



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : QD-44-LED35-LO-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  
[MORE] FWA - WHITE ACRYLIC LENS

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	11887
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	127
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	2161	2155	2146
55	2079	2069	2055
65	1970	1954	1942
75	1817	1794	1785
85	1570	1524	1545

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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>	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543
<b>2.5</b>	3445.174	3446.045	3445.055	3443.880	3444.448	3443.880	3445.055	3446.045	3445.174	3446.045
<b>5.0</b>	3432.977	3433.056	3432.172	3431.868	3430.786	3431.868	3432.172	3433.056	3432.977	3433.056
<b>7.5</b>	3411.897	3412.108	3411.553	3411.052	3410.682	3411.052	3411.553	3412.108	3411.897	3412.108
<b>10.0</b>	3382.949	3383.464	3381.735	3381.286	3380.441	3381.286	3381.735	3383.464	3382.949	3383.464
<b>12.5</b>	3345.976	3347.111	3344.946	3344.379	3343.230	3344.379	3344.946	3347.111	3345.976	3347.111
<b>15.0</b>	3303.630	3303.036	3301.663	3299.921	3299.551	3299.921	3301.663	3303.036	3303.630	3303.036
<b>17.5</b>	3252.084	3252.203	3251.121	3248.019	3247.200	3248.019	3251.121	3252.203	3252.084	3252.203
<b>20.0</b>	3195.126	3194.215	3192.565	3190.005	3187.378	3190.005	3192.565	3194.215	3195.126	3194.215
<b>22.5</b>	3129.984	3129.535	3126.882	3122.922	3121.761	3122.922	3126.882	3129.535	3129.984	3129.535
<b>25.0</b>	3058.704	3058.044	3054.573	3051.563	3050.164	3051.563	3054.573	3058.044	3058.704	3058.044
<b>27.5</b>	2980.719	2979.385	2974.726	2971.149	2968.786	2971.149	2974.726	2979.385	2980.719	2979.385
<b>30.0</b>	2894.377	2894.206	2890.285	2886.207	2883.369	2886.207	2890.285	2894.206	2894.377	2894.206
<b>32.5</b>	2803.984	2803.799	2798.941	2794.361	2794.110	2794.361	2798.941	2803.799	2803.984	2803.799
<b>35.0</b>	2710.105	2708.548	2703.321	2696.971	2697.631	2696.971	2703.321	2708.548	2710.105	2708.548
<b>37.5</b>	2609.640	2607.132	2601.192	2595.001	2595.358	2595.001	2601.192	2607.132	2609.640	2607.132
<b>40.0</b>	2505.017	2500.780	2495.011	2488.226	2486.088	2488.226	2495.011	2500.780	2505.017	2500.780
<b>42.5</b>	2391.035	2389.702	2382.151	2376.026	2375.076	2376.026	2382.151	2389.702	2391.035	2389.702
<b>45.0</b>	2273.528	2274.875	2267.720	2259.220	2257.675	2259.220	2267.720	2274.875	2273.528	2274.875
<b>47.5</b>	2153.342	2154.161	2147.046	2139.020	2137.001	2139.020	2147.046	2154.161	2153.342	2154.161
<b>50.0</b>	2029.764	2029.170	2022.544	2015.732	2011.720	2015.732	2022.544	2029.170	2029.764	2029.170
<b>52.5</b>	1903.268	1902.054	1895.929	1888.326	1884.379	1888.326	1895.929	1902.054	1903.268	1902.054
<b>55.0</b>	1774.265	1773.288	1765.962	1758.002	1753.765	1758.002	1765.962	1773.288	1774.265	1773.288
