



8165 E Kaiser Blvd. Anaheim, CA 92808  
www.lightlaboratory.com

Report No: L061801703



**Report No:** L061801703

**Issue Date:** 6/29/2018

**Report Prepared For:** Cerno LLC  
1751 McGaw Ave, Irvine, CA, 92614

**Model Number:** 07-210-W27P1

**Test:** Photometric/Colorimetric/Electrical Test

**Standards Used:** Appropriate part or all test guidelines were used for test performed:  
*IESNA LM79: 2008* Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products  
*ANSI NEMA ANSLG C78.377: 2008* Specification of the Chromaticity of Solid State Lighting Products  
*ANSI C82.77:2002:* Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

**Description of Sample:** Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** Fixture is tested with no special conditions.

**Sample Arrival Date:** 6/25/18

**Date of Tests:** 6/26/18 - 6/29/18

**Seasoning of Sample:** No seasoning was performed in accordance with IESNA LM-79.

#### Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S4	1/9/19
BK PRECISION	1747	PS-DC04	1/10/19
Fluke Digital Thermometer	52K/J	MT-TP05	1/10/19
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

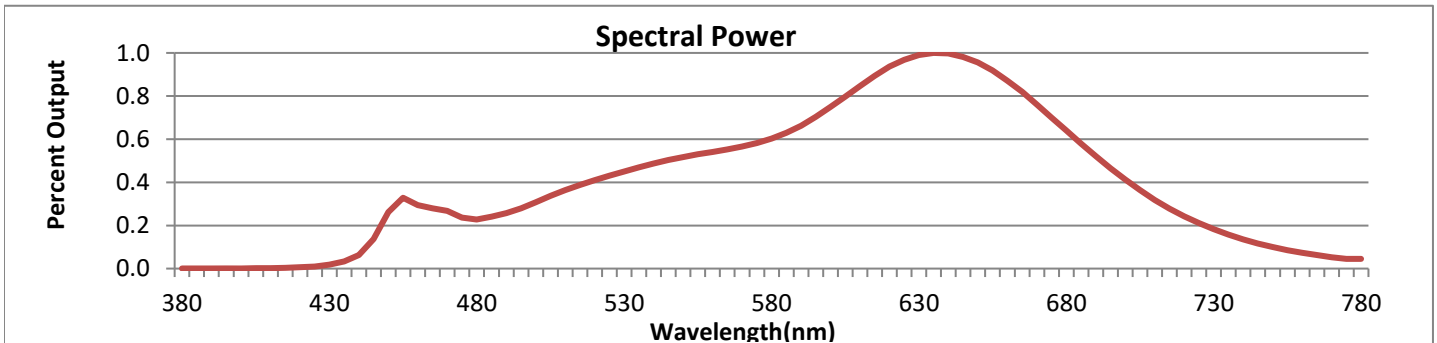
\*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

## Test Summary

<b>Manufacturer:</b>	Cerno LLC
<b>Model Number:</b>	07-210-W27P1
<b>Driver Model Number:</b>	L.T.F. DA40W24VLID010-0000
<b>Total Lumens:</b>	1562.58
<b>Input Voltage (VAC/60Hz):</b>	120.00
<b>Input Current (Amp):</b>	0.28
<b>Input Power (W):</b>	33.09
<b>Input Power Factor:</b>	0.97
<b>Current ATHD @ 120V(%):</b>	15%
<b>Current ATHD @ 277V(%):</b>	N/A
<b>Efficacy:</b>	47.22
<b>Color Rendering Index (CRI):</b>	97
<b>Correlated Color Temperature (K):</b>	2713
<b>Chromaticity Coordinate x:</b>	0.4583
<b>Chromaticity Coordinate y:</b>	0.4094
<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	0:35
<b>Total Operating Time (Hours):</b>	1:30



