



Report of Test

LLIA001626-008A

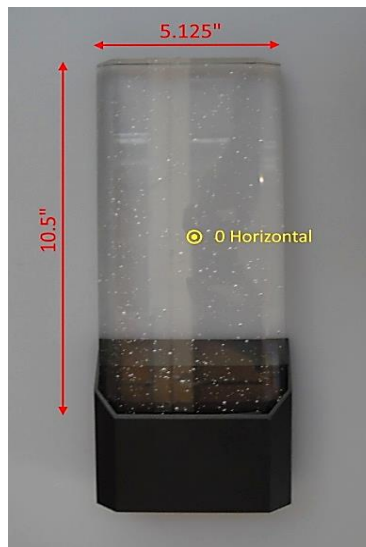
Indoor Distribution Photometry Test Report

Catalog Number: Esprit 3-755-xx

Wall mounted, cast aluminum housing, decorative vertical columnar trapezium clear air bubble glass enclosure.

14 white LEDs, mounted on one white circuit board.

Integral LED driver



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

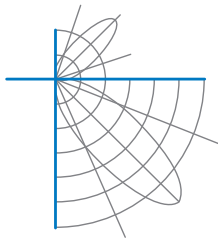
Performance Summary			
Input Voltage	120.0 Vac	Luminous Flux	164.1 Lumens
Input Current	0.0550 A	Total Efficacy	26.3 Lm/W
Input Power	6.24 W	Downward Flux	19.4 Lumens
Frequency	60.00 Hz	Downward Flux	11.8 % of Total
Power Factor	0.945		
Current THD	33.3 %		

