

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00665 ~ SW1910GV-55L35KEX-TF2-MWI.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] SP-00665  
[TESTLAB] Spectrum Photometric Lab VLS-245-981  
[MANUFAC] Spectrum Lighting  
[ISSUEDATE] 4/20/2018  
[UPDATE] 4/26/2018  
[LUMCAT] SW1910GV-55L-35K-EX-TF2-MWI  
[LUMINAIRE] Nom. 19" diam x 10" H, Short Warehouse Shade  
[OTHER] Regressed, 6" diam. low profile frosted glass diffuser  
[OTHER] Reflector: Matte White interior finish  
[OTHER] Beam Angle: 106 degrees  
[LAMP] N/A, Gen3  
[LAMPCAT] N/A  
[OTHER] Total Luminaire Watts is approximate  
[OTHER] CCT Multipliers: 27K x 0.971, 30K x 0.985, 40K x 1.03  
[OTHER] This report generated by Spectrum Lighting  
[\_CRI]85+

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4536
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	39
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Circular
Luminous Length (0-180)	1.54 ft (Diameter)
Luminous Width (90-270)	1.54 ft (Diameter)
Luminous Height	0.00 ft

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : SP-00665 ~ SW1910GV-55L35KEX-TF2-MWI.IES****LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8735	8831	8727
55	8391	8377	8234
65	7750	7641	7458
75	7071	6845	6704
85	5403	4868	4871

