

Report of Test

LLIA000824-060A

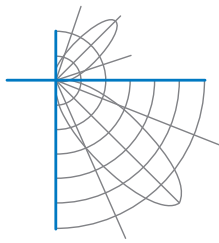
Catalog Number: 3-607-40 Magneta Pendant
Pendant mounted, formed steel canopy, spun aluminum housing, translucent white plastic enclosure.
12 white LEDs, one Harvard Engineering LEDENG-163-930 LED board
One LTF DA6W150C2040LPD010-0014 dimming LED driver.
120.0Vac, 60.00Hz, 0.0589A, 6.58W, 0.932PF, 10.8%THD(i)



Performance Summary

Total Light Output	233 lm
Luminaire Power	6.58 W
Luminous Efficacy	35.4 lm/W

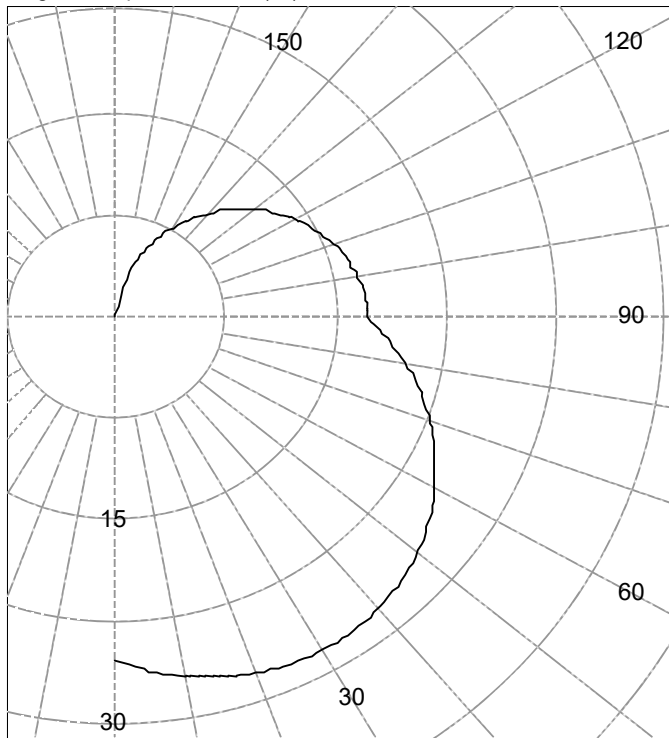
PREPARED FOR : Oxygen Lighting, 201 Railhead Road, Fort Worth, TX 76106, USA



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Legend: All planes - Solid (cd)



(Rotational symmetry)

AVERAGE LUMINANCE (cd / m²)

Gamma	C0
45.0	6112
55.0	5689
65.0	5297
75.0	4936
85.0	4597

INTENSITY SUMMARY (cd)

Gamma	All Planes	Flux (lm)	Gamma	C0	Flux (lm)
0	25.4		90	17.2	
5	26.2	3	95	17.0	19
10	27.0		100	16.8	
15	27.5	8	105	16.3	17
20	28.0		110	15.8	
25	28.3	13	115	15.0	15
30	28.3		120	14.2	
35	28.3	18	125	13.3	12
40	28.0		130	12.3	
45	27.5	21	135	11.1	9
50	26.9		140	10.0	
55	26.1	23	145	8.7	6
60	25.2		150	7.4	
65	24.0	24	155	6.1	3
70	22.8		160	4.8	
75	21.5	23	165	2.8	1
80	20.0		170	0.1	
85	18.5	20	175	0.0	0
90	17.2		180	0.0	

ZONAL FLUX AND PERCENTAGES

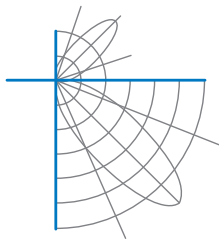
Zone	Flux (lm)	%Lamp	%Luminaire
0-30	23	N / A	10.0
0-40	41	N / A	17.7
0-60	86	N / A	36.8
0-90	153	N / A	65.5
40-90	111	N / A	47.8
60-90	67	N / A	28.6
90-180	81	N / A	34.5
0-180	233	N / A	100.0

Total Light Output = 233 lm

Signed:

Authorized Signatory

Date of test 13-Sep-2017
Date of report 14-Sep-2017

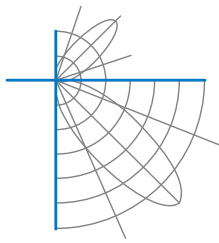


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Intensity (cd) and Flux (lm) data

