

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] SP-00621\_14  
 [TESTLAB] Spectrum Lighting Photometric Lab, VLS-245-981  
 [MANUFAC] Spectrum Lighting  
 [ISSUEDATE] 6/7/2018  
 [UPDATE] 7/13/2018  
 [LUMCAT] SGRTV8BX-80L35K-ND-DO101-AR8BX-SGWF  
 [LUMINAIRE] Nom. 8" Diam x 9" H, Open aperture  
 [OTHER] Semi-diffuse aluminum reflector trim  
 [OTHER] Deep regressed retrofit high output LED downlight  
 [OTHER] BX Series, Narrow Beam  
 [OTHER] 24.5 Deg Beam Angle  
 [LAMPCAT] N/A  
 [LAMP] N/A, Bridgelux Vero 29  
 [OTHER] Dimmable driver tested at 100% output  
 [OTHER] Tested CCT: 3500K  
 [OTHER] CCT Output: 27K x 0.932, 30K x 1.00, 40K x 1.01  
 [OTHER] This report prepared by Spectrum Lighting

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6448
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	60
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.42
Spacing Criterion (90-270)	0.42
Spacing Criterion (Diagonal)	0.44
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.63 ft (Diameter)
Luminous Width (90-270)	0.63 ft (Diameter)
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	129	99	60
55	41	74	69
65	73	56	126
75	121	160	103
85	200	402	416

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES

## CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	22381.88	22381.88	22381.88	22381.88	22381.88	22381.88	22381.88	22381.88	22381.88	22381.88
2.5	22126.23	21926.10	22089.50	21950.11	21970.43	21775.42	21669.11	21628.02	21685.46	21645.88
5.0	20383.31	20528.33	20480.69	20597.36	20510.80	20602.65	20384.55	20417.61	20150.60	20518.63
7.5	18200.11	17867.77	18183.10	17947.06	17999.96	17620.63	17408.01	17412.96	17402.93	17407.25
10.0	14399.50	14464.32	14454.09	14478.78	14479.62	14349.83	14083.88	14251.25	14000.06	14200.97
12.5	10840.11	10630.62	10663.95	10529.65	10558.77	10624.35	10708.25	10738.49	10773.73	10682.39
15.0	8166.79	8081.70	8016.45	7924.04	8015.64	7914.22	7757.07	8004.01	7707.45	7894.91
17.5	6127.77	5848.50	5854.04	5655.44	5774.44	5866.96	5991.16	5971.91	6067.21	6002.49
20.0	4928.05	4862.24	4723.97	4684.25	4715.95	4770.27	4732.47	4856.81	4736.50	4848.18
22.5	4133.21	4012.10	3953.63	3875.52	3900.33	3897.99	4029.73	4060.21	4120.75	4063.78
25.0	3556.21	3501.54	3498.29	3492.24	3500.32	3479.07	3491.26	3540.73	3555.28	3544.95
27.5	3023.28	2976.84	2993.60	3032.27	3047.92	3019.31	3024.28	3026.78	3036.45	3063.85
30.0	2484.21	2437.95	2472.74	2494.39	2557.93	2440.06	2416.51	2482.77	2526.53	2605.00
32.5	1800.97	1713.05	1684.14	1752.35	1817.68	1755.05	1773.44	1835.80	2019.82	2067.79
35.0	1140.31	915.54	942.11	926.72	1020.40	951.40	983.42	1029.08	1233.72	1360.87
37.5	533.17	461.36	444.01	472.55	527.54	459.15	379.32	480.90	516.04	758.95
40.0	171.29	89.34	112.89	98.98	130.93	108.20	125.81	99.07	205.43	249.23
42.5	39.06	36.35	32.57	39.84	47.45	37.55	11.08	18.10	11.97	72.28
45.0	2.64	2.44	2.03	2.16	1.22	1.49	4.03	1.62	5.66	6.83
47.5	1.67	1.61	2.06	2.26	0.81	1.53	2.19	1.40	2.65	3.73
50.0	1.28	1.13	1.80	1.92	0.85	1.35	1.82	1.34	1.82	2.99
52.5	0.94	0.90	1.48	1.24	1.11	0.70	1.70	1.70	1.66	2.83
55.0	0.67	1.01	1.22	0.97	1.14	1.04	1.54	1.65	1.64	2.47
57.5	0.70	1.19	1.05	0.80	1.13	2.18	1.20	1.14	1.45	1.81
60.0	1.21	0.88	1.13	0.80	0.99	1.87	0.97	0.99	1.20	1.64
62.5	1.22	0.65	1.01	0.79	1.04	1.13	0.88	1.00	0.77	1.78
65.0	0.89	0.65	0.69	0.72	1.53	0.97	0.99	0.97	0.58	1.40
67.5	0.92	0.56	0.83	0.75	1.76	0.85	1.21	0.95	0.67	0.94
70.0	1.01	0.36	1.18	0.90	1.74	0.80	0.84	1.04	0.78	1.04
72.5	0.98	0.44	1.15	0.95	1.29	0.76	0.47	1.00	0.88	1.04
75.0	0.90	0.61	1.20	0.89	0.77	0.72	0.65	0.75	0.71	0.77
77.5	0.77	0.73	1.48	0.43	0.53	0.90	0.86	0.58	0.70	0.95
80.0	0.64	1.01	1.67	0.24	0.54	0.99	1.02	0.53	0.95	1.22
82.5	0.51	0.93	0.98	0.43	1.03	0.84	0.81	0.72	1.58	0.96
85.0	0.50	1.15	1.01	0.57	1.05	0.89	1.06	0.94	1.09	0.98
87.5	0.53	0.57	1.02	0.35	0.89	1.81	0.91	0.62	0.42	0.25
90.0	0.00	0.00	0.00	0.00	0.00	0.44	1.05	0.56	1.02	0.99
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES

