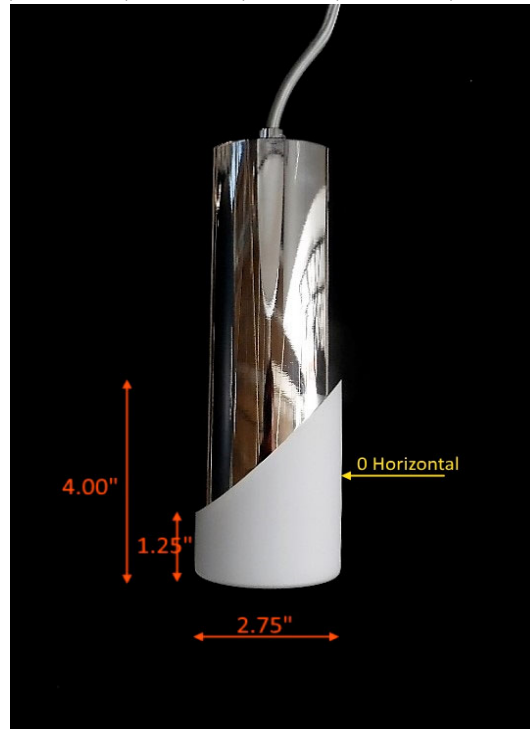




# Report of Test

## LLIA001067-010A

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)



### Performance Summary

Total Light Output	147 lm
Luminaire Power	6.98 W
Luminous Efficacy	21.1 lm/W

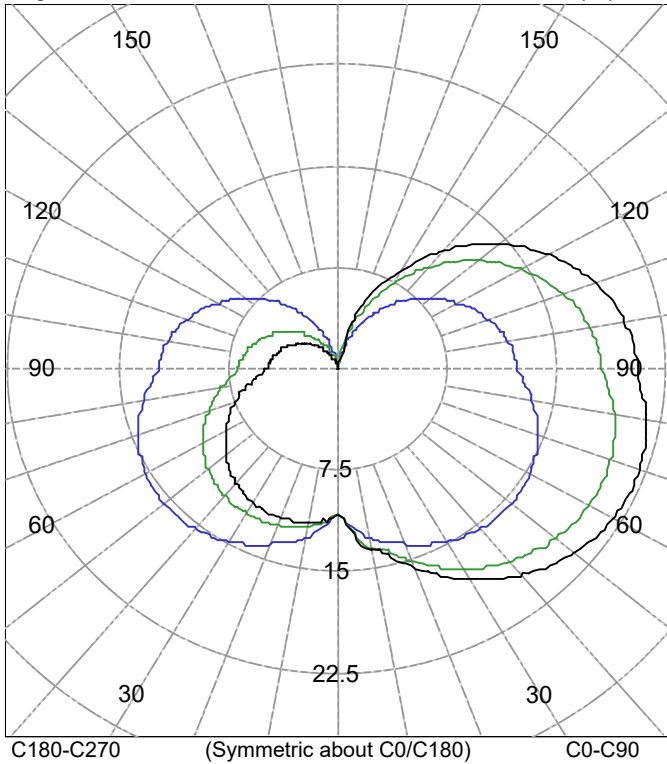
**PREPARED FOR : Oxygen Lighting, 201 Railhead Road, Fort Worth, TX 76106, USA**



**Test Report No. LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%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	10.6	10.6	10.6	10.6	10.6	
5.0	12.2	12.2	12.1	11.9	11.7	1
10.0	13.6	13.6	13.5	13.2	12.7	
15.0	14.4	14.3	14.1	13.7	13.2	4
20.0	15.7	15.6	15.2	14.5	13.8	
25.0	16.9	16.7	16.1	15.3	14.3	7
30.0	17.9	17.7	17.0	16.0	14.7	
35.0	18.9	18.6	17.8	16.6	15.1	9
40.0	19.8	19.4	18.5	17.0	15.3	
45.0	20.5	20.1	19.0	17.4	15.4	12
50.0	21.1	20.6	19.5	17.6	15.5	
55.0	21.5	21.1	19.7	17.7	15.4	14
60.0	21.8	21.3	19.9	17.7	15.2	
65.0	21.9	21.4	19.9	17.6	14.9	15
70.0	21.9	21.4	19.8	17.3	14.5	
75.0	21.7	21.2	19.5	17.0	14.1	15
80.0	21.4	20.8	19.1	16.5	13.5	
85.0	20.9	20.3	18.6	15.9	12.8	14
90.0	20.5	19.8	18.1	15.4	12.3	