<b>57.5</b>	1640.377	1640.984	1633.223	1625.012	1621.712	1625.012	1633.223	1640.984	1640.377	1640.984
<b>60.0</b>	1506.463	1507.242	1499.956	1491.534	1489.884	1491.534	1499.956	1507.242	1506.463	1507.242
<b>62.5</b>	1372.510	1371.374	1364.365	1358.293	1355.482	1358.293	1364.365	1371.374	1372.510	1371.374
<b>65.0</b>	1238.503	1234.913	1228.933	1221.832	1221.185	1221.832	1228.933	1234.913	1238.503	1234.913
<b>67.5</b>	1102.451	1100.299	1093.052	1086.677	1086.307	1086.677	1093.052	1100.299	1102.451	1100.299
<b>70.0</b>	965.435	964.168	955.759	950.862	951.509	950.862	955.759	964.168	965.435	964.168
<b>72.5</b>	831.112	829.211	821.489	817.318	818.110	817.318	821.489	829.211	831.112	829.211
<b>75.0</b>	699.706	696.643	690.743	686.836	687.443	686.836	690.743	696.643	699.706	696.643
<b>77.5</b>	570.808	566.808	560.617	558.637	558.452	558.637	560.617	566.808	570.808	566.808
<b>80.0</b>	443.533	440.312	433.858	432.709	432.458	432.709	433.858	440.312	443.533	440.312
<b>82.5</b>	319.427	319.163	312.180	311.177	313.870	311.177	312.180	319.163	319.427	319.163
<b>85.0</b>	203.597	202.752	197.617	198.224	200.310	198.224	197.617	202.752	203.597	202.752
<b>87.5</b>	96.611	96.875	89.140	90.407	91.212	90.407	89.140	96.875	96.611	96.875
<b>90.0</b>	97.376	100.478	87.239	46.609	11.642	46.609	87.239	100.478	97.376	100.478
<b>92.5</b>	132.172	122.932	92.730	53.434	24.460	53.434	92.730	122.932	132.172	122.932
<b>95.0</b>	132.673	124.991	98.063	62.713	43.705	62.713	98.063	124.991	132.673	124.991
<b>97.5</b>	147.629	139.788	111.725	75.860	59.783	75.860	111.725	139.788	147.629	139.788
<b>100.0</b>	165.422	157.106	128.938	92.281	80.916	92.281	128.938	157.106	165.422	157.106
<b>102.5</b>	184.510	176.748	146.348	110.154	102.604	110.154	146.348	176.748	184.510	176.748
<b>105.0</b>	205.247	197.366	164.868	130.165	122.681	130.165	164.868	197.366	205.247	197.366
<b>107.5</b>	224.374	214.922	184.008	151.285	146.071	151.285	184.008	214.922	224.374	214.922
<b>110.0</b>	242.075	233.086	204.706	173.540	170.108	173.540	204.706	233.086	242.075	233.086
<b>112.5</b>	260.185	252.265	225.020	197.010	186.582	197.010	225.020	252.265	260.185	252.265
<b>115.0</b>	281.992	273.689	247.672	219.028	217.536	219.028	247.672	273.689	281.992	273.689
<b>117.5</b>	304.973	296.604	270.772	243.672	240.478	243.672	270.772	296.604	304.973	296.604
<b>120.0</b>	327.400	321.143	293.383	267.590	261.136	267.590	293.383	321.143	327.400	321.143
<b>122.5</b>	350.368	343.913	318.648	296.683	284.777	296.683	318.648	343.913	350.368	343.913
<b>125.0</b>	372.451	366.524	343.543	319.229	316.391	319.229	343.543	366.524	372.451	366.524
<b>127.5</b>	396.832	390.232	367.184	342.276	333.854	342.276	367.184	390.232	396.832	390.232
<b>130.0</b>	420.182	414.058	393.215	368.610	360.202	368.610	393.215	414.058	420.182	414.058
<b>132.5</b>	443.956	437.092	420.829	391.591	390.694	391.591	420.829	437.092	443.956	437.092