FIG. 1 LUMINAIRE



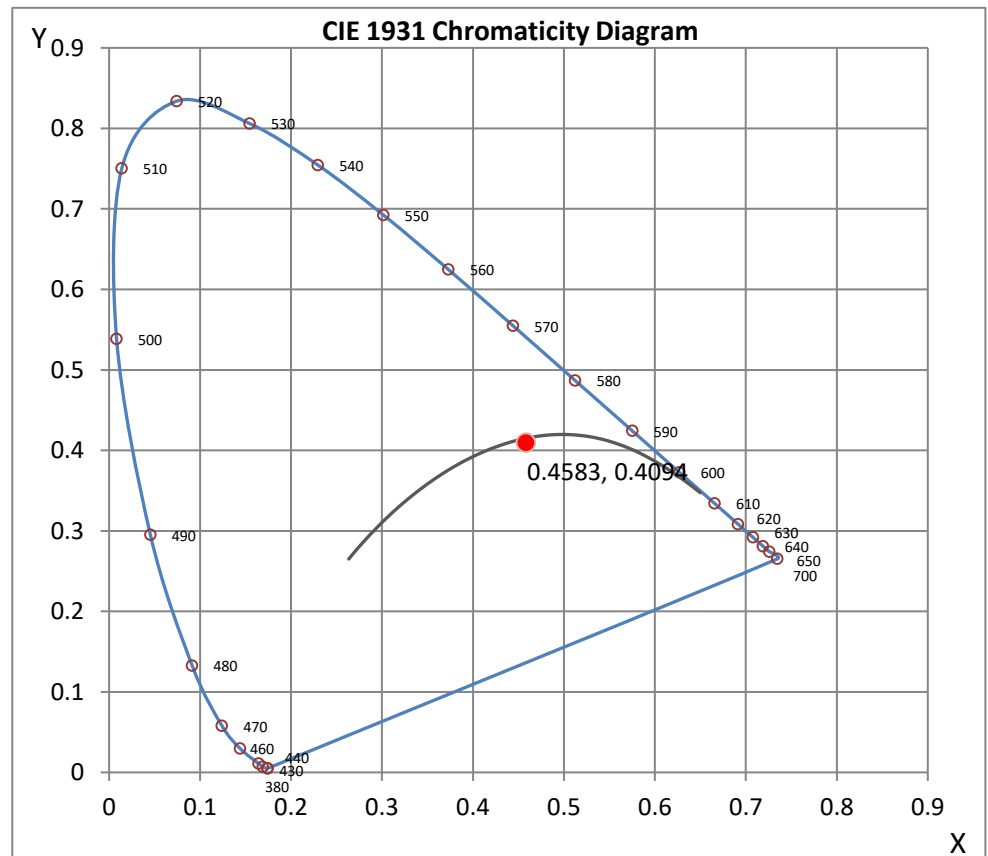
Wavelength	W/m <sup>2</sup> nm	440	0.0634	510	0.3636	580	0.6033	650	0.9555	720	0.2427
380	0.0008	450	0.2623	520	0.4107	590	0.6629	660	0.8722	730	0.1826
390	0.0008	460	0.2936	530	0.4507	600	0.7492	670	0.7598	740	0.1355
400	0.0009	470	0.2679	540	0.4874	610	0.8467	680	0.6402	750	0.0998
410	0.0019	480	0.2279	550	0.5172	620	0.9365	690	0.5212	760	0.0732
420	0.0057	490	0.2569	560	0.5414	630	0.9901	700	0.4126	770	0.0530
430	0.0179	500	0.3081	570	0.5661	640	0.9972	710	0.3185	780	0.0450

**CRI & CCT**

x	0.4583
y	0.4094
u'	0.2620
v'	0.5267
CRI	96.50
CCT	2713
Duv	-0.00031

**R Values**

R1	95.71
R2	97.07
R3	98.64
R4	96.11
R5	95.66
R6	94.07
R7	96.98
R8	97.69
R9	98.43
R10	95.60
R11	93.46
R12	85.80
R13	95.50
R14	97.92



## Test Methods

### Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

### Disclaimers:

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Joseph Shin

Test Report Released by:



Jeff Ahn  
Engineering Manager

Test Report Reviewed by:



Steve Kang  
Quality Assurance

*\*Attached are photometric data reports. Total number of pages: 12*



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## Photometric Test Report

### IES INDOOR REPORT

PHOTOMETRIC FILENAME : L061801703.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] L061801703  
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)  
[ISSUEDATE] 6/29/2018  
[MANUFAC] Cerno LLC  
[LUMCAT] 07-210-W27P1  
[LUMINAIRE] Camur Linear Pendant  
[BALLASTCAT] L.T.F. DA40W24VLID010-0000  
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
[INPUT] 120VAC, 33.09W  
[TEST PROCEDURE] IESNA:LM-79-08

