity (x,y)	(0.4643, 0.4087)
(u',v')	(0.2662, 0.5273)
Duv	-0.0010
CCT	2625 K
CRI (Ra)	92
R9	48
TM-30: Rf	90
TM-30: Rg	97
TM-30: Rcs,h1	-6

Prepared For:

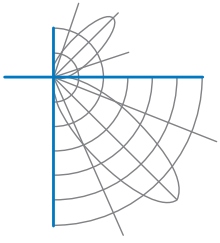
Boyd Lighting

1455 Vapor Trail

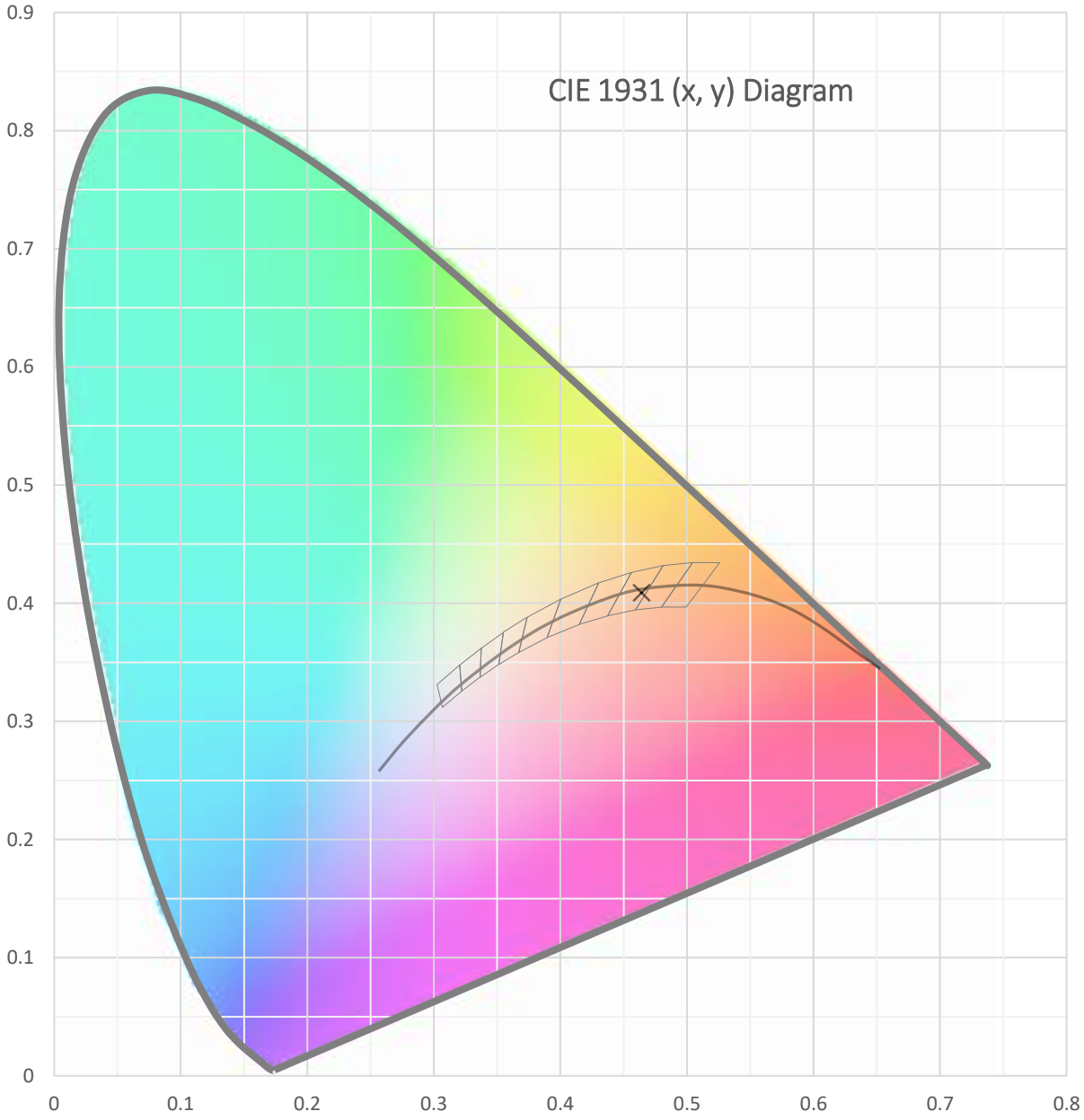
Colorado Springs, CO 80916, USA

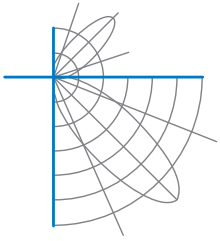
Test date: 05/12/2022

Report date: 05/16/2022

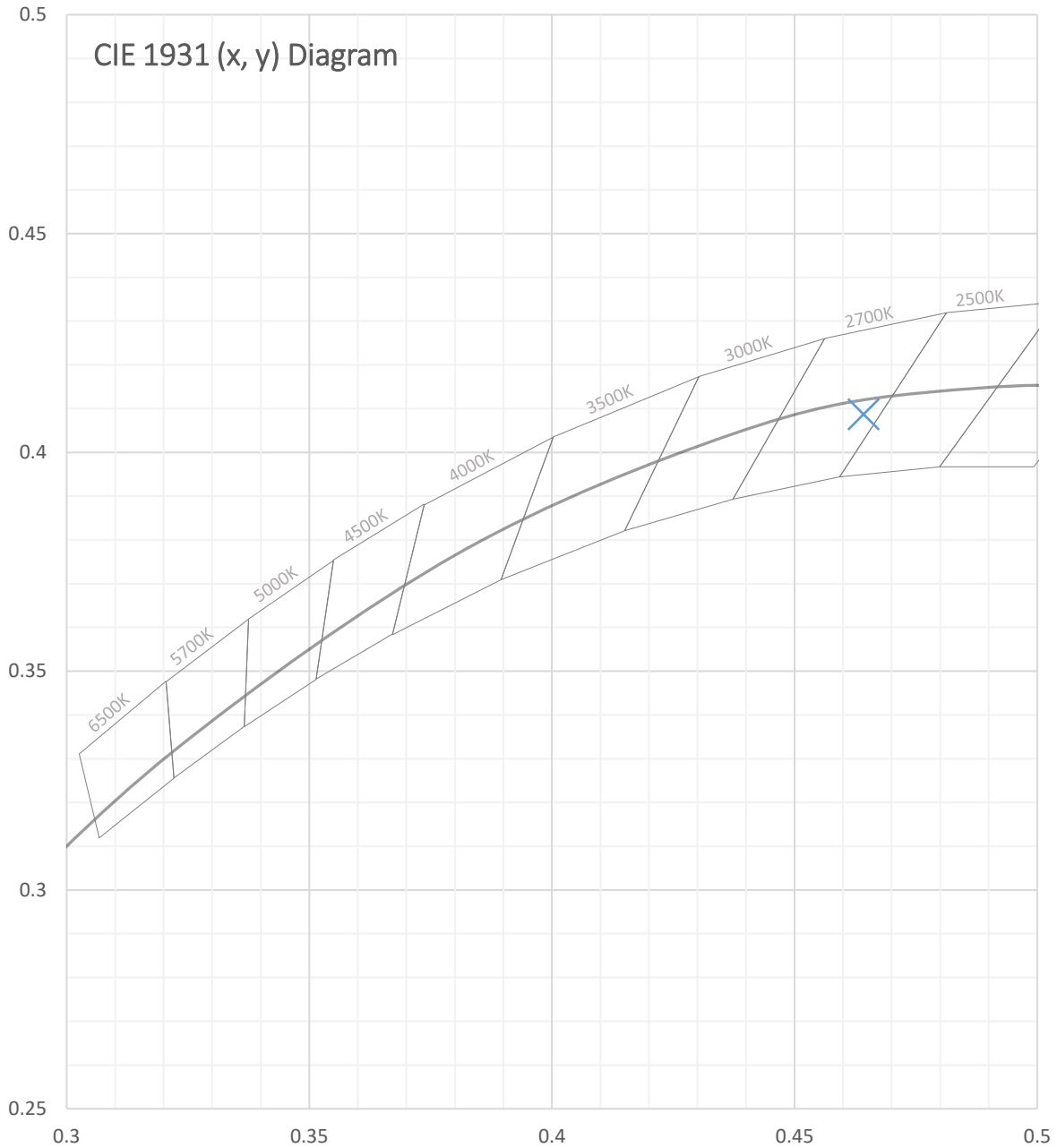


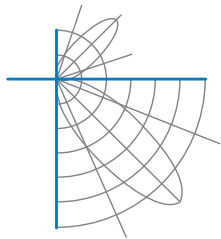
Test Report Number: LLIA001753-001B





Test Report Number: LLIA001753-001B





**Test Report Number: LLIA001753-001B**

Total Radiant Flux	1.050 W
Total Luminous Flux	307.3 Lm
Chromaticity CIE 1931 (x, y)	(0.4643, 0.4087)
Chromaticity CIE 1976 (u', v')	(0.2662, 0.5273)
Correlated Color Temperature (CCT)	2625 K
Color Rendering Index (Ra)	92
R1	95
R2	99
R3	95
R4	95
R5	96
R6	94
R7	87
R8	75
R9	48
R10	100
R11	99
R12	86
R13	98
R14	98
TM-30: Rf	90
TM-30: Rg	97
TM-30: Rcs,h1	-6
Distance from Planckian Locus (Duv)	-0.0010
Scotopic/Photopic Ratio ‡	1.294