Gamma	Intensity	Flux	Gamma	Intensity	Flux
0.0	25.4		90.0	17.2	
2.5	25.8		92.5	17.1	
5.0	26.2	3	95.0	17.0	
7.5	26.6		97.5	16.9	19
10.0	27.0		100.0	16.8	
12.5	27.3		102.5	16.6	
15.0	27.5	8	105.0	16.3	
17.5	27.8		107.5	16.1	17
20.0	28.0		110.0	15.8	
22.5	28.1		112.5	15.4	
25.0	28.3	13	115.0	15.0	
27.5	28.3		117.5	14.7	15
30.0	28.3		120.0	14.2	
32.5	28.3		122.5	13.8	
35.0	28.3	18	125.0	13.3	
37.5	28.1		127.5	12.8	12
40.0	28.0		130.0	12.3	
42.5	27.8		132.5	11.7	
45.0	27.5	21	135.0	11.1	
47.5	27.2		137.5	10.6	9
50.0	26.9		140.0	10.0	
52.5	26.5		142.5	9.3	
55.0	26.1	23	145.0	8.7	
57.5	25.7		147.5	8.1	6
60.0	25.2		150.0	7.4	
62.5	24.6		152.5	6.8	
65.0	24.0	24	155.0	6.1	
67.5	23.5		157.5	5.5	3
70.0	22.8		160.0	4.8	
72.5	22.2		162.5	4.0	
75.0	21.5	23	165.0	2.8	
77.5	20.8		167.5	1.1	1
80.0	20.0		170.0	0.1	
82.5	19.3		172.5	0.0	
85.0	18.5	20	175.0	0.0	
87.5	17.8		177.5	0.0	0
90.0	17.2		180.0	0.0	



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Coefficients Of Utilization - Zonal Cavity Method

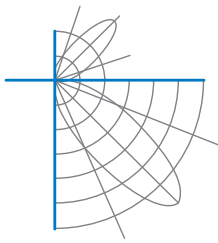
Effective Floor Cavity Reflectance 0.20

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	97	91	85	80	91	85	80	75	74	70	67	65	61	59	55	53	51	46
2	87	77	69	62	81	72	65	59	63	57	52	54	50	46	46	43	40	35
3	78	66	57	50	72	62	54	47	54	47	42	47	41	37	40	35	32	28
4	71	58	48	41	66	54	45	39	47	40	34	41	35	30	35	30	26	23
5	65	51	41	34	60	48	39	33	42	35	29	36	30	26	31	26	22	19
6	59	45	36	29	55	43	34	28	37	30	25	32	26	22	28	23	19	16
7	55	41	32	25	51	38	30	24	34	27	21	29	23	19	25	20	17	14
8	51	37	28	22	47	35	27	21	30	24	19	27	21	17	23	18	15	12
9	47	33	25	19	44	32	24	19	28	21	17	24	19	15	21	16	13	11
10	44	31	23	17	41	29	21	16	26	19	15	22	17	13	19	15	12	10

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

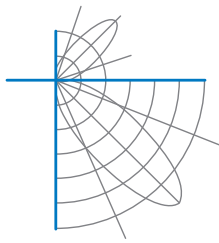
Height(ft)	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	0.7	9.98	9.98
8.0	0.4	13.31	13.31
10.0	0.3	16.63	16.63
12.0	0.2	19.96	19.96
14.0	0.1	23.28	23.28
16.0	0.1	26.61	26.61



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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.

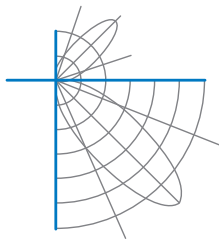
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

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

LLIA000824-060B

Integrating Sphere Report

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One LTF DA6W150C2040LPD010-0014 dimming LED driver.



