



IES INDOOR REPORT

PHOTOMETRIC FILENAME : QD-44-LED35-HO-D9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

IESNA:LM-63-2002[ISSUE DATE][TEST] [TEST LAB] LIGHT LABORATORY, INC.[MANUFACTURER] PRUDENTIAL LTG.[LUMCAT] QUALITY

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	36022
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	85
Total Luminaire Watts	426
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6549	6532	6503
55	6300	6271	6227
65	5969	5923	5885
75	5506	5436	5410
85	4758	4618	4681

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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>
0.0	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16
2.5	10439.92	10442.56	10439.56	10436.00	10437.72	10436.00	10439.56	10442.56	10439.92	10442.56
5.0	10402.96	10403.20	10400.52	10399.60	10396.32	10399.60	10400.52	10403.20	10402.96	10403.20
7.5	10339.08	10339.72	10338.04	10336.52	10335.40	10336.52	10338.04	10339.72	10339.08	10339.72
10.0	10251.36	10252.92	10247.68	10246.32	10243.76	10246.32	10247.68	10252.92	10251.36	10252.92
12.5	10139.32	10142.76	10136.20	10134.48	10131.00	10134.48	10136.20	10142.76	10139.32	10142.76
15.0	10011.00	10009.20	10005.04	9999.76	9998.64	9999.76	10005.04	10009.20	10011.00	10009.20
17.5	9854.80	9855.16	9851.88	9842.48	9840.00	9842.48	9851.88	9855.16	9854.80	9855.16
20.0	9682.20	9679.44	9674.44	9666.68	9658.72	9666.68	9674.44	9679.44	9682.20	9679.44
22.5	9484.80	9483.44	9475.40	9463.40	9459.88	9463.40	9475.40	9483.44	9484.80	9483.44
25.0	9268.80	9266.80	9256.28	9247.16	9242.92	9247.16	9256.28	9266.80	9268.80	9266.80
27.5	9032.48	9028.44	9014.32	9003.48	8996.32	9003.48	9014.32	9028.44	9032.48	9028.44
30.0	8770.84	8770.32	8758.44	8746.08	8737.48	8746.08	8758.44	8770.32	8770.84	8770.32
32.5	8496.92	8496.36	8481.64	8467.76	8467.00	8467.76	8481.64	8496.36	8496.92	8496.36
35.0	8212.44	8207.72	8191.88	8172.64	8174.64	8172.64	8191.88	8207.72	8212.44	8207.72
37.5	7908.00	7900.40	7882.40	7863.64	7864.72	7863.64	7882.40	7900.40	7908.00	7900.40
40.0	7590.96	7578.12	7560.64	7540.08	7533.60	7540.08	7560.64	7578.12	7590.96	7578.12
42.5	7245.56	7241.52	7218.64	7200.08	7197.20	7200.08	7218.64	7241.52	7245.56	7241.52
45.0	6889.48	6893.56	6871.88	6846.12	6841.44	6846.12	6871.88	6893.56	6889.48	6893.56
47.5	6525.28	6527.76	6506.20	6481.88	6475.76	6481.88	6506.20	6527.76	6525.28	6527.76
50.0	6150.80	6149.00	6128.92	6108.28	6096.12	6108.28	6128.92	6149.00	6150.80	6149.00
52.5	5767.48	5763.80	5745.24	5722.20	5710.24	5722.20	5745.24	5763.80	5767.48	5763.80
55.0	5376.56	5373.60	5351.40	5327.28	5314.44	5327.28	5351.40	5373.60	5376.56	5373.60
57.5	4970.84	4972.68	4949.16	4924.28	4914.28	4924.28	4949.16	4972.68	4970.84	4972.68
60.0	4565.04	4567.40	4545.32	4519.80	4514.80	4519.80	4545.32	4567.40	4565.04	4567.40
62.5	4159.12	4155.68	4134.44	4116.04	4107.52	4116.04	4134.44	4155.68	4159.12	4155.68
65.0	3753.04	3742.16	3724.04	3702.52	3700.56	3702.52	3724.04	3742.16	3753.04	3742.16
67.5	3340.76	3334.24	3312.28	3292.96	3291.84	3292.96	3312.28	3334.24	3340.76	3334.24
70.0	2925.56	2921.72	2896.24	2881.40	2883.36	2881.40	2896.24	2921.72	2925.56	2921.72
72.5	2518.52	2512.76	2489.36	2476.72	2479.12	2476.72	2489.36	2512.76	2518.52	2512.76
75.0	2120.32	2111.04	2093.16	2081.32	2083.16	2081.32	2093.16	2111.04	2120.32	2111.04
77.5	1729.72	1717.60	1698.84	1692.84	1692.28	1692.84	1698.84	1717.60	1729.72	1717.60
80.0	1344.04	1334.28	1314.72	1311.24	1310.48	1311.24	1314.72	1334.28	1344.04	1334.28
82.5	967.96	967.16	946.00	942.96	951.12	942.96	946.00	967.16	967.96	967.16
85.0	616.96	614.40	598.84	600.68	607.00	600.68	598.84	614.40	616.96	614.40
87.5	292.76	293.56	270.12	273.96	276.40	273.96	270.12	293.56	292.76	293.56
90.0	295.08	304.48	264.36	141.24	35.28	141.24	264.36	304.48	295.08	304.48
92.5	400.52	372.52	281.00	161.92	74.12	161.92	281.00	372.52	400.52	372.52
95.0	402.04	378.76	297.16	190.04	132.44	190.04	297.16	378.76	402.04	378.76
97.5	447.36	423.60	338.56	229.88	181.16	229.88	338.56	423.60	447.36	423.60
100.0	501.28	476.08	390.72	279.64	245.20	279.64	390.72	476.08	501.28	476.08
102.5	559.12	535.60	443.48	333.80	310.92	333.80	443.48	535.60	559.12	535.60
105.0	621.96	598.08	499.60	394.44	371.76	394.44	499.60	598.08	621.96	598.08
107.5	679.92	651.28	557.60	458.44	442.64	458.44	557.60	651.28	679.92	651.28
110.0	733.56	706.32	620.32	525.88	515.48	525.88	620.32	706.32	733.56	706.32
112.5	788.44	764.44	681.88	597.00	565.40	597.00	681.88	764.44	788.44	764.44
115.0	854.52	829.36	750.52	663.72	659.20	663.72	750.52	829.36	854.52	829.36
117.5	924.16	898.80	820.52	738.40	728.72	738.40	820.52	898.80	924.16	898.80
120.0	992.12	973.16	889.04	810.88	791.32	810.88	889.04	973.16	992.12	973.16
122.5	1061.72	1042.16	965.60	899.04	862.96	899.04	965.60	1042.16	1061.72	1042.16
125.0	1128.64	1110.68	1041.04	967.36	958.76	967.36	1041.04	1110.68	1128.64	1110.68
127.5	1202.52	1182.52	1112.68	1037.20	1011.68	1037.20	1112.68	1182.52	1202.52	1182.52
130.0	1273.28	1254.72	1191.56	1117.00	1091.52	1117.00	1191.56	1254.72	1273.28	1254.72
132.5	1345.32	1324.52	1275.24	1186.64	1183.92	1186.64	1275.24	1324.52	1345.32	1324.52

