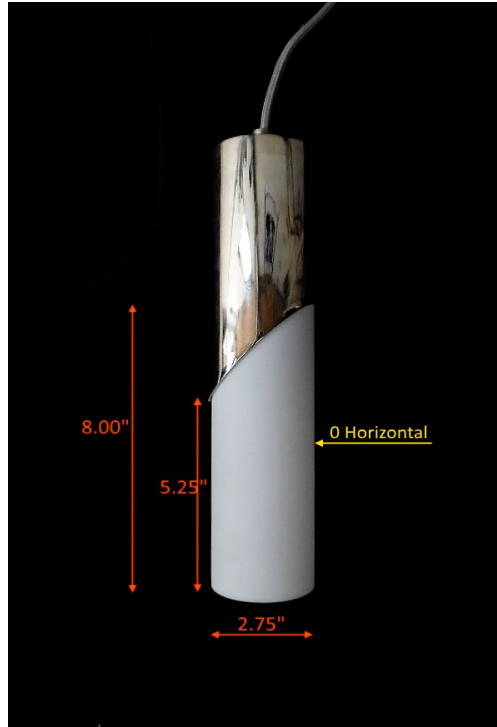




# Report of Test

## LLIA001067-013A

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)



### Performance Summary

Total Light Output	177 lm
Luminaire Power	7.07 W
Luminous Efficacy	25.0 lm/W

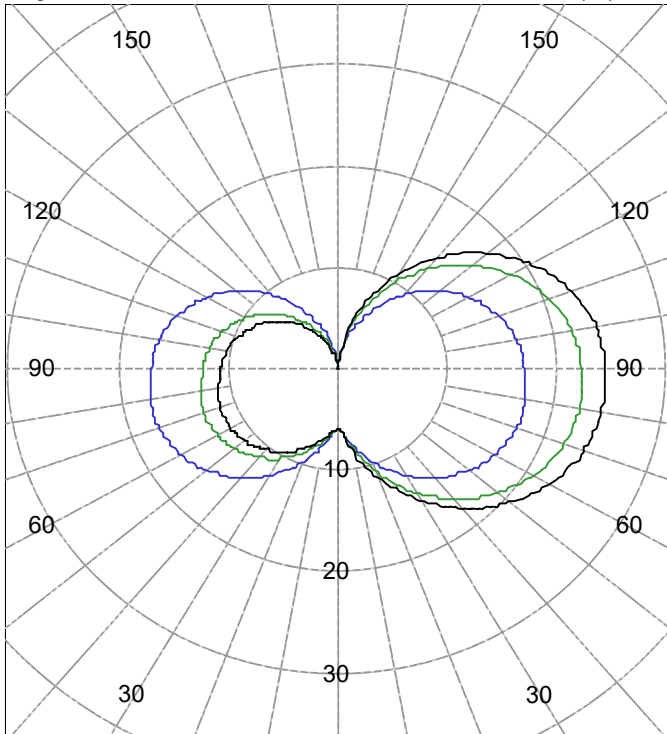
**PREPARED FOR : Oxygen Lighting, 201 Railhead Road, Fort Worth, TX 76106, USA**



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

Legend: C0/C180-Black, C45/C225-Green, C90/C270-Blue (cd)



C180-C270 (Symmetric about C0/C180) C0-C90

**AVERAGE LUMINANCE (cd/m<sup>2</sup>)**

Gamma	C0	C45	C90
45.0	1505	1400	1160
55.0	1555	1439	1166
65.0	1597	1473	1172
75.0	1639	1503	1180
85.0	1680	1533	1186

**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	5.9	5.9	5.9	5.9	5.9	
5.0	6.6	6.7	6.6	6.6	6.6	1
10.0	8.3	8.3	8.1	7.9	7.6	
15.0	10.0	9.9	9.6	9.2	8.8	3
20.0	11.7	11.5	11.1	10.5	9.9	
25.0	13.3	13.1	12.6	11.9	11.0	5
30.0	14.9	14.7	14.0	13.1	12.1	
35.0	16.4	16.2	15.4	14.3	13.1	8
40.0	17.9	17.6	16.7	15.4	14.0	
45.0	19.2	18.9	17.9	16.5	14.8	12
50.0	20.4	20.1	19.0	17.4	15.5	
55.0	21.5	21.1	19.9	18.1	16.2	15
60.0	22.4	22.0	20.7	18.8	16.6	
65.0	23.2	22.7	21.4	19.3	17.0	17
70.0	23.8	23.3	21.8	19.7	17.3	
75.0	24.1	23.7	22.1	19.9	17.4	19
80.0	24.3	23.9	22.3	20.0	17.3	
85.0	24.4	23.8	22.2	19.9	17.2	19
90.0	24.2	23.7	22.1	19.7	17.0	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	8	N / A	4.7
0-40	17	N / A	9.3
0-60	43	N / A	24.1
0-90	97	N / A	54.8
40-90	81	N / A	45.5
60-90	54	N / A	30.7
90-180	80	N / A	45.2
0-180	177	N / A	100.0

