



IES INDOOR REPORT

PHOTOMETRIC FILENAME : QDF-44-LED35-HO-FWA-D9.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 IESNA:LM-63-2002
 [TESTLAB] Intertek
 [ISSUE DATE] August 3, 2017
 [MANUFAC] Prudential Lighting
 [LAMPCAT] QDF-44-LED35-HO-FWA-D9
 [LUMINAIRE] 4' x 4' x 5"H. LED FIXTURE
 [MORE] FLAT WHITE ACRYLIC LENS

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	13669
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	211
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.42 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1917	1837	1903
55	1769	1668	1754
65	1574	1443	1560
75	1260	1110	1241
85	628	502	604

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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	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857
2.5	3376.523	3379.903	3382.999	3380.342	3378.510	3380.342	3382.999	3379.903	3376.523	3379.903
5.0	3367.777	3366.384	3369.506	3366.461	3365.223	3366.461	3369.506	3366.384	3367.777	3366.384
7.5	3343.370	3345.950	3349.459	3344.764	3344.196	3344.764	3349.459	3345.950	3343.370	3345.950
10.0	3313.365	3316.177	3318.319	3316.151	3312.385	3316.151	3318.319	3316.177	3313.365	3316.177
12.5	3279.386	3279.696	3280.857	3277.684	3277.090	3277.684	3280.857	3279.696	3279.386	3279.696
15.0	3236.842	3235.604	3236.275	3234.030	3232.637	3234.030	3236.275	3235.604	3236.842	3235.604
17.5	3184.081	3185.062	3186.352	3183.978	3182.662	3183.978	3186.352	3185.062	3184.081	3185.062
20.0	3125.876	3127.166	3128.611	3125.231	3120.923	3125.231	3128.611	3127.166	3125.876	3127.166
22.5	3060.577	3063.053	3061.505	3057.945	3055.571	3057.945	3061.505	3063.053	3060.577	3063.053
25.0	2993.703	2992.439	2991.458	2988.440	2985.576	2988.440	2991.458	2992.439	2993.703	2992.439
27.5	2918.573	2914.394	2915.761	2911.814	2906.318	2911.814	2915.761	2914.394	2918.573	2914.394
30.0	2836.039	2834.414	2831.989	2827.241	2822.107	2827.241	2831.989	2834.414	2836.039	2834.414
32.5	2749.583	2747.287	2743.340	2739.728	2736.038	2739.728	2743.340	2747.287	2749.583	2747.287
35.0	2655.233	2650.537	2649.557	2643.984	2640.836	2643.984	2649.557	2650.537	2655.233	2650.537
37.5	2556.083	2552.059	2546.744	2542.745	2538.694	2542.745	2546.744	2552.059	2556.083	2552.059
40.0	2447.801	2445.324	2439.493	2436.862	2433.714	2436.862	2439.493	2445.324	2447.801	2445.324
42.5	2338.357	2335.545	2330.720	2327.444	2323.780	2327.444	2330.720	2335.545	2338.357	2335.545
45.0	2226.695	2223.779	2217.175	2212.711	2210.492	2212.711	2217.175	2223.779	2226.695	2223.779
47.5	2113.097	2106.441	2097.076	2094.109	2094.728	2094.109	2097.076	2106.441	2113.097	2106.441
50.0	1990.212	1984.201	1974.861	1973.158	1971.533	1973.158	1974.861	1984.201	1990.212	1984.201
52.5	1864.127	1856.568	1850.221	1849.808	1849.009	1849.808	1850.221	1856.568	1864.127	1856.568
55.0	1733.812	1729.787	1723.156	1720.654	1719.983	1720.654	1723.156	1729.787	1733.812	1729.787
57.5	1608.578	1601.716	1593.640	1591.808	1593.176	1591.808	1593.640	1601.716	1608.578	1601.716
60.0	1480.249	1472.071	1460.977	1460.383	1464.589	1460.383	1460.977	1472.071	1480.249	1472.071
62.5	1347.663	1336.311	1328.958	1327.487	1332.880	1327.487	1328.958	1336.311	1347.663	1336.311
65.0	1211.155	1200.448	1193.869	1196.449	1200.010	1196.449	1193.869	1200.448	1211.155	1200.448
67.5	1075.834	1064.276	1059.812	1059.271	1066.417	1059.271	1059.812	1064.276	1075.834	1064.276
70.0	940.591	931.406	925.472	924.182	930.967	924.182	925.472	931.406	940.591	931.406
72.5	803.309	795.079	791.028	791.647	791.028	791.647	791.028	795.079	803.309	795.079
75.0	673.586	664.969	662.338	660.815	663.447	660.815	662.338	664.969	673.586	664.969
77.5	545.025	537.079	534.499	530.887	534.344	530.887	534.499	537.079	545.025	537.079
80.0	420.875	416.051	411.149	410.297	408.053	410.297	411.149	416.051	420.875	416.051
82.5	297.680	293.062	291.024	288.315	290.353	288.315	291.024	293.062	297.680	293.062
85.0	178.278	173.892	174.872	173.376	171.622	173.376	174.872	173.892	178.278	173.892
87.5	76.033	68.628	62.771	67.906	70.563	67.906	62.771	68.628	76.033	68.628
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	25.155	27.606	28.870	29.825	28.561	29.825	28.870	27.606	25.155	27.606
95.0	53.277	54.438	56.708	56.399	56.528	56.399	56.708	54.438	53.277	54.438
97.5	88.468	88.055	89.449	88.907	91.667	88.907	89.449	88.055	88.468	88.055
100.0	128.639	128.923	132.509	132.044	129.929	132.044	132.509	128.923	128.639	128.923
102.5	175.182	174.898	178.691	176.059	176.214	176.059	178.691	174.898	175.182	174.898
105.0	224.460	223.480	227.711	225.518	225.647	225.518	227.711	223.480	224.460	223.480
107.5	273.506	277.582	278.485	279.259	277.634	279.259	278.485	277.582	273.506	277.582
110.0	331.582	331.607	332.949	334.884	332.562	334.884	332.949	331.607	331.582	331.607
112.5	386.923	387.774	390.328	390.767	388.032	390.767	390.328	387.774	386.923	387.774
115.0	443.631	444.224	446.366	447.346	445.850	447.346	446.366	444.224	443.631	444.224
117.5	500.623	503.461	503.023	505.757	504.493	505.757	503.023	503.461	500.623	503.461
120.0	559.679	563.601	563.936	565.923	562.698	565.923	563.936	563.601	559.679	563.601
122.5	626.501	622.786	625.521	623.870	623.070	623.870	625.521	622.786	626.501	622.786
125.0	685.970	685.945	687.880	688.705	686.564	688.705	687.880	685.945	685.970	685.945
127.5	745.259	747.245	751.038	749.929	746.962	749.929	751.038	747.245	745.259	747.245
130.0	806.766	811.333	813.887	813.010	811.668	813.010	813.887	811.333	806.766	811.333
132.5	871.705	874.156	877.742	876.890	874.878	876.890	877.742	874.156	871.705	874.156