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1563
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	47
Total Luminaire Watts	33.09
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.10
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.38 ft
Luminous Width (90-270)	4.91 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2725	2808	2887
55	2393	2483	2585
65	2131	2208	2331
75	1882	1934	2115
85	999	1010	1538

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L061801703.IES**

**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0</b>	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
<b>5</b>	690.20	690.03	689.87	689.54	689.20	688.87	688.71	688.37	688.04	687.54
<b>10</b>	674.26	673.76	673.26	672.93	672.76	672.43	672.10	671.77	671.43	671.10
<b>15</b>	644.20	643.53	643.20	642.87	642.70	642.54	642.70	642.54	642.54	642.54
<b>20</b>	603.01	602.35	602.02	601.68	601.68	602.02	602.35	602.85	603.34	604.01
<b>25</b>	553.52	552.86	552.53	552.53	552.86	553.52	554.35	555.18	556.51	557.51
<b>30</b>	499.38	498.72	498.55	498.55	499.22	500.21	501.54	503.04	504.53	506.19
<b>35</b>	443.08	442.42	442.42	442.75	443.58	444.58	446.24	448.07	450.06	452.05
<b>40</b>	387.45	386.62	386.62	387.12	387.95	389.28	391.10	393.10	395.25	397.58
<b>45</b>	334.31	333.48	333.48	333.97	334.97	336.30	338.13	339.79	342.11	344.44
<b>50</b>	284.32	283.65	283.65	284.15	284.98	286.31	287.81	289.96	292.12	294.28
<b>55</b>	238.15	237.49	237.32	237.82	238.48	239.81	241.14	242.97	244.96	247.12
<b>60</b>	195.47	194.80	194.80	194.97	195.63	196.47	197.79	199.29	201.12	202.78
<b>65</b>	156.28	155.78	155.45	155.61	155.78	156.77	157.60	158.93	160.26	161.92
<b>70</b>	119.24	118.74	118.41	118.24	118.41	119.08	119.74	120.90	121.90	123.23
<b>75</b>	84.53	83.87	83.54	83.37	83.37	83.87	84.37	85.03	85.86	86.86
<b>80</b>	49.82	48.99	48.49	48.33	48.33	48.49	48.83	49.32	49.99	50.82
<b>85</b>	15.11	14.28	13.95	13.62	13.45	13.45	13.78	14.12	14.61	15.28
<b>90</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Angles**      **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
<b>0</b>	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
<b>5</b>	687.21	686.88	686.38	686.05	685.55	685.22	684.55	684.22	683.72	683.23
<b>10</b>	670.77	670.44	669.94	669.28	668.61	667.95	667.12	666.12	665.12	664.13
<b>15</b>	642.37	642.21	641.87	641.54	641.04	640.38	639.38	638.05	636.73	635.23
<b>20</b>	604.34	604.67	604.84	604.84	604.34	603.84	603.01	601.68	600.02	598.03
<b>25</b>	558.67	559.34	560.17	560.50	560.66	560.33	559.67	558.50	556.51	554.35
<b>30</b>	508.02	509.01	510.34	511.17	511.67	511.67	511.34	510.34	508.68	506.52
<b>35</b>	454.21	456.20	457.86	459.19	460.02	460.52	460.19	459.36	457.70	455.37
<b>40</b>	400.07	402.23	404.22	405.72	407.05	407.71	407.88	407.21	405.72	403.39
<b>45</b>	346.93	349.25	351.58	353.24	354.57	355.56	355.73	355.40	354.23	352.08
<b>50</b>	296.77	299.10	301.26	303.08	304.41	305.41	305.91	305.74	304.74	302.92
<b>55</b>	249.28	251.27	253.26	254.92	256.42	257.58	258.08	258.24	257.25	255.75
<b>60</b>	204.77	206.60	208.59	210.08	211.41	212.41	213.24	213.40	212.74	211.41
<b>65</b>	163.58	165.08	166.74	168.07	169.06	170.23	170.89	171.22	170.89	169.89
<b>70</b>	124.56	125.88	127.05	128.38	129.70	130.70	131.36	131.86	131.70	130.87
<b>75</b>	88.02	89.18	90.34	91.51	92.50	93.50	94.33	94.83	94.99	93.50
<b>80</b>	51.65	52.65	53.81	54.80	55.80	56.80	57.79	58.46	58.62	58.29
<b>85</b>	15.94	16.77	17.60	18.60	19.76	20.76	21.92	22.75	23.25	23.08
<b>90</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Angles**      **Horizontal Angles**

