



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : BTRI-PRO-22-LED35-SO.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST]BTRI-22-LED35-SO  
 [TESTLAB]INTERTEK  
 [ISSUE DATE] 8-9-18  
 [MANUFAC] PRUDENTIAL  
 [\_TOTAL LUMINAIRE LUMENS] 3031.7

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6974
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	57
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	2.29 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	48174	31272	26996
55	47970	27792	23051
65	48566	24243	19348
75	50991	19962	15122
85	58456	13820	9773

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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>	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83
<b>2.5</b>	1927.86	1945.80	1942.81	1932.00	1925.79	1931.08	1940.05	1949.94	1934.30	1949.94
<b>5.0</b>	1926.71	1943.96	1941.20	1933.15	1927.86	1932.69	1936.60	1952.93	1944.88	1952.93
<b>7.5</b>	1928.32	1937.98	1935.45	1932.69	1924.41	1916.36	1925.79	1945.80	1925.33	1945.80
<b>10.0</b>	1902.33	1923.26	1916.13	1913.60	1905.78	1902.10	1914.06	1925.33	1914.06	1925.33
<b>12.5</b>	1881.17	1893.36	1896.35	1890.37	1884.85	1881.86	1896.12	1903.71	1889.45	1903.71
<b>15.0</b>	1855.41	1869.67	1869.21	1863.23	1851.50	1855.41	1871.28	1875.65	1865.76	1875.65
<b>17.5</b>	1825.51	1832.87	1837.70	1833.33	1818.61	1826.20	1841.15	1844.14	1833.10	1844.14
<b>20.0</b>	1791.70	1794.00	1801.13	1801.82	1779.74	1789.86	1798.37	1806.19	1802.97	1806.19
<b>22.5</b>	1746.16	1749.38	1762.49	1759.73	1738.34	1748.92	1753.06	1763.64	1755.36	1763.64
<b>25.0</b>	1701.77	1704.30	1714.19	1711.89	1690.04	1705.45	1703.84	1715.57	1708.90	1715.57
<b>27.5</b>	1656.23	1657.38	1664.51	1665.89	1641.05	1654.16	1655.77	1666.81	1661.06	1666.81
<b>30.0</b>	1600.80	1601.72	1611.84	1617.13	1593.67	1607.47	1607.70	1615.52	1614.83	1615.52
<b>32.5</b>	1554.80	1549.51	1562.16	1564.69	1535.48	1555.49	1554.11	1561.93	1562.85	1561.93
<b>35.0</b>	1503.74	1495.23	1510.64	1513.63	1482.12	1501.90	1499.37	1510.64	1513.63	1510.64
<b>37.5</b>	1450.38	1443.71	1458.20	1460.50	1428.53	1451.30	1442.79	1455.90	1461.88	1455.90
<b>40.0</b>	1393.34	1389.20	1407.37	1410.13	1374.94	1395.87	1392.65	1407.37	1411.28	1407.37
<b>42.5</b>	1342.05	1335.84	1358.84	1363.44	1322.96	1339.52	1337.91	1352.86	1362.75	1352.86
<b>45.0</b>	1286.85	1279.26	1306.63	1312.84	1271.21	1285.24	1283.86	1301.34	1314.45	1301.34
<b>47.5</b>	1237.40	1225.67	1257.64	1265.00	1216.70	1227.97	1225.44	1246.37	1263.16	1246.37
<b>50.0</b>	1179.90	1171.85	1205.20	1212.10	1167.02	1169.78	1171.39	1195.31	1213.71	1195.31
<b>52.5</b>	1122.86	1118.26	1152.53	1164.49	1112.05	1113.43	1118.95	1144.25	1163.11	1144.25