## CANDELA TABULATION - (Cont.)

127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert.  
Angles

## Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	22381.881	22381.881	22381.881	22381.881	22381.881	22381.881	22381.881
2.5	21659.260	21639.750	21634.141	21725.490	21968.369	21855.650	22126.230
5.0	20273.000	20533.230	20453.961	20401.199	20359.029	20521.400	20383.311
7.5	17349.900	17374.131	17344.529	17529.051	17918.779	17762.461	18200.119
10.0	13957.430	14128.260	14066.090	14286.020	14401.110	14451.960	14399.500
12.5	10640.100	10607.170	10645.770	10637.700	10696.020	10703.180	10840.110
15.0	7660.635	7839.482	7816.652	8054.614	8214.479	8154.354	8166.796
17.5	6034.223	5969.724	6021.699	5940.301	6083.040	5956.334	6127.774
20.0	4798.843	4832.154	4851.908	4934.915	4971.845	4996.026	4928.057
22.5	4112.968	4050.641	4128.402	4092.711	4148.416	4126.915	4133.217
25.0	3551.152	3550.956	3591.762	3625.518	3650.943	3576.409	3556.218
27.5	3061.471	3084.952	3102.894	3153.161	3145.112	3060.404	3023.288
30.0	2594.182	2607.385	2622.322	2670.966	2635.502	2590.758	2484.215
32.5	2113.514	2059.971	2076.623	2081.989	2049.006	1963.037	1800.976
35.0	1384.960	1365.842	1316.760	1409.350	1442.937	1246.426	1140.316
37.5	743.370	775.614	696.815	794.500	755.922	678.795	533.170
40.0	323.155	274.216	248.050	196.209	244.830	168.189	171.299
42.5	84.063	92.163	65.882	91.184	82.691	71.968	39.069
45.0	27.105	13.363	17.214	10.072	9.106	3.885	2.644
47.5	8.681	9.526	8.889	7.227	6.550	3.715	1.678
50.0	5.602	7.724	5.989	5.498	4.607	3.082	1.289
52.5	4.450	5.464	3.759	5.267	2.851	1.997	0.945
55.0	3.416	3.787	2.406	4.718	2.195	1.477	0.674
57.5	2.243	2.967	2.952	3.993	1.615	1.168	0.704
60.0	1.552	2.855	2.724	2.571	1.281	0.958	1.219
62.5	1.699	3.173	1.819	1.152	1.125	0.828	1.227
65.0	1.367	2.123	1.172	1.113	1.213	1.091	0.897

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES****CANDELA TABULATION - (Cont.)**

67.5	0.691	0.883	0.612	0.989	0.907	1.139	0.922
70.0	0.519	0.908	0.503	0.664	0.376	0.825	1.019
72.5	0.498	0.854	0.477	0.846	0.422	1.071	0.984
75.0	0.866	0.617	0.679	1.419	0.549	1.626	0.908
77.5	0.972	0.665	0.708	1.122	0.682	1.885	0.772
80.0	0.781	0.729	0.686	1.298	0.898	1.042	0.645
82.5	0.595	0.394	0.834	1.063	1.316	0.315	0.517
85.0	0.674	0.719	0.176	0.393	1.302	0.537	0.505
87.5	0.670	0.800	0.529	0.540	0.475	1.110	0.535
90.0	0.321	0.957	0.526	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	4027.37	N.A.	62.50
0-30	5655.73	N.A.	87.70
0-40	6415.16	N.A.	99.50
0-60	6445.22	N.A.	100.00
0-80	6447.22	N.A.	100.00
0-90	6448.04	N.A.	100.00
10-90	4702.19	N.A.	72.90
20-40	2387.79	N.A.	37.00
20-50	2415.99	N.A.	37.50
40-70	31.16	N.A.	0.50
60-80	2.00	N.A.	0.00
70-80	0.91	N.A.	0.00
80-90	0.82	N.A.	0.00
90-110	0.05	N.A.	0.00
90-120	0.05	N.A.	0.00
90-130	0.05	N.A.	0.00
90-150	0.05	N.A.	0.00
90-180	0.05	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	6448.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	1745.86
10-20	2281.52
20-30	1628.36
30-40	759.43
40-50	28.20
50-60	1.86
60-70	1.10
70-80	0.91
80-90	0.82
90-100	0.05
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 : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES