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

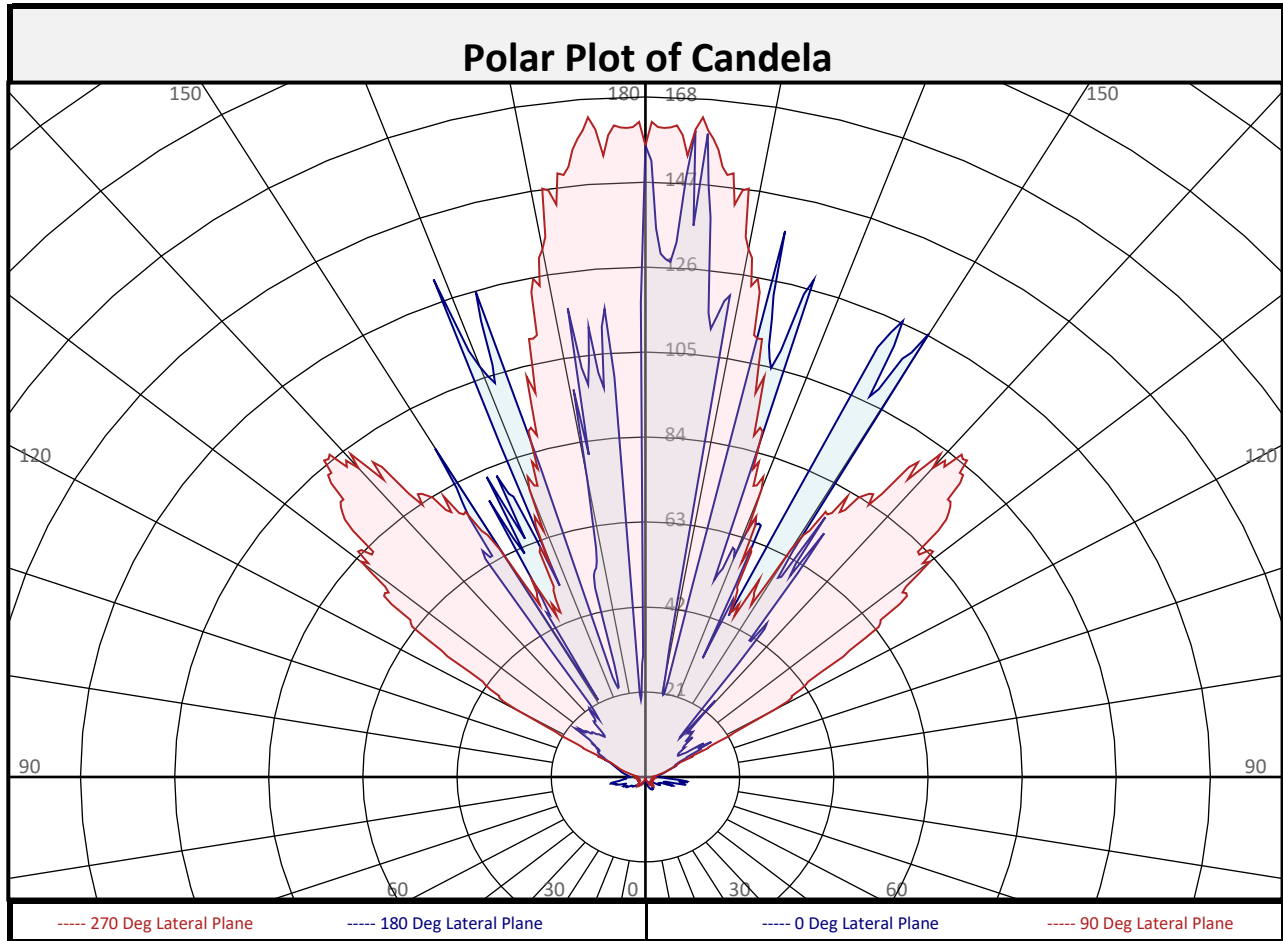
Test date: 01/19/2022

Report date: 01/21/2022

Signed: _____

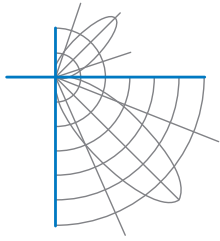


Report of Test
LLIA001626-008A



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	0.0	0.0%	90-100	3.6	2.2%	0-20	0.5	0.3%
10-20	0.4	0.2%	100-110	5.5	3.4%	0-30	1.6	1.0%
20-30	1.1	0.7%	110-120	8.7	5.3%	0-40	3.1	1.9%
30-40	1.5	0.9%	120-130	15.9	9.7%	0-60	7.5	4.6%
40-50	1.9	1.2%	130-140	23.0	14.0%	0-80	15.0	9.1%
50-60	2.4	1.5%	140-150	27.5	16.8%	10-90	19.3	11.8%
60-70	3.2	1.9%	150-160	27.3	16.6%	20-50	4.5	2.7%
70-80	4.3	2.6%	160-170	23.0	14.0%	40-90	16.2	9.9%
80-90	4.3	2.6%	170-180	10.3	6.3%	60-90	11.9	7.3%
0-90	19.4	11.8%	90-180	144.8	88.2%	0-180	164.1	100.0%



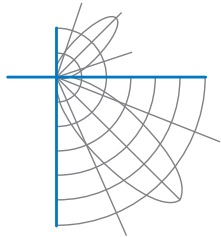
Report of Test

LLIA001626-008A

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	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
7.5	1	1	1	1	0	0	0	0	0	0
10	2	1	1	1	1	0	0	0	0	1
12.5	2	2	2	1	1	1	1	1	1	1
15	2	2	2	2	1	1	1	1	1	1
17.5	3	3	3	2	1	1	1	1	1	2
20	3	3	3	2	1	1	1	2	2	2
22.5	3	3	3	2	1	1	2	2	2	2
25	3	3	3	2	2	2	2	2	2	2
27.5	3	3	4	3	2	2	2	2	2	2
30	3	3	4	2	2	2	2	2	2	2
32.5	3	3	3	2	3	2	2	2	2	2
35	2	3	3	2	2	2	2	3	3	3
37.5	2	3	3	2	2	2	2	3	3	3
40	2	3	3	2	2	2	2	3	3	3
42.5	2	3	3	2	2	2	2	3	3	3
45	2	3	3	2	2	2	2	3	3	3
47.5	2	2	3	2	2	2	2	3	3	3
50	2	2	3	2	2	2	2	3	4	4
52.5	2	3	3	2	2	2	2	3	4	4
55	3	3	4	2	2	2	2	3	4	4
57.5	4	4	4	2	2	2	3	3	5	5
60	3	4	4	3	2	2	3	3	5	5
62.5	3	4	4	3	2	2	3	3	5	5
65	4	4	4	3	2	2	3	3	5	5
67.5	4	4	4	3	2	3	3	3	5	5
70	6	4	4	3	2	3	4	4	5	5
72.5	5	4	5	3	2	3	4	4	6	6
75	5	5	5	3	2	3	4	4	7	7
77.5	9	6	5	3	2	3	4	4	8	8
80	8	5	6	4	2	3	4	4	7	7
82.5	9	6	7	4	2	3	4	4	5	5
85	6	7	6	4	2	3	3	3	4	4
87.5	4	5	5	4	2	3	2	3	4	4
90	3	4	5	4	2	3	2	3	3	3