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135.0	1414.52	1392.12	1342.16	1260.24	1256.76	1260.24	1342.16	1392.12	1414.52	1392.12
137.5	1477.44	1455.88	1406.96	1337.64	1313.60	1337.64	1406.96	1455.88	1477.44	1455.88
140.0	1544.00	1518.88	1470.88	1429.24	1386.00	1429.24	1470.88	1518.88	1544.00	1518.88
142.5	1599.40	1580.32	1532.48	1503.24	1477.96	1503.24	1532.48	1580.32	1599.40	1580.32
145.0	1659.60	1636.64	1601.00	1560.60	1557.84	1560.60	1601.00	1636.64	1659.60	1636.64
147.5	1709.48	1691.76	1660.36	1620.16	1611.20	1620.16	1660.36	1691.76	1709.48	1691.76
150.0	1763.80	1742.64	1712.80	1673.88	1666.00	1673.88	1712.80	1742.64	1763.80	1742.64
152.5	1808.60	1792.64	1760.16	1734.72	1714.08	1734.72	1760.16	1792.64	1808.60	1792.64
155.0	1856.32	1836.96	1810.60	1786.92	1777.52	1786.92	1810.60	1836.96	1856.32	1836.96
157.5	1894.60	1880.16	1853.56	1830.36	1828.48	1830.36	1853.56	1880.16	1894.60	1880.16
160.0	1927.52	1917.92	1895.36	1871.68	1867.76	1871.68	1895.36	1917.92	1927.52	1917.92
162.5	1960.00	1950.48	1936.40	1915.80	1910.20	1915.80	1936.40	1950.48	1960.00	1950.48
165.0	1987.72	1979.72	1965.16	1950.80	1948.56	1950.80	1965.16	1979.72	1987.72	1979.72
167.5	2009.36	2004.12	1993.76	1982.88	1987.36	1982.88	1993.76	2004.12	2009.36	2004.12
170.0	2028.88	2025.60	2015.60	2004.84	2010.72	2004.84	2015.60	2025.60	2028.88	2025.60
172.5	2042.48	2040.16	2034.92	2027.16	2026.56	2027.16	2034.92	2040.16	2042.48	2040.16
175.0	2054.36	2052.96	2045.96	2043.84	2047.68	2043.84	2045.96	2052.96	2054.36	2052.96
177.5	2060.76	2058.40	2055.80	2052.12	2052.84	2052.12	2055.80	2058.40	2060.76	2058.40
180.0	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24

