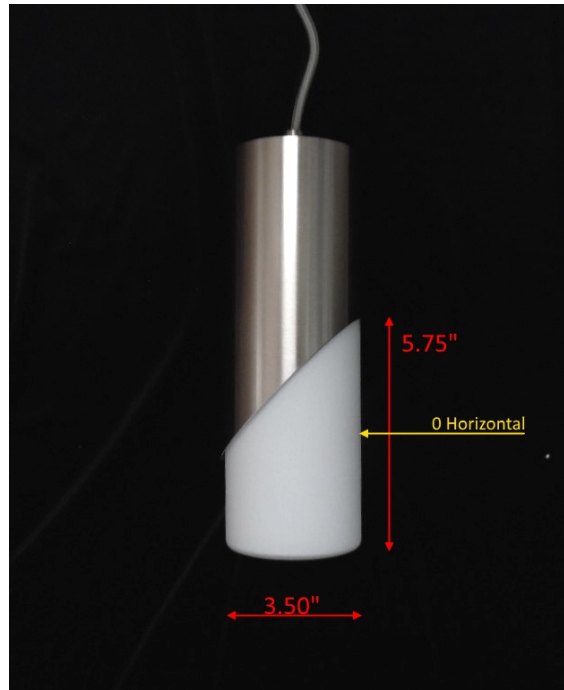




# Report of Test

## LLIA001067-014A

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)



### Performance Summary

Total Light Output	221 lm
Luminaire Power	7.11 W
Luminous Efficacy	31.1 lm/W

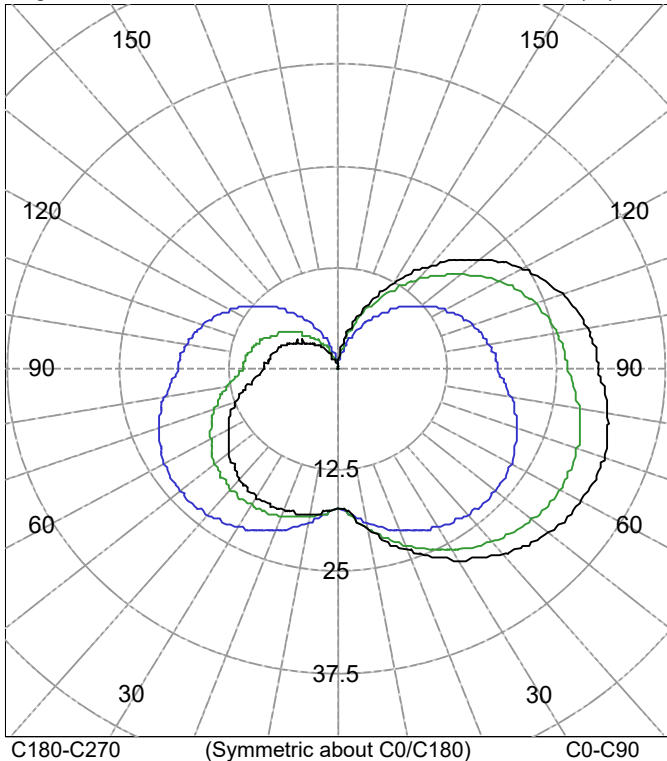
**PREPARED FOR : Oxygen Lighting, 201 Railhead Road, Fort Worth, TX 76106, USA**



**Test Report No. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)

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



**INTENSITY SUMMARY (cd)**

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	17.1	17.1	17.1	17.1	17.1	
5.0	18.1	18.1	18.2	18.2	18.1	2
10.0	20.1	20.1	19.9	19.6	19.2	
15.0	22.1	21.9	21.6	21.0	20.2	6
20.0	23.9	23.7	23.1	22.2	21.2	
25.0	25.5	25.3	24.5	23.3	21.9	10
30.0	27.1	26.7	25.7	24.2	22.5	
35.0	28.4	28.0	26.8	25.0	23.0	14
40.0	29.6	29.1	27.6	25.6	23.3	
45.0	30.6	30.0	28.4	26.0	23.4	18
50.0	31.3	30.7	28.9	26.3	23.4	
55.0	31.9	31.2	29.2	26.4	23.2	21
60.0	32.2	31.4	29.3	26.3	22.8	
65.0	32.3	31.5	29.2	26.0	22.3	22
70.0	32.2	31.3	28.9	25.5	21.7	
75.0	31.8	30.9	28.5	24.9	20.9	22
80.0	31.2	30.3	27.8	24.1	20.0	
85.0	30.5	29.5	27.0	23.2	19.0	21
90.0	29.6	28.7	26.1	22.4	18.1	