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**CANDELA TABULATION - (Cont.)**

135.0	466.792	459.400	442.913	415.879	414.731	415.879	442.913	459.400	466.792	459.400
137.5	487.555	480.440	464.297	441.421	433.488	441.421	464.297	480.440	487.555	480.440
140.0	509.520	501.230	485.390	471.649	457.380	471.649	485.390	501.230	509.520	501.230
142.5	527.802	521.506	505.718	496.069	487.727	496.069	505.718	521.506	527.802	521.506
145.0	547.668	540.091	528.330	514.998	514.087	514.998	528.330	540.091	547.668	540.091
147.5	564.128	558.281	547.919	534.653	531.696	534.653	547.919	558.281	564.128	558.281
150.0	582.054	575.071	565.224	552.380	549.780	552.380	565.224	575.071	582.054	575.071
152.5	596.838	591.571	580.853	572.458	565.646	572.458	580.853	591.571	596.838	591.571
155.0	612.586	606.197	597.498	589.684	586.582	589.684	597.498	606.197	612.586	606.197
157.5	625.218	620.453	611.675	604.019	603.398	604.019	611.675	620.453	625.218	620.453
160.0	636.082	632.914	625.469	617.654	616.361	617.654	625.469	632.914	636.082	632.914
162.5	646.800	643.658	639.012	632.214	630.366	632.214	639.012	643.658	646.800	643.658
165.0	655.948	653.308	648.503	643.764	643.025	643.764	648.503	653.308	655.948	653.308
167.5	663.089	661.360	657.941	654.350	655.829	654.350	657.941	661.360	663.089	661.360
170.0	669.530	668.448	665.148	661.597	663.538	661.597	665.148	668.448	669.530	668.448
172.5	674.018	673.253	671.524	668.963	668.765	668.963	671.524	673.253	674.018	673.253
175.0	677.939	677.477	675.167	674.467	675.734	674.467	675.167	677.477	677.939	677.477
177.5	680.051	679.272	678.414	677.200	677.437	677.200	678.414	679.272	680.051	679.272
180.0	678.889	678.889	678.889	678.889	678.889	678.889	678.889	678.889	678.889	678.889

**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	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543	3449.543
2.5	3445.055	3443.880	3444.448	3443.880	3445.055	3446.045	3445.174
5.0	3432.172	3431.868	3430.786	3431.868	3432.172	3433.056	3432.977
7.5	3411.553	3411.052	3410.682	3411.052	3411.553	3412.108	3411.897
10.0	3381.735	3381.286	3380.441	3381.286	3381.735	3383.464	3382.949
12.5	3344.946	3344.379	3343.230	3344.379	3344.946	3347.111	3345.976
15.0	3301.663	3299.921	3299.551	3299.921	3301.663	3303.036	3303.630
17.5	3251.121	3248.019	3247.200	3248.019	3251.121	3252.203	3252.084
20.0	3192.565	3190.005	3187.378	3190.005	3192.565	3194.215	3195.126
22.5	3126.882	3122.922	3121.761	3122.922	3126.882	3129.535	3129.984
25.0	3054.573	3051.563	3050.164	3051.563	3054.573	3058.044	3058.704
27.5	2974.726	2971.149	2968.786	2971.149	2974.726	2979.385	2980.719
30.0	2890.285	2886.207	2883.369	2886.207	2890.285	2894.206	2894.377
32.5	2798.941	2794.361	2794.110	2794.361	2798.941	2803.799	2803.984
35.0	2703.321	2696.971	2697.631	2696.971	2703.321	2708.548	2710.105
37.5	2601.192	2595.001	2595.358	2595.001	2601.192	2607.132	2609.640
40.0	2495.011	2488.226	2486.088	2488.226	2495.011	2500.780	2505.017
42.5	2382.151	2376.026	2375.076	2376.026	2382.151	2389.702	2391.035
45.0	2267.720	2259.220	2257.675	2259.220	2267.720	2274.875	2273.528
47.5	2147.046	2139.020	2137.001	2139.020	2147.046	2154.161	2153.342
50.0	2022.544	2015.732	2011.720	2015.732	2022.544	2029.170	2029.764
52.5	1895.929	1888.326	1884.379	1888.326	1895.929	1902.054	1903.268
55.0	1765.962	1758.002	1753.765	1758.002	1765.962	1773.288	1774.265
57.5	1633.223	1625.012	1621.712	1625.012	1633.223	1640.984	1640.377
60.0	1499.956	1491.534	1489.884	1491.534	1499.956	1507.242	1506.463
62.5	1364.365	1358.293	1355.482	1358.293	1364.365	1371.374	1372.510
65.0	1228.933	1221.832	1221.185	1221.832	1228.933	1234.913	1238.503
67.5	1093.052	1086.677	1086.307	1086.677	1093.052	1100.299	1102.451
70.0	955.759	950.862	951.509	950.862	955.759	964.168	965.435
72.5	821.489	817.318	818.110	817.318	821.489	829.211	831.112
75.0	690.743	686.836	687.443	686.836	690.743	696.643	699.706
77.5	560.617	558.637	558.452	558.637	560.617	566.808	570.808
80.0	433.858	432.709	432.458	432.709	433.858	440.312	443.533