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
<b>0</b>	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
<b>5</b>	682.73	682.23	681.73	681.23	680.90	680.73	680.40	680.07	679.90	679.74
<b>10</b>	662.96	661.80	660.64	659.48	658.48	657.48	656.49	655.66	654.99	654.33
<b>15</b>	633.74	631.74	629.75	628.09	625.76	624.10	622.11	620.28	618.79	617.63
<b>20</b>	596.04	593.38	590.72	588.07	585.08	582.25	579.60	576.94	574.61	572.62
<b>25</b>	551.86	548.87	545.55	542.06	538.24	534.59	531.10	527.62	524.46	521.80
<b>30</b>	503.70	500.05	496.23	492.24	488.26	483.94	479.62	475.63	471.98	468.49
<b>35</b>	452.38	448.56	444.58	440.26	435.78	431.29	426.48	422.16	418.17	414.35

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L061801703.IES**

**CANDELA TABULATION - (Cont.)**

<b>40</b>	400.40	396.75	392.60	388.28	383.63	378.65	374.00	369.68	365.53	361.54
<b>45</b>	349.25	345.60	341.78	337.79	332.98	328.33	324.01	319.86	315.87	312.05
<b>50</b>	300.26	296.77	293.12	289.30	284.82	280.66	276.51	272.53	268.87	265.55
<b>55</b>	253.43	250.44	247.12	243.63	239.64	235.82	232.34	228.85	225.69	222.54
<b>60</b>	209.42	206.76	203.77	200.62	197.30	194.14	190.98	188.16	185.34	182.85
<b>65</b>	168.40	166.07	163.58	160.76	157.94	155.11	152.62	150.30	147.97	146.14
<b>70</b>	129.37	127.38	125.22	122.89	120.40	118.24	116.09	114.26	112.43	111.10
<b>75</b>	92.17	90.51	88.52	86.69	84.53	83.54	81.87	80.21	78.89	78.05
<b>80</b>	56.96	55.30	53.64	51.98	50.32	48.83	47.50	46.33	45.34	44.67
<b>85</b>	21.76	20.10	18.60	17.11	15.78	14.78	13.95	13.12	12.62	12.29
<b>90</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>150</b></u>	<u><b>155</b></u>	<u><b>160</b></u>	<u><b>165</b></u>	<u><b>170</b></u>	<u><b>175</b></u>	<u><b>180</b></u>	<u><b>185</b></u>	<u><b>190</b></u>	<u><b>195</b></u>
<b>0</b>	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
<b>5</b>	679.74	679.90	680.07	680.24	680.57	680.90	681.40	681.90	682.56	683.06
<b>10</b>	653.83	653.66	653.66	653.83	654.16	654.66	655.49	656.49	657.48	658.81
<b>15</b>	616.63	615.97	615.47	615.47	615.63	616.30	617.29	618.62	620.28	622.11
<b>20</b>	570.96	569.47	568.64	568.14	568.14	568.80	569.96	571.62	573.62	576.27
<b>25</b>	519.48	517.48	515.99	515.33	515.16	515.66	516.82	518.48	521.14	524.29
<b>30</b>	465.67	463.34	461.52	460.52	460.02	460.36	461.52	463.34	466.00	469.32
<b>35</b>	411.03	408.37	406.38	405.22	404.72	405.05	406.22	407.88	410.70	414.02
<b>40</b>	358.55	355.73	353.57	352.41	351.74	352.08	353.07	354.90	357.39	360.88
<b>45</b>	309.06	306.41	304.58	303.25	302.75	302.92	303.91	305.58	308.07	311.22
<b>50</b>	262.89	260.57	258.74	257.58	257.25	257.41	258.41	259.91	262.23	265.22
<b>55</b>	220.21	218.39	216.89	215.90	215.56	215.90	216.89	218.22	220.55	223.20
<b>60</b>	180.85	179.36	178.20	177.70	177.37	177.86	178.70	180.02	182.02	184.34
<b>65</b>	144.48	143.32	142.49	142.16	142.16	142.66	143.65	144.98	146.81	148.97
<b>70</b>	109.94	109.11	108.61	108.61	108.61	109.44	110.44	111.60	113.26	115.26
<b>75</b>	77.22	76.73	76.56	76.73	77.06	77.89	78.89	80.21	81.87	83.70
<b>80</b>	44.18	44.01	44.18	44.51	45.17	46.00	47.00	48.33	49.99	51.65
<b>85</b>	12.12	12.12	12.46	12.79	13.45	14.28	15.28	16.61	17.94	19.43
<b>90</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>200</b></u>	<u><b>205</b></u>	<u><b>210</b></u>	<u><b>215</b></u>	<u><b>220</b></u>	<u><b>225</b></u>	<u><b>230</b></u>	<u><b>235</b></u>	<u><b>240</b></u>	<u><b>245</b></u>
<b>0</b>	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
<b>5</b>	683.89	684.39	685.22	685.88	686.55	687.21	687.88	688.54	689.20	689.70
<b>10</b>	660.31	661.80	663.30	665.12	666.95	668.61	670.27	672.10	673.59	675.09
<b>15</b>	624.44	627.09	629.58	632.41	635.23	638.05	641.21	644.03	646.86	649.51
<b>20</b>	579.10	582.59	586.41	590.39	594.38	598.36	602.68	606.83	610.65	614.64
<b>25</b>	527.62	531.93	536.58	541.23	546.38	551.53	557.18	562.16	567.31	572.12
<b>30</b>	473.48	477.96	482.94	488.75	494.57	500.71	507.19	512.83	518.81	524.63
<b>35</b>	418.51	423.16	428.47	434.61	440.76	447.40	454.38	461.02	467.50	473.81
<b>40</b>	365.03	369.85	374.99	381.30	387.45	394.09	401.40	408.21	414.85	421.49
<b>45</b>	315.21	319.53	324.67	330.65	336.80	342.78	349.92	356.39	363.04	369.51
<b>50</b>	268.71	273.02	277.67	283.32	288.64	294.61	301.26	307.40	313.55	319.69
<b>55</b>	226.36	230.01	234.33	239.31	244.46	249.77	255.42	261.07	266.71	272.19
<b>60</b>	187.17	190.65	194.31	198.79	203.27	207.92	213.07	218.05	223.04	227.85
<b>65</b>	151.46	154.28	157.94	161.59	165.58	169.23	173.55	178.03	182.18	186.33
<b>70</b>	117.58	120.24	123.23	126.38	129.70	133.19	137.01	140.66	144.32	147.97
<b>75</b>	85.69	88.19	90.84	93.50	96.49	99.48	102.80	105.79	108.94	111.93
<b>80</b>	53.48	55.80	58.13	60.45	62.94	65.60	68.42	71.08	73.74	76.39
<b>85</b>	21.26	23.25	25.24	27.24	29.56	31.72	34.21	36.54	38.86	41.35