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135.0	934.399	937.417	941.545	939.275	940.384	939.275	941.545	937.417	934.399	937.417
137.5	1001.246	1002.304	1004.600	1001.479	1002.717	1001.479	1004.600	1002.304	1001.246	1002.304
140.0	1063.811	1065.488	1070.519	1064.353	1067.217	1064.353	1070.519	1065.488	1063.811	1065.488
142.5	1123.925	1126.609	1131.898	1124.777	1125.835	1124.777	1131.898	1126.609	1123.925	1126.609
145.0	1184.736	1184.452	1191.831	1184.968	1185.046	1184.968	1191.831	1184.452	1184.736	1184.452
147.5	1243.870	1242.502	1246.733	1241.651	1242.786	1241.651	1246.733	1242.502	1243.870	1242.502
150.0	1297.895	1298.024	1304.035	1297.121	1296.708	1297.121	1304.035	1298.024	1297.895	1298.024
152.5	1348.385	1347.147	1353.081	1348.153	1347.792	1348.153	1353.081	1347.147	1348.385	1347.147
155.0	1394.696	1394.800	1400.166	1397.018	1396.141	1397.018	1400.166	1394.800	1394.696	1394.800
157.5	1438.298	1438.427	1441.936	1440.079	1440.001	1440.079	1441.936	1438.427	1438.298	1438.427
160.0	1480.662	1478.056	1482.081	1478.082	1480.094	1478.082	1482.081	1478.056	1480.662	1478.056
162.5	1514.357	1510.719	1518.278	1514.589	1512.499	1514.589	1518.278	1510.719	1514.357	1510.719
165.0	1543.408	1539.589	1546.426	1541.937	1542.118	1541.937	1546.426	1539.589	1543.408	1539.589
167.5	1568.511	1567.350	1574.497	1567.273	1569.001	1567.273	1574.497	1567.350	1568.511	1567.350
170.0	1593.718	1588.583	1593.537	1589.615	1590.441	1589.615	1593.537	1588.583	1593.718	1588.583
172.5	1611.236	1606.721	1610.642	1607.108	1608.346	1607.108	1610.642	1606.721	1611.236	1606.721
175.0	1618.563	1619.440	1623.104	1620.498	1621.582	1620.498	1623.104	1619.440	1618.563	1619.440
177.5	1627.567	1626.793	1631.669	1627.799	1628.083	1627.799	1631.669	1626.793	1627.567	1626.793
180.0	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489