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

Gamma	C0	C45	C90
45.0	2633	2448	1986
55.0	2671	2449	1910
65.0	2707	2457	1841
75.0	2753	2471	1779
85.0	2808	2491	1720

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	12	N / A	7.8
0-40	21	N / A	14.3
0-60	47	N / A	31.9
0-90	91	N / A	61.9
40-90	70	N / A	47.6
60-90	44	N / A	30.0
90-180	56	N / A	38.1
0-180	147	N / A	100.0

Total Light Output = 147 lm

Spacing Criterion: 0-180 2.5  
Spacing Criterion: 90-270 2.0

Signed:

Authorized Signatory

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



**Test Report No. LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	10.6	10.6	10.6	10.6	10.6
2.5	11.3	11.3	11.2	11.2	11.1
5.0	12.2	12.2	12.1	11.9	11.7
7.5	13.2	13.2	13.1	12.7	12.3
10.0	13.6	13.6	13.5	13.2	12.7
12.5	13.8	13.8	13.7	13.4	13.1
15.0	14.4	14.3	14.1	13.7	13.2
17.5	15.0	14.9	14.6	14.1	13.5
20.0	15.7	15.6	15.2	14.5	13.8
22.5	16.3	16.1	15.7	14.9	14.0
25.0	16.9	16.7	16.1	15.3	14.3
27.5	17.4	17.2	16.6	15.6	14.5
30.0	17.9	17.7	17.0	16.0	14.7
32.5	18.5	18.2	17.5	16.3	14.9
35.0	18.9	18.6	17.8	16.6	15.1
37.5	19.4	19.0	18.2	16.8	15.2
40.0	19.8	19.4	18.5	17.0	15.3
42.5	20.2	19.8	18.8	17.2	15.4
45.0	20.5	20.1	19.0	17.4	15.4
47.5	20.8	20.4	19.3	17.5	15.5
50.0	21.1	20.6	19.5	17.6	15.5
52.5	21.3	20.9	19.6	17.7	15.4
55.0	21.5	21.1	19.7	17.7	15.4
57.5	21.7	21.2	19.8	17.7	15.3
60.0	21.8	21.3	19.9	17.7	15.2
62.5	21.9	21.4	19.9	17.7	15.0
65.0	21.9	21.4	19.9	17.6	14.9
67.5	22.0	21.4	19.8	17.5	14.7
70.0	21.9	21.4	19.8	17.3	14.5
72.5	21.9	21.3	19.7	17.2	14.3
75.0	21.7	21.2	19.5	17.0	14.1
77.5	21.6	21.0	19.3	16.7	13.8
80.0	21.4	20.8	19.1	16.5	13.5
82.5	21.2	20.6	18.9	16.2	13.2
85.0	20.9	20.3	18.6	15.9	12.8
87.5	20.7	20.1	18.2	15.6	12.5
90.0	20.5	19.8	18.1	15.4	12.3