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : L061801703.IES

CANDELA TABULATION - (Cont.)

90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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Vert. Angles Horizontal Angles

	<u>250</u>	<u>255</u>	<u>260</u>	<u>265</u>	<u>270</u>	<u>275</u>	<u>280</u>	<u>285</u>	<u>290</u>	<u>295</u>
0	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
5	690.37	690.87	691.20	691.70	691.86	692.19	692.19	692.36	692.53	692.53
10	676.42	677.58	678.58	679.24	679.90	680.57	680.73	681.07	680.90	680.90
15	651.84	653.83	655.66	657.15	658.15	658.98	659.31	659.31	659.15	658.48
20	617.96	621.11	623.61	625.43	626.93	627.76	628.26	627.92	627.26	626.26
25	576.61	580.43	583.58	586.07	587.73	588.73	588.90	588.40	587.24	585.41
30	529.61	533.93	537.75	540.73	542.56	543.56	543.56	542.73	541.07	538.74
35	479.29	484.10	488.26	491.41	493.40	494.23	494.07	492.74	490.75	487.92
40	427.14	432.12	436.27	439.60	441.59	442.42	441.92	440.43	438.10	434.95
45	375.16	380.14	384.13	387.45	389.44	390.11	389.44	387.78	384.96	381.97
50	325.01	329.82	333.97	336.80	338.46	338.79	338.29	336.46	333.81	330.49
55	277.34	281.66	285.15	287.97	289.47	289.80	288.97	286.98	284.48	281.33
60	232.17	236.16	239.48	241.80	243.30	243.30	242.47	240.47	237.98	234.99
65	190.32	193.81	196.63	198.62	199.79	199.79	198.62	196.80	194.47	191.65
70	151.13	154.12	156.61	158.43	159.43	159.10	157.94	156.28	154.12	151.46
75	114.92	117.41	119.41	120.90	121.73	121.40	120.24	118.41	116.25	113.76
80	78.89	81.04	82.87	84.20	84.86	84.37	83.04	81.21	79.22	76.89
85	43.35	45.50	47.17	48.33	48.83	48.33	46.67	44.84	42.85	40.69
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles Horizontal Angles

