



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BTRI-44-LED35-HO.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] BTRI-44-LED35-HO  
 [TESTLAB] INTERTEK  
 [ISSUEDATE] 8-9-18  
 [MANUFAC] PRUDENTIAL  
 [\_TOTALLUMINAIRELUMENS] 7777.6

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11045
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	105
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.29 ft
Luminous Width (90-270)	0.17 ft
Luminous Height	0.15 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	41467	26326	22492
55	41927	23635	19361
65	43845	20834	16301
75	48570	17508	13026
85	68718	13077	9024

**IES INDOOR REPORT**  
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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>	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672
<b>2.5</b>	2946.926	2931.448	2940.394	2946.358	2936.702	2943.660	2935.992	2930.170	2945.222	2930.170
<b>5.0</b>	2937.838	2926.904	2942.950	2946.216	2934.146	2935.424	2927.188	2926.620	2945.506	2926.620
<b>7.5</b>	2927.614	2915.970	2931.164	2940.536	2924.064	2919.662	2913.130	2916.680	2933.010	2916.680
<b>10.0</b>	2911.000	2892.682	2914.550	2923.638	2904.326	2898.362	2890.126	2895.806	2912.136	2895.806
<b>12.5</b>	2883.594	2861.726	2888.422	2897.510	2873.512	2869.536	2860.022	2864.140	2884.304	2864.140
<b>15.0</b>	2846.958	2824.806	2849.798	2858.744	2834.746	2831.764	2821.398	2828.072	2847.668	2828.072
<b>17.5</b>	2801.802	2776.242	2804.642	2813.730	2786.040	2785.898	2776.668	2779.792	2802.086	2779.792
<b>20.0</b>	2751.534	2722.140	2750.682	2760.480	2731.654	2734.920	2722.140	2725.264	2751.676	2725.264
<b>22.5</b>	2691.184	2659.376	2691.752	2701.124	2669.884	2674.002	2660.086	2666.760	2686.782	2666.760
<b>25.0</b>	2627.284	2592.778	2627.994	2637.082	2603.286	2608.966	2592.920	2599.594	2622.172	2599.594
<b>27.5</b>	2559.124	2522.204	2558.272	2568.070	2530.724	2540.522	2523.482	2529.730	2551.172	2529.730
<b>30.0</b>	2480.598	2450.494	2485.568	2496.360	2456.600	2468.102	2450.210	2457.594	2479.036	2457.594
<b>32.5</b>	2413.716	2375.092	2413.432	2422.946	2378.642	2395.114	2375.376	2382.618	2405.054	2382.618
<b>35.0</b>	2341.012	2296.850	2339.166	2347.118	2299.548	2315.878	2297.844	2305.796	2330.930	2305.796
<b>37.5</b>	2260.214	2217.614	2262.486	2270.864	2221.732	2238.204	2219.176	2228.406	2254.676	2228.406
<b>40.0</b>	2175.866	2139.656	2184.102	2196.172	2139.372	2157.122	2138.662	2152.436	2181.972	2152.436
<b>42.5</b>	2092.512	2060.988	2110.688	2119.634	2063.544	2076.182	2061.698	2076.040	2108.274	2076.040
<b>45.0</b>	2016.542	1980.758	2034.008	2046.220	1983.456	1994.674	1980.332	2001.206	2035.144	2001.206
<b>47.5</b>	1938.016	1899.818	1961.162	1971.670	1906.208	1911.604	1901.380	1925.094	1963.292	1925.094
<b>50.0</b>	1852.248	1819.588	1883.346	1895.842	1827.256	1828.250	1818.878	1849.550	1889.594	1849.550
<b>52.5</b>	1762.220	1736.092	1805.956	1820.440	1744.470	1745.606	1736.376	1773.012	1813.482	1773.012