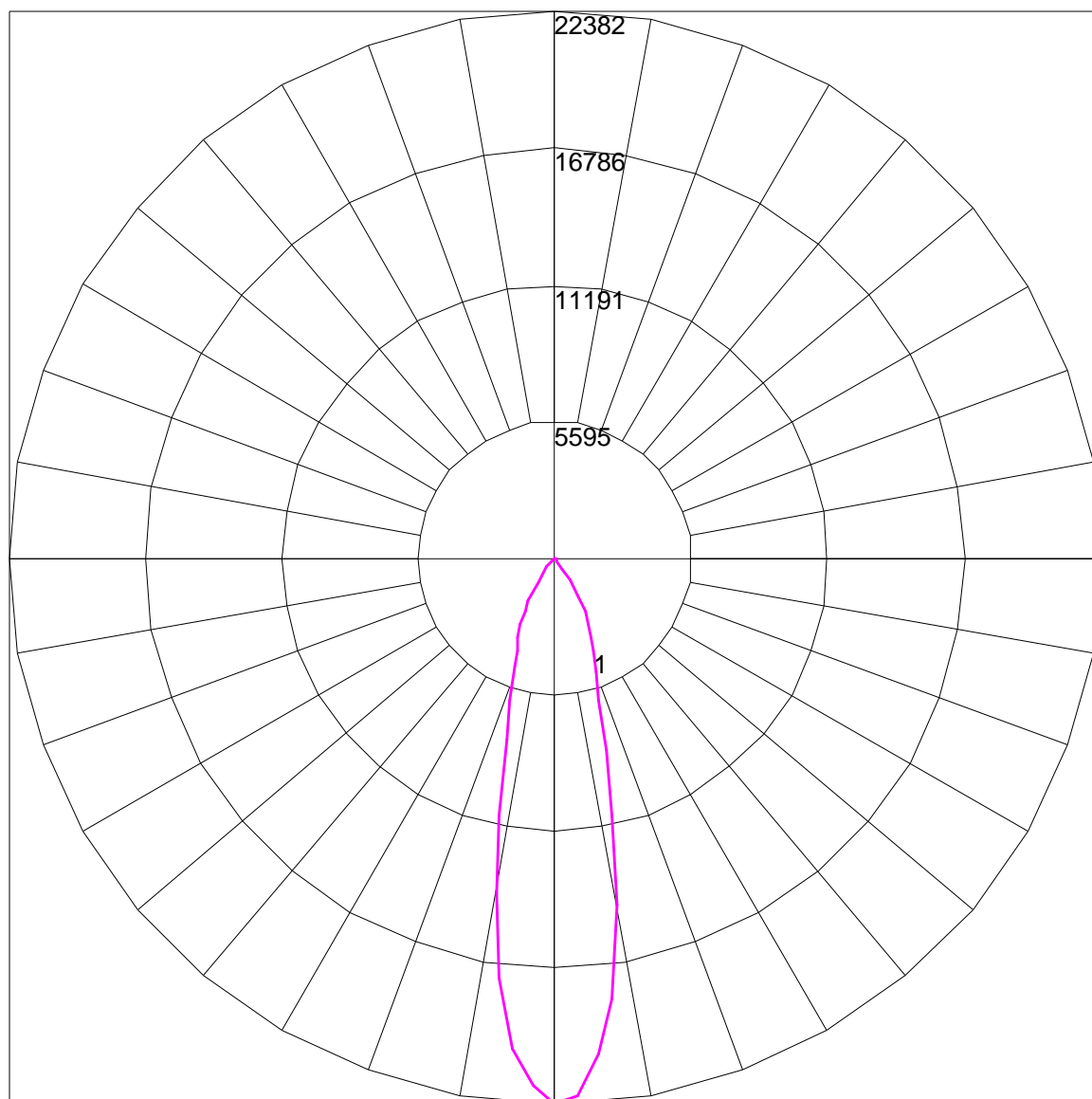
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96
2	110	106	103	100	108	105	102	99	101	99	97	99	97	95	96	94	93	91
3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	90	89	87
4	102	96	92	88	101	95	91	88	93	89	87	91	88	86	89	87	85	84
5	98	92	87	84	97	91	87	83	89	85	83	88	84	82	86	83	81	80
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77
7	92	84	79	76	90	84	79	76	82	78	76	81	78	75	80	77	75	74
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	78	74	72	71
9	85	78	73	70	85	77	73	70	77	72	70	76	72	69	75	72	69	68
10	83	75	70	67	82	75	70	67	74	70	67	73	70	67	73	69	67	66

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : SP-00621\_14 ~ SGE8BX80L-35KND-DO101-AR8BXSGWF.IES

POLAR GRAPH



Maximum Candela = 22381.881 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)