**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	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857	3384.857
2.5	3382.999	3380.342	3378.510	3380.342	3382.999	3379.903	3376.523
5.0	3369.506	3366.461	3365.223	3366.461	3369.506	3366.384	3367.777
7.5	3349.459	3344.764	3344.196	3344.764	3349.459	3345.950	3343.370
10.0	3318.319	3316.151	3312.385	3316.151	3318.319	3316.177	3313.365
12.5	3280.857	3277.684	3277.090	3277.684	3280.857	3279.696	3279.386
15.0	3236.275	3234.030	3232.637	3234.030	3236.275	3235.604	3236.842
17.5	3186.352	3183.978	3182.662	3183.978	3186.352	3185.062	3184.081
20.0	3128.611	3125.231	3120.923	3125.231	3128.611	3127.166	3125.876
22.5	3061.505	3057.945	3055.571	3057.945	3061.505	3063.053	3060.577
25.0	2991.458	2988.440	2985.576	2988.440	2991.458	2992.439	2993.703
27.5	2915.761	2911.814	2906.318	2911.814	2915.761	2914.394	2918.573
30.0	2831.989	2827.241	2822.107	2827.241	2831.989	2834.414	2836.039
32.5	2743.340	2739.728	2736.038	2739.728	2743.340	2747.287	2749.583
35.0	2649.557	2643.984	2640.836	2643.984	2649.557	2650.537	2655.233
37.5	2546.744	2542.745	2538.694	2542.745	2546.744	2552.059	2556.083
40.0	2439.493	2436.862	2433.714	2436.862	2439.493	2445.324	2447.801
42.5	2330.720	2327.444	2323.780	2327.444	2330.720	2335.545	2338.357
45.0	2217.175	2212.711	2210.492	2212.711	2217.175	2223.779	2226.695
47.5	2097.076	2094.109	2094.728	2094.109	2097.076	2106.441	2113.097
50.0	1974.861	1973.158	1971.533	1973.158	1974.861	1984.201	1990.212
52.5	1850.221	1849.808	1849.009	1849.808	1850.221	1856.568	1864.127
55.0	1723.156	1720.654	1719.983	1720.654	1723.156	1729.787	1733.812
57.5	1593.640	1591.808	1593.176	1591.808	1593.640	1601.716	1608.578
60.0	1460.977	1460.383	1464.589	1460.383	1460.977	1472.071	1480.249
62.5	1328.958	1327.487	1332.880	1327.487	1328.958	1336.311	1347.663
65.0	1193.869	1196.449	1200.010	1196.449	1193.869	1200.448	1211.155
67.5	1059.812	1059.271	1066.417	1059.271	1059.812	1064.276	1075.834
70.0	925.472	924.182	930.967	924.182	925.472	931.406	940.591
72.5	791.028	791.647	791.028	791.647	791.028	795.079	803.309
75.0	662.338	660.815	663.447	660.815	662.338	664.969	673.586
77.5	534.499	530.887	534.344	530.887	534.499	537.079	545.025
80.0	411.149	410.297	408.053	410.297	411.149	416.051	420.875

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CANDELA TABULATION - (Cont.)