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

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

Gamma	C0	C45	C90
45.0	2248	2087	1721
55.0	2241	2054	1630
65.0	2238	2027	1548
75.0	2243	2009	1478
85.0	2257	1998	1409

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	18	N / A	8.0
0-40	32	N / A	14.5
0-60	71	N / A	32.2
0-90	137	N / A	62.1
40-90	105	N / A	47.5
60-90	66	N / A	29.8
90-180	84	N / A	37.9
0-180	221	N / A	100.0

Total Light Output = 221 lm

Spacing Criterion: 0-180 2.4  
Spacing Criterion: 90-270 2.0

Signed:

Authorized Signatory

Date of test 9-Jan-2019  
Date of report 10-Jan-2019



**Test Report No. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	17.1	17.1	17.1	17.1	17.1
2.5	17.3	17.3	17.4	17.5	17.5
5.0	18.1	18.1	18.2	18.2	18.1
7.5	19.1	19.1	19.1	18.9	18.6
10.0	20.1	20.1	19.9	19.6	19.2
12.5	21.1	21.0	20.8	20.3	19.7
15.0	22.1	21.9	21.6	21.0	20.2
17.5	23.0	22.8	22.4	21.6	20.7
20.0	23.9	23.7	23.1	22.2	21.2
22.5	24.7	24.5	23.8	22.8	21.6
25.0	25.5	25.3	24.5	23.3	21.9
27.5	26.4	26.0	25.1	23.8	22.2
30.0	27.1	26.7	25.7	24.2	22.5
32.5	27.8	27.4	26.3	24.7	22.8
35.0	28.4	28.0	26.8	25.0	23.0
37.5	29.0	28.5	27.3	25.3	23.1
40.0	29.6	29.1	27.6	25.6	23.3
42.5	30.1	29.5	28.0	25.8	23.3
45.0	30.6	30.0	28.4	26.0	23.4
47.5	31.0	30.3	28.7	26.2	23.4
50.0	31.3	30.7	28.9	26.3	23.4
52.5	31.6	31.0	29.1	26.4	23.3
55.0	31.9	31.2	29.2	26.4	23.2
57.5	32.0	31.3	29.3	26.4	23.0
60.0	32.2	31.4	29.3	26.3	22.8
62.5	32.2	31.5	29.3	26.2	22.6
65.0	32.3	31.5	29.2	26.0	22.3
67.5	32.2	31.4	29.1	25.8	22.0
70.0	32.2	31.3	28.9	25.5	21.7
72.5	32.0	31.1	28.7	25.3	21.3
75.0	31.8	30.9	28.5	24.9	20.9
77.5	31.5	30.6	28.2	24.6	20.5
80.0	31.2	30.3	27.8	24.1	20.0
82.5	30.9	29.9	27.4	23.7	19.5
85.0	30.5	29.5	27.0	23.2	19.0
87.5	30.0	29.1	26.5	22.8	18.5
90.0	29.6	28.7	26.1	22.4	18.1