Total Light Output = 177 lm

Spacing Criterion:	0-180	3.4
Spacing Criterion:	90-270	2.4

Signed:

Authorized Signatory

Date of test 11-Jan-2019  
Date of report 15-Jan-2019



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	5.9	5.9	5.9	5.9	5.9
2.5	5.9	5.9	5.9	6.0	6.1
5.0	6.6	6.7	6.6	6.6	6.6
7.5	7.5	7.5	7.4	7.2	7.1
10.0	8.3	8.3	8.1	7.9	7.6
12.5	9.2	9.1	8.9	8.5	8.2
15.0	10.0	9.9	9.6	9.2	8.8
17.5	10.8	10.7	10.3	9.9	9.3
20.0	11.7	11.5	11.1	10.5	9.9
22.5	12.5	12.3	11.8	11.2	10.5
25.0	13.3	13.1	12.6	11.9	11.0
27.5	14.1	13.9	13.3	12.5	11.5
30.0	14.9	14.7	14.0	13.1	12.1
32.5	15.7	15.4	14.7	13.7	12.6
35.0	16.4	16.2	15.4	14.3	13.1
37.5	17.2	16.9	16.1	14.9	13.5
40.0	17.9	17.6	16.7	15.4	14.0
42.5	18.6	18.2	17.3	15.9	14.4
45.0	19.2	18.9	17.9	16.5	14.8
47.5	19.9	19.5	18.4	16.9	15.2
50.0	20.4	20.1	19.0	17.4	15.5
52.5	21.0	20.6	19.5	17.8	15.9
55.0	21.5	21.1	19.9	18.1	16.2
57.5	22.0	21.6	20.3	18.5	16.4
60.0	22.4	22.0	20.7	18.8	16.6
62.5	22.8	22.4	21.1	19.1	16.8
65.0	23.2	22.7	21.4	19.3	17.0
67.5	23.5	23.0	21.6	19.5	17.1
70.0	23.8	23.3	21.8	19.7	17.3
72.5	24.0	23.5	22.0	19.8	17.3
75.0	24.1	23.7	22.1	19.9	17.4
77.5	24.3	23.8	22.2	20.0	17.4
80.0	24.3	23.9	22.3	20.0	17.3
82.5	24.4	23.9	22.3	20.0	17.3
85.0	24.4	23.8	22.2	19.9	17.2
87.5	24.3	23.8	22.2	19.8	17.1
90.0	24.2	23.7	22.1	19.7	17.0



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with  
cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	24.2	23.7	22.1	19.7	17.0
92.5	24.3	23.7	22.1	19.7	16.9
95.0	24.2	23.6	22.0	19.6	16.8
97.5	24.1	23.5	21.8	19.4	16.7
100.0	23.9	23.3	21.6	19.3	16.5
102.5	23.6	23.0	21.4	19.0	16.3
105.0	23.3	22.8	21.1	18.8	16.1
107.5	23.0	22.4	20.8	18.5	15.8
110.0	22.6	22.0	20.4	18.1	15.5
112.5	22.1	21.5	20.0	17.7	15.2
115.0	21.6	21.1	19.5	17.3	14.8
117.5	21.0	20.5	19.0	16.8	14.4
120.0	20.4	19.9	18.5	16.3	13.9
122.5	19.8	19.3	17.9	15.8	13.4
125.0	19.1	18.6	17.3	15.2	13.0
127.5	18.4	18.0	16.6	14.7	12.5
130.0	17.6	17.2	15.9	14.0	11.9
132.5	16.9	16.4	15.2	13.4	11.4
135.0	16.1	15.6	14.4	12.7	10.8
137.5	15.2	14.8	13.7	12.0	10.2
140.0	14.3	13.9	12.8	11.3	9.6
142.5	13.4	13.0	12.0	10.5	8.9
145.0	12.5	12.1	11.2	9.8	8.3
147.5	11.5	11.2	10.3	9.0	7.6
150.0	10.5	10.2	9.4	8.3	6.9
152.5	9.5	9.3	8.5	7.5	6.3
155.0	8.5	8.3	7.6	6.7	5.6
157.5	7.5	7.3	6.7	5.9	4.9
160.0	6.6	6.4	5.9	5.1	4.3
162.5	5.6	5.5	5.0	4.3	3.6
165.0	4.6	4.4	4.0	3.4	2.8
167.5	2.9	2.8	2.6	2.3	1.9
170.0	1.1	1.1	1.0	0.9	0.9
172.5	0.2	0.2	0.2	0.2	0.2
175.0	0.0	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	0.0