**Test Report No. LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	20.5	19.8	18.1	15.4	12.3
92.5	20.5	19.8	18.0	15.3	12.2
95.0	20.3	19.6	17.8	15.1	12.1
97.5	20.1	19.5	17.7	15.0	11.9
100.0	19.9	19.3	17.5	14.8	11.7
102.5	19.7	19.0	17.2	14.6	11.6
105.0	19.4	18.8	17.0	14.4	11.4
107.5	19.0	18.4	16.7	14.1	11.1
110.0	18.7	18.1	16.3	13.8	10.9
112.5	18.2	17.6	16.0	13.4	10.6
115.0	17.8	17.2	15.5	13.1	10.3
117.5	17.3	16.7	15.1	12.7	10.0
120.0	16.8	16.2	14.6	12.2	9.6
122.5	16.2	15.6	14.1	11.8	9.3
125.0	15.6	15.0	13.5	11.3	8.9
127.5	15.0	14.4	13.0	10.9	8.5
130.0	14.3	13.8	12.4	10.4	8.1
132.5	13.6	13.1	11.8	9.8	7.7
135.0	12.9	12.4	11.2	9.3	7.2
137.5	12.1	11.7	10.5	8.8	6.8
140.0	11.4	11.0	9.8	8.2	6.4
142.5	10.6	10.2	9.2	7.6	5.9
145.0	9.8	9.5	8.5	7.0	5.4
147.5	9.0	8.7	7.8	6.5	5.0
150.0	8.2	7.9	7.1	5.9	4.5
152.5	7.4	7.2	6.4	5.3	4.1
155.0	6.7	6.4	5.7	4.7	3.6
157.5	5.9	5.6	5.0	4.1	3.1
160.0	5.1	4.9	4.3	3.5	2.7
162.5	4.3	4.1	3.6	3.0	2.2
165.0	3.5	3.3	2.8	2.2	1.7
167.5	1.7	1.7	1.6	1.4	1.0
170.0	0.3	0.3	0.3	0.2	0.2
172.5	0.0	0.0	0.0	0.0	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 Report No. LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	10.6	10.6	10.6	10.6	10.6
2.5	11.1	11.1	11.1	11.1	11.1
5.0	11.7	11.5	11.4	11.3	11.2
7.5	12.3	11.9	11.6	11.4	11.4
10.0	12.7	12.3	11.9	11.6	11.5
12.5	13.1	12.6	12.0	11.7	11.6
15.0	13.2	12.6	12.1	11.7	11.6
17.5	13.5	12.8	12.2	11.8	11.7
20.0	13.8	13.0	12.3	11.8	11.7
22.5	14.0	13.1	12.3	11.8	11.6
25.0	14.3	13.3	12.4	11.8	11.6
27.5	14.5	13.4	12.4	11.8	11.5
30.0	14.7	13.5	12.4	11.7	11.4
32.5	14.9	13.6	12.4	11.6	11.4
35.0	15.1	13.6	12.3	11.5	11.2
37.5	15.2	13.6	12.2	11.4	11.1
40.0	15.3	13.6	12.1	11.2	10.9
42.5	15.4	13.5	12.0	11.0	10.7
45.0	15.4	13.5	11.9	10.8	10.5
47.5	15.5	13.4	11.7	10.6	10.2
50.0	15.5	13.3	11.5	10.4	10.0
52.5	15.4	13.2	11.3	10.1	9.7
55.0	15.4	13.0	11.1	9.9	9.4
57.5	15.3	12.9	10.9	9.6	9.1
60.0	15.2	12.7	10.6	9.3	8.8
62.5	15.0	12.5	10.3	9.0	8.5
65.0	14.9	12.3	10.1	8.7	8.2
67.5	14.7	12.0	9.7	8.3	7.9
70.0	14.5	11.7	9.5	8.0	7.5
72.5	14.3	11.5	9.1	7.7	7.2
75.0	14.1	11.2	8.8	7.3	6.8
77.5	13.8	10.9	8.5	7.0	6.5
80.0	13.5	10.5	8.1	6.6	6.1
82.5	13.2	10.2	7.7	6.2	5.8
85.0	12.8	9.8	7.4	5.9	5.3
87.5	12.5	9.5	7.0	5.5	5.0
90.0	12.3	9.2	6.8	5.3	4.8



**Test Report No. LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	12.3	9.2	6.8	5.3	4.8
92.5	12.2	9.2	6.7	5.3	4.8
95.0	12.1	9.1	6.7	5.2	4.7
97.5	11.9	8.9	6.5	5.1	4.6
100.0	11.7	8.8	6.4	5.0	4.5
102.5	11.6	8.7	6.3	4.9	4.4
105.0	11.4	8.5	6.2	4.8	4.3
107.5	11.1	8.3	6.0	4.7	4.2
110.0	10.9	8.1	5.9	4.5	4.1
112.5	10.6	7.9	5.7	4.4	4.0
115.0	10.3	7.6	5.5	4.2	3.8
117.5	10.0	7.4	5.3	4.1	3.7
120.0	9.6	7.1	5.1	3.9	3.5
122.5	9.3	6.8	4.9	3.8	3.4
125.0	8.9	6.6	4.7	3.6	3.2
127.5	8.5	6.3	4.5	3.4	3.1
130.0	8.1	5.9	4.2	3.2	2.9
132.5	7.7	5.6	4.0	3.0	2.7
135.0	7.2	5.3	3.8	2.9	2.5
137.5	6.8	5.0	3.5	2.7	2.4
140.0	6.4	4.6	3.3	2.5	2.2
142.5	5.9	4.3	3.0	2.2	2.0
145.0	5.4	3.9	2.8	2.0	1.8
147.5	5.0	3.6	2.5	1.8	1.6
150.0	4.5	3.2	2.2	1.6	1.4
152.5	4.1	2.9	2.0	1.4	1.2
155.0	3.6	2.5	1.7	1.2	1.1
157.5	3.1	2.2	1.5	1.0	0.9
160.0	2.7	1.9	1.2	0.9	0.7
162.5	2.2	1.5	1.0	0.7	0.5
165.0	1.7	1.2	0.7	0.5	0.4
167.5	1.0	0.7	0.4	0.3	0.2
170.0	0.2	0.1	0.1	0.1	0.0
172.5	0.0	0.0	0.0	0.0	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: LLIA001067-010A**