82.5	291.024	288.315	290.353	288.315	291.024	293.062	297.680
85.0	174.872	173.376	171.622	173.376	174.872	173.892	178.278
87.5	62.771	67.906	70.563	67.906	62.771	68.628	76.033
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	28.870	29.825	28.561	29.825	28.870	27.606	25.155
95.0	56.708	56.399	56.528	56.399	56.708	54.438	53.277
97.5	89.449	88.907	91.667	88.907	89.449	88.055	88.468
100.0	132.509	132.044	129.929	132.044	132.509	128.923	128.639
102.5	178.691	176.059	176.214	176.059	178.691	174.898	175.182
105.0	227.711	225.518	225.647	225.518	227.711	223.480	224.460
107.5	278.485	279.259	277.634	279.259	278.485	277.582	273.506
110.0	332.949	334.884	332.562	334.884	332.949	331.607	331.582
112.5	390.328	390.767	388.032	390.767	390.328	387.774	386.923
115.0	446.366	447.346	445.850	447.346	446.366	444.224	443.631
117.5	503.023	505.757	504.493	505.757	503.023	503.461	500.623
120.0	563.936	565.923	562.698	565.923	563.936	563.601	559.679
122.5	625.521	623.870	623.070	623.870	625.521	622.786	626.501
125.0	687.880	688.705	686.564	688.705	687.880	685.945	685.970
127.5	751.038	749.929	746.962	749.929	751.038	747.245	745.259
130.0	813.887	813.010	811.668	813.010	813.887	811.333	806.766
132.5	877.742	876.890	874.878	876.890	877.742	874.156	871.705
135.0	941.545	939.275	940.384	939.275	941.545	937.417	934.399
137.5	1004.600	1001.479	1002.717	1001.479	1004.600	1002.304	1001.246
140.0	1070.519	1064.353	1067.217	1064.353	1070.519	1065.488	1063.811
142.5	1131.898	1124.777	1125.835	1124.777	1131.898	1126.609	1123.925
145.0	1191.831	1184.968	1185.046	1184.968	1191.831	1184.452	1184.736
147.5	1246.733	1241.651	1242.786	1241.651	1246.733	1242.502	1243.870
150.0	1304.035	1297.121	1296.708	1297.121	1304.035	1298.024	1297.895
152.5	1353.081	1348.153	1347.792	1348.153	1353.081	1347.147	1348.385
155.0	1400.166	1397.018	1396.141	1397.018	1400.166	1394.800	1394.696
157.5	1441.936	1440.079	1440.001	1440.079	1441.936	1438.427	1438.298
160.0	1482.081	1478.082	1480.094	1478.082	1482.081	1478.056	1480.662
162.5	1518.278	1514.589	1512.499	1514.589	1518.278	1510.719	1514.357
165.0	1546.426	1541.937	1542.118	1541.937	1546.426	1539.589	1543.408
167.5	1574.497	1567.273	1569.001	1567.273	1574.497	1567.350	1568.511
170.0	1593.537	1589.615	1590.441	1589.615	1593.537	1588.583	1593.718
172.5	1610.642	1607.108	1608.346	1607.108	1610.642	1606.721	1611.236
175.0	1623.104	1620.498	1621.582	1620.498	1623.104	1619.440	1618.563
177.5	1631.669	1627.799	1628.083	1627.799	1631.669	1626.793	1627.567
180.0	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489	1631.489

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1232.66	N.A.	9.00
0-30	2610.63	N.A.	19.10
0-40	4266.52	N.A.	31.20
0-60	7519.58	N.A.	55.00
0-80	9408.5	N.A.	68.80
0-90	9609.92	N.A.	70.30
10-90	9290.12	N.A.	68.00
20-40	3033.86	N.A.	22.20
20-50	4744.2	N.A.	34.70
40-70	4439.26	N.A.	32.50
60-80	1888.92	N.A.	13.80
70-80	702.71	N.A.	5.10
80-90	201.43	N.A.	1.50
90-110	305.08	N.A.	2.20
90-120	747.01	N.A.	5.50
90-130	1361.18	N.A.	10.00
90-150	2827.29	N.A.	20.70
90-180	4058.82	N.A.	29.70
110-180	3753.74	N.A.	27.50
0-180	13668.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	319.80
10-20	912.86
20-30	1377.97
30-40	1655.89
40-50	1710.34
50-60	1542.72
60-70	1186.2
70-80	702.71
80-90	201.43
90-100	64.85
100-110	240.23
110-120	441.93
120-130	614.17
130-140	724.55
140-150	741.56
150-160	642.70
160-170	435.06
170-180	153.78