**Test Report No. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.

120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	29.6	28.7	26.1	22.4	18.1
92.5	29.5	28.6	26.0	22.3	18.0
95.0	29.3	28.4	25.9	22.1	17.8
97.5	29.1	28.2	25.7	21.9	17.7
100.0	28.9	27.9	25.4	21.7	17.4
102.5	28.5	27.6	25.1	21.4	17.2
105.0	28.1	27.2	24.8	21.1	16.9
107.5	27.6	26.8	24.3	20.7	16.5
110.0	27.1	26.3	23.8	20.2	16.1
112.5	26.5	25.7	23.3	19.7	15.7
115.0	25.9	25.1	22.7	19.2	15.3
117.5	25.2	24.4	22.1	18.7	14.8
120.0	24.5	23.7	21.4	18.0	14.3
122.5	23.7	22.9	20.7	17.4	13.8
125.0	22.8	22.0	19.9	16.7	13.2
127.5	21.9	21.2	19.1	16.0	12.7
130.0	21.0	20.2	18.2	15.2	12.1
132.5	20.0	19.2	17.3	14.5	11.4
135.0	18.9	18.2	16.3	13.7	10.8
137.5	17.8	17.1	15.4	12.9	10.1
140.0	16.7	16.0	14.4	12.0	9.5
142.5	15.5	14.9	13.4	11.2	8.8
145.0	14.3	13.8	12.4	10.3	8.1
147.5	13.1	12.7	11.3	9.5	7.4
150.0	12.0	11.5	10.3	8.6	6.7
152.5	10.8	10.4	9.3	7.7	6.0
155.0	9.6	9.2	8.3	6.9	5.3
157.5	8.4	8.1	7.3	6.0	4.6
160.0	7.3	7.0	6.2	5.2	4.0
162.5	6.2	5.9	5.3	4.3	3.3
165.0	5.0	4.8	4.3	3.5	2.6
167.5	3.9	3.8	3.3	2.6	1.9
170.0	2.7	2.5	2.1	1.7	1.2
172.5	0.7	0.7	0.6	0.5	0.3
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. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	17.1	17.1	17.1	17.1	17.1
2.5	17.5	17.6	17.6	17.6	17.6
5.0	18.1	18.0	17.9	17.8	17.8
7.5	18.6	18.4	18.2	18.0	17.9
10.0	19.2	18.8	18.4	18.2	18.1
12.5	19.7	19.2	18.7	18.4	18.2
15.0	20.2	19.5	18.9	18.5	18.4
17.5	20.7	19.8	19.1	18.6	18.4
20.0	21.2	20.1	19.2	18.7	18.4
22.5	21.6	20.3	19.3	18.7	18.5
25.0	21.9	20.5	19.4	18.7	18.4
27.5	22.2	20.7	19.4	18.6	18.3
30.0	22.5	20.8	19.5	18.6	18.3
32.5	22.8	20.9	19.4	18.4	18.1
35.0	23.0	21.0	19.3	18.3	17.9
37.5	23.1	21.0	19.2	18.1	17.7
40.0	23.3	21.0	19.1	17.9	17.5
42.5	23.3	20.9	18.9	17.6	17.2
45.0	23.4	20.8	18.7	17.3	16.9
47.5	23.4	20.7	18.5	17.0	16.5
50.0	23.4	20.5	18.2	16.7	16.2
52.5	23.3	20.3	17.9	16.3	15.8
55.0	23.2	20.1	17.6	15.9	15.4
57.5	23.0	19.8	17.2	15.5	14.9
60.0	22.8	19.5	16.8	15.0	14.4
62.5	22.6	19.2	16.4	14.6	13.9
65.0	22.3	18.8	15.9	14.1	13.4
67.5	22.0	18.4	15.4	13.6	13.0
70.0	21.7	18.0	14.9	13.1	12.5
72.5	21.3	17.5	14.4	12.5	11.9
75.0	20.9	17.0	13.9	12.0	11.3
77.5	20.5	16.5	13.4	11.4	10.8
80.0	20.0	16.0	12.8	10.9	10.2
82.5	19.5	15.5	12.3	10.3	9.7
85.0	19.0	14.9	11.7	9.8	9.1
87.5	18.5	14.4	11.2	9.3	8.6
90.0	18.1	14.0	10.9	9.0	8.3



**Test Report No. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	18.1	14.0	10.9	9.0	8.3
92.5	18.0	13.9	10.8	8.9	8.2
95.0	17.8	13.8	10.7	8.8	8.1
97.5	17.7	13.6	10.5	8.6	8.0
100.0	17.4	13.4	10.4	8.5	7.9
102.5	17.2	13.2	10.2	8.3	7.7
105.0	16.9	13.0	10.0	8.2	7.6
107.5	16.5	12.7	9.8	8.0	7.4
110.0	16.1	12.4	9.5	7.8	7.2
112.5	15.7	12.1	9.3	7.6	7.0
115.0	15.3	11.7	9.0	7.3	6.8
117.5	14.8	11.3	8.7	7.1	6.6
120.0	14.3	10.9	8.4	6.8	6.3
122.5	13.8	10.5	8.0	6.5	6.0
125.0	13.2	10.1	7.7	6.2	5.8
127.5	12.7	9.6	7.3	5.9	5.5
130.0	12.1	9.2	7.0	5.7	5.2
132.5	11.4	8.7	6.6	5.4	4.9
135.0	10.8	8.2	6.2	5.0	4.6
137.5	10.1	7.7	5.8	4.7	4.3
140.0	9.5	7.1	5.4	4.3	4.0
142.5	8.8	6.6	5.0	4.0	3.7
145.0	8.1	6.1	4.6	3.6	3.3
147.5	7.4	5.5	4.1	3.3	3.0
150.0	6.7	5.0	3.7	2.9	2.7
152.5	6.0	4.5	3.3	2.6	2.4
155.0	5.3	3.9	2.9	2.3	2.1
157.5	4.6	3.4	2.5	1.9	1.8
160.0	4.0	2.9	2.1	1.6	1.5
162.5	3.3	2.4	1.7	1.3	1.1
165.0	2.6	1.9	1.3	1.0	0.8
167.5	1.9	1.4	1.0	0.7	0.6
170.0	1.2	0.9	0.6	0.4	0.3
172.5	0.3	0.2	0.1	0.1	0.1
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: LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.