<b>55.0</b>	1677.162	1656.572	1729.418	1742.340	1661.684	1659.128	1655.436	1694.770	1738.506	1694.770
<b>57.5</b>	1594.234	1571.940	1650.466	1663.246	1578.472	1574.212	1570.378	1613.262	1661.826	1613.262
<b>60.0</b>	1508.324	1486.598	1566.828	1582.164	1494.550	1486.030	1483.758	1533.600	1582.590	1533.600
<b>62.5</b>	1415.030	1400.546	1481.912	1495.970	1408.782	1397.138	1396.286	1450.530	1497.958	1450.530
<b>65.0</b>	1322.304	1309.808	1392.878	1408.924	1318.044	1305.548	1307.394	1362.916	1409.634	1362.916
<b>67.5</b>	1226.312	1216.514	1304.554	1320.032	1229.720	1215.094	1215.946	1273.030	1320.884	1273.030
<b>70.0</b>	1134.154	1122.510	1213.248	1227.732	1139.692	1121.090	1122.936	1181.724	1231.140	1181.724
<b>72.5</b>	1040.434	1028.790	1116.262	1135.290	1046.966	1029.074	1030.494	1090.134	1140.260	1090.134
<b>75.0</b>	942.170	936.632	1024.388	1042.280	956.512	934.360	937.058	997.692	1046.682	997.692
<b>77.5</b>	846.888	841.492	929.248	946.430	862.508	838.226	844.616	902.836	950.264	902.836
<b>80.0</b>	750.754	744.648	831.552	847.314	766.090	744.222	750.044	806.560	850.154	806.560
<b>82.5</b>	654.762	650.076	733.288	748.482	671.376	648.656	653.342	713.408	755.298	713.408
<b>85.0</b>	553.090	551.954	632.752	645.248	575.526	551.812	557.208	618.410	656.892	618.410
<b>87.5</b>	419.610	422.166	497.426	506.514	452.554	420.036	436.508	498.562	527.814	498.562
<b>90.0</b>	272.782	277.468	336.256	343.072	291.952	272.072	283.432	334.978	357.272	334.978
<b>92.5</b>	259.150	266.392	314.388	318.506	272.924	256.452	262.984	307.998	332.138	307.998
<b>95.0</b>	299.904	304.874	338.386	334.978	305.300	290.248	292.094	329.724	352.870	329.724
<b>97.5</b>	299.336	288.544	324.186	331.996	308.708	304.732	306.152	326.458	339.948	326.458
<b>100.0</b>	276.758	270.652	313.110	318.364	294.082	293.940	293.230	312.542	316.376	312.542
<b>102.5</b>	271.504	262.558	302.886	308.992	280.024	279.172	278.036	299.478	298.058	299.478
<b>105.0</b>	258.582	250.346	288.544	306.152	266.676	267.670	265.256	283.432	289.538	283.432
<b>107.5</b>	246.512	235.720	272.782	298.342	252.476	255.884	252.050	267.954	290.248	267.954
<b>110.0</b>	235.436	216.408	260.144	289.396	240.122	242.394	236.572	243.388	275.906	243.388
<b>112.5</b>	219.248	196.528	251.624	280.024	229.898	231.034	214.704	228.336	265.256	228.336
<b>115.0</b>	208.456	187.298	240.832	267.386	220.384	220.526	189.996	218.822	255.742	218.822
<b>117.5</b>	175.512	179.204	232.170	255.032	212.148	209.024	175.654	211.296	245.234	211.296
<b>120.0</b>	153.644	174.660	224.360	241.400	201.924	186.162	169.548	201.640	236.430	201.640
<b>122.5</b>	142.852	165.998	214.278	231.318	190.564	161.880	163.158	194.966	226.064	194.966
<b>125.0</b>	135.184	159.608	206.894	219.248	175.370	145.976	154.212	189.428	223.934	189.428
<b>127.5</b>	127.800	153.928	200.646	210.018	163.158	137.314	146.686	185.168	218.964	185.168
<b>130.0</b>	120.984	145.692	192.552	199.652	150.520	128.084	139.586	182.896	213.568	182.896
<b>132.5</b>	114.594	141.858	185.168	190.138	140.438	120.984	134.332	176.648	207.178	176.648