	<u>300</u>	<u>305</u>	<u>310</u>	<u>315</u>	<u>320</u>	<u>325</u>	<u>330</u>	<u>335</u>	<u>340</u>	<u>345</u>
0	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64	692.64
5	692.36	692.36	692.36	692.19	692.03	691.70	691.70	691.53	691.20	691.03
10	680.57	680.24	679.57	679.07	678.74	678.08	677.58	676.92	676.25	675.59
15	657.82	656.82	655.66	654.50	653.00	651.51	650.34	648.85	647.85	646.69
20	624.60	622.94	620.95	618.62	616.46	614.31	612.15	610.15	608.16	606.50
25	583.25	580.59	577.77	574.78	571.62	568.47	565.48	562.82	560.33	558.01
30	535.59	532.27	528.61	524.79	520.97	517.32	513.50	510.18	507.19	504.70
35	484.44	480.62	476.46	471.81	467.33	463.18	459.03	455.21	451.55	448.73
40	430.96	426.81	421.99	417.34	412.69	408.04	403.72	399.74	396.09	393.10
45	377.82	373.33	368.52	363.70	359.05	354.40	350.25	345.93	342.61	339.45
50	326.50	322.02	317.37	312.72	308.23	303.91	299.76	295.94	292.46	289.63
55	277.34	273.36	268.87	264.56	260.24	256.25	252.43	248.78	245.62	243.13
60	231.51	227.69	223.54	219.55	215.73	212.08	208.42	205.27	202.44	200.28
65	188.33	185.01	181.19	177.86	174.21	170.72	168.07	165.24	162.75	160.59
70	148.30	145.31	141.99	138.84	135.68	132.53	129.87	127.38	125.22	123.23
75	110.94	108.11	105.12	102.30	99.64	96.82	94.33	92.01	90.18	88.19
80	74.07	71.58	68.75	66.26	63.61	61.12	58.79	56.80	54.97	53.31
85	38.20	35.71	33.22	30.72	28.40	25.91	23.92	21.76	20.10	18.43
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles Horizontal Angles

	<u>350</u>	<u>355</u>	<u>360</u>
0	692.64	692.64	692.64
5	690.87	690.37	690.20
10	675.09	674.59	674.26
15	645.69	644.70	644.20
20	605.01	603.84	603.01



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L061801703.IES**

**CANDELA TABULATION - (Cont.)**

<b>25</b>	556.01	554.69	553.52
<b>30</b>	502.54	500.71	499.38
<b>35</b>	446.24	444.41	443.08
<b>40</b>	390.77	388.61	387.45
<b>45</b>	337.46	335.47	334.31
<b>50</b>	287.31	285.48	284.32
<b>55</b>	240.97	239.31	238.15
<b>60</b>	198.13	196.63	195.47
<b>65</b>	158.77	157.27	156.28
<b>70</b>	121.57	120.24	119.24
<b>75</b>	86.69	85.53	84.53
<b>80</b>	51.82	50.65	49.82
<b>85</b>	17.11	15.94	15.11
<b>90</b>	0.00	0.00	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L061801703.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	244.64	N.A.	15.70
0-30	499.18	N.A.	31.90
0-40	780.30	N.A.	49.90
0-60	1269.84	N.A.	81.30
0-80	1533.63	N.A.	98.10
0-90	1562.58	N.A.	100.00
10-90	1497.6	N.A.	95.80
20-40	535.66	N.A.	34.30
20-50	801.78	N.A.	51.30
40-70	654.63	N.A.	41.90
60-80	263.79	N.A.	16.90
70-80	98.69	N.A.	6.30
80-90	28.95	N.A.	1.90
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1562.58	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	64.98
10-20	179.66
20-30	254.54
30-40	281.12
40-50	266.12
50-60	223.42
60-70	165.10
70-80	98.69
80-90	28.95
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