<b>55.0</b>	1066.05	1058.69	1102.85	1111.13	1056.39	1057.31	1059.38	1087.67	1111.59	1087.67
<b>57.5</b>	1009.01	1003.72	1049.03	1059.61	1005.33	1001.88	1001.19	1034.77	1060.30	1034.77
<b>60.0</b>	952.66	948.52	994.52	1006.48	948.98	943.69	945.76	979.34	1006.94	979.34
<b>62.5</b>	888.72	890.79	942.08	949.90	893.32	879.52	886.42	924.14	951.74	924.14
<b>65.0</b>	828.46	830.99	881.82	892.17	835.36	821.10	827.08	862.96	890.56	862.96
<b>67.5</b>	764.98	768.89	822.25	832.37	774.87	760.38	766.82	802.70	835.82	802.70
<b>70.0</b>	706.10	708.17	764.29	770.73	713.46	696.67	704.03	742.67	772.57	742.67
<b>72.5</b>	643.54	646.53	699.43	708.63	653.66	634.34	641.24	679.19	709.09	679.19
<b>75.0</b>	580.06	583.05	638.02	646.99	592.94	572.47	581.67	618.24	646.76	618.24
<b>77.5</b>	512.67	518.19	574.77	584.20	529.46	506.69	514.05	553.15	578.91	553.15
<b>80.0</b>	449.19	456.55	510.83	516.81	466.44	444.59	449.65	486.45	515.66	486.45
<b>82.5</b>	385.48	393.30	442.06	451.72	402.50	379.04	381.11	425.27	445.74	425.27
<b>85.0</b>	312.57	321.31	367.31	375.59	332.81	303.14	306.36	349.60	367.54	349.60
<b>87.5</b>	237.82	244.03	287.96	297.39	253.46	229.08	236.21	270.25	285.20	270.25
<b>90.0</b>	188.83	189.06	229.54	232.53	199.87	182.85	183.54	212.75	233.22	212.75
<b>92.5</b>	171.81	177.56	210.22	215.74	185.15	174.34	174.57	199.64	215.97	199.64
<b>95.0</b>	166.75	168.59	197.11	202.17	174.11	168.13	165.83	190.21	204.70	190.21
<b>97.5</b>	161.92	160.54	188.60	196.65	174.57	161.92	167.44	187.22	192.28	187.22
<b>100.0</b>	162.38	155.48	186.99	193.89	174.11	166.98	168.82	185.84	191.13	185.84
<b>102.5</b>	157.55	154.79	181.70	190.44	166.52	169.05	165.83	178.48	189.06	178.48
<b>105.0</b>	159.62	153.18	166.98	175.72	159.16	158.93	159.16	160.77	182.16	160.77
<b>107.5</b>	158.70	143.29	159.39	162.38	148.12	149.27	148.35	149.50	168.59	149.50
<b>110.0</b>	143.06	131.56	151.11	151.80	134.09	138.69	131.79	140.30	162.61	140.30
<b>112.5</b>	136.16	123.51	141.22	143.98	126.27	127.65	124.43	135.70	150.42	135.70
<b>115.0</b>	123.28	118.45	136.16	133.63	117.07	120.06	114.77	129.26	141.22	129.26
<b>117.5</b>	121.21	114.31	125.35	126.27	107.18	112.70	108.56	123.51	138.00	123.51
<b>120.0</b>	113.39	111.09	121.21	121.44	101.66	107.64	106.03	115.23	129.26	115.23
<b>122.5</b>	111.09	104.19	115.23	115.00	95.91	103.04	101.66	109.48	122.59	109.48
<b>125.0</b>	102.58	97.98	111.32	109.71	93.84	95.68	96.37	107.87	118.22	107.87
<b>127.5</b>	98.67	92.69	104.65	102.12	88.09	89.93	87.63	101.66	113.39	101.66
<b>130.0</b>	95.91	83.95	99.82	97.06	83.03	89.24	80.96	96.14	107.41	96.14
<b>132.5</b>	83.26	78.20	93.15	90.62	80.50	83.95	78.89	91.77	100.74	91.77