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**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>
<b>0.0</b>	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705
<b>2.5</b>	1719.544	1724.175	1726.646	1727.604	1725.824	1711.819	1707.402	1704.619	1703.685	1704.134
<b>5.0</b>	1712.715	1720.619	1722.476	1722.407	1718.610	1699.138	1694.654	1684.131	1683.153	1680.732
<b>7.5</b>	1703.306	1712.616	1717.387	1716.361	1709.820	1684.898	1677.833	1662.845	1661.783	1655.087
<b>10.0</b>	1681.694	1693.659	1698.976	1698.583	1689.190	1659.389	1651.789	1633.312	1627.992	1621.602
<b>12.5</b>	1657.521	1672.141	1679.472	1679.856	1667.787	1632.339	1621.443	1602.858	1593.802	1587.308
<b>15.0</b>	1625.323	1645.920	1650.594	1650.370	1636.998	1598.519	1583.780	1562.706	1555.307	1546.078
<b>17.5</b>	1590.405	1614.777	1620.039	1619.702	1605.431	1562.377	1543.939	1522.067	1515.868	1504.496
<b>20.0</b>	1549.313	1576.739	1581.195	1582.265	1564.490	1519.378	1501.300	1478.748	1471.010	1458.260
<b>22.5</b>	1507.291	1535.432	1540.653	1543.524	1522.904	1474.734	1456.468	1434.560	1425.971	1412.303
<b>25.0</b>	1463.683	1490.639	1494.605	1499.851	1477.372	1426.545	1409.456	1387.185	1380.275	1368.826
<b>27.5</b>	1418.652	1444.741	1447.729	1455.154	1431.050	1378.589	1361.177	1340.332	1335.176	1325.129
<b>30.0</b>	1371.790	1397.933	1398.885	1407.777	1381.654	1331.013	1311.924	1294.804	1291.637	1280.357
<b>32.5</b>	1323.970	1348.714	1349.595	1359.327	1332.309	1282.840	1265.296	1249.398	1247.161	1235.755
<b>35.0</b>	1275.198	1297.965	1299.521	1308.794	1283.101	1233.933	1220.190	1204.220	1200.892	1191.725
<b>37.5</b>	1226.231	1245.269	1247.781	1256.699	1232.846	1184.953	1173.831	1158.870	1156.264	1147.395
<b>40.0</b>	1177.115	1191.652	1193.839	1202.302	1180.484	1135.901	1126.926	1113.274	1113.986	1102.352
<b>42.5</b>	1124.516	1138.150	1138.478	1146.111	1126.165	1085.265	1078.891	1066.875	1069.687	1057.129
<b>45.0</b>	1069.892	1084.689	1081.646	1087.911	1068.907	1033.460	1030.501	1019.596	1023.121	1011.587
<b>47.5</b>	1013.613	1026.011	1023.236	1028.168	1009.829	979.019	979.261	970.759	974.103	963.166
<b>50.0</b>	956.599	966.086	963.578	967.087	948.675	923.115	927.429	920.599	922.988	910.843
<b>52.5</b>	895.739	903.128	899.281	901.427	884.644	862.487	869.332	863.776	867.698	856.116
<b>55.0</b>	833.664	839.735	832.214	832.704	818.034	799.870	810.448	802.602	809.698	798.908
<b>57.5</b>	767.578	773.224	765.066	763.707	750.374	735.127	745.335	738.857	746.301	737.174
<b>60.0</b>	700.655	706.493	697.883	694.573	681.997	669.753	679.847	673.861	680.204	671.825
<b>62.5</b>	633.968	638.504	628.884	625.028	613.906	601.371	610.719	605.740	611.301	604.148
<b>65.0</b>	567.310	570.678	559.292	555.330	545.960	532.409	541.826	536.499	541.381	535.041
<b>67.5</b>	501.009	505.021	493.498	489.497	480.788	467.931	475.503	468.734	474.387	467.779
<b>70.0</b>	434.897	439.960	428.530	424.663	416.681	403.958	410.024	401.338	408.117	401.355
<b>72.5</b>	376.163	378.884	367.434	365.478	357.906	344.329	349.291	341.503	347.311	340.930
<b>75.0</b>	316.986	317.449	306.858	307.199	300.549	284.774	288.875	282.823	287.381	282.492
<b>77.5</b>	252.911	254.556	241.559	245.121	237.792	222.985	229.592	221.347	227.005	221.798
<b>80.0</b>	189.990	192.634	176.227	182.723	174.136	162.369	171.554	159.665	166.595	160.592
<b>82.5</b>	133.584	133.415	124.130	129.747	123.265	113.063	116.734	110.711	116.811	111.619
<b>85.0</b>	81.568	81.618	73.495	77.952	73.539	66.473	68.875	63.009	68.092	64.275
<b>87.5</b>	45.307	45.231	40.445	44.052	40.588	33.990	34.160	33.115	36.403	34.079
<b>90.0</b>	16.520	18.583	11.344	13.335	9.294	8.049	11.132	6.615	8.164	5.137
<b>92.5</b>	7.120	7.010	5.667	6.529	5.242	4.149	4.671	3.522	4.182	3.317
<b>95.0</b>	0.938	0.851	1.170	1.025	1.633	1.308	1.225	1.051	0.969	1.620
<b>97.5</b>	0.849	1.052	1.164	1.263	1.491	1.064	1.127	1.225	1.070	1.389
<b>100.0</b>	0.921	1.181	1.227	1.375	1.428	0.905	1.064	1.293	1.160	1.169
<b>102.5</b>	1.223	1.245	1.478	1.110	1.722	0.900	1.032	1.059	1.213	1.017
<b>105.0</b>	1.361	1.341	1.572	1.042	1.898	1.033	1.036	0.971	1.184	0.896
<b>107.5</b>	1.316	1.461	1.362	1.408	1.709	1.360	1.064	1.196	0.980	0.892
<b>110.0</b>	1.301	1.423	1.347	1.593	1.537	1.397	1.122	1.330	0.956	0.912
<b>112.5</b>	1.313	1.300	1.619	1.480	1.402	1.126	1.194	1.317	1.221	0.992
<b>115.0</b>	1.340	1.208	1.651	1.320	1.393	1.046	1.099	1.239	1.243	1.090
<b>117.5</b>	1.378	1.128	1.408	1.100	1.594	1.121	0.943	1.082	0.962	1.225
<b>120.0</b>	1.542	1.144	1.324	1.027	1.775	1.143	0.954	1.002	0.878	1.309
<b>122.5</b>	1.768	1.185	1.378	1.097	1.930	1.133	1.005	0.994	0.977	1.317
<b>125.0</b>	1.708	1.062	1.353	1.166	1.934	1.130	1.017	1.010	1.000	1.302

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**CANDELA TABULATION - (Cont.)**