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Coefficients Of Utilization - Zonal Cavity Method**

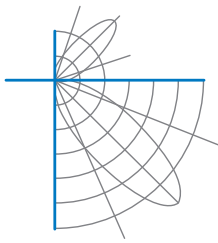
Effective Floor Cavity Reflectance 0.20

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	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	46	42	43	39	36	32
3	77	64	55	48	71	60	52	45	51	45	39	44	38	34	36	32	29	25
4	69	56	46	39	64	52	43	37	45	38	32	38	32	28	32	27	23	20
5	63	49	40	33	58	46	37	31	39	32	27	33	28	23	28	23	19	16
6	58	44	34	28	53	41	32	26	35	28	23	30	24	20	25	20	17	14
7	53	39	30	24	49	37	28	22	32	25	20	27	21	17	23	18	14	12
8	49	35	27	21	46	33	25	19	29	22	17	24	19	15	21	16	12	10
9	46	32	24	18	42	30	22	17	26	20	15	22	17	13	19	14	11	9
10	43	29	21	16	40	28	20	15	24	18	13	21	15	12	17	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	0.3	12.11	12.22
8.0	0.2	16.15	16.29
10.0	0.1	20.19	20.37
12.0	0.1	24.23	24.44
14.0	0.1	28.27	28.51
16.0	0.0	32.30	32.58



**Test Report No. LLIA001067-010A**

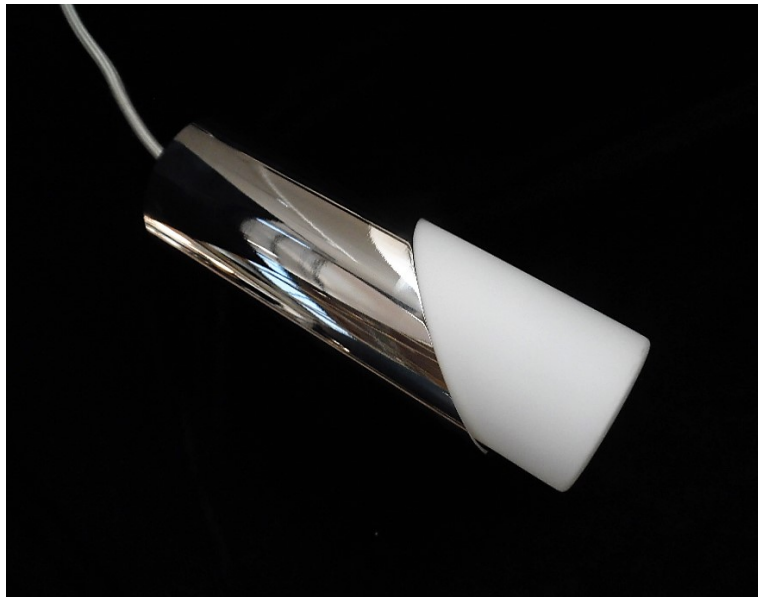
Catalog Number: 3-667-120 Ellipse Pendant with Glass Enclosure

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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)







## Test Report No. LLIA001067-010A

Catalog Number: 3-667-120 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, 0.0597A, 6.98W, 0.974PF, 19.1%THD(i)

**Test Distance** 9.5 m  
**Test Temperature** 25.0 °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

**LLIA001067-010B**

Integrating Sphere Report

Catalog Number: 3-667-120 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.

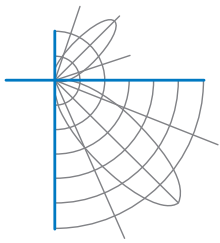


### Performance Summary

Voltage	120.0 Vac
Current	0.0596 A
Power	6.97 W
Frequency	59.99 Hz
Power Factor	0.975
Current THD	19.1 %
Total Luminous Flux	145.4 lm
Efficacy	20.9 lm/W
Chromaticity (x,y)	(0.4409, 0.4015)
(u',v')	(0.2543, 0.5210)
Duv	-0.0015
CCT	2913 K
CRI (Ra)	96
R9	83
TM-30: Rf	92
TM-30: Rg	100