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	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16	10453.16
2.5	10439.56	10436.00	10437.72	10436.00	10439.56	10442.56	10439.92
5.0	10400.52	10399.60	10396.32	10399.60	10400.52	10403.20	10402.96
7.5	10338.04	10336.52	10335.40	10336.52	10338.04	10339.72	10339.08
10.0	10247.68	10246.32	10243.76	10246.32	10247.68	10252.92	10251.36
12.5	10136.20	10134.48	10131.00	10134.48	10136.20	10142.76	10139.32
15.0	10005.04	9999.76	9998.64	9999.76	10005.04	10009.20	10011.00
17.5	9851.88	9842.48	9840.00	9842.48	9851.88	9855.16	9854.80
20.0	9674.44	9666.68	9658.72	9666.68	9674.44	9679.44	9682.20
22.5	9475.40	9463.40	9459.88	9463.40	9475.40	9483.44	9484.80
25.0	9256.28	9247.16	9242.92	9247.16	9256.28	9266.80	9268.80
27.5	9014.32	9003.48	8996.32	9003.48	9014.32	9028.44	9032.48
30.0	8758.44	8746.08	8737.48	8746.08	8758.44	8770.32	8770.84
32.5	8481.64	8467.76	8467.00	8467.76	8481.64	8496.36	8496.92
35.0	8191.88	8172.64	8174.64	8172.64	8191.88	8207.72	8212.44
37.5	7882.40	7863.64	7864.72	7863.64	7882.40	7900.40	7908.00
40.0	7560.64	7540.08	7533.60	7540.08	7560.64	7578.12	7590.96
42.5	7218.64	7200.08	7197.20	7200.08	7218.64	7241.52	7245.56
45.0	6871.88	6846.12	6841.44	6846.12	6871.88	6893.56	6889.48
47.5	6506.20	6481.88	6475.76	6481.88	6506.20	6527.76	6525.28
50.0	6128.92	6108.28	6096.12	6108.28	6128.92	6149.00	6150.80
52.5	5745.24	5722.20	5710.24	5722.20	5745.24	5763.80	5767.48
55.0	5351.40	5327.28	5314.44	5327.28	5351.40	5373.60	5376.56
57.5	4949.16	4924.28	4914.28	4924.28	4949.16	4972.68	4970.84
60.0	4545.32	4519.80	4514.80	4519.80	4545.32	4567.40	4565.04
62.5	4134.44	4116.04	4107.52	4116.04	4134.44	4155.68	4159.12
65.0	3724.04	3702.52	3700.56	3702.52	3724.04	3742.16	3753.04
67.5	3312.28	3292.96	3291.84	3292.96	3312.28	3334.24	3340.76
70.0	2896.24	2881.40	2883.36	2881.40	2896.24	2921.72	2925.56
72.5	2489.36	2476.72	2479.12	2476.72	2489.36	2512.76	2518.52
75.0	2093.16	2081.32	2083.16	2081.32	2093.16	2111.04	2120.32
77.5	1698.84	1692.84	1692.28	1692.84	1698.84	1717.60	1729.72
80.0	1314.72	1311.24	1310.48	1311.24	1314.72	1334.28	1344.04

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CANDELA TABULATION - (Cont.)