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**CANDELA TABULATION - (Cont.)**

135.0	76.36	72.91	87.40	86.71	77.28	76.13	73.60	88.32	97.52	88.32
137.5	63.02	70.15	82.11	80.73	71.53	69.92	69.69	84.18	94.30	84.18
140.0	57.04	66.01	78.20	74.98	69.00	67.39	66.24	77.05	86.94	77.05
142.5	54.51	60.49	73.14	72.45	61.41	60.03	61.18	73.37	82.11	73.37
145.0	48.07	54.51	67.85	66.70	58.88	55.89	58.42	69.00	77.97	69.00
147.5	42.55	53.36	62.33	64.40	55.20	48.76	52.44	65.32	66.93	65.32
150.0	39.56	48.76	57.96	57.73	51.52	45.54	50.60	59.11	65.09	59.11
152.5	38.18	43.93	55.43	52.67	46.69	40.25	46.00	54.51	56.12	54.51
155.0	30.59	40.25	48.53	48.99	38.41	37.95	40.25	48.99	53.13	48.99
157.5	30.36	36.57	46.69	45.77	37.49	32.89	40.48	44.39	44.85	44.39
160.0	25.99	34.96	42.09	42.55	34.04	29.67	32.66	40.25	41.86	40.25
162.5	23.92	31.51	36.34	37.49	29.90	25.30	28.06	36.11	39.56	36.11
165.0	19.78	27.37	32.43	31.28	26.68	22.54	27.60	30.36	33.12	30.36
167.5	20.93	25.99	26.45	28.29	20.93	19.78	24.15	25.99	26.22	25.99
170.0	20.01	20.24	20.70	23.00	18.63	16.56	19.78	20.01	23.46	20.01
172.5	18.63	16.79	17.25	17.71	15.64	15.18	16.10	17.94	20.01	17.94
175.0	12.65	14.26	13.34	14.03	14.03	12.65	14.03	14.49	13.80	14.49
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	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>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	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83	1936.83
2.5	1940.05	1931.08	1925.79	1932.00	1942.81	1945.80	1927.86
5.0	1936.60	1932.69	1927.86	1933.15	1941.20	1943.96	1926.71
7.5	1925.79	1916.36	1924.41	1932.69	1935.45	1937.98	1928.32
10.0	1914.06	1902.10	1905.78	1913.60	1916.13	1923.26	1902.33
12.5	1896.12	1881.86	1884.85	1890.37	1896.35	1893.36	1881.17
15.0	1871.28	1855.41	1851.50	1863.23	1869.21	1869.67	1855.41
17.5	1841.15	1826.20	1818.61	1833.33	1837.70	1832.87	1825.51
20.0	1798.37	1789.86	1779.74	1801.82	1801.13	1794.00	1791.70
22.5	1753.06	1748.92	1738.34	1759.73	1762.49	1749.38	1746.16
25.0	1703.84	1705.45	1690.04	1711.89	1714.19	1704.30	1701.77
27.5	1655.77	1654.16	1641.05	1665.89	1664.51	1657.38	1656.23
30.0	1607.70	1607.47	1593.67	1617.13	1611.84	1601.72	1600.80
32.5	1554.11	1555.49	1535.48	1564.69	1562.16	1549.51	1554.80
35.0	1499.37	1501.90	1482.12	1513.63	1510.64	1495.23	1503.74
37.5	1442.79	1451.30	1428.53	1460.50	1458.20	1443.71	1450.38
40.0	1392.65	1395.87	1374.94	1410.13	1407.37	1389.20	1393.34
42.5	1337.91	1339.52	1322.96	1363.44	1358.84	1335.84	1342.05
45.0	1283.86	1285.24	1271.21	1312.84	1306.63	1279.26	1286.85
47.5	1225.44	1227.97	1216.70	1265.00	1257.64	1225.67	1237.40
50.0	1171.39	1169.78	1167.02	1212.10	1205.20	1171.85	1179.90
52.5	1118.95	1113.43	1112.05	1164.49	1152.53	1118.26	1122.86
55.0	1059.38	1057.31	1056.39	1111.13	1102.85	1058.69	1066.05
57.5	1001.19	1001.88	1005.33	1059.61	1049.03	1003.72	1009.01
60.0	945.76	943.69	948.98	1006.48	994.52	948.52	952.66
62.5	886.42	879.52	893.32	949.90	942.08	890.79	888.72
65.0	827.08	821.10	835.36	892.17	881.82	830.99	828.46
67.5	766.82	760.38	774.87	832.37	822.25	768.89	764.98
70.0	704.03	696.67	713.46	770.73	764.29	708.17	706.10
72.5	641.24	634.34	653.66	708.63	699.43	646.53	643.54
75.0	581.67	572.47	592.94	646.99	638.02	583.05	580.06
77.5	514.05	506.69	529.46	584.20	574.77	518.19	512.67
80.0	449.65	444.59	466.44	516.81	510.83	456.55	449.19

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**CANDELA TABULATION - (Cont.)**