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	5.9	5.9	5.9	5.9	5.9
2.5	6.1	6.1	6.1	6.1	6.1
5.0	6.6	6.5	6.4	6.4	6.3
7.5	7.1	6.9	6.8	6.7	6.6
10.0	7.6	7.4	7.1	7.0	7.0
12.5	8.2	7.8	7.5	7.4	7.3
15.0	8.8	8.3	7.9	7.7	7.6
17.5	9.3	8.8	8.3	8.0	7.9
20.0	9.9	9.2	8.7	8.4	8.3
22.5	10.5	9.7	9.1	8.7	8.6
25.0	11.0	10.1	9.5	9.0	8.9
27.5	11.5	10.6	9.8	9.3	9.2
30.0	12.1	11.0	10.1	9.6	9.4
32.5	12.6	11.4	10.4	9.9	9.7
35.0	13.1	11.8	10.8	10.1	9.9
37.5	13.5	12.2	11.1	10.4	10.2
40.0	14.0	12.5	11.4	10.6	10.4
42.5	14.4	12.8	11.6	10.8	10.5
45.0	14.8	13.1	11.8	11.0	10.7
47.5	15.2	13.4	12.0	11.2	10.9
50.0	15.5	13.7	12.2	11.3	11.0
52.5	15.9	13.9	12.4	11.4	11.1
55.0	16.2	14.1	12.5	11.6	11.2
57.5	16.4	14.3	12.7	11.6	11.3
60.0	16.6	14.5	12.8	11.7	11.4
62.5	16.8	14.6	12.8	11.7	11.4
65.0	17.0	14.7	12.9	11.8	11.4
67.5	17.1	14.8	12.9	11.8	11.4
70.0	17.3	14.9	12.9	11.8	11.4
72.5	17.3	14.9	12.9	11.7	11.3
75.0	17.4	14.9	12.9	11.6	11.3
77.5	17.4	14.8	12.8	11.6	11.2
80.0	17.3	14.7	12.7	11.5	11.1
82.5	17.3	14.7	12.6	11.3	11.0
85.0	17.2	14.5	12.5	11.2	10.8
87.5	17.1	14.4	12.3	11.1	10.7
90.0	17.0	14.3	12.3	11.0	10.6



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	17.0	14.3	12.3	11.0	10.6
92.5	16.9	14.3	12.2	11.0	10.6
95.0	16.8	14.2	12.1	10.9	10.5
97.5	16.7	14.1	12.0	10.8	10.4
100.0	16.5	13.9	11.8	10.6	10.3
102.5	16.3	13.7	11.7	10.5	10.1
105.0	16.1	13.5	11.5	10.3	9.9
107.5	15.8	13.3	11.3	10.1	9.7
110.0	15.5	13.0	11.0	9.9	9.5
112.5	15.2	12.7	10.8	9.7	9.3
115.0	14.8	12.4	10.5	9.4	9.0
117.5	14.4	12.0	10.2	9.1	8.8
120.0	13.9	11.6	9.9	8.8	8.5
122.5	13.4	11.2	9.5	8.5	8.2
125.0	13.0	10.8	9.2	8.2	7.9
127.5	12.5	10.4	8.8	7.8	7.6
130.0	11.9	9.9	8.4	7.5	7.2
132.5	11.4	9.4	8.0	7.1	6.8
135.0	10.8	9.0	7.6	6.7	6.5
137.5	10.2	8.4	7.1	6.3	6.1
140.0	9.6	7.9	6.7	5.9	5.7
142.5	8.9	7.4	6.2	5.5	5.3
145.0	8.3	6.8	5.7	5.1	4.9
147.5	7.6	6.3	5.3	4.7	4.5
150.0	6.9	5.7	4.8	4.3	4.1
152.5	6.3	5.1	4.3	3.8	3.7
155.0	5.6	4.6	3.8	3.4	3.3
157.5	4.9	4.0	3.4	3.0	2.9
160.0	4.3	3.5	2.9	2.5	2.5
162.5	3.6	2.9	2.4	2.2	2.1
165.0	2.8	2.3	2.0	1.7	1.7
167.5	1.9	1.6	1.4	1.3	1.2
170.0	0.9	0.8	0.7	0.6	0.6
172.5	0.2	0.1	0.1	0.1	0.0
175.0	0.0	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	0.0