82.5	946.00	942.96	951.12	942.96	946.00	967.16	967.96
85.0	598.84	600.68	607.00	600.68	598.84	614.40	616.96
87.5	270.12	273.96	276.40	273.96	270.12	293.56	292.76
90.0	264.36	141.24	35.28	141.24	264.36	304.48	295.08
92.5	281.00	161.92	74.12	161.92	281.00	372.52	400.52
95.0	297.16	190.04	132.44	190.04	297.16	378.76	402.04
97.5	338.56	229.88	181.16	229.88	338.56	423.60	447.36
100.0	390.72	279.64	245.20	279.64	390.72	476.08	501.28
102.5	443.48	333.80	310.92	333.80	443.48	535.60	559.12
105.0	499.60	394.44	371.76	394.44	499.60	598.08	621.96
107.5	557.60	458.44	442.64	458.44	557.60	651.28	679.92
110.0	620.32	525.88	515.48	525.88	620.32	706.32	733.56
112.5	681.88	597.00	565.40	597.00	681.88	764.44	788.44
115.0	750.52	663.72	659.20	663.72	750.52	829.36	854.52
117.5	820.52	738.40	728.72	738.40	820.52	898.80	924.16
120.0	889.04	810.88	791.32	810.88	889.04	973.16	992.12
122.5	965.60	899.04	862.96	899.04	965.60	1042.16	1061.72
125.0	1041.04	967.36	958.76	967.36	1041.04	1110.68	1128.64
127.5	1112.68	1037.20	1011.68	1037.20	1112.68	1182.52	1202.52
130.0	1191.56	1117.00	1091.52	1117.00	1191.56	1254.72	1273.28
132.5	1275.24	1186.64	1183.92	1186.64	1275.24	1324.52	1345.32
135.0	1342.16	1260.24	1256.76	1260.24	1342.16	1392.12	1414.52
137.5	1406.96	1337.64	1313.60	1337.64	1406.96	1455.88	1477.44
140.0	1470.88	1429.24	1386.00	1429.24	1470.88	1518.88	1544.00
142.5	1532.48	1503.24	1477.96	1503.24	1532.48	1580.32	1599.40
145.0	1601.00	1560.60	1557.84	1560.60	1601.00	1636.64	1659.60
147.5	1660.36	1620.16	1611.20	1620.16	1660.36	1691.76	1709.48
150.0	1712.80	1673.88	1666.00	1673.88	1712.80	1742.64	1763.80
152.5	1760.16	1734.72	1714.08	1734.72	1760.16	1792.64	1808.60
155.0	1810.60	1786.92	1777.52	1786.92	1810.60	1836.96	1856.32
157.5	1853.56	1830.36	1828.48	1830.36	1853.56	1880.16	1894.60
160.0	1895.36	1871.68	1867.76	1871.68	1895.36	1917.92	1927.52
162.5	1936.40	1915.80	1910.20	1915.80	1936.40	1950.48	1960.00
165.0	1965.16	1950.80	1948.56	1950.80	1965.16	1979.72	1987.72
167.5	1993.76	1982.88	1987.36	1982.88	1993.76	2004.12	2009.36
170.0	2015.60	2004.84	2010.72	2004.84	2015.60	2025.60	2028.88
172.5	2034.92	2027.16	2026.56	2027.16	2034.92	2040.16	2042.48
175.0	2045.96	2043.84	2047.68	2043.84	2045.96	2052.96	2054.36
177.5	2055.80	2052.12	2052.84	2052.12	2055.80	2058.40	2060.76
180.0	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24	2057.24

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3810.95	N.A.	10.60
0-30	8075.46	N.A.	22.40
0-40	13198.74	N.A.	36.60
0-60	23276.32	N.A.	64.60
0-80	29179.68	N.A.	81.00
0-90	29890.35	N.A.	83.00
10-90	28902.34	N.A.	80.20
20-40	9387.79	N.A.	26.10
20-50	14684.89	N.A.	40.80
40-70	13763.39	N.A.	38.20
60-80	5903.37	N.A.	16.40
70-80	2217.55	N.A.	6.20
80-90	710.66	N.A.	2.00
90-110	845.24	N.A.	2.30
90-120	1589.56	N.A.	4.40
90-130	2519.36	N.A.	7.00
90-150	4547.56	N.A.	12.60
90-180	6131.35	N.A.	17.00
110-180	5286.1	N.A.	14.70
0-180	36021.69	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	988.01
10-20	2822.94
20-30	4264.51
30-40	5123.29
40-50	5297.1
50-60	4780.47
60-70	3685.82
70-80	2217.55
80-90	710.66
90-100	319.60
100-110	525.64
110-120	744.32
120-130	929.80
130-140	1027.64
140-150	1000.55
150-160	834.67
160-170	554.65
170-180	194.47