**Electrical Data**

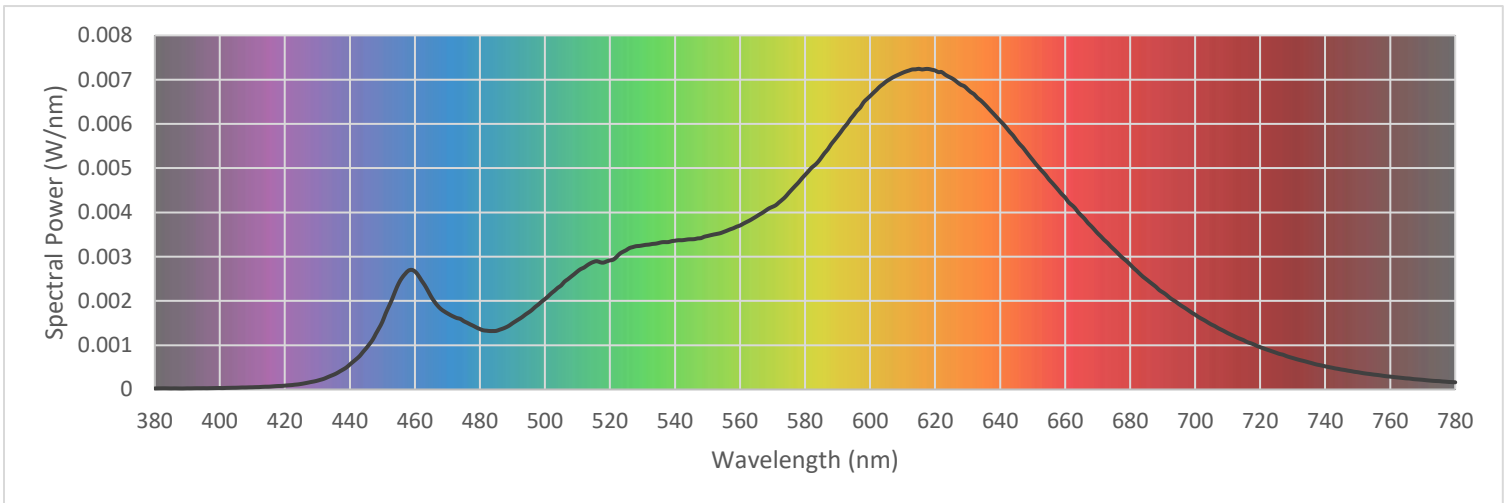
Voltage	120.0 Vac
Current	0.0644 A
Power	7.43 W
Frequency	59.99 Hz
Power Factor	0.962
Current THD	15.2 %



Test Report Number: LLIA001753-001B

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

380	0.000023	480	0.001365	580	0.004846	680	0.002823
385	0.000024	485	0.001324	585	0.005238	685	0.002489
390	0.000026	490	0.001495	590	0.005721	690	0.002197
395	0.000028	495	0.001742	595	0.006200	695	0.001930
400	0.000033	500	0.002042	600	0.006627	700	0.001689
405	0.000039	505	0.002350	605	0.006960	705	0.001467
410	0.000049	510	0.002667	610	0.007154	710	0.001275
415	0.000063	515	0.002883	615	0.007244	715	0.001110
420	0.000087	520	0.002917	620	0.007207	720	0.000956
425	0.000125	525	0.003148	625	0.007037	725	0.000828
430	0.000199	530	0.003254	630	0.006783	730	0.000711
435	0.000334	535	0.003309	635	0.006462	735	0.000611
440	0.000565	540	0.003360	640	0.006069	740	0.000523
445	0.000930	545	0.003394	645	0.005636	745	0.000451
450	0.001530	550	0.003467	650	0.005187	750	0.000390
455	0.002395	555	0.003560	655	0.004748	755	0.000335
460	0.002667	560	0.003704	660	0.004340	760	0.000290
465	0.002096	565	0.003907	665	0.003930	765	0.000250
470	0.001720	570	0.004126	670	0.003529	770	0.000218
475	0.001544	575	0.004441	675	0.003166	775	0.000189
						780	0.000161