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**CANDELA TABULATION - (Cont.)**

135.0	106.074	138.734	177.358	182.470	129.362	112.038	130.072	170.826	197.948	170.826
137.5	102.382	135.752	171.820	172.104	122.546	102.666	130.498	163.158	185.452	163.158
140.0	96.844	131.208	163.300	161.596	112.322	94.004	130.498	157.052	175.796	157.052
142.5	91.022	124.960	153.502	151.372	105.790	87.898	127.658	150.662	164.010	150.662
145.0	97.270	120.842	142.000	138.734	99.684	85.910	123.682	143.278	151.798	143.278
147.5	113.316	118.570	132.060	128.652	92.726	83.922	118.428	133.338	139.444	133.338
150.0	107.068	109.340	120.558	119.990	87.472	85.058	110.192	120.416	127.516	120.416
152.5	97.980	100.394	110.334	107.068	78.100	83.638	100.110	110.618	116.724	110.618
155.0	88.182	89.460	100.252	96.844	70.574	84.348	90.170	98.832	105.648	98.832
157.5	80.798	79.946	89.886	87.472	63.474	76.680	79.662	89.176	93.294	89.176
160.0	71.000	71.284	78.668	76.822	58.220	67.734	71.994	80.798	81.650	80.798
162.5	60.918	61.770	68.586	65.604	50.126	59.214	62.764	68.728	72.278	68.728
165.0	53.108	54.244	58.504	57.652	45.866	52.540	54.528	59.782	59.498	59.782
167.5	42.884	45.298	48.280	48.138	38.340	40.470	43.736	49.842	52.114	49.842
170.0	36.920	37.204	40.186	40.186	33.654	36.210	36.778	41.464	40.186	41.464
172.5	27.690	29.678	32.802	31.098	25.986	28.968	31.382	33.796	32.944	33.796
175.0	24.140	23.856	24.140	23.430	22.578	24.140	23.714	25.844	24.992	25.844
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	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672	2941.672
2.5	2935.992	2943.660	2936.702	2946.358	2940.394	2931.448	2946.926
5.0	2927.188	2935.424	2934.146	2946.216	2942.950	2926.904	2937.838
7.5	2913.130	2919.662	2924.064	2940.536	2931.164	2915.970	2927.614
10.0	2890.126	2898.362	2904.326	2923.638	2914.550	2892.682	2911.000
12.5	2860.022	2869.536	2873.512	2897.510	2888.422	2861.726	2883.594
15.0	2821.398	2831.764	2834.746	2858.744	2849.798	2824.806	2846.958
17.5	2776.668	2785.898	2786.040	2813.730	2804.642	2776.242	2801.802
20.0	2722.140	2734.920	2731.654	2760.480	2750.682	2722.140	2751.534
22.5	2660.086	2674.002	2669.884	2701.124	2691.752	2659.376	2691.184
25.0	2592.920	2608.966	2603.286	2637.082	2627.994	2592.778	2627.284
27.5	2523.482	2540.522	2530.724	2568.070	2558.272	2522.204	2559.124
30.0	2450.210	2468.102	2456.600	2496.360	2485.568	2450.494	2480.598
32.5	2375.376	2395.114	2378.642	2422.946	2413.432	2375.092	2413.716
35.0	2297.844	2315.878	2299.548	2347.118	2339.166	2296.850	2341.012
37.5	2219.176	2238.204	2221.732	2270.864	2262.486	2217.614	2260.214
40.0	2138.662	2157.122	2139.372	2196.172	2184.102	2139.656	2175.866
42.5	2061.698	2076.182	2063.544	2119.634	2110.688	2060.988	2092.512
45.0	1980.332	1994.674	1983.456	2046.220	2034.008	1980.758	2016.542
47.5	1901.380	1911.604	1906.208	1971.670	1961.162	1899.818	1938.016
50.0	1818.878	1828.250	1827.256	1895.842	1883.346	1819.588	1852.248
52.5	1736.376	1745.606	1744.470	1820.440	1805.956	1736.092	1762.220
55.0	1655.436	1659.128	1661.684	1742.340	1729.418	1656.572	1677.162
57.5	1570.378	1574.212	1578.472	1663.246	1650.466	1571.940	1594.234
60.0	1483.758	1486.030	1494.550	1582.164	1566.828	1486.598	1508.324
62.5	1396.286	1397.138	1408.782	1495.970	1481.912	1400.546	1415.030
65.0	1307.394	1305.548	1318.044	1408.924	1392.878	1309.808	1322.304
67.5	1215.946	1215.094	1229.720	1320.032	1304.554	1216.514	1226.312
70.0	1122.936	1121.090	1139.692	1227.732	1213.248	1122.510	1134.154
72.5	1030.494	1029.074	1046.966	1135.290	1116.262	1028.790	1040.434
75.0	937.058	934.360	956.512	1042.280	1024.388	936.632	942.170
77.5	844.616	838.226	862.508	946.430	929.248	841.492	846.888
80.0	750.044	744.222	766.090	847.314	831.552	744.648	750.754

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**CANDELA TABULATION - (Cont.)**