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

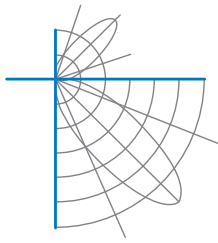


Report of Test

LLIA001626-008A

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles								
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	3	4	5	4	2	3	2	3	3
	92.5	2	3	5	3	2	3	2	3	4
	95	3	3	5	4	2	3	3	3	4
	97.5	3	3	5	4	2	3	3	4	4
	100	3	4	6	5	3	4	3	4	5
	102.5	4	4	6	5	3	4	4	5	5
	105	5	5	7	6	4	5	4	5	6
	107.5	5	5	7	7	5	5	5	6	6
	110	6	6	8	7	6	6	5	6	7
	112.5	7	6	9	8	7	7	6	8	8
	115	8	7	9	9	9	7	7	9	10
	117.5	10	8	11	10	16	8	8	10	11
	120	14	9	11	10	33	9	8	10	12
	122.5	15	10	12	11	42	10	9	10	13
	125	9	11	13	12	60	12	10	10	14
	127.5	9	14	14	14	73	14	12	12	20
	130	11	13	14	15	83	17	18	19	17
	132.5	13	19	19	22	82	22	17	16	16
	135	13	23	25	16	96	27	22	16	15
	137.5	15	20	27	17	106	29	26	18	13
140	18	28	33	20	100	33	34	20	18	
142.5	15	30	37	24	97	29	39	29	20	
145	41	33	50	35	85	42	32	48	20	
147.5	62	62	41	36	77	37	45	58	64	
150	126	88	54	29	65	27	62	25	94	
152.5	120	42	54	36	55	31	87	36	50	
155	44	44	50	34	45	38	73	54	72	
157.5	67	64	87	51	61	55	43	126	64	
160	58	66	86	77	76	71	26	119	108	
162.5	51	132	47	110	80	75	40	46	126	
165	107	127	23	121	102	71	61	35	23	
167.5	49	21	99	141	112	87	90	67	52	
170	27	69	109	134	132	47	116	118	75	
172.5	112	114	154	121	150	19	108	123	98	
175	160	169	155	129	160	24	21	119	112	
177.5	127	126	131	137	161	30	23	20	20	
180	156	156	156	156	156	156	156	156	156	



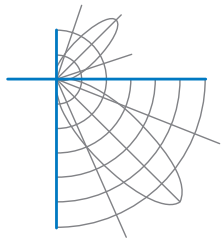
Report of Test

LLIA001626-008A

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	98	98	98	98		86	86	86	86		62	62	62		41	41	41		21	21	21	12
1	88	83	79	75		76	72	69	66		52	50	48		34	32	31		16	16	15	7
2	79	72	66	60		69	62	57	53		45	41	38		29	27	25		14	13	12	5
3	72	63	55	50		62	54	48	43		39	35	32		25	22	20		12	10	9	4
4	66	55	47	41		57	48	41	36		34	30	26		22	19	17		10	9	8	3
5	60	49	41	35		52	42	36	31		30	26	22		19	17	14		9	8	6	2
6	55	43	35	30		47	38	31	26		27	23	19		17	14	12		8	7	5	2
7	51	39	31	26		44	34	27	23		24	20	17		16	13	11		7	6	5	2
8	47	35	27	22		40	30	24	20		22	18	14		14	11	9		7	5	4	1
9	43	32	24	19		37	28	21	17		20	16	13		13	10	8		6	5	4	1
10	40	29	22	17		35	25	19	15		18	14	11		12	9	7		6	4	3	1

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 ²)			
	0 deg Plane	45 deg Plane	90 deg Plane
0	0	0	0
45	79	173	851
55	113	166	614
65	117	175	574
75	136	186	602
85	179	230	691