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

Test date: 01/09/2019  
Report date: 01/14/2019



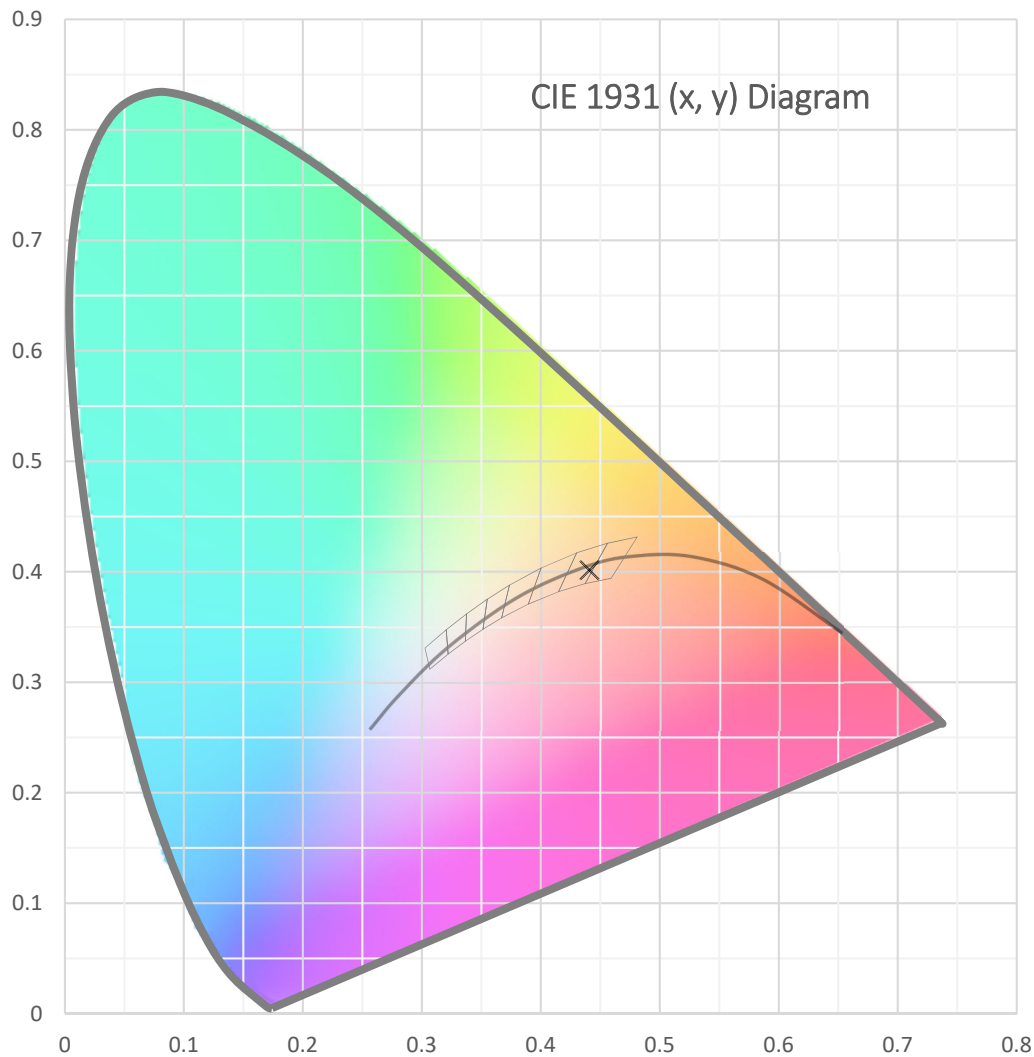
**Test Report Number: LLIA001067-010B**

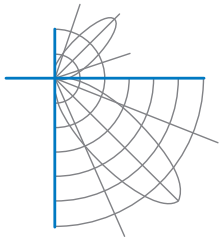
Catalog Number: 3-667-120 Ellipse Pendant with Glass Enclosure

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.