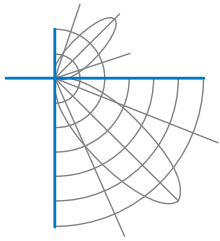
Performance Summary

Voltage	120.0 Vac
Current	0.0588 A
Power	6.59 W
Frequency	60.00 Hz
Power Factor	0.933
Current THD	10.8 %
Total Luminous Flux	235.2 lm
Efficacy	35.7 lm/W
Chromaticity (x,y)	(0.4455, 0.4020)
(u',v')	(0.2570, 0.5218)
Duv	-0.0019
CCT	2844 K
CRI (Ra)	97
R9	85

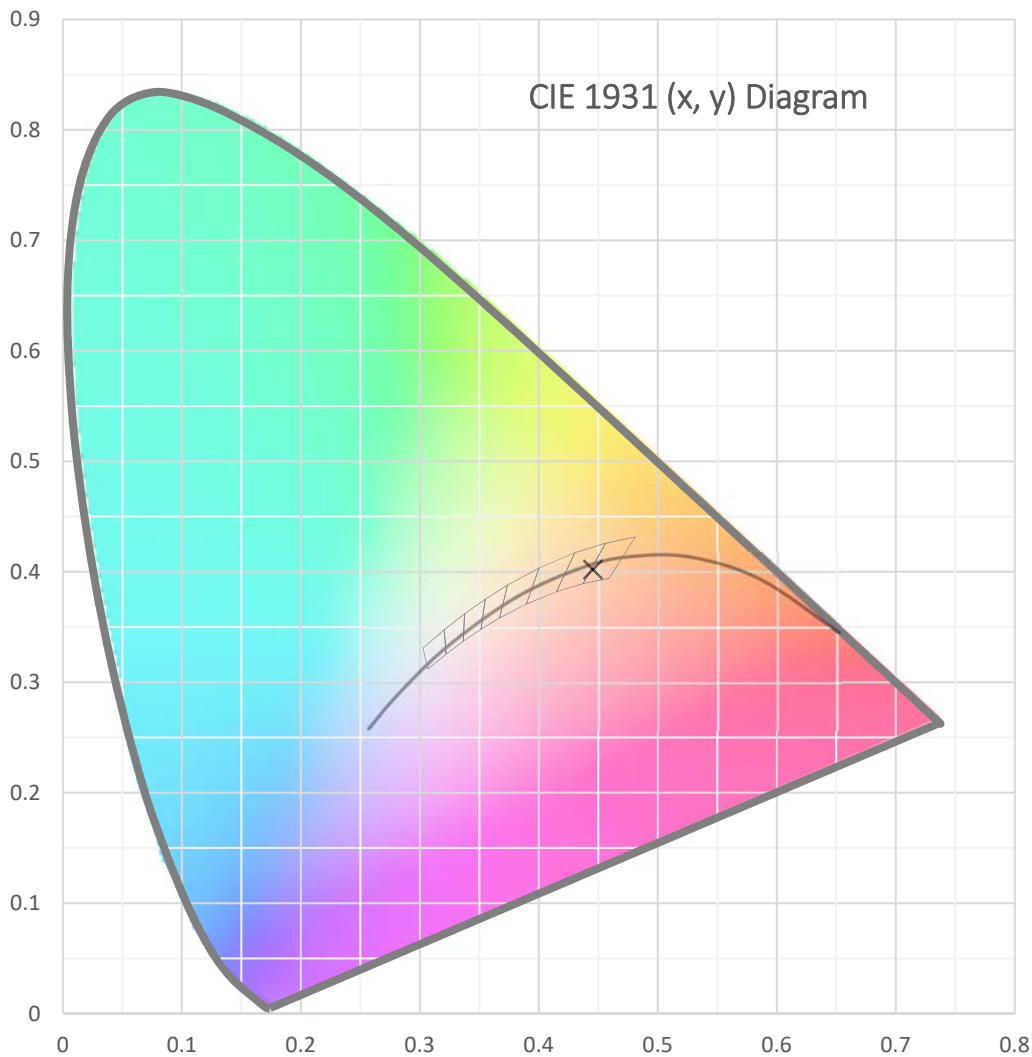
Prepared For:
Oxygen Lighting
201 Railhead Road
Fort Worth, TX 76106, USA