Report of Test

LLIA001626-008A

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

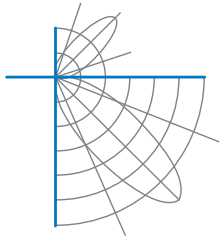
Room Size

UGR Viewed Crosswise

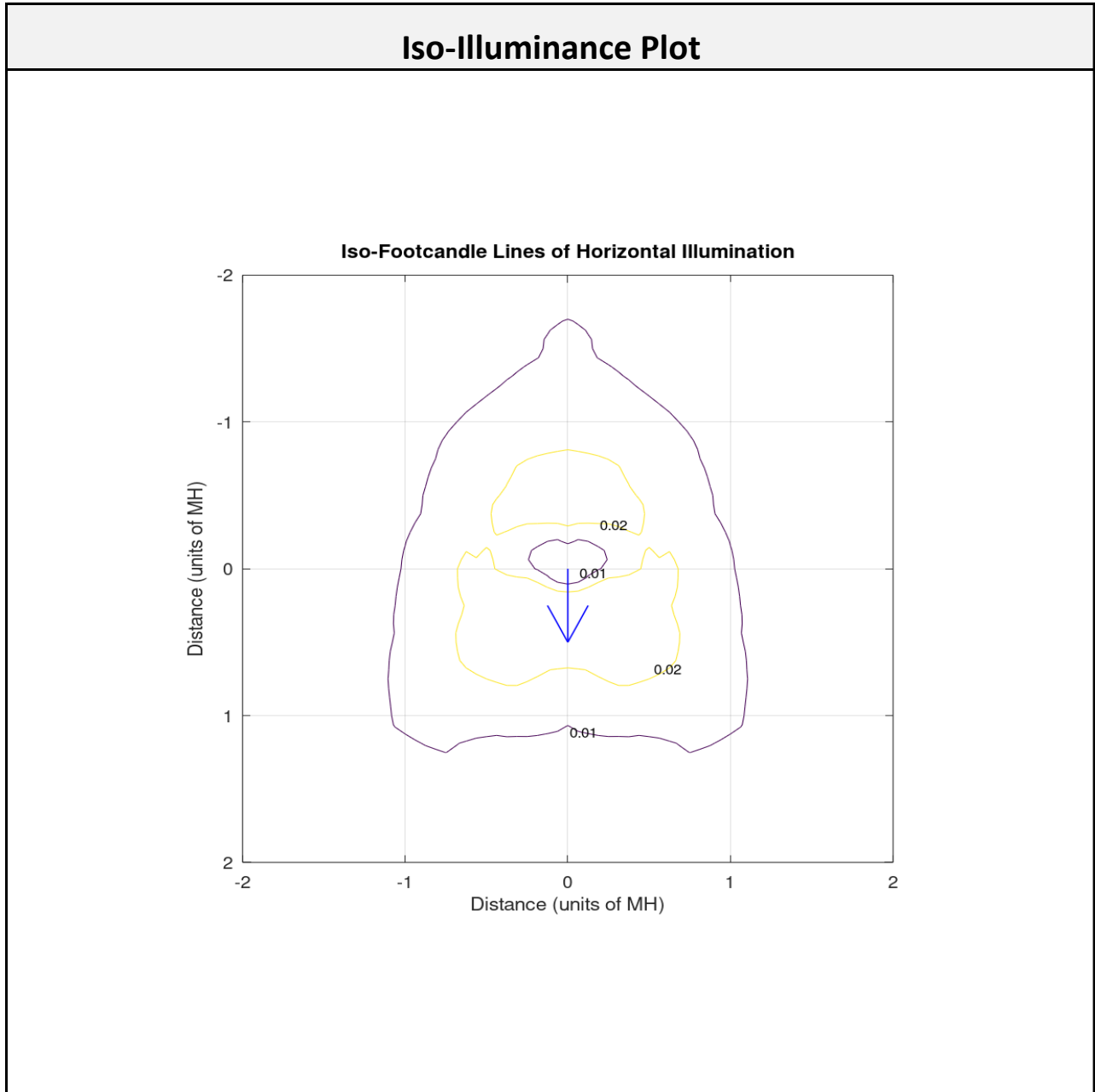
UGR Viewed Endwise

X=2H	Y=2H	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
	3H	2.1	2.7	3.3	3.9	5.6	0.0	0.0	0.0	0.0	0.0
	4H	3.7	4.2	4.9	5.4	7.1	0.0	0.0	0.0	0.0	0.0
	6H	7.4	7.9	8.6	9.1	10.9	0.0	0.0	0.0	0.0	0.7
	8H	8.8	9.3	10.0	10.5	12.2	0.0	0.0	0.0	0.0	1.3
	12H	9.9	10.4	11.1	11.6	13.3	0.0	0.0	0.0	0.1	1.8
4H	2H	0.0	0.0	0.0	0.4	2.2	0.0	0.0	0.0	0.0	0.0
	3H	2.6	3.1	3.9	4.3	6.1	0.0	0.0	0.0	0.0	0.6
	4H	4.5	4.9	5.7	6.1	7.9	0.0	0.0	0.0	0.2	2.0
	6H	8.1	8.5	9.3	9.7	11.5	0.0	0.2	1.1	1.5	3.2
	8H	9.6	10.0	10.8	11.2	12.9	0.4	0.8	1.7	2.0	3.8
	12H	10.9	11.2	12.1	12.4	14.2	1.0	1.3	2.2	2.5	4.3
8H	4H	4.8	5.2	6.0	6.4	8.2	0.2	0.6	1.4	1.8	3.5
	6H	8.4	8.7	9.7	10.0	11.8	1.8	2.1	3.0	3.3	5.1
	8H	10.0	10.3	11.3	11.5	13.3	2.5	2.7	3.7	4.0	5.8
	12H	11.4	11.7	12.7	12.9	14.7	3.1	3.3	4.3	4.6	6.4
12H	4H	4.8	5.2	6.1	6.4	8.2	0.7	1.0	2.0	2.3	4.0
	6H	8.5	8.8	9.7	10.0	11.8	2.5	2.8	3.8	4.0	5.8
	8H	10.1	10.4	11.4	11.6	13.4	3.3	3.5	4.6	4.8	6.6

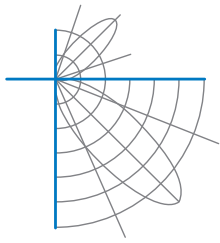
Maximum UGR = 14.7



Report of Test
LLIA001626-008A



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.



Report of Test

LLIA001626-008A

Test Distance 9.5 m
Ambient Temperature 24.5 °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.