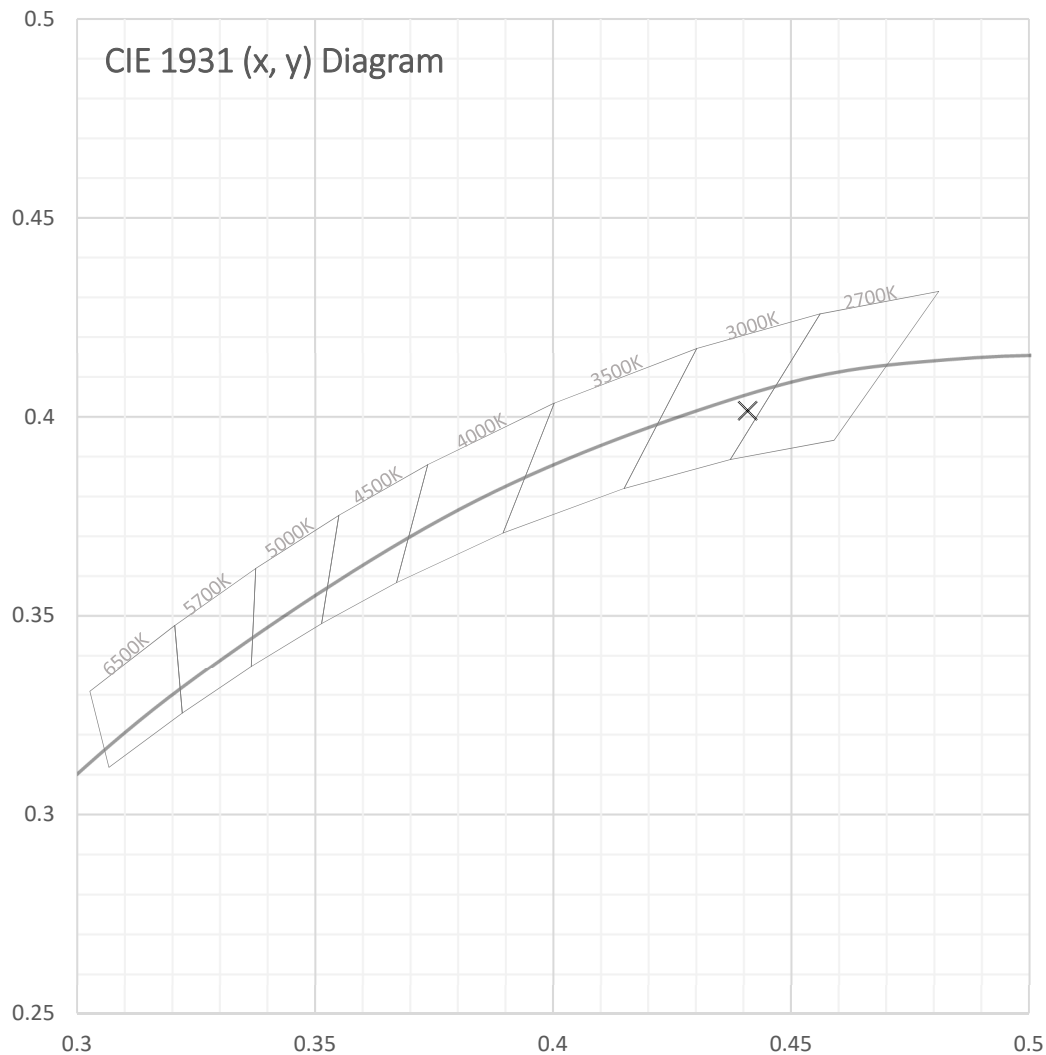
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<b>Spectral Data</b>	Total Radiant Flux	0.552 W
	Total Luminous Flux	145.4 Lm
	Chromaticity CIE 1931 (x, y)	(0.4409, 0.4015)
	Chromaticity CIE 1976 (u', v')	(0.2543, 0.5210)
	Correlated Color Temperature (CCT)	2913 K
	Color Rendering Index (Ra)	96
	R1	98
	R2	99
	R3	97
	R4	96
	R5	97
	R6	97
	R7	96
	R8	92
	R9	83
	R10	95
	R11	96
	R12	83
	R13	98
	R14	97
	TM-30: Rf	92
	TM-30: Rg	100
	Distance from Planckian Locus (Duv)	-0.0015
	Scotopic/Photopic Ratio *	1.411

**Electrical Data**

Voltage	120.0 Vac
Current	0.0596 A
Power	6.97 W
Frequency	59.99 Hz
Power Factor	0.975
Current THD	19.1 %