<b>82.5</b>	381.11	379.04	402.50	451.72	442.06	393.30	385.48
<b>85.0</b>	306.36	303.14	332.81	375.59	367.31	321.31	312.57
<b>87.5</b>	236.21	229.08	253.46	297.39	287.96	244.03	237.82
<b>90.0</b>	183.54	182.85	199.87	232.53	229.54	189.06	188.83
<b>92.5</b>	174.57	174.34	185.15	215.74	210.22	177.56	171.81
<b>95.0</b>	165.83	168.13	174.11	202.17	197.11	168.59	166.75
<b>97.5</b>	167.44	161.92	174.57	196.65	188.60	160.54	161.92
<b>100.0</b>	168.82	166.98	174.11	193.89	186.99	155.48	162.38
<b>102.5</b>	165.83	169.05	166.52	190.44	181.70	154.79	157.55
<b>105.0</b>	159.16	158.93	159.16	175.72	166.98	153.18	159.62
<b>107.5</b>	148.35	149.27	148.12	162.38	159.39	143.29	158.70
<b>110.0</b>	131.79	138.69	134.09	151.80	151.11	131.56	143.06
<b>112.5</b>	124.43	127.65	126.27	143.98	141.22	123.51	136.16
<b>115.0</b>	114.77	120.06	117.07	133.63	136.16	118.45	123.28
<b>117.5</b>	108.56	112.70	107.18	126.27	125.35	114.31	121.21
<b>120.0</b>	106.03	107.64	101.66	121.44	121.21	111.09	113.39
<b>122.5</b>	101.66	103.04	95.91	115.00	115.23	104.19	111.09
<b>125.0</b>	96.37	95.68	93.84	109.71	111.32	97.98	102.58
<b>127.5</b>	87.63	89.93	88.09	102.12	104.65	92.69	98.67
<b>130.0</b>	80.96	89.24	83.03	97.06	99.82	83.95	95.91
<b>132.5</b>	78.89	83.95	80.50	90.62	93.15	78.20	83.26
<b>135.0</b>	73.60	76.13	77.28	86.71	87.40	72.91	76.36
<b>137.5</b>	69.69	69.92	71.53	80.73	82.11	70.15	63.02
<b>140.0</b>	66.24	67.39	69.00	74.98	78.20	66.01	57.04
<b>142.5</b>	61.18	60.03	61.41	72.45	73.14	60.49	54.51
<b>145.0</b>	58.42	55.89	58.88	66.70	67.85	54.51	48.07
<b>147.5</b>	52.44	48.76	55.20	64.40	62.33	53.36	42.55
<b>150.0</b>	50.60	45.54	51.52	57.73	57.96	48.76	39.56
<b>152.5</b>	46.00	40.25	46.69	52.67	55.43	43.93	38.18
<b>155.0</b>	40.25	37.95	38.41	48.99	48.53	40.25	30.59
<b>157.5</b>	40.48	32.89	37.49	45.77	46.69	36.57	30.36
<b>160.0</b>	32.66	29.67	34.04	42.55	42.09	34.96	25.99
<b>162.5</b>	28.06	25.30	29.90	37.49	36.34	31.51	23.92
<b>165.0</b>	27.60	22.54	26.68	31.28	32.43	27.37	19.78
<b>167.5</b>	24.15	19.78	20.93	28.29	26.45	25.99	20.93
<b>170.0</b>	19.78	16.56	18.63	23.00	20.70	20.24	20.01
<b>172.5</b>	16.10	15.18	15.64	17.71	17.25	16.79	18.63
<b>175.0</b>	14.03	12.65	14.03	14.03	13.34	14.26	12.65
<b>177.5</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>180.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	710.03	N.A.	10.20
0-30	1496.61	N.A.	21.50
0-40	2437.96	N.A.	35.00
0-60	4401.87	N.A.	63.10
0-80	5883.05	N.A.	84.40
0-90	6250.71	N.A.	89.60
10-90	6066.5	N.A.	87.00
20-40	1727.92	N.A.	24.80
20-50	2726.52	N.A.	39.10
40-70	2806.73	N.A.	40.20
60-80	1481.18	N.A.	21.20
70-80	638.36	N.A.	9.20
80-90	367.66	N.A.	5.30
90-110	373.32	N.A.	5.40
90-120	498.64	N.A.	7.20
90-130	590.67	N.A.	8.50
90-150	692.80	N.A.	9.90
90-180	722.99	N.A.	10.40
110-180	349.67	N.A.	5.00
0-180	6973.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	184.21
10-20	525.82
20-30	786.58
30-40	941.35
40-50	998.60
50-60	965.31
60-70	842.81
70-80	638.36
80-90	367.66
90-100	201.95
100-110	171.37
110-120	125.32
120-130	92.04
130-140	63.06
140-150	39.06
150-160	20.63
160-170	8.22
170-180	1.36