**Test Number: LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure

Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.

12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board

One ERP ESS010W-0180-42 dimmable LED driver.

120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Coefficients Of Utilization - Zonal Cavity Method**

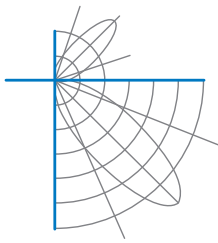
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	93	87	81	75	86	80	75	70	67	63	59	56	52	50	45	43	40	35
2	83	73	64	57	76	67	59	53	56	50	45	46	41	37	36	33	30	25
3	74	62	53	45	68	57	49	42	48	41	35	39	34	29	31	27	23	19
4	67	54	44	37	61	50	41	34	41	34	29	34	28	24	26	22	18	15
5	61	47	38	30	56	43	35	28	36	29	24	29	24	19	23	19	15	12
6	56	42	32	26	51	39	30	24	32	25	20	26	21	16	21	16	13	10
7	52	37	28	22	47	34	26	20	29	22	17	24	18	14	19	14	11	8
8	48	34	25	19	44	31	23	18	26	19	15	21	16	12	17	13	9	7
9	44	31	22	17	40	28	21	15	24	17	13	19	14	11	15	11	8	6
10	41	28	20	15	38	26	18	13	22	16	11	18	13	9	14	10	7	5

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.

**Circle of Light Plot**

Height(ft)	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	0.2	17.26	17.44
8.0	0.1	23.01	23.25
10.0	0.1	28.76	29.07
12.0	0.0	34.52	34.88
14.0	0.0	40.27	40.70
16.0	0.0	46.02	46.51



**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with  
cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)







**Test Report No. LLIA001067-013A**

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0599A, 7.07W, 0.985PF, 12.6%THD(i)

**Test Distance** 9.5 m  
**Test Temperature** 24.9 °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

**LLIA001067-013B**

Integrating Sphere Report

Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure

Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.

12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board

One ERP ESS010W-0180-42 dimmable LED driver.

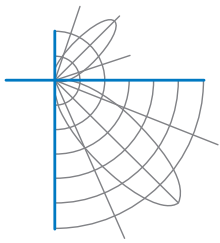


### Performance Summary

Voltage	120.0 Vac
Current	0.0599 A
Power	7.08 W
Frequency	59.99 Hz
Power Factor	0.986
Current THD	12.6 %
Total Luminous Flux	175.9 lm
Efficacy	24.8 lm/W
Chromaticity (x,y)	(0.4429, 0.4011)
(u',v')	(0.2558, 0.5211)
Duv	-0.0019
CCT	2877 K
CRI (Ra)	97
R9	84
TM-30: Rf	93
TM-30: Rg	100