**Test Report Number: LLIA001067-010B**

Catalog Number: 3-667-120 Ellipse Pendant with Glass Enclosure

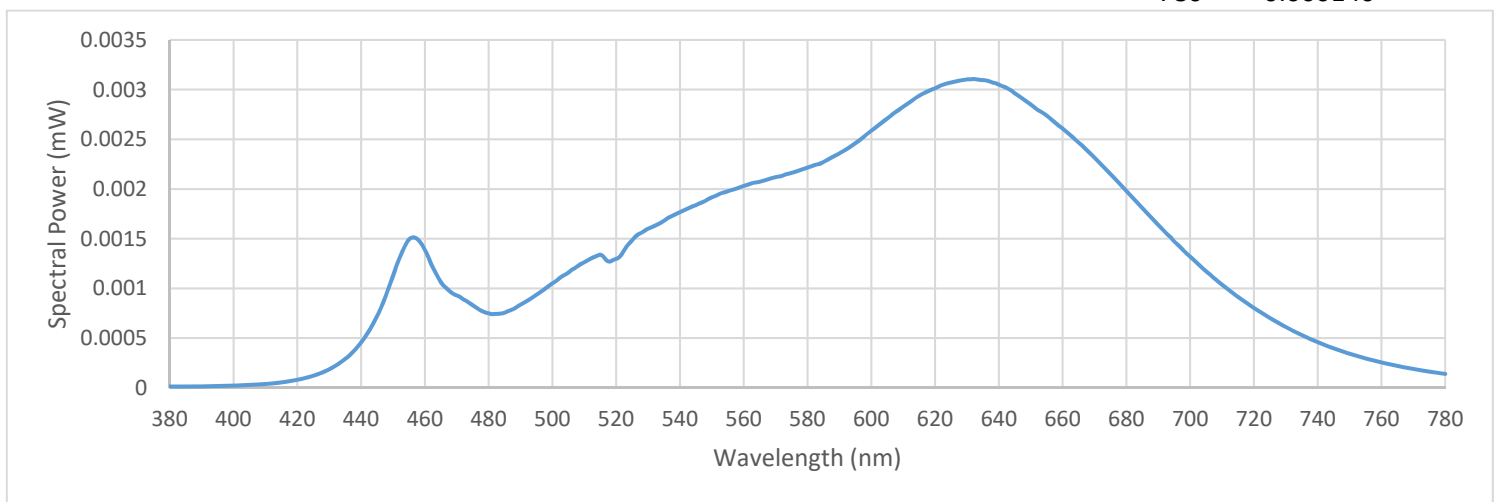
Pendant mounted, formed and machined steel housing, center lampholder with cast aluminum heatsink, frosted glass enclosure below LEDs, translucent white glass enclosure.