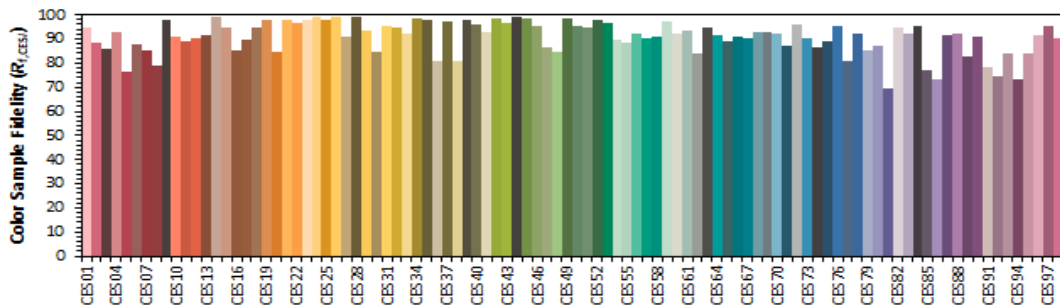
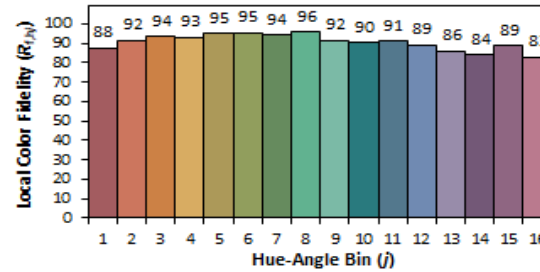
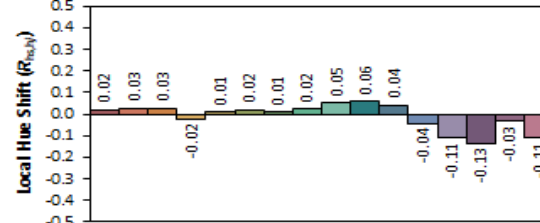
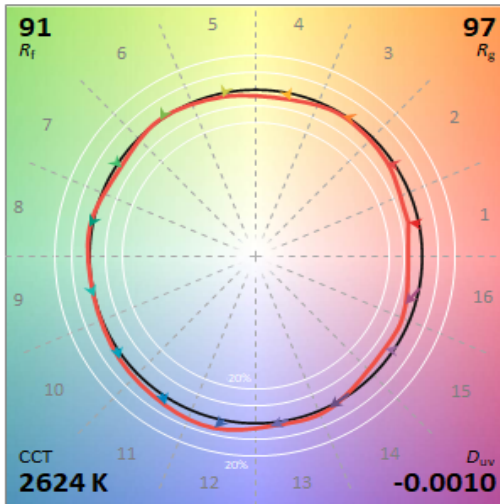
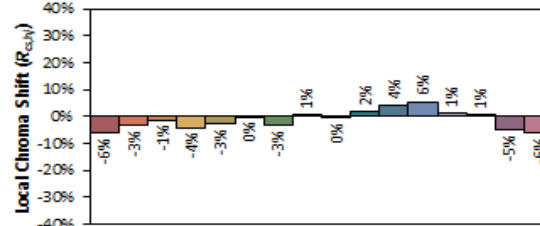
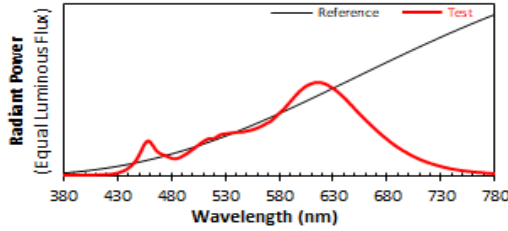


Test Report Number: LLIA001753-001B

IES TM-30 Details

Source: LLIA001753-001A  
Date: 5/16/2022

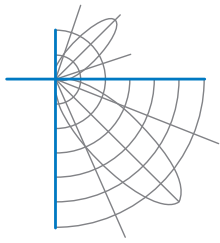
Manufacturer: Boyd Lighting  
Model: C-10725 Loop Sconce Single



Notes:

$x$  0.4643  
 $y$  0.4087  
 $u'$  0.2662  
 $v'$  0.5273

CIE 13.3-1995 (CRI)  
 $R_a$  92  
 $R_g$  48



## Test Report Number: LLIA001753-001B

**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:** 25.4 °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.