82.5	653.342	648.656	671.376	748.482	733.288	650.076	654.762
85.0	557.208	551.812	575.526	645.248	632.752	551.954	553.090
87.5	436.508	420.036	452.554	506.514	497.426	422.166	419.610
90.0	283.432	272.072	291.952	343.072	336.256	277.468	272.782
92.5	262.984	256.452	272.924	318.506	314.388	266.392	259.150
95.0	292.094	290.248	305.300	334.978	338.386	304.874	299.904
97.5	306.152	304.732	308.708	331.996	324.186	288.544	299.336
100.0	293.230	293.940	294.082	318.364	313.110	270.652	276.758
102.5	278.036	279.172	280.024	308.992	302.886	262.558	271.504
105.0	265.256	267.670	266.676	306.152	288.544	250.346	258.582
107.5	252.050	255.884	252.476	298.342	272.782	235.720	246.512
110.0	236.572	242.394	240.122	289.396	260.144	216.408	235.436
112.5	214.704	231.034	229.898	280.024	251.624	196.528	219.248
115.0	189.996	220.526	220.384	267.386	240.832	187.298	208.456
117.5	175.654	209.024	212.148	255.032	232.170	179.204	175.512
120.0	169.548	186.162	201.924	241.400	224.360	174.660	153.644
122.5	163.158	161.880	190.564	231.318	214.278	165.998	142.852
125.0	154.212	145.976	175.370	219.248	206.894	159.608	135.184
127.5	146.686	137.314	163.158	210.018	200.646	153.928	127.800
130.0	139.586	128.084	150.520	199.652	192.552	145.692	120.984
132.5	134.332	120.984	140.438	190.138	185.168	141.858	114.594
135.0	130.072	112.038	129.362	182.470	177.358	138.734	106.074
137.5	130.498	102.666	122.546	172.104	171.820	135.752	102.382
140.0	130.498	94.004	112.322	161.596	163.300	131.208	96.844
142.5	127.658	87.898	105.790	151.372	153.502	124.960	91.022
145.0	123.682	85.910	99.684	138.734	142.000	120.842	97.270
147.5	118.428	83.922	92.726	128.652	132.060	118.570	113.316
150.0	110.192	85.058	87.472	119.990	120.558	109.340	107.068
152.5	100.110	83.638	78.100	107.068	110.334	100.394	97.980
155.0	90.170	84.348	70.574	96.844	100.252	89.460	88.182
157.5	79.662	76.680	63.474	87.472	89.886	79.946	80.798
160.0	71.994	67.734	58.220	76.822	78.668	71.284	71.000
162.5	62.764	59.214	50.126	65.604	68.586	61.770	60.918
165.0	54.528	52.540	45.866	57.652	58.504	54.244	53.108
167.5	43.736	40.470	38.340	48.138	48.280	45.298	42.884
170.0	36.778	36.210	33.654	40.186	40.186	37.204	36.920
172.5	31.382	28.968	25.986	31.098	32.802	29.678	27.690
175.0	23.714	24.140	22.578	23.430	24.140	23.856	24.140
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

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1079.21	N.A.	9.80
0-30	2282.61	N.A.	20.70
0-40	3733.95	N.A.	33.80
0-60	6794.97	N.A.	61.50
0-80	9160.03	N.A.	82.90
0-90	9784.8	N.A.	88.60
10-90	9505.61	N.A.	86.10
20-40	2654.74	N.A.	24.00
20-50	4204.78	N.A.	38.10
40-70	4394.22	N.A.	39.80
60-80	2365.06	N.A.	21.40
70-80	1031.85	N.A.	9.30
80-90	624.77	N.A.	5.70
90-110	623.24	N.A.	5.60
90-120	844.59	N.A.	7.60
90-130	1006.31	N.A.	9.10
90-150	1199.61	N.A.	10.90
90-180	1260.55	N.A.	11.40
110-180	637.32	N.A.	5.80
0-180	11045.35	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	279.19
10-20	800.02
20-30	1203.4
30-40	1451.34
40-50	1550.04
50-60	1510.98
60-70	1333.2
70-80	1031.85
80-90	624.77
90-100	332.45
100-110	290.79
110-120	221.35
120-130	161.73
130-140	116.02
140-150	77.28
150-160	42.50
160-170	15.98
170-180	2.46

