

# PHILIPS

# PHILIPS

# Day-Brite

# CFI

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : APX16LL40-UNV-W.IES

## DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] FO33728.PSO

[TESTLAB] PHILIPS DAY-BRITE PHOTOMETRIC LABORATORY

[ISSUEDATE] 10/28/14

[MANUFAC] PHILIPS DAY-BRITE - PHILIPS CFI

[LUMCAT] APX16LL40-UNV-W

[LUMINAIRE] PHILIPS APX 4-2LP 1.0.1 4000K 2-95W DRIVERS 4.7K RESISTORS WIDE OPTICS DIRA LENS

[LAMP] LED. LUMINAIRE OUTPUT = 15801 LMS

[TESTDATE] 10/28/14

## CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15801
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	128
Total Luminaire Watts	123.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.92
Spacing Criterion (90-270)	2.22
Spacing Criterion (Diagonal)	1.98
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.29 ft
Luminous Width (90-270)	1.17 ft
Luminous Height	0.50 ft



## LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12282	11163	12316
55	10005	10139	6306
65	2973	1641	3664
75	1405	1139	889
85	771	734	1031

**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>	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33
<b>2.5</b>	3451.97	3457.56	3466.93	3465.78	3465.95	3465.78	3466.93	3457.56	3451.97	3457.56
<b>5.0</b>	3542.11	3535.98	3522.69	3503.16	3494.06	3503.16	3522.69	3535.98	3542.11	3535.98
<b>7.5</b>	3662.34	3646.88	3611.47	3564.68	3539.55	3564.68	3611.47	3646.88	3662.34	3646.88
<b>10.0</b>	3800.81	3778.88	3720.93	3649.20	3605.01	3649.20	3720.93	3778.88	3800.81	3778.88
<b>12.5</b>	3944.31	3920.17	3849.83	3747.57	3693.77	3747.57	3849.83	3920.17	3944.31	3920.17
<b>15.0</b>	4100.09	4075.07	3988.55	3865.10	3800.89	3865.10	3988.55	4075.07	4100.09	4075.07
<b>17.5</b>	4272.60	4248.51	4147.43	4005.74	3938.16	4005.74	4147.43	4248.51	4272.60	4248.51
<b>20.0</b>	4472.91	4446.58	4337.07	4173.69	4086.38	4173.69	4337.07	4446.58	4472.91	4446.58
<b>22.5</b>	4708.86	4680.85	4549.32	4363.11	4258.80	4363.11	4549.32	4680.85	4708.86	4680.85
<b>25.0</b>	4920.32	4914.77	4785.70	4582.26	4482.59	4582.26	4785.70	4914.77	4920.32	4914.77
<b>27.5</b>	5039.98	5063.68	4983.57	4829.95	4761.03	4829.95	4983.57	5063.68	5039.98	5063.68
<b>30.0</b>	5035.36	5072.54	5076.77	5058.16	5026.40	5058.16	5076.77	5072.54	5035.36	5072.54
<b>32.5</b>	4933.51	4994.26	5070.41	5215.93	5274.06	5215.93	5070.41	4994.26	4933.51	4994.26
<b>35.0</b>	4822.89	4904.30	5045.36	5314.40	5410.42	5314.40	5045.36	4904.30	4822.89	4904.30
<b>37.5</b>	4747.51	4857.84	5049.06	5374.16	5506.43	5374.16	5049.06	4857.84	4747.51	4857.84
<b>40.0</b>	4714.60	4826.94	5088.67	5428.03	5548.94	5428.03	5088.67	4826.94	4714.60	4826.94
<b>42.5</b>	4647.66	4791.02	5115.98	5487.39	5685.07	5487.39	5115.98	4791.02	4647.66	4791.02
<b>45.0</b>	4525.84	4724.90	5101.00	5605.59	5801.67	5605.59	5101.00	4724.90	4525.84	4724.90
<b>47.5</b>	4313.49	4606.67	5023.33	5624.28	5731.49	5624.28	5023.33	4606.67	4313.49	4606.67
<b>50.0</b>	3980.20	4416.52	4907.57	5386.05	4960.40	5386.05	4907.57	4416.52	3980.20	4416.52
<b>52.5</b>	3570.16	4140.48	4710.48	4485.45	4186.86	4485.45	4710.48	4140.48	3570.16	4140.48
<b>55.0</b>	3124.38	3731.86	4205.24	3311.54	2718.57	3311.54	4205.24	3731.86	3124.38	3731.86
<b>57.5</b>	2668.09	3241.52	3486.84	2158.91	2306.47	2158.91	3486.84	3241.52	2668.09	3241.52
<b>60.0</b>	2100.37	2642.22	2371.89	1531.49	1535.53	1531.49	2371.89	2642.22	2100.37	2642.22
<b>62.5</b>	1357.49	1948.83	1230.24	1380.85	1908.59	1380.85	1230.24	1948.83	1357.49	1948.83
<b>65.0</b>	733.01	1218.07	590.75	1400.65	1385.15	1400.65	590.75	1218.07	733.01	1218.07
<b>67.5</b>	469.22	682.61	547.18	1261.58	1026.17	1261.58	547.18	682.61	469.22	682.61
<b>70.0</b>	407.61	465.20	621.20	635.33	562.52	635.33	621.20	465.20	407.61	465.20
<b>72.5</b>	334.20	349.26	453.12	398.74	365.22	398.74	453.12	349.26	334.20	349.26
<b>75.0</b>	243.58	239.83	335.14	289.60	278.54	289.60	335.14	239.83	243.58	239.83
<b>77.5</b>	187.93	172.33	267.00	222.00	231.03	222.00	267.00	172.33	187.93	172.33
<b>80.0</b>	140.81	137.89	191.53	206.75	229.60	206.75	191.53	137.89	140.81	137.89
<b>82.5</b>	103.26	123.99	164.37	211.17	236.62	211.17	164.37	123.99	103.26	123.99
<b>85.0</b>	73.15	107.31	161.12	218.39	246.76	218.39	161.12	107.31	73.15	107.31
<b>87.5</b>	47.98	88.47	169.36	194.62	210.33	194.62	169.36	88.47	47.98	88.47
<b>90.0</b>	25.49	67.87	130.78	144.76	160.67	144.76	130.78	67.87	25.49	67.87
<b>92.5</b>	24.07	58.56	80.68	88.61	105.35	88.61	80.68	58.56	24.07	58.56
<b>95.0</b>	29.12	39.25	43.75	70.18	78.71	70.18	43.75	39.25	29.12	39.25
<b>97.5</b>	36.98	27.74	39.53	60.19	64.68	60.19	39.53	27.74	36.98	27.74
<b>100.0</b>	35.81	27.26	38.04	55.26	61.65	55.26	38.04	27.26	35.81	27.26
<b>102.5</b>	33.67	27.18	34.87	49.50	53.26	49.50	34.87	27.18	33.67	27.18
<b>105.0</b>	30.63	27.44	34.35	42.32	46.78	42.32	34.35	27.44	30.63	27.44
<b>107.5</b>	27.50	28.00	33.31	41.57	44.60	41.57	33.31	28.00	27.50	28.00
<b>110.0</b>	24.93	27.48	31.88	40.39	43.63	40.39	31.88	27.48	24.93	27.48
<b>112.5</b>	22.44	26.65	30.32	38.57	41.82	38.57	30.32	26.65	22.44	26.65
<b>115.0</b>	21.96	27.22	28.93	36.23	39.53	36.23	28.93	27.22	21.96	27.22
<b>117.5</b>	23.59	28.19	27.37	33.04	36.69	33.04	27.37	28.19	23.59	28.19
<b>120.0</b>	24.12	28.61	25.94	30.08	33.97	30.08	25.94	28.61	24.12	28.61
<b>122.5</b>	22.79	26.63	24.91	26.86	30.63	26.86	24.91	26.63	22.79	26.63
<b>125.0</b>	20.58	22.32	24.26	24.47	27.49	24.47	24.26	22.32	20.58	22.32
<b>127.5</b>	18.05	18.62	25.66	23.38	25.70	23.38	25.66	18.62	18.05	18.62
<b>130.0</b>	15.50	15.60	28.53	23.50	24.76	23.50	28.53	15.60	15.50	15.60
<b>132.5</b>	13.08	13.00	20.75	25.14	25.82	25.14	20.75	13.00	13.08	13.00