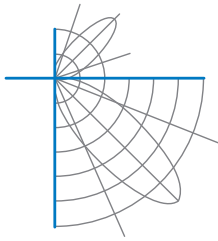
Test date: 09/13/2017

Report date: 09/14/2017

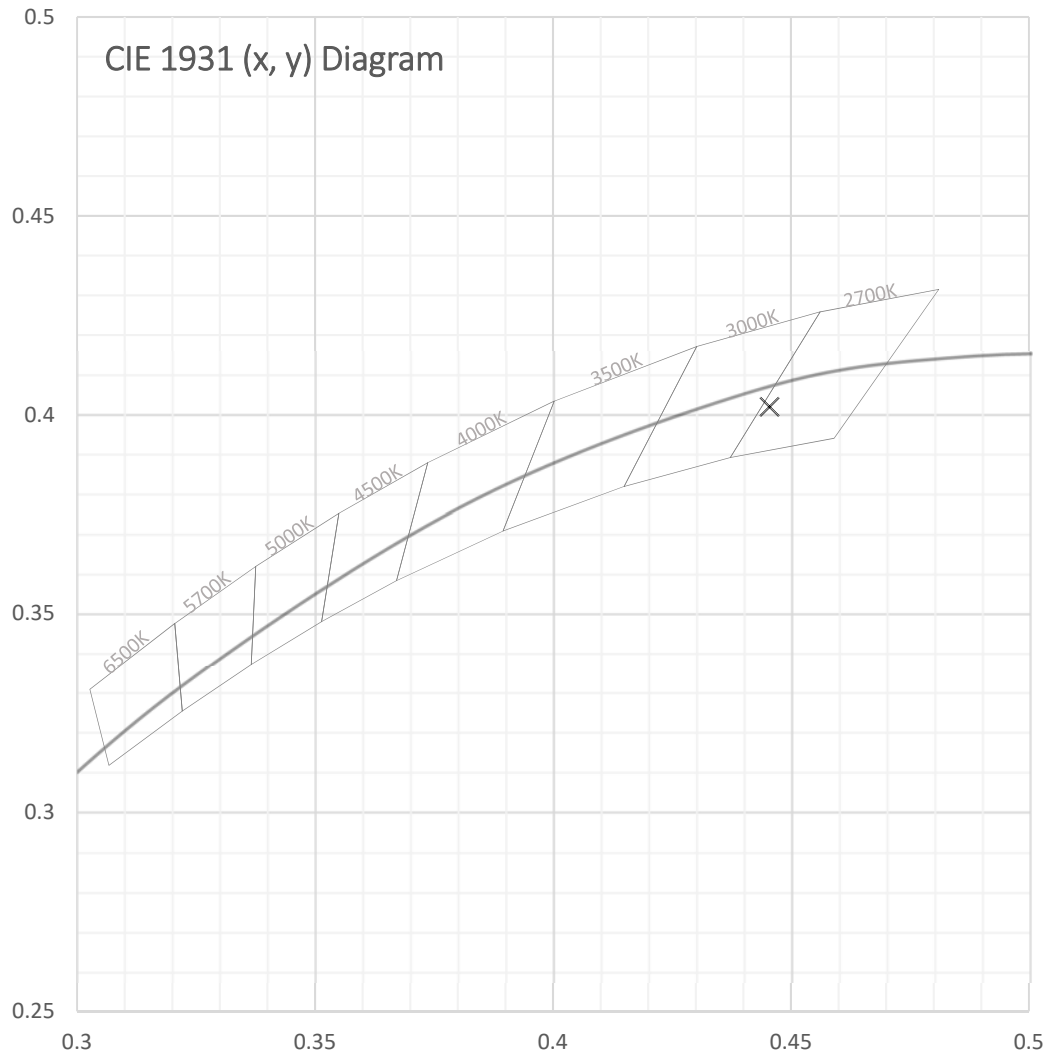


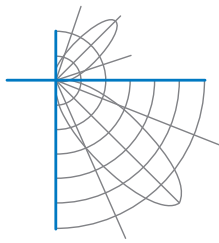
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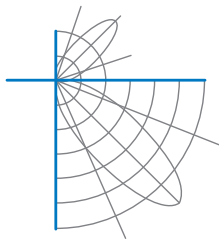
One LTF DA6W150C2040LPD010-0014 dimming LED driver.

Spectral Data

Total Radiant Flux	0.892 W
Total Luminous Flux	235.2 Lm
Chromaticity CIE 1931 (x, y)	(0.4455, 0.4020)
Chromaticity CIE 1976 (u', v')	(0.2570, 0.5218)
Correlated Color Temperature (CCT)	2844 K
Color Rendering Index (Ra)	97
R1	98
R2	98
R3	96
R4	97
R5	98
R6	97
R7	96
R8	93
R9	85
R10	94
R11	97
R12	86
R13	99
R14	97
Distance from Planckian Locus (Duv)	-0.0019
Scotopic/Photopic Ratio *	1.374

Electrical Data

Voltage	120.0 Vac
Current	0.0588 A
Power	6.59 W
Frequency	60.00 Hz
Power Factor	0.933
Current THD	10.8 %