127.5	1.545	0.909	1.276	1.233	1.788	1.131	1.023	1.041	0.967	1.261
130.0	1.628	1.042	1.246	1.257	1.739	1.053	1.054	1.154	0.942	1.170
132.5	1.773	1.204	1.240	1.255	1.763	0.947	1.087	1.311	0.922	1.034
135.0	1.543	1.266	1.181	1.374	1.801	1.165	0.927	1.276	1.105	1.052
137.5	1.253	1.319	1.102	1.543	1.847	1.457	0.792	1.164	1.371	1.174
140.0	1.174	1.200	1.304	1.410	1.694	1.480	1.081	1.016	1.406	1.399
142.5	1.109	1.102	1.580	1.187	1.456	1.465	1.345	0.857	1.372	1.676
145.0	1.467	1.188	1.689	1.474	1.469	1.436	1.439	0.979	1.441	1.609
147.5	1.796	1.269	1.770	1.863	1.559	1.406	1.523	1.155	1.530	1.411
150.0	1.620	1.331	1.583	1.891	1.860	1.305	1.568	1.332	1.612	1.394
152.5	1.481	1.363	1.374	1.879	2.204	1.200	1.562	1.509	1.695	1.426
155.0	1.599	1.301	1.448	1.625	2.097	1.035	1.408	1.545	1.527	1.354
157.5	1.668	1.354	1.495	1.378	1.938	0.921	1.317	1.562	1.366	1.264
160.0	1.573	1.632	1.264	1.313	1.934	1.031	1.340	1.413	1.373	1.442
162.5	1.412	1.723	1.340	1.298	1.933	1.124	1.309	1.278	1.370	1.516
165.0	1.180	1.677	1.941	1.376	1.941	1.193	1.248	1.169	1.348	1.272
167.5	1.656	1.384	1.868	1.772	1.801	1.345	1.467	1.340	1.313	1.395
170.0	1.495	1.374	1.880	1.585	1.751	1.501	1.193	1.488	1.309	1.498
172.5	1.161	1.355	1.907	0.960	1.747	1.543	0.933	1.417	1.436	1.365
175.0	1.558	1.305	1.441	1.508	1.221	1.378	1.545	1.254	1.589	1.388
177.5	1.813	1.694	1.462	1.628	1.446	1.252	1.410	1.421	1.786	1.347
180.0	1.474	1.474	1.474	1.474	1.474	1.474	1.474	1.474	1.474	1.474

**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	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705	1714.705
2.5	1707.905	1708.273	1713.818	1707.631	1711.224	1714.371	1719.544
5.0	1684.777	1684.588	1693.080	1692.419	1698.162	1706.336	1712.715
7.5	1660.080	1658.914	1669.150	1676.102	1682.240	1695.737	1703.306
10.0	1626.808	1624.266	1635.642	1645.107	1653.939	1673.123	1681.694
12.5	1591.950	1588.390	1599.595	1612.876	1624.090	1647.321	1657.521
15.0	1551.538	1548.666	1558.000	1572.888	1585.247	1611.215	1625.323
17.5	1509.861	1507.517	1514.899	1531.927	1545.871	1573.623	1590.405
20.0	1465.030	1463.185	1469.353	1487.191	1502.324	1532.625	1549.313
22.5	1420.102	1418.331	1424.417	1442.742	1458.700	1490.622	1507.291
25.0	1374.993	1372.612	1380.252	1399.084	1414.207	1446.889	1463.683
27.5	1329.786	1327.056	1335.853	1355.124	1369.539	1401.721	1418.652
30.0	1284.442	1281.711	1291.229	1310.558	1323.873	1354.663	1371.790
32.5	1239.851	1236.892	1246.630	1265.698	1278.237	1307.630	1323.970
35.0	1196.083	1192.589	1202.051	1220.397	1232.715	1260.622	1275.198
37.5	1152.218	1147.095	1155.868	1174.637	1186.903	1213.663	1226.231
40.0	1108.271	1100.710	1108.770	1128.338	1140.328	1166.744	1177.115
42.5	1062.562	1053.956	1060.670	1080.812	1093.260	1117.847	1124.516
45.0	1015.738	1006.989	1012.150	1032.186	1045.245	1067.773	1069.892
47.5	965.804	956.324	961.229	980.085	993.694	1013.114	1013.613
50.0	914.358	904.071	909.597	925.621	937.066	956.433	956.599
52.5	860.621	848.122	852.039	869.120	878.693	897.501	895.739
55.0	806.080	791.028	793.284	811.549	818.357	837.849	833.664
57.5	744.038	729.272	731.725	749.065	754.635	773.942	767.578
60.0	680.210	666.545	669.852	684.700	688.007	709.114	700.655
62.5	613.273	600.450	606.510	619.719	621.740	642.786	633.968
65.0	545.865	533.959	543.056	554.575	555.709	576.272	567.310

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**CANDELA TABULATION - (Cont.)**