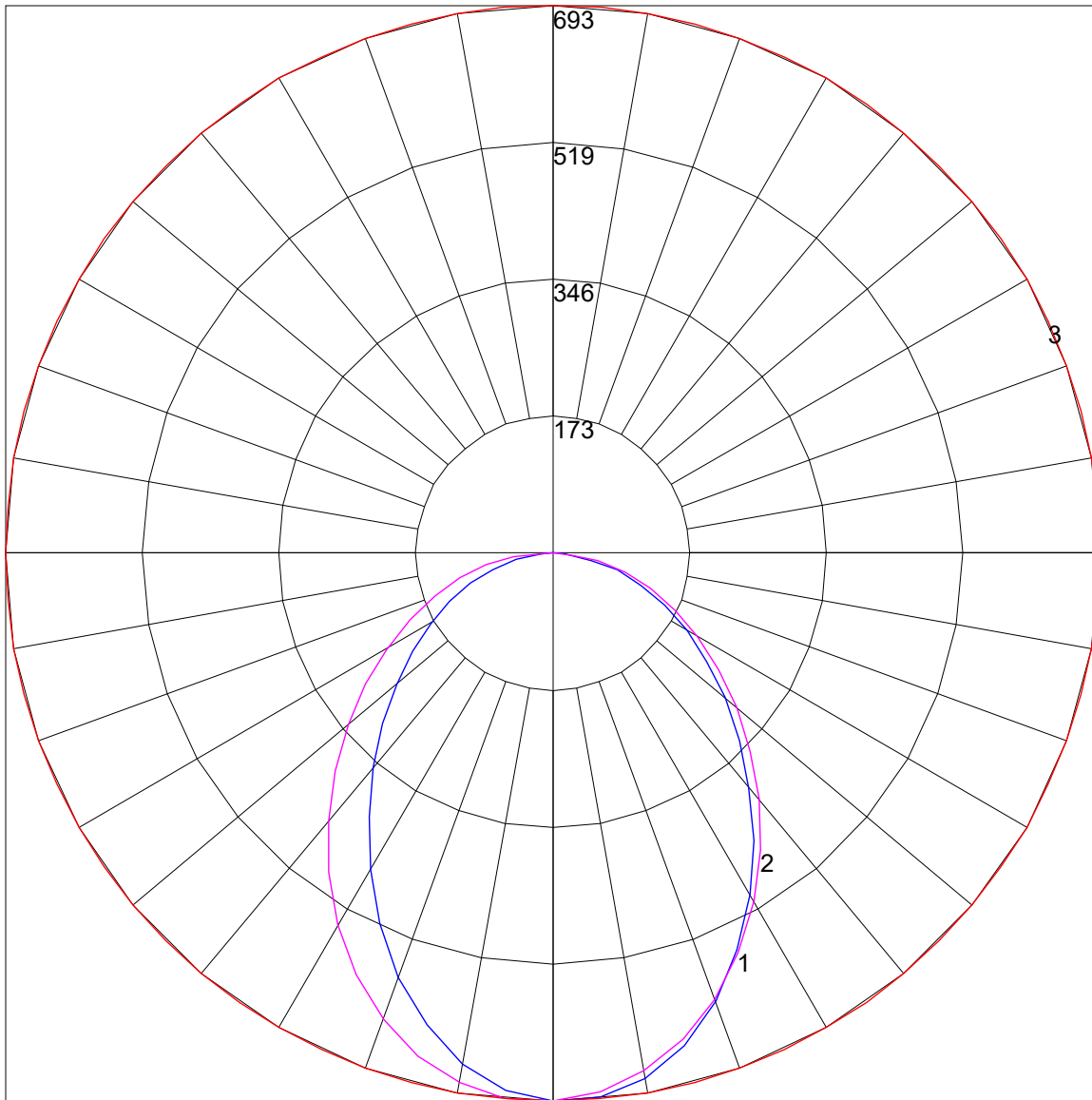
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : L061801703.IES**

**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
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

POLAR GRAPH



Maximum Candela = 692.64 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 3 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)