120.0Vac, 60.00Hz, 0.0601A, 7.11W, 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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	96	89	83	78	89	83	78	73	72	68	64	61	58	55	52	49	47	42
2	85	75	67	60	79	70	63	56	60	54	49	51	47	43	43	39	36	32
3	77	65	55	48	71	60	52	45	52	45	39	44	38	34	36	32	29	25
4	69	56	47	39	64	52	44	37	45	38	32	38	32	28	32	27	23	20
5	63	49	40	33	58	46	37	31	40	32	27	34	28	23	28	23	20	16
6	58	44	35	28	54	41	32	26	35	28	23	30	24	20	25	20	17	14
7	53	39	30	24	49	37	28	23	32	25	20	27	21	17	23	18	14	12
8	49	36	27	21	46	33	25	20	29	22	17	25	19	15	21	16	13	10
9	46	32	24	18	43	30	23	17	26	20	15	23	17	13	19	14	11	9
10	43	30	22	16	40	28	20	15	24	18	13	21	15	12	18	13	10	8

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	0.5	11.78	11.75
8.0	0.3	15.71	15.66
10.0	0.2	19.64	19.58
12.0	0.1	23.57	23.49
14.0	0.1	27.49	27.41
16.0	0.1	31.42	31.32





**Test Report No. LLIA001067-014A**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.

120.0Vac, 60.00Hz, 0.0601A, 7.11W, 0.985PF, 12.6%THD(i)







## Test Report No. LLIA001067-014A

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.  
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board  
One ERP ESS010W-0180-42 dimmable LED driver.  
120.0Vac, 60.00Hz, 0.0601A, 7.11W, 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

**LLIA001067-014B**

Integrating Sphere Report

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.

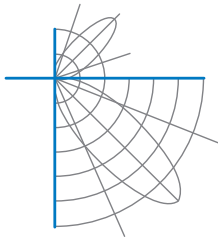


### Performance Summary

Voltage	120.0 Vac
Current	0.0601 A
Power	7.11 W
Frequency	59.99 Hz
Power Factor	0.986
Current THD	12.6 %
Total Luminous Flux	222.0 lm
Efficacy	31.2 lm/W
Chromaticity (x,y)	(0.4375, 0.3997)
(u',v')	(0.2529, 0.5197)
Duv	-0.0018
CCT	2954 K
CRI (Ra)	97
R9	85
TM-30: Rf	93
TM-30: Rg	101