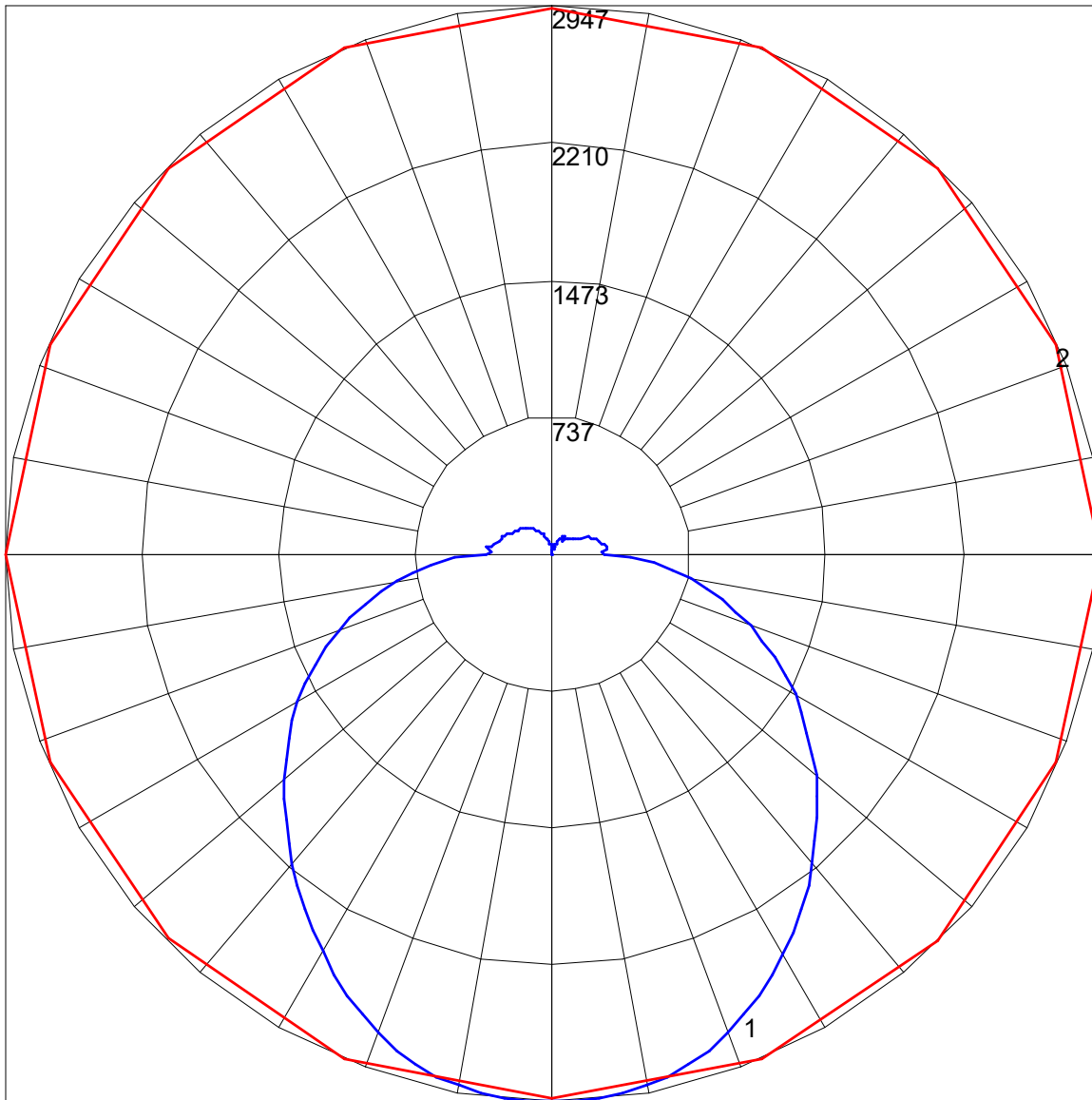
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	98	93	89	100	95	90	86	88	85	81	83	80	77	77	75	72	70
2	94	84	77	70	90	82	75	69	76	70	65	71	66	62	66	62	59	56
3	85	73	65	58	81	71	63	56	66	59	54	62	56	51	58	53	49	46
4	77	65	55	48	74	63	54	47	59	51	45	55	49	43	51	46	42	39
5	71	57	48	41	68	56	47	40	52	45	39	49	42	37	46	40	36	33
6	65	52	42	36	63	50	41	35	47	39	34	44	38	33	42	36	31	29
7	61	47	38	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	26	37	30	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	26	22	20
10	49	36	28	22	47	35	27	22	33	26	21	31	25	21	30	24	20	18

POLAR GRAPH



Maximum Candela = 2946.926 Located At Horizontal Angle = 0, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)