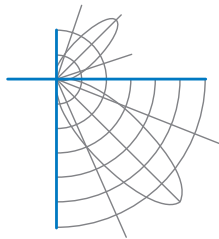
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

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

LLIA001626-008B

Integrating Sphere Report

Catalog Number: Esprit 3-755-xx

Wall mounted, cast aluminum housing, decorative vertical
columnar trapezium clear air bubble glass enclosure.

14 white LEDs, mounted on one white circuit board.

Integral LED driver



Performance Summary

Voltage	120.0 Vac
Current	0.0557 A
Power	6.35 W
Frequency	59.97 Hz
Power Factor	0.950
Current THD	31.9 %
Total Luminous Flux	163.3 lm
Efficacy	25.7 lm/W
Chromaticity (x,y)	(0.4328, 0.4158)
(u',v')	(0.2430, 0.5253)
Duv	0.0053
CCT	3165 K
CRI (Ra)	89
R9	50
TM-30: Rf	88
TM-30: Rg	96
TM-30: Rcs,h1	-6

Prepared For:

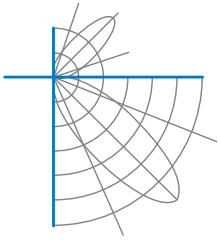
Oxygen Lighting

201 Railhead Road

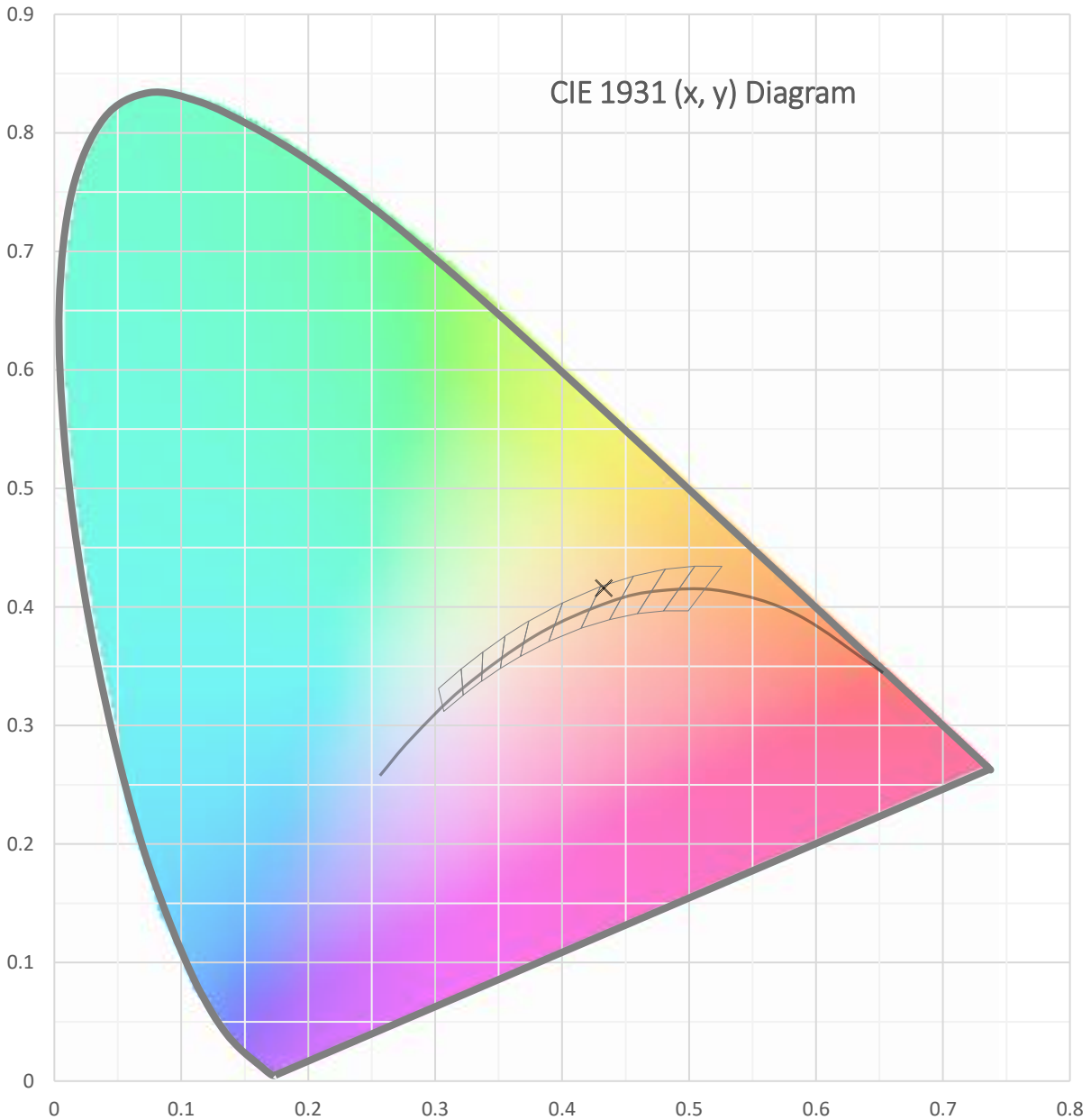
Fort Worth, TX 76106, USA

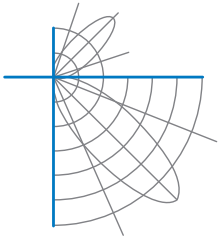
Test date: 01/19/2022

Report date: 01/21/2022

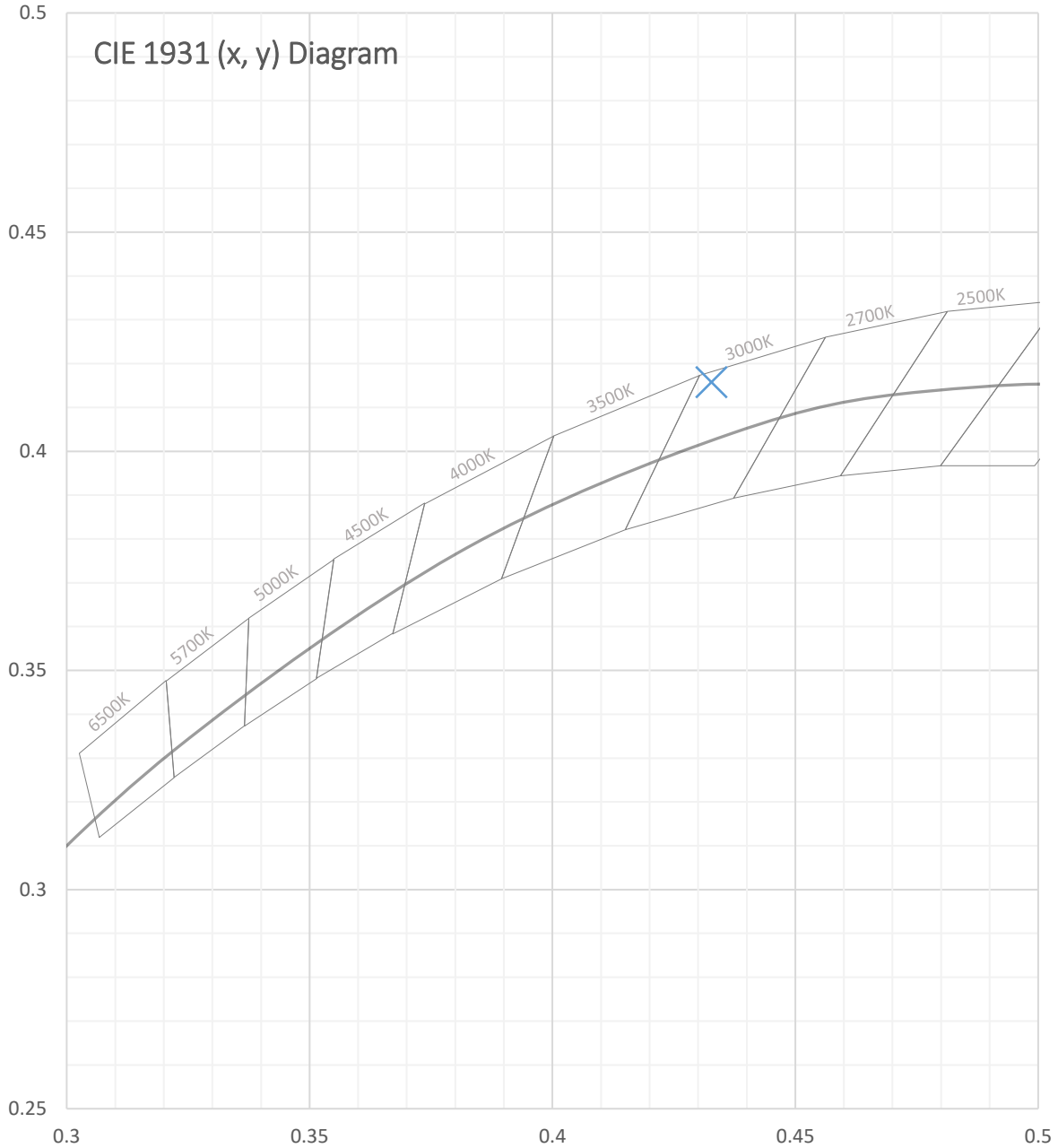


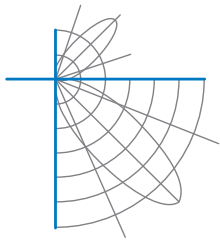
Test Report Number: LLIA001626-008B





Test Report Number: LLIA001626-008B





Test Report Number: LLIA001626-008B

Total Radiant Flux	0.555 W
Total Luminous Flux	163.3 Lm
Chromaticity CIE 1931 (x, y)	(0.4328, 0.4158)
Chromaticity CIE 1976 (u', v')	(0.2430, 0.5253)
Correlated Color Temperature (CCT)	3165 K
Color Rendering Index (Ra)	89
R1	88
R2	93
R3	96
R4	89
R5	87
R6	90
R7	93
R8	80
R9	50
R10	82
R11	87
R12	70
R13	89
R14	97
TM-30: Rf	88
TM-30: Rg	96
TM-30: Rcs,h1	-6
Distance from Planckian Locus (Duv)	0.0053
Scotopic/Photopic Ratio ‡	1.428