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**CANDELA TABULATION - (Cont.)**

82.5	312.180	311.177	313.870	311.177	312.180	319.163	319.427
85.0	197.617	198.224	200.310	198.224	197.617	202.752	203.597
87.5	89.140	90.407	91.212	90.407	89.140	96.875	96.611
90.0	87.239	46.609	11.642	46.609	87.239	100.478	97.376
92.5	92.730	53.434	24.460	53.434	92.730	122.932	132.172
95.0	98.063	62.713	43.705	62.713	98.063	124.991	132.673
97.5	111.725	75.860	59.783	75.860	111.725	139.788	147.629
100.0	128.938	92.281	80.916	92.281	128.938	157.106	165.422
102.5	146.348	110.154	102.604	110.154	146.348	176.748	184.510
105.0	164.868	130.165	122.681	130.165	164.868	197.366	205.247
107.5	184.008	151.285	146.071	151.285	184.008	214.922	224.374
110.0	204.706	173.540	170.108	173.540	204.706	233.086	242.075
112.5	225.020	197.010	186.582	197.010	225.020	252.265	260.185
115.0	247.672	219.028	217.536	219.028	247.672	273.689	281.992
117.5	270.772	243.672	240.478	243.672	270.772	296.604	304.973
120.0	293.383	267.590	261.136	267.590	293.383	321.143	327.400
122.5	318.648	296.683	284.777	296.683	318.648	343.913	350.368
125.0	343.543	319.229	316.391	319.229	343.543	366.524	372.451
127.5	367.184	342.276	333.854	342.276	367.184	390.232	396.832
130.0	393.215	368.610	360.202	368.610	393.215	414.058	420.182
132.5	420.829	391.591	390.694	391.591	420.829	437.092	443.956
135.0	442.913	415.879	414.731	415.879	442.913	459.400	466.792
137.5	464.297	441.421	433.488	441.421	464.297	480.440	487.555
140.0	485.390	471.649	457.380	471.649	485.390	501.230	509.520
142.5	505.718	496.069	487.727	496.069	505.718	521.506	527.802
145.0	528.330	514.998	514.087	514.998	528.330	540.091	547.668
147.5	547.919	534.653	531.696	534.653	547.919	558.281	564.128
150.0	565.224	552.380	549.780	552.380	565.224	575.071	582.054
152.5	580.853	572.458	565.646	572.458	580.853	591.571	596.838
155.0	597.498	589.684	586.582	589.684	597.498	606.197	612.586
157.5	611.675	604.019	603.398	604.019	611.675	620.453	625.218
160.0	625.469	617.654	616.361	617.654	625.469	632.914	636.082
162.5	639.012	632.214	630.366	632.214	639.012	643.658	646.800
165.0	648.503	643.764	643.025	643.764	648.503	653.308	655.948
167.5	657.941	654.350	655.829	654.350	657.941	661.360	663.089
170.0	665.148	661.597	663.538	661.597	665.148	668.448	669.530
172.5	671.524	668.963	668.765	668.963	671.524	673.253	674.018
175.0	675.167	674.467	675.734	674.467	675.167	677.477	677.939
177.5	678.414	677.200	677.437	677.200	678.414	679.272	680.051
180.0	678.889	678.889	678.889	678.889	678.889	678.889	678.889

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1257.61	N.A.	10.60
0-30	2664.9	N.A.	22.40
0-40	4355.59	N.A.	36.60
0-60	7681.18	N.A.	64.60
0-80	9629.29	N.A.	81.00
0-90	9863.81	N.A.	83.00
10-90	9537.77	N.A.	80.20
20-40	3097.97	N.A.	26.10
20-50	4846.01	N.A.	40.80
40-70	4541.92	N.A.	38.20
60-80	1948.11	N.A.	16.40
70-80	731.79	N.A.	6.20
80-90	234.52	N.A.	2.00
90-110	278.93	N.A.	2.30
90-120	524.55	N.A.	4.40
90-130	831.39	N.A.	7.00
90-150	1500.69	N.A.	12.60
90-180	2023.34	N.A.	17.00
110-180	1744.41	N.A.	14.70
0-180	11887.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	326.04
10-20	931.57
20-30	1407.29
30-40	1690.68
40-50	1748.04
50-60	1577.56
60-70	1216.32
70-80	731.79
80-90	234.52
90-100	105.47
100-110	173.46
110-120	245.63
120-130	306.84
130-140	339.12
140-150	330.18
150-160	275.44
160-170	183.03
170-180	64.18