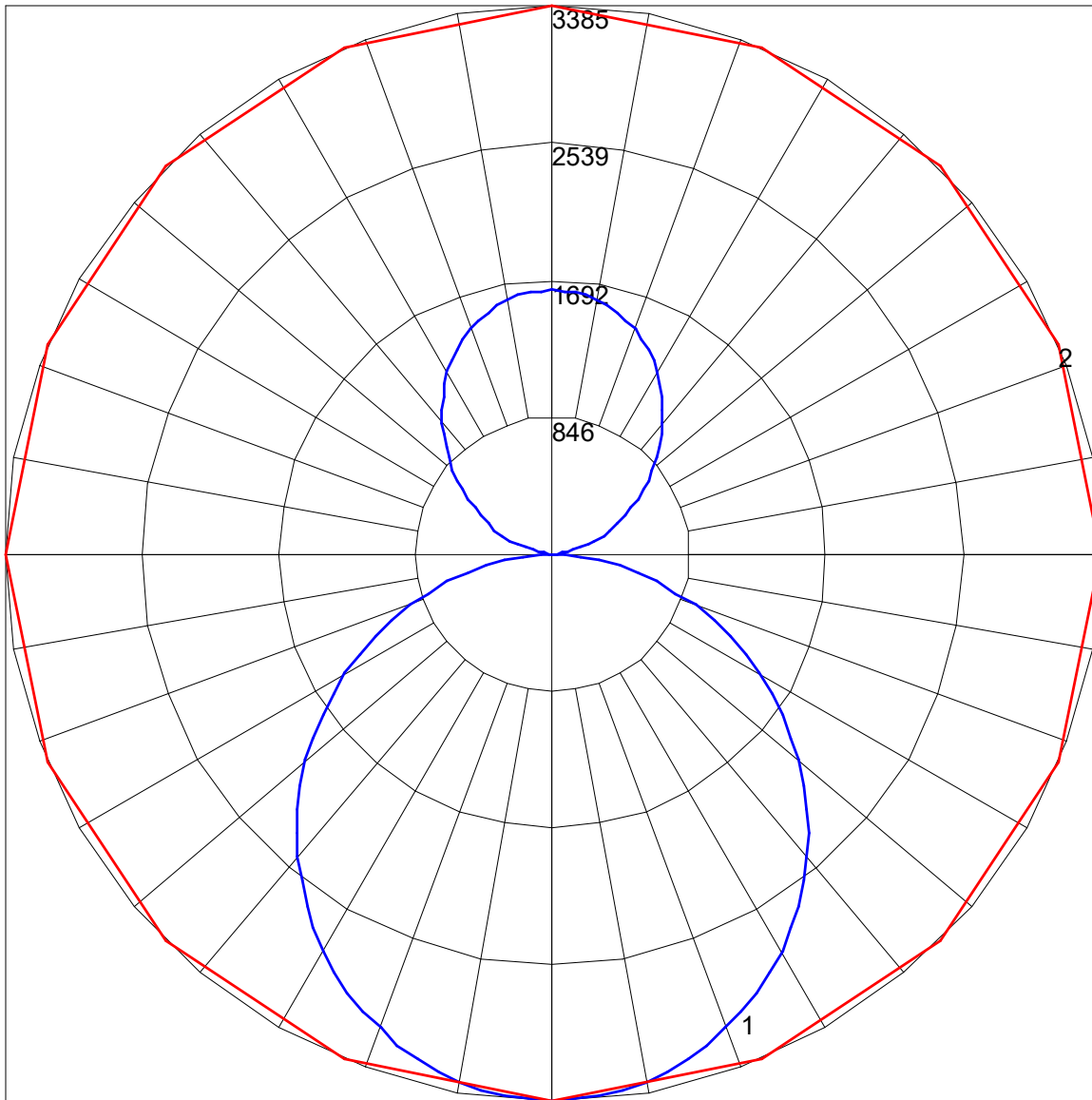
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PHOTOMETRIC FILENAME : QDF-44-LED35-HO-FWA-D9.IES

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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	102	97	93	90	96	92	89	85	83	80	77	74	72	70	66	64	63	59
2	93	85	78	73	87	80	75	70	72	68	64	65	61	58	57	55	52	49
3	84	74	67	60	79	71	64	58	63	58	53	57	52	49	51	47	44	41
4	77	66	57	51	73	62	55	49	56	50	45	51	46	42	45	41	38	35
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	41	36	33	30
6	65	53	44	38	62	50	42	37	45	39	34	41	36	31	37	32	29	26
7	60	48	39	33	57	45	38	32	41	35	30	37	32	28	34	29	26	23
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	26	23	21
9	52	40	32	26	49	38	31	26	34	28	24	31	26	22	28	24	21	19
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

POLAR GRAPH



Maximum Candela = 3384.857 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.)