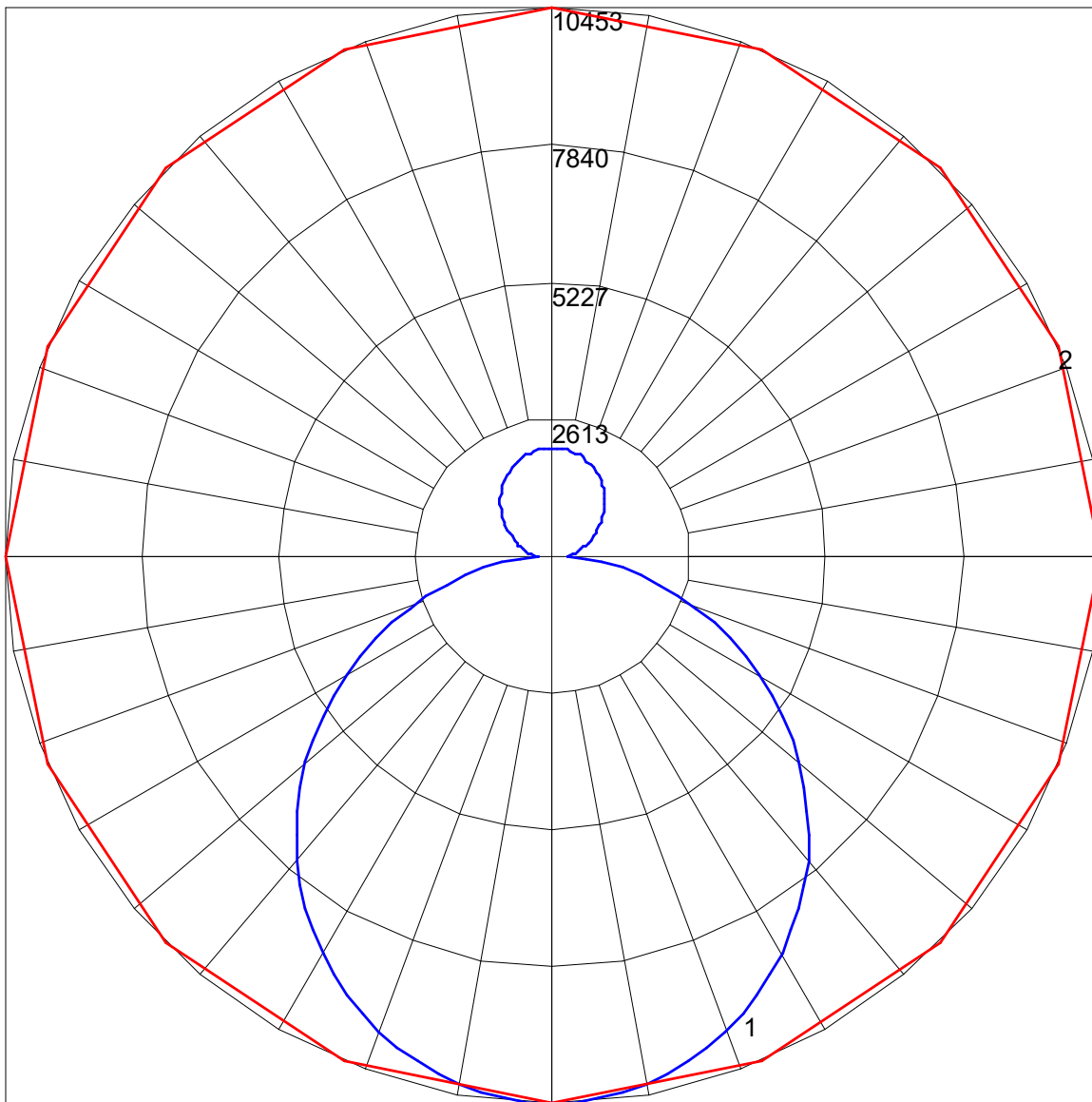
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83
1	105	100	96	92	100	96	92	89	89	86	83	82	80	77	76	74	72	69
2	95	87	80	75	91	84	78	72	77	72	68	72	68	64	66	63	60	57
3	87	76	68	62	83	73	66	60	68	62	57	63	58	54	58	54	51	48
4	79	67	59	52	76	65	57	51	60	54	48	56	50	46	52	47	44	41
5	73	60	51	45	69	58	50	44	54	47	42	50	44	40	47	42	38	35
6	67	54	45	39	64	52	44	38	49	42	36	45	39	35	42	37	33	31
7	62	49	40	34	59	47	39	34	44	37	32	41	35	31	39	33	30	27
8	58	45	36	30	55	43	35	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	27	52	40	32	27	37	30	26	35	29	25	33	28	24	22
10	50	38	30	25	48	36	29	24	34	28	23	32	27	22	30	25	22	20

POLAR GRAPH



Maximum Candela = 10453.16 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)