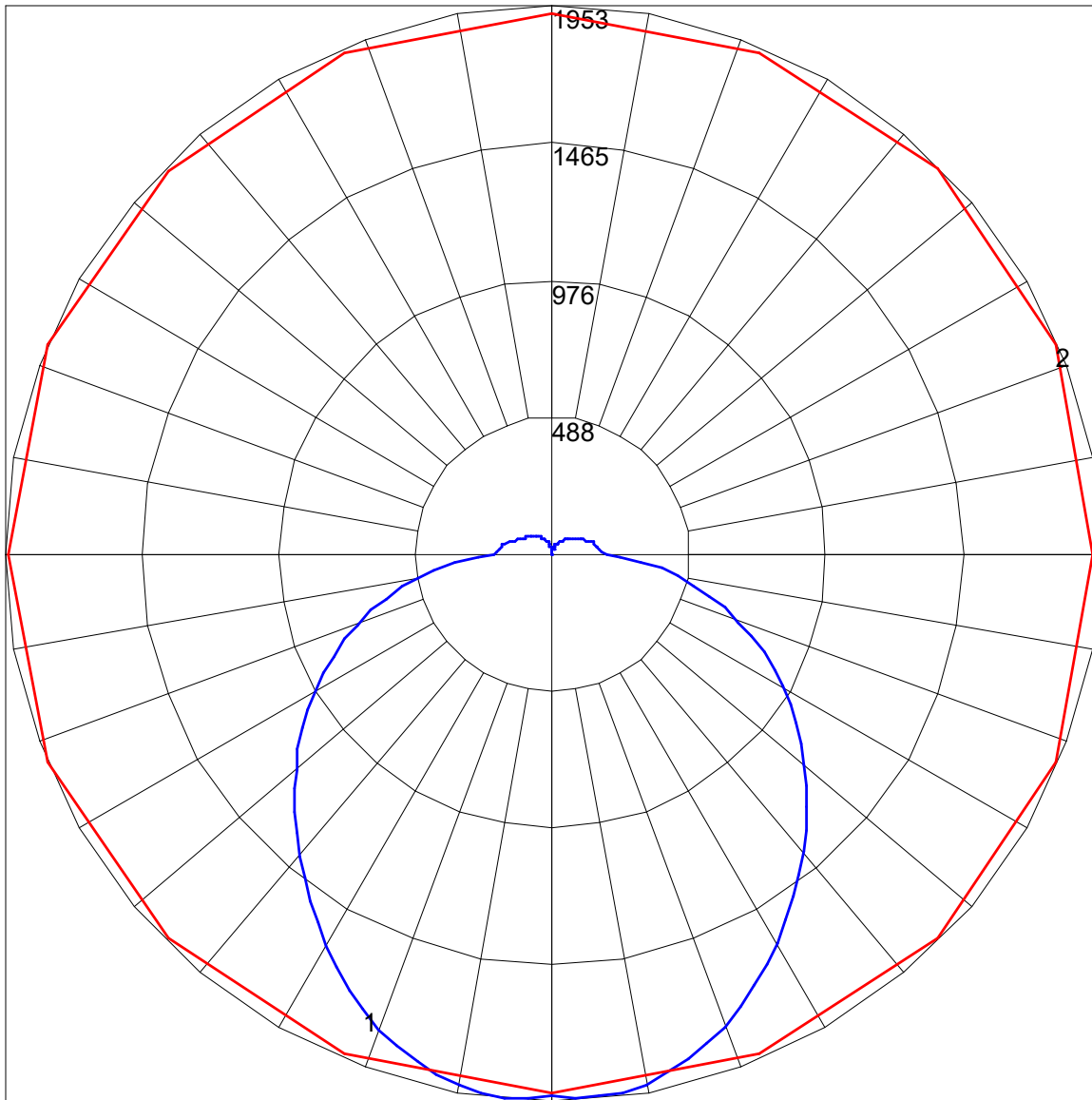
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**PHOTOMETRIC FILENAME : BTRI-PRO-22-LED35-SO.IES**

**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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	90
1	104	99	94	89	101	96	91	87	89	86	82	84	81	78	78	76	74	71
2	94	85	77	71	90	82	75	69	77	71	66	72	67	63	67	64	60	57
3	85	74	65	58	82	72	64	57	67	60	55	63	57	52	59	54	50	48
4	78	65	56	49	75	63	55	48	59	52	46	56	49	44	52	47	43	40
5	71	58	49	42	69	56	48	41	53	45	40	50	43	38	47	41	37	34
6	66	52	43	36	63	51	42	36	48	40	34	45	38	33	42	37	32	30
7	61	47	38	32	59	46	37	31	43	36	30	41	34	29	39	33	29	26
8	57	43	34	28	55	42	34	28	40	32	27	38	31	26	36	30	26	23
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21
10	50	36	28	23	48	35	28	23	34	27	22	32	26	21	30	25	21	19

POLAR GRAPH



Maximum Candela = 1952.93 Located At Horizontal Angle = 157.5, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (157.5 - 337.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)