Electrical Data

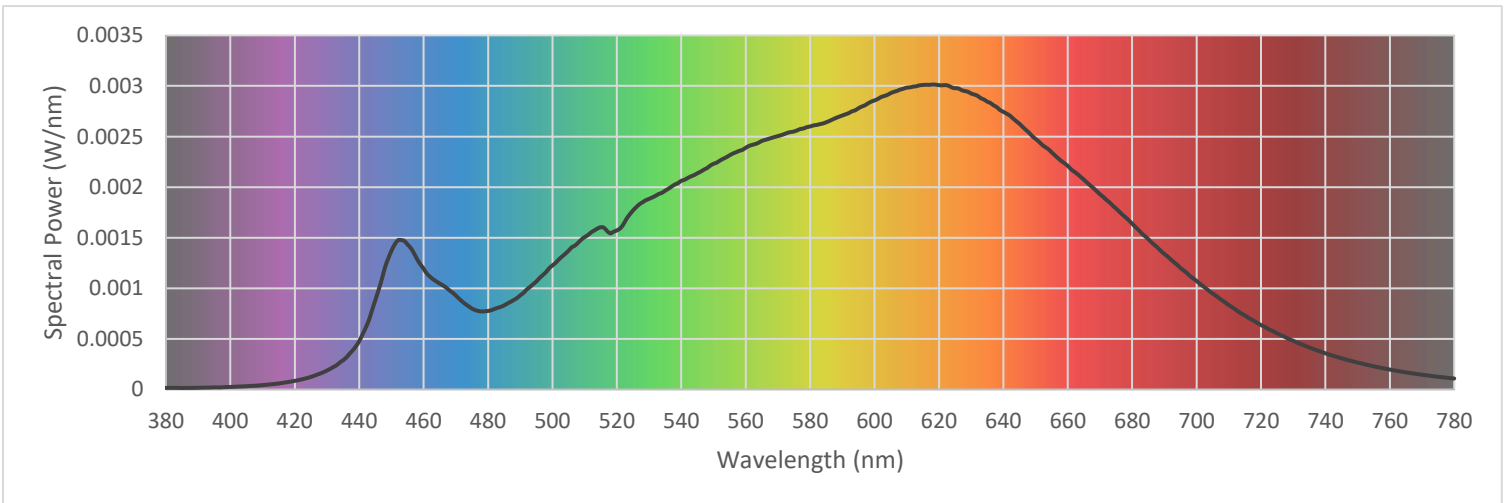
Voltage	120.0 Vac
Current	0.0557 A
Power	6.35 W
Frequency	59.97 Hz
Power Factor	0.950
Current THD	31.9 %