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

Test date: 01/07/2019  
Report date: 01/09/2019



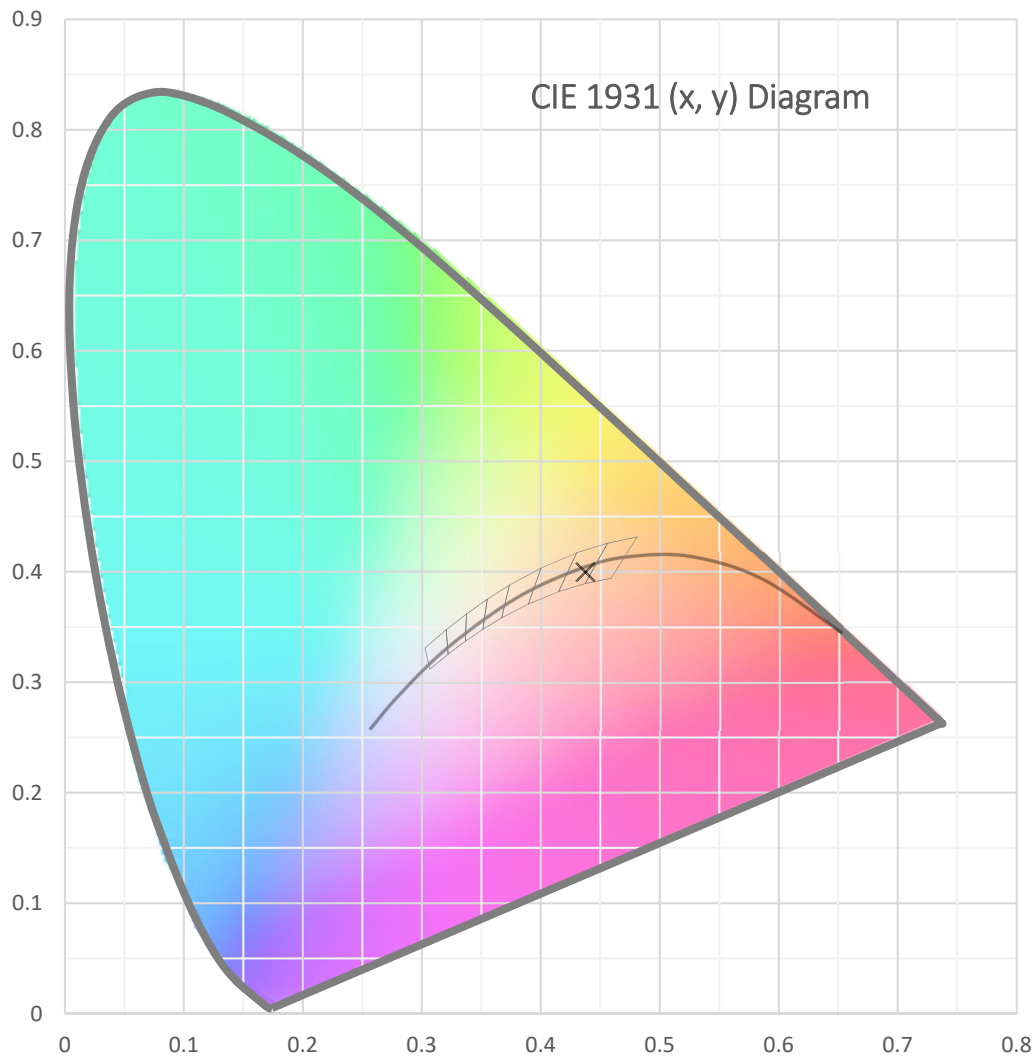
**Test Report Number: LLIA001067-014B**

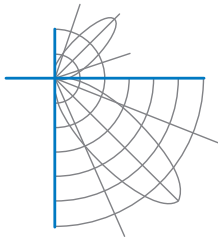
Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.