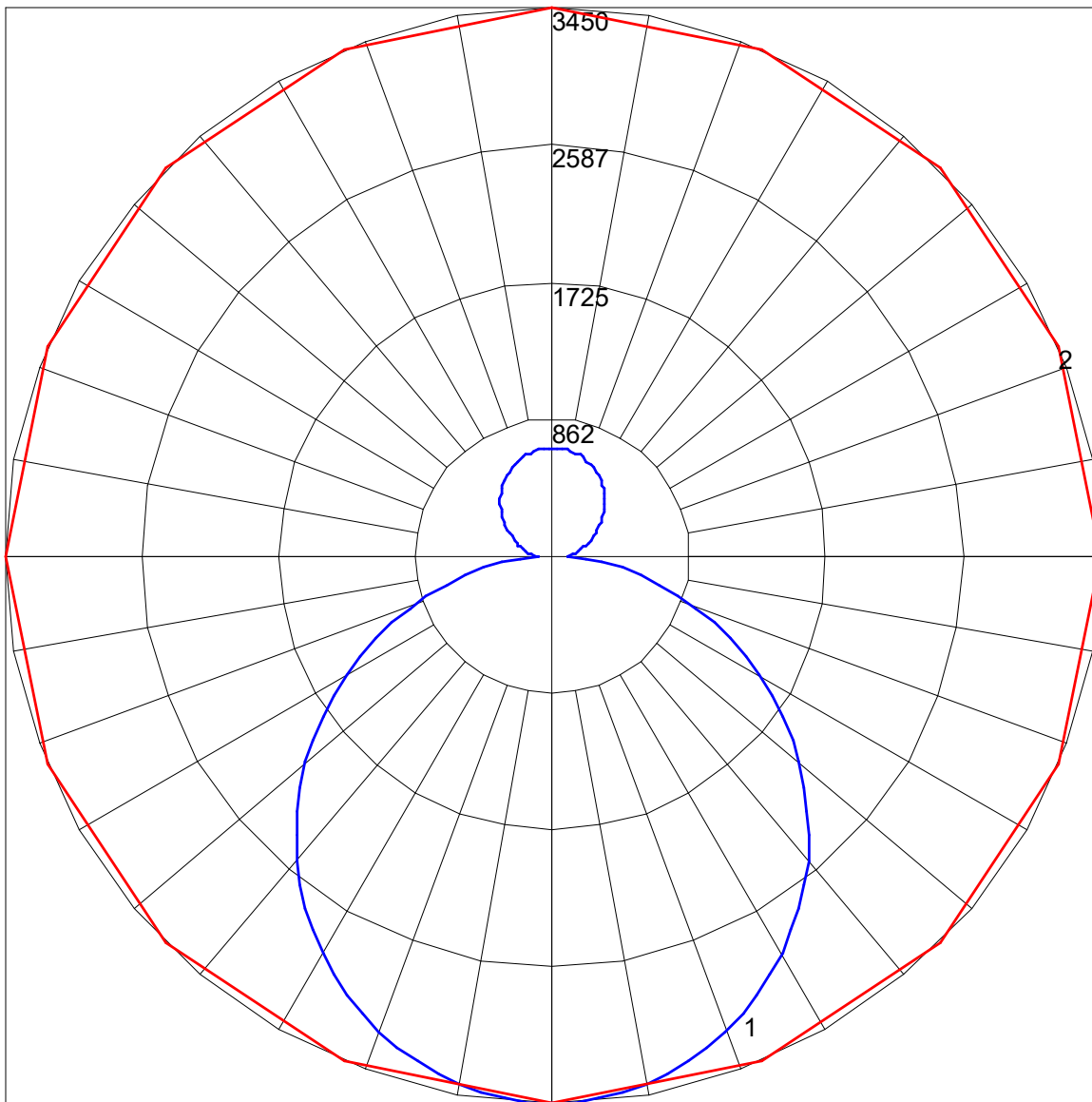
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : QD-44-LED35-LO-D9.IES**

**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	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 = 3449.543 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.)