Prepared For:  
Oxygen Lighting  
201 Railhead Road  
Fort Worth, TX 76106, USA

Test date: 01/11/2019  
Report date: 01/14/2019



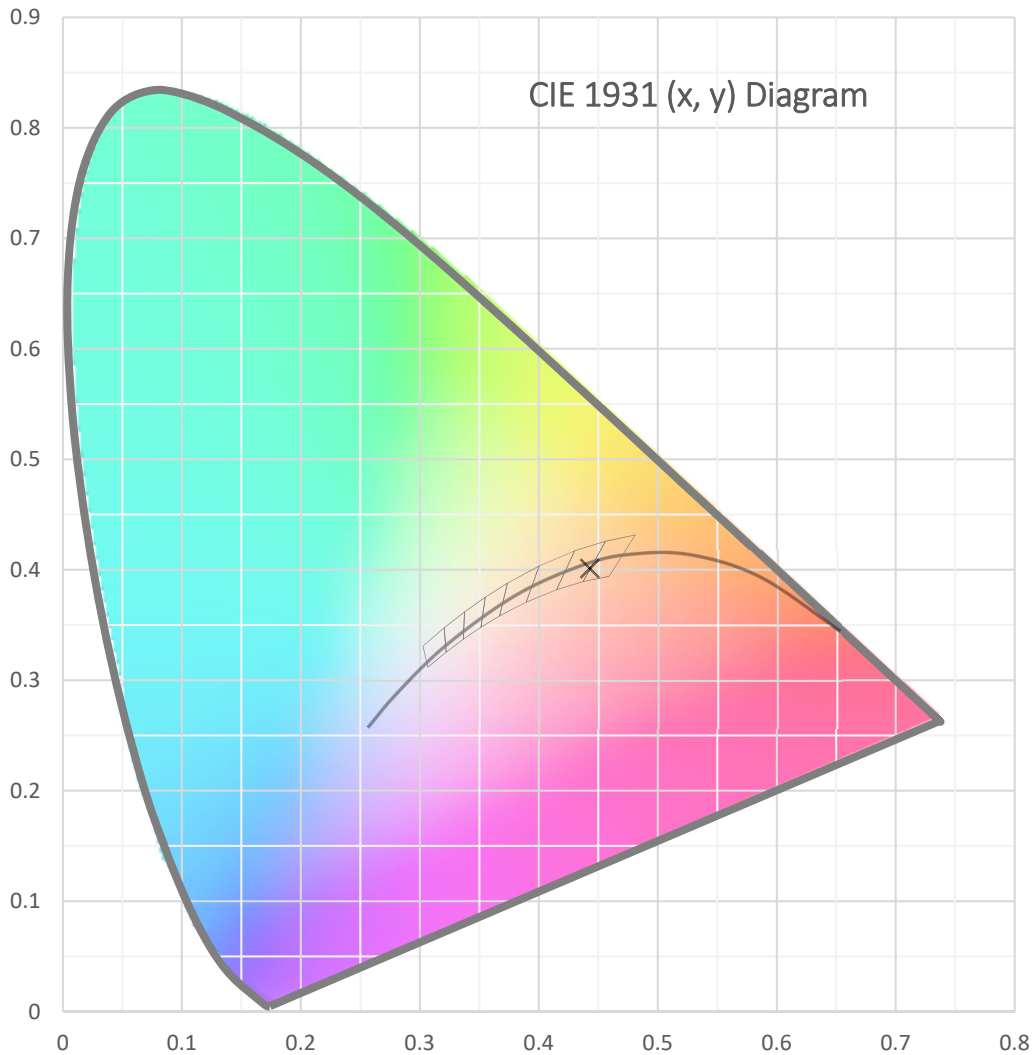
**Test Report Number: LLIA001067-013B**

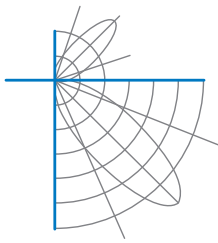
Catalog Number: 3-668-220 Ellipse Pendant with Acrylic Enclosure

Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.

12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board

One ERP ESS010W-0180-42 dimmable LED driver.