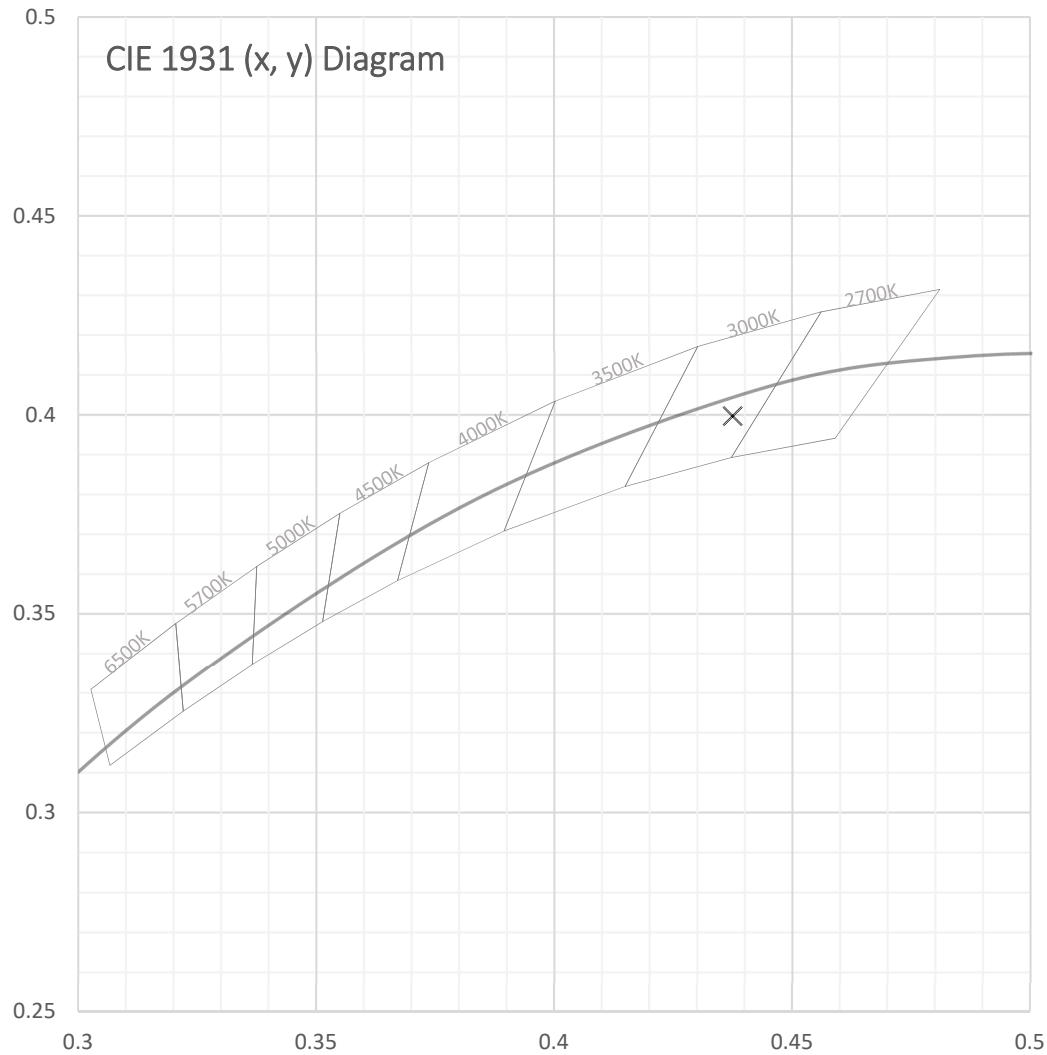
**Test Report Number: LLIA001067-014B**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.





**Test Report Number: LLIA001067-014B**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

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

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

One ERP ESS010W-0180-42 dimmable LED driver.

<b>Spectral Data</b>	Total Radiant Flux	0.843 W
	Total Luminous Flux	222.0 Lm
	Chromaticity CIE 1931 (x, y)	(0.4375, 0.3997)
	Chromaticity CIE 1976 (u', v')	(0.2529, 0.5197)
	Correlated Color Temperature (CCT)	2954 K
	Color Rendering Index (Ra)	97
	R1	98
	R2	99
	R3	97
	R4	97
	R5	97
	R6	97
	R7	96
	R8	93
	R9	85
	R10	95
	R11	97
	R12	83
	R13	99
	R14	97
	TM-30: Rf	93
	TM-30: Rg	101
	Distance from Planckian Locus (Duv)	-0.0018
	Scotopic/Photopic Ratio *	1.430

**Electrical Data**

Voltage	120.0 Vac
Current	0.0601 A
Power	7.11 W
Frequency	59.99 Hz
Power Factor	0.986
Current THD	12.6 %