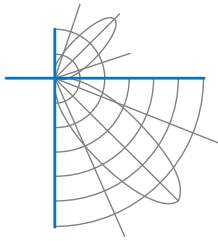
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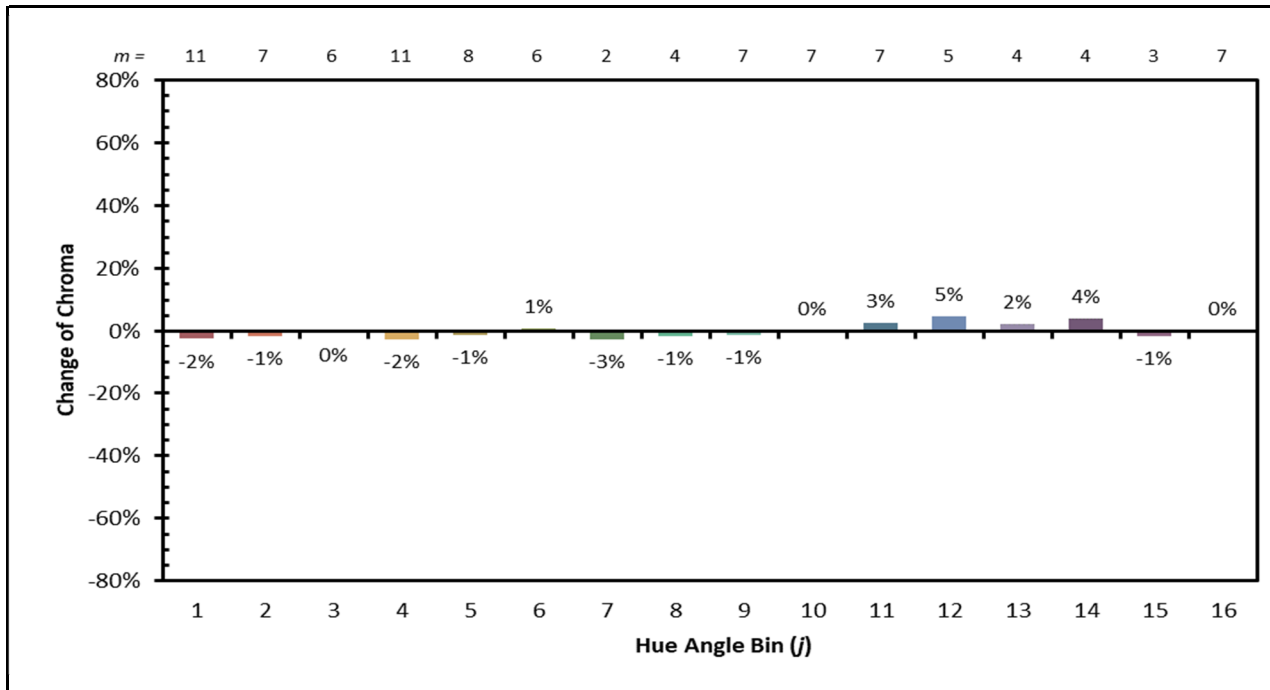
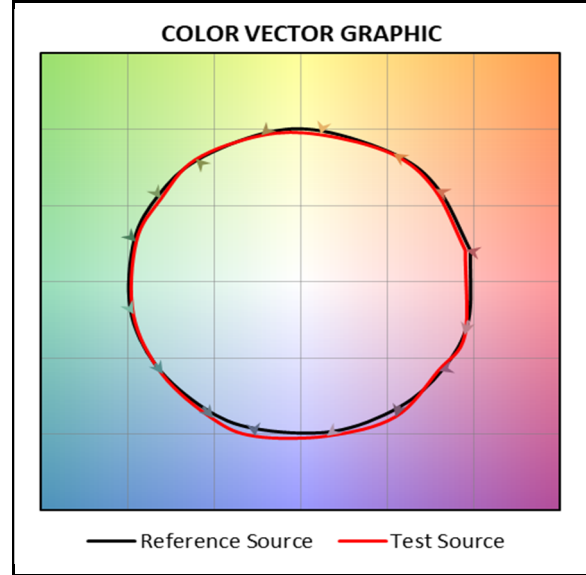
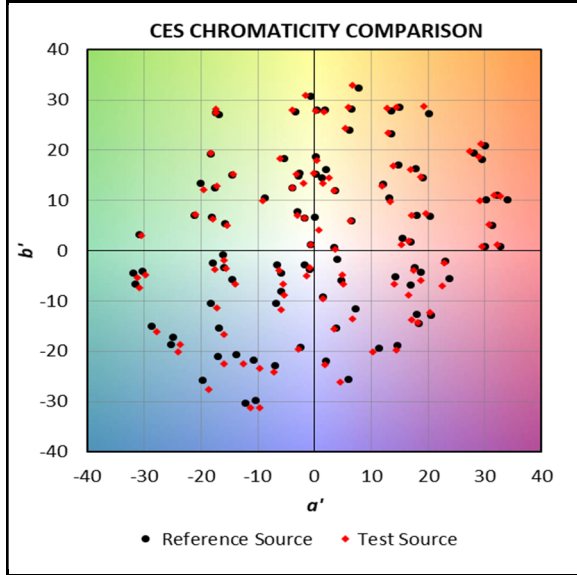
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000012	480	0.000749	580	0.002215	680	0.001980
385	0.000013	485	0.000755	585	0.002273	685	0.001812
390	0.000015	490	0.000837	590	0.002358	690	0.001638
395	0.000017	495	0.000934	595	0.002460	695	0.001471
400	0.000022	500	0.001051	600	0.002585	700	0.001321
405	0.000028	505	0.001159	605	0.002708	705	0.001173
410	0.000039	510	0.001262	610	0.002830	710	0.001037
415	0.000054	515	0.001339	615	0.002937	715	0.000915
420	0.000080	520	0.001298	620	0.003012	720	0.000802
425	0.000122	525	0.001483	625	0.003073	725	0.000702
430	0.000187	530	0.001601	630	0.003103	730	0.000613
435	0.000290	535	0.001680	635	0.003096	735	0.000531
440	0.000453	540	0.001768	640	0.003050	740	0.000458
445	0.000721	545	0.001838	645	0.002963	745	0.000397
450	0.001121	550	0.001916	650	0.002850	750	0.000342
455	0.001492	555	0.001977	655	0.002739	755	0.000295
460	0.001388	560	0.002030	660	0.002609	760	0.000256
465	0.001062	565	0.002073	665	0.002468	765	0.000220
470	0.000929	570	0.002120	670	0.002313	770	0.000189
475	0.000829	575	0.002163	675	0.002153	775	0.000162
						780	0.000140





IES TM-30 Summary





**Test Report Number: LLIA001067-010B**

Catalog Number: 3-667-120 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: 25.0 °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.