67.5	478.824	468.787	477.398	491.980	491.491	510.550	501.009
70.0	411.830	403.834	412.543	429.830	428.181	444.946	434.897
72.5	351.938	345.870	355.361	371.783	369.045	383.932	376.163
75.0	292.030	287.768	297.823	314.101	311.424	322.992	316.986
77.5	231.887	228.273	238.445	255.036	251.877	262.865	252.911
80.0	172.813	169.789	180.159	196.055	191.839	202.781	189.990
82.5	120.840	116.864	125.689	139.333	136.943	142.951	133.584
85.0	72.376	68.215	76.379	84.923	82.876	87.935	81.568
87.5	38.437	34.919	39.717	48.566	47.201	50.785	45.307
90.0	11.662	9.616	13.378	17.040	12.939	20.808	16.520
92.5	5.437	4.338	5.904	7.916	6.689	9.309	7.120
95.0	1.180	1.010	1.403	1.027	1.016	1.652	0.938
97.5	0.992	1.320	1.049	1.170	1.463	1.449	0.849
100.0	0.890	1.400	0.906	1.354	1.839	1.321	0.921
102.5	0.922	1.154	0.985	1.628	1.712	1.300	1.223
105.0	0.940	1.142	1.066	1.762	1.607	1.255	1.361
107.5	0.941	1.383	1.147	1.657	1.592	1.183	1.316
110.0	0.919	1.349	1.275	1.490	1.520	1.210	1.301
112.5	0.877	1.081	1.432	1.243	1.281	1.323	1.313
115.0	0.824	1.085	1.434	1.255	1.191	1.276	1.340
117.5	0.764	1.265	1.362	1.525	1.418	1.124	1.378
120.0	0.856	1.348	1.243	1.593	1.574	1.263	1.542
122.5	1.030	1.384	1.108	1.509	1.617	1.546	1.768
125.0	1.031	1.356	1.176	1.555	1.594	1.656	1.708
127.5	0.964	1.305	1.291	1.678	1.491	1.703	1.545
130.0	1.122	1.322	1.298	1.501	1.355	1.714	1.628
132.5	1.344	1.355	1.289	1.196	1.189	1.717	1.773
135.0	1.378	1.450	1.354	1.319	1.295	1.724	1.543
137.5	1.377	1.554	1.424	1.579	1.601	1.731	1.253
140.0	1.315	1.367	1.219	1.561	1.488	1.534	1.174
142.5	1.246	1.158	1.054	1.484	1.140	1.320	1.109
145.0	1.377	1.069	1.430	1.511	1.220	1.546	1.467
147.5	1.499	1.021	1.735	1.551	1.476	1.755	1.796
150.0	1.283	1.555	1.577	1.554	1.572	1.642	1.620
152.5	1.075	1.970	1.480	1.556	1.621	1.571	1.481
155.0	0.927	1.565	1.628	1.531	1.858	1.811	1.599
157.5	0.905	1.332	1.768	1.493	2.131	1.940	1.668
160.0	1.357	1.655	1.889	1.380	1.757	1.701	1.573
162.5	1.520	1.660	1.777	1.390	1.432	1.527	1.412
165.0	1.354	1.329	1.472	1.591	1.342	1.422	1.180
167.5	1.140	1.699	1.449	1.248	1.521	1.118	1.656
170.0	1.071	1.840	1.368	1.465	1.625	1.127	1.495
172.5	1.071	1.758	1.258	1.883	1.512	1.459	1.161
175.0	1.064	1.756	1.381	1.147	1.779	1.472	1.558
177.5	1.556	1.506	1.486	1.273	1.222	1.415	1.813
180.0	1.474	1.474	1.474	1.474	1.474	1.474	1.474

**IES INDOOR REPORT**  
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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	609.73	N.A.	13.40
0-30	1266.22	N.A.	27.90
0-40	2041.82	N.A.	45.00
0-60	3573.03	N.A.	78.80
0-80	4433.55	N.A.	97.80
0-90	4524.64	N.A.	99.80
10-90	4363.62	N.A.	96.20
20-40	1432.08	N.A.	31.60
20-50	2236.42	N.A.	49.30
40-70	2076.17	N.A.	45.80
60-80	860.51	N.A.	19.00
70-80	315.57	N.A.	7.00
80-90	91.09	N.A.	2.00
90-110	5.36	N.A.	0.10
90-120	6.60	N.A.	0.10
90-130	7.76	N.A.	0.20
90-150	9.67	N.A.	0.20
90-180	10.93	N.A.	0.20
110-180	5.57	N.A.	0.10
0-180	4535.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	161.01
10-20	448.72
20-30	656.48
30-40	775.60
40-50	804.33
50-60	726.88
60-70	544.95
70-80	315.57
80-90	91.09
90-100	4.03
100-110	1.33
110-120	1.24
120-130	1.16
130-140	1.03
140-150	0.88
150-160	0.71
160-170	0.42
170-180	0.14