**Test Report Number: LLIA001067-014B**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure

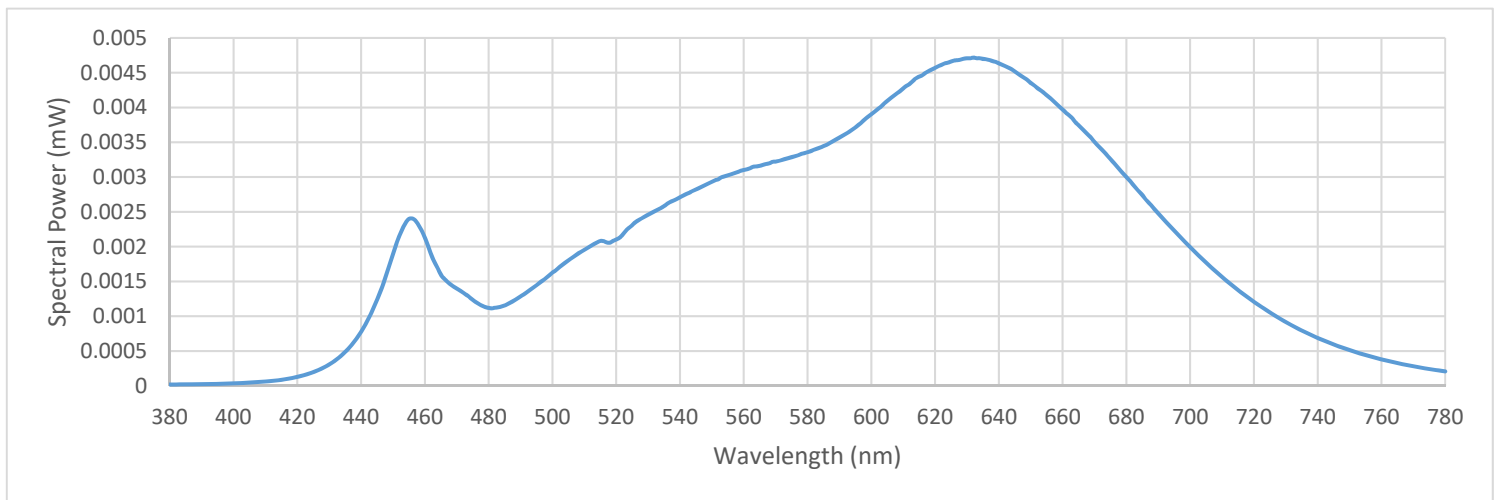
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.

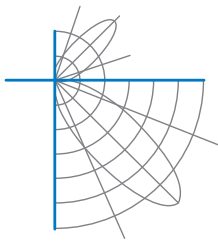
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board

One ERP ESS010W-0180-42 dimmable LED driver.