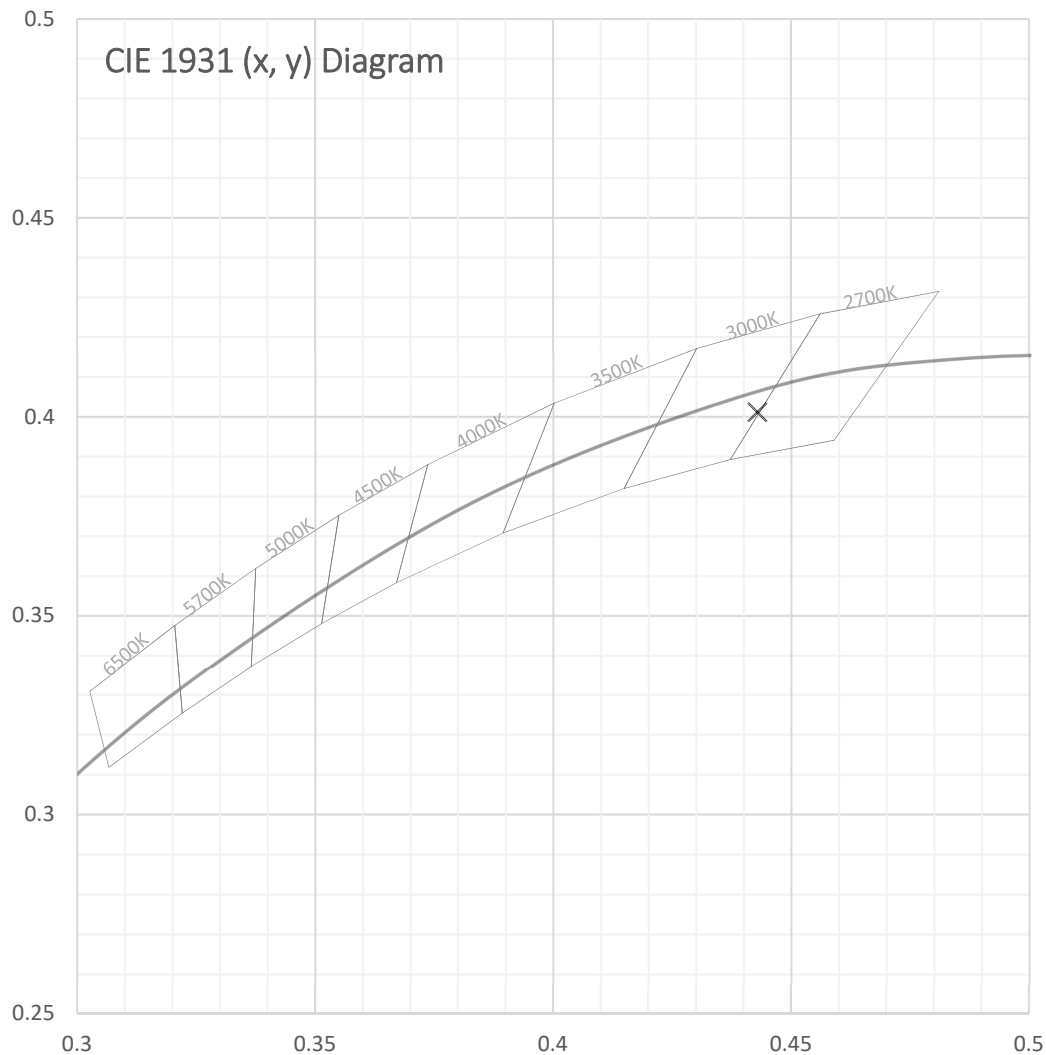
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<b>Spectral Data</b>	Total Radiant Flux	0.664 W
	Total Luminous Flux	175.9 Lm
	Chromaticity CIE 1931 (x, y)	(0.4429, 0.4011)
	Chromaticity CIE 1976 (u', v')	(0.2558, 0.5211)
	Correlated Color Temperature (CCT)	2877 K
	Color Rendering Index (Ra)	97
	R1	99
	R2	99
	R3	97
	R4	97
	R5	98
	R6	97
	R7	96
	R8	93
	R9	84
	R10	96
	R11	97
	R12	85
	R13	99
	R14	97
	TM-30: Rf	93
	TM-30: Rg	100
	Distance from Planckian Locus (Duv)	-0.0019
	Scotopic/Photopic Ratio *	1.403

**Electrical Data**

Voltage	120.0 Vac
Current	0.0599 A
Power	7.08 W
Frequency	59.99 Hz
Power Factor	0.986
Current THD	12.6 %