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : SP-00665 ~ SW1910GV-55L35KEX-TF2-MWI.IES

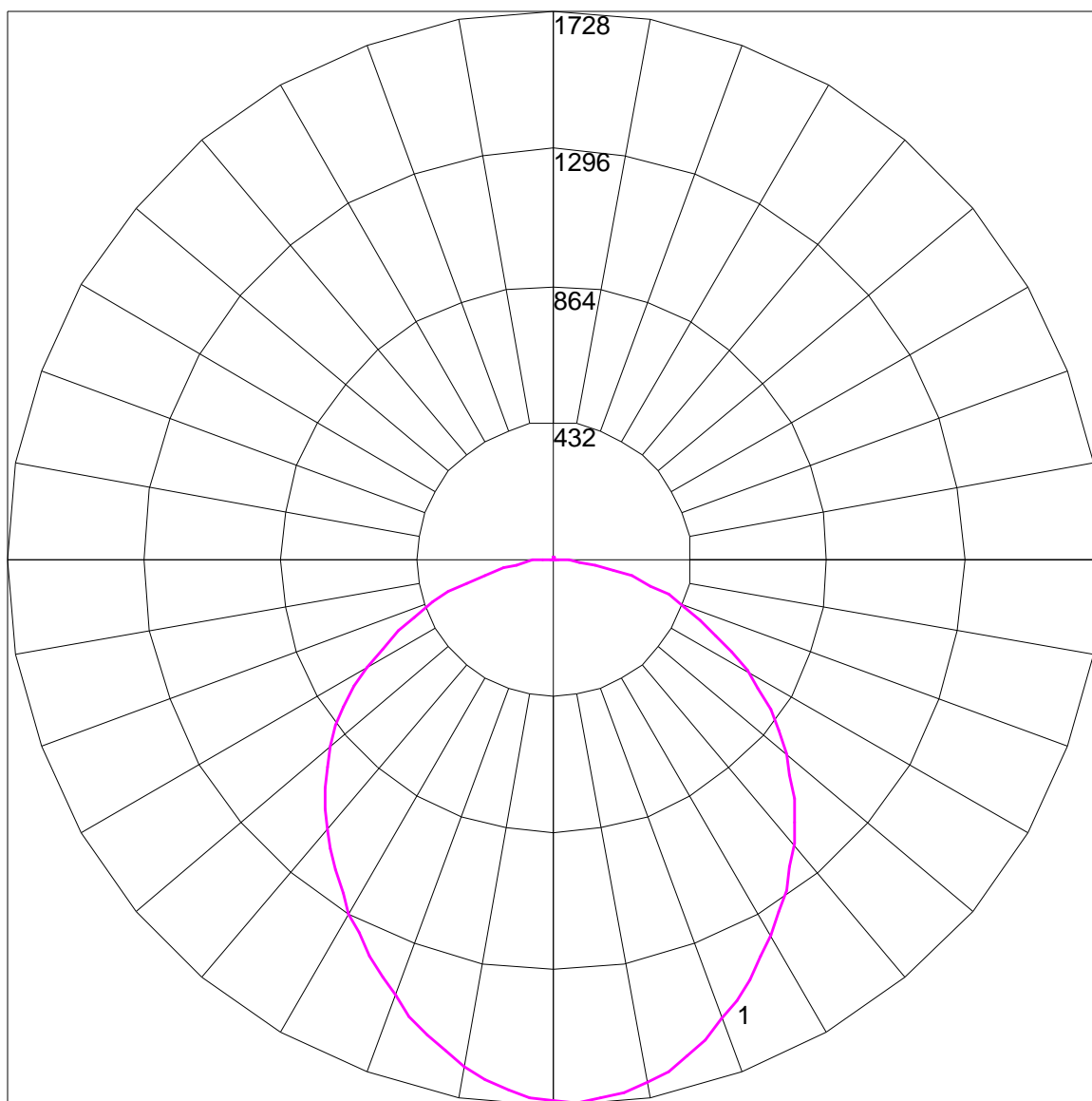
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	69	65	61	59
4	82	70	62	55	80	69	61	55	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	47	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	42	36	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	36	31	26	24

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POLAR GRAPH



Maximum Candela = 1727.604 Located At Horizontal Angle = 67.5, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)