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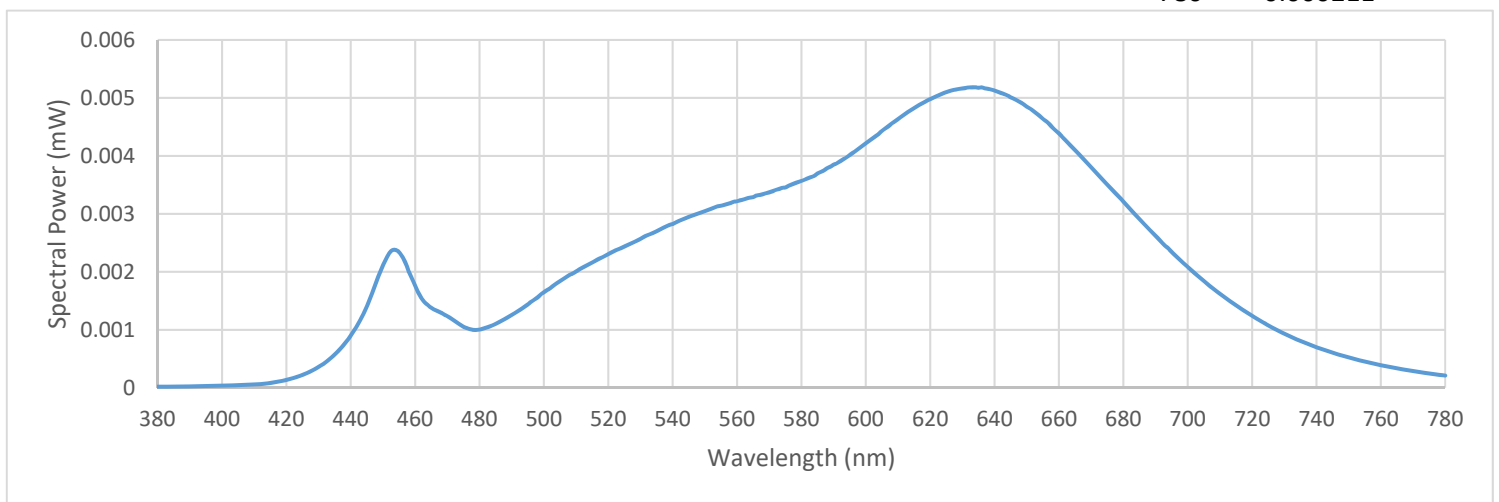
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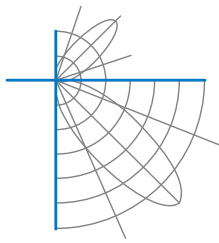
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Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000019	480	0.001006	580	0.003567	680	0.003210
385	0.000020	485	0.001103	585	0.003697	685	0.002915
390	0.000024	490	0.001255	590	0.003849	690	0.002623
395	0.000029	495	0.001437	595	0.004015	695	0.002340
400	0.000037	500	0.001647	600	0.004211	700	0.002085
405	0.000046	505	0.001839	605	0.004432	705	0.001846
410	0.000057	510	0.002006	610	0.004635	710	0.001619
415	0.000082	515	0.002163	615	0.004825	715	0.001424
420	0.000136	520	0.002308	620	0.004979	720	0.001239
425	0.000223	525	0.002436	625	0.005097	725	0.001075
430	0.000362	530	0.002570	630	0.005161	730	0.000934
435	0.000573	535	0.002697	635	0.005174	735	0.000807
440	0.000898	540	0.002825	640	0.005127	740	0.000699
445	0.001412	545	0.002945	645	0.005010	745	0.000605
450	0.002113	550	0.003050	650	0.004848	750	0.000523
455	0.002341	555	0.003137	655	0.004638	755	0.000451
460	0.001760	560	0.003216	660	0.004391	760	0.000391
465	0.001379	565	0.003288	665	0.004099	765	0.000336
470	0.001237	570	0.003370	670	0.003800	770	0.000287
475	0.001053	575	0.003456	675	0.003507	775	0.000246
						780	0.000211





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One LTF DA6W150C2040LPD010-0014 dimming LED driver.

Test Equipment Configuration: LightLab International Allentown 2m Integrating Sphere
Measurements acquired using a Labsphere CDS 2600 spectroradiometer
Testing was performed using 4 π geometry

Test Temperature: 24.7 °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

Significance: The laboratory has not participated in the selection of samples to be tested.
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Notes: The measurements and other derived quantities contained in this report are based on the absolute data as measured.

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