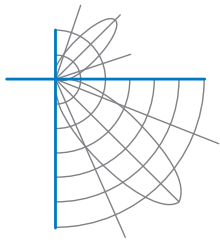


Test Report Number: LLIA001626-008B

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

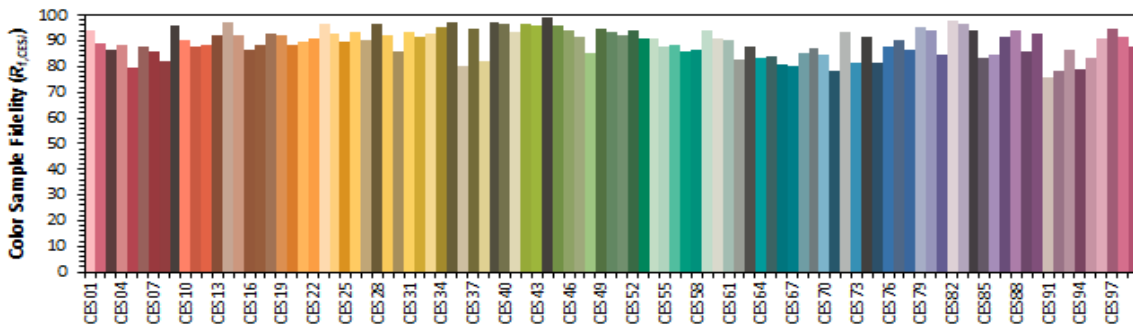
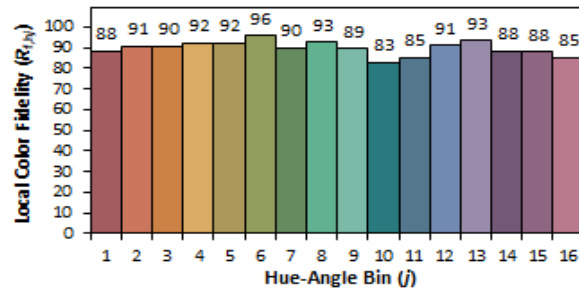
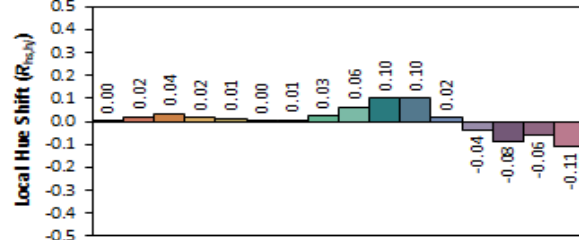
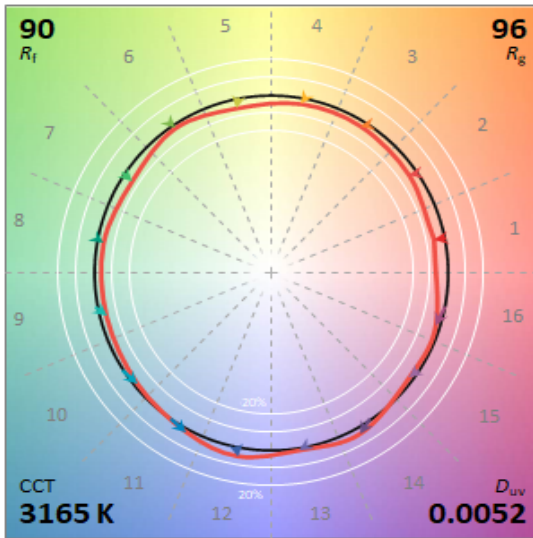
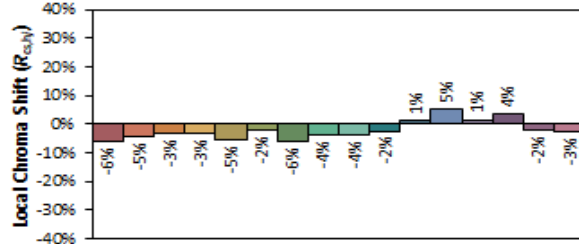
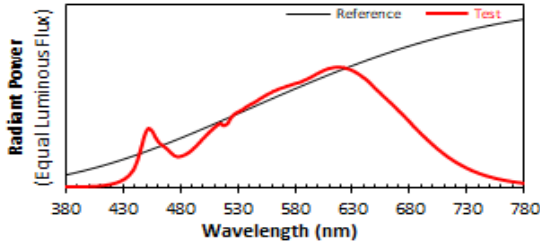
380	0.000016	480	0.000776	580	0.002599	680	0.001639
385	0.000015	485	0.000831	585	0.002641	685	0.001487
390	0.000017	490	0.000930	590	0.002708	690	0.001339
395	0.000021	495	0.001068	595	0.002779	695	0.001202
400	0.000025	500	0.001226	600	0.002857	700	0.001072
405	0.000032	505	0.001372	605	0.002929	705	0.000948
410	0.000043	510	0.001506	610	0.002983	710	0.000834
415	0.000059	515	0.001604	615	0.003009	715	0.000732
420	0.000085	520	0.001572	620	0.003008	720	0.000636
425	0.000124	525	0.001769	625	0.002977	725	0.000555
430	0.000188	530	0.001884	630	0.002925	730	0.000481
435	0.000289	535	0.001965	635	0.002845	735	0.000415
440	0.000477	540	0.002062	640	0.002745	740	0.000357
445	0.000884	545	0.002137	645	0.002626	745	0.000309
450	0.001370	550	0.002230	650	0.002477	750	0.000266
455	0.001433	555	0.002314	655	0.002344	755	0.000228
460	0.001193	560	0.002389	660	0.002209	760	0.000197
465	0.001047	565	0.002457	665	0.002074	765	0.000169
470	0.000928	570	0.002504	670	0.001929	770	0.000146
475	0.000799	575	0.002550	675	0.001789	775	0.000125
						780	0.000108



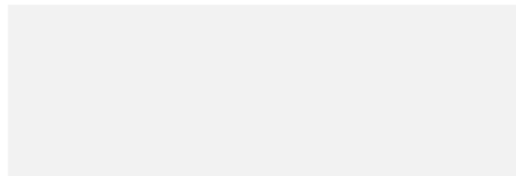


Test Report Number: LLIA001626-008B

IES TM-30 Details



Notes:



x 0.4328
y 0.4157
u' 0.2430
v' 0.5253

CIE 13.3-1995 (CRI)	
R _a	89
R _s	51



Test Report Number: LLIA001626-008B

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

Test Temperature: 25.3 °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.