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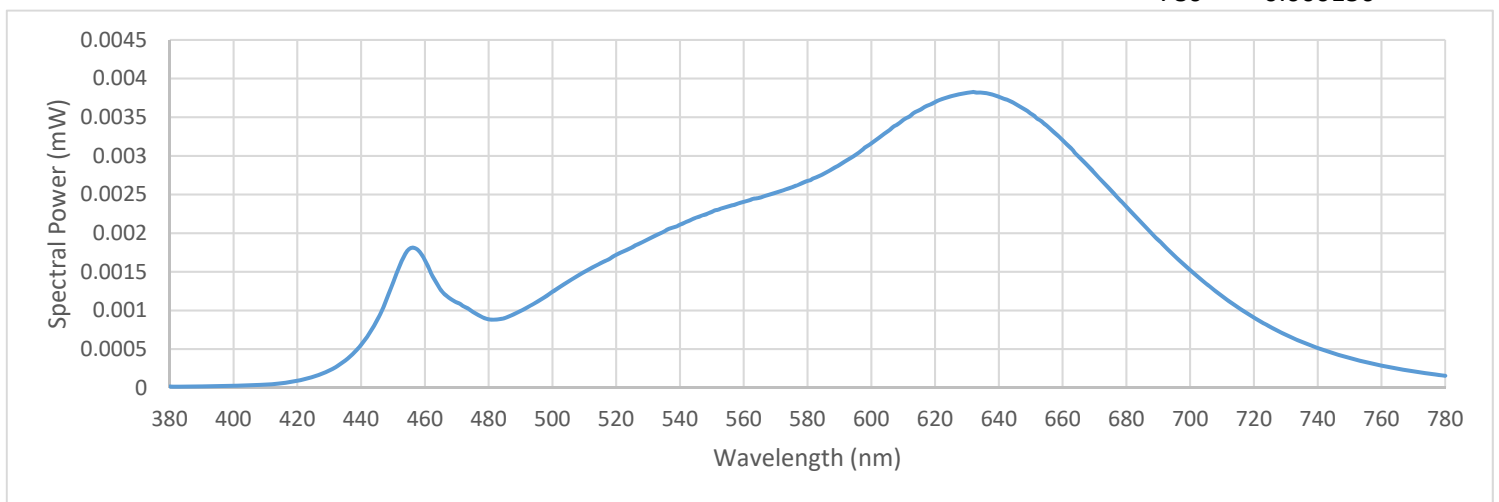
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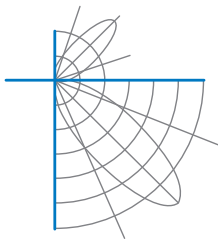
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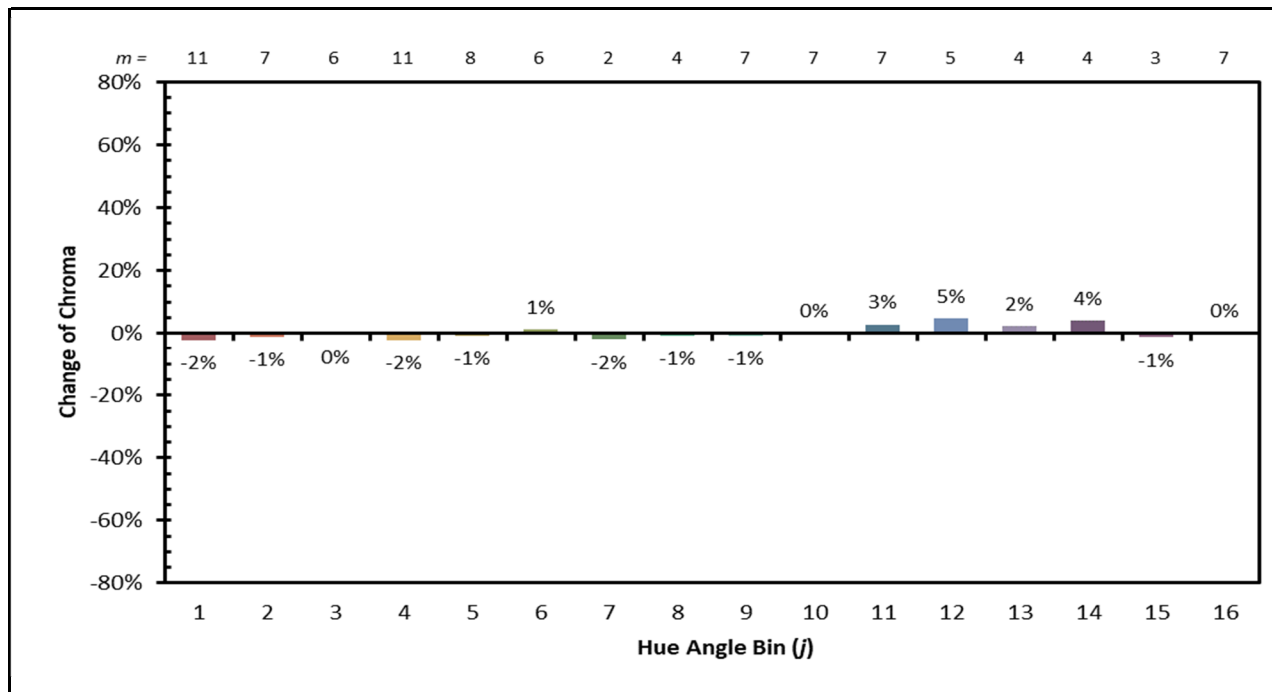
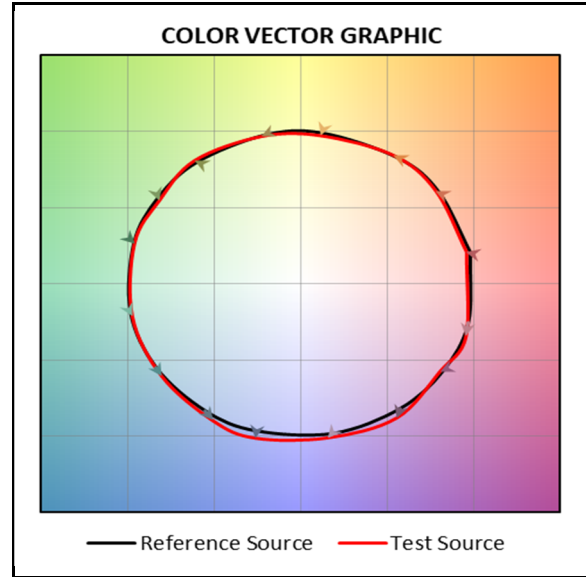
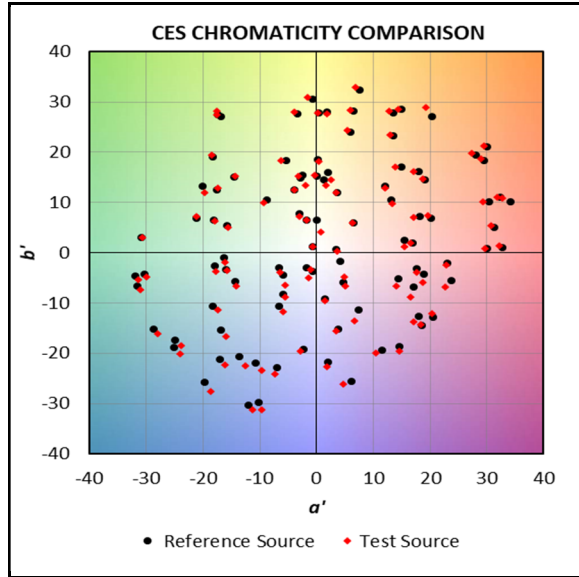
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000015	480	0.000886	580	0.002676	680	0.002338
385	0.000015	485	0.000901	585	0.002767	685	0.002128
390	0.000018	490	0.000995	590	0.002882	690	0.001912
395	0.000021	495	0.001105	595	0.003011	695	0.001707
400	0.000026	500	0.001241	600	0.003159	700	0.001527
405	0.000032	505	0.001372	605	0.003312	705	0.001347
410	0.000041	510	0.001497	610	0.003464	710	0.001184
415	0.000058	515	0.001609	615	0.003589	715	0.001041
420	0.000091	520	0.001721	620	0.003696	720	0.000908
425	0.000143	525	0.001816	625	0.003770	725	0.000789
430	0.000224	530	0.001924	630	0.003816	730	0.000685
435	0.000352	535	0.002020	635	0.003816	735	0.000594
440	0.000554	540	0.002111	640	0.003766	740	0.000513
445	0.000873	545	0.002201	645	0.003677	745	0.000445
450	0.001355	550	0.002275	650	0.003547	750	0.000385
455	0.001793	555	0.002343	655	0.003392	755	0.000333
460	0.001653	560	0.002405	660	0.003206	760	0.000288
465	0.001263	565	0.002459	665	0.002991	765	0.000247
470	0.001103	570	0.002525	670	0.002777	770	0.000212
475	0.000983	575	0.002592	675	0.002563	775	0.000182
						780	0.000156





IES TM-30 Summary





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cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white plastic enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable 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:** 24.8 °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.

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.