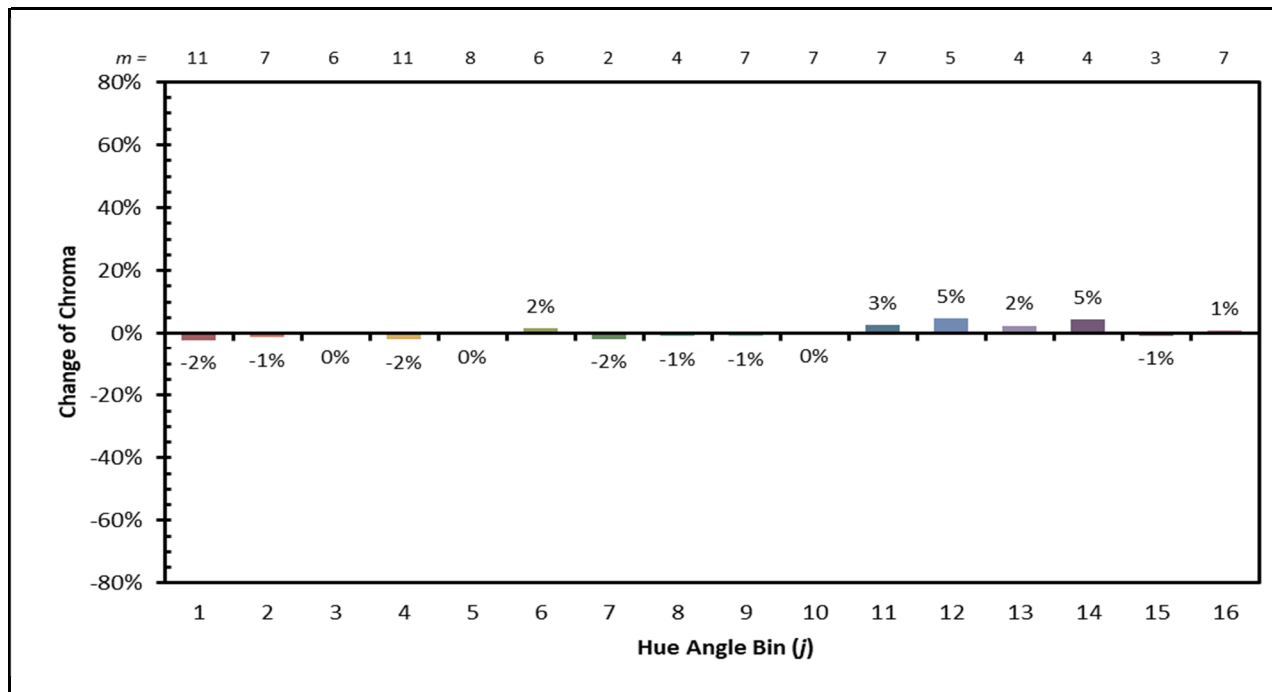
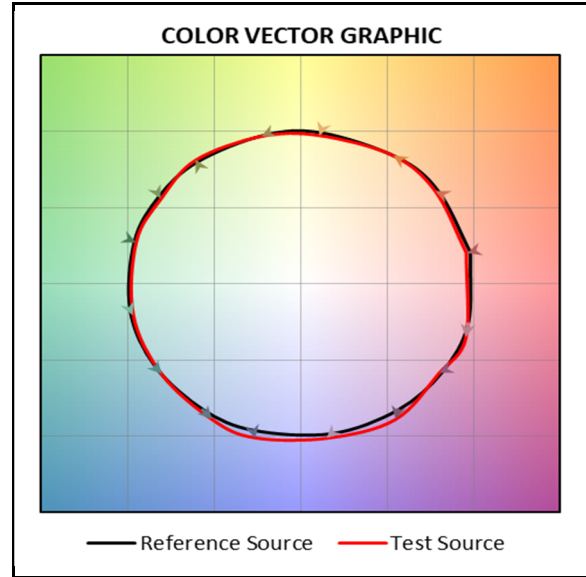
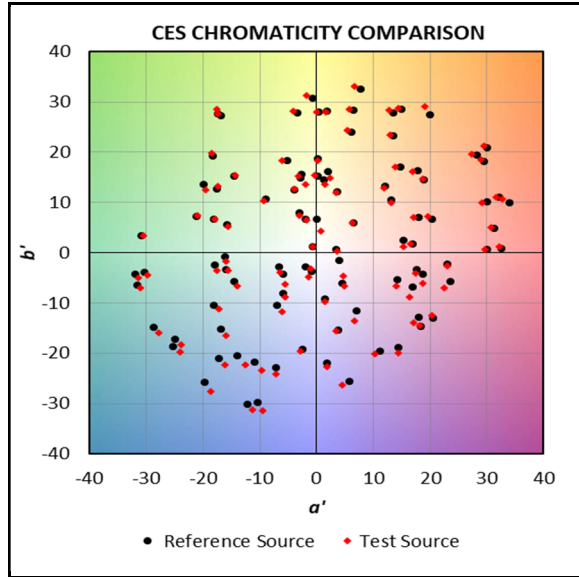
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000019	480	0.001120	580	0.003359	680	0.002997
385	0.000020	485	0.001153	585	0.003444	685	0.002744
390	0.000023	490	0.001285	590	0.003568	690	0.002479
395	0.000027	495	0.001443	595	0.003717	695	0.002225
400	0.000035	500	0.001627	600	0.003900	700	0.001996
405	0.000045	505	0.001801	605	0.004094	705	0.001770
410	0.000061	510	0.001953	610	0.004274	710	0.001563
415	0.000086	515	0.002081	615	0.004442	715	0.001375
420	0.000129	520	0.002102	620	0.004570	720	0.001206
425	0.000197	525	0.002307	625	0.004660	725	0.001054
430	0.000307	530	0.002459	630	0.004708	730	0.000918
435	0.000486	535	0.002581	635	0.004698	735	0.000795
440	0.000772	540	0.002709	640	0.004634	740	0.000686
445	0.001238	545	0.002823	645	0.004518	745	0.000594
450	0.001891	550	0.002934	650	0.004351	750	0.000511
455	0.002399	555	0.003024	655	0.004175	755	0.000440
460	0.002130	560	0.003101	660	0.003972	760	0.000381
465	0.001597	565	0.003161	665	0.003745	765	0.000327
470	0.001396	570	0.003223	670	0.003505	770	0.000281
475	0.001232	575	0.003287	675	0.003259	775	0.000242
						780	0.000207





IES TM-30 Summary







**Test Report Number: LLIA001067-014B**

Catalog Number: 3-677-124 Ellipse Pendant with Glass Enclosure  
Pendant mounted, formed and machined steel housing, center lampholder with  
cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass 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: 24.4 °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.