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**CANDELA TABULATION - (Cont.)**

135.0	10.73	10.35	15.94	27.21	28.53	27.21	15.94	10.35	10.73	10.35
137.5	8.62	8.32	12.66	22.96	24.70	22.96	12.66	8.32	8.62	8.32
140.0	6.81	6.51	9.88	16.73	22.07	16.73	9.88	6.51	6.81	6.51
142.5	5.34	5.07	7.43	13.58	16.17	13.58	7.43	5.07	5.34	5.07
145.0	4.23	3.86	5.37	11.19	13.13	11.19	5.37	3.86	4.23	3.86
147.5	3.27	2.92	3.76	8.93	10.65	8.93	3.76	2.92	3.27	2.92
150.0	2.54	2.21	2.15	6.82	8.38	6.82	2.15	2.21	2.54	2.21
152.5	1.92	1.63	1.71	5.05	6.28	5.05	1.71	1.63	1.92	1.63
155.0	1.45	1.47	1.61	3.12	4.47	3.12	1.61	1.47	1.45	1.47
157.5	1.36	1.40	1.51	1.78	2.84	1.78	1.51	1.40	1.36	1.40
160.0	1.33	1.33	1.34	1.64	1.80	1.64	1.34	1.33	1.33	1.33
162.5	1.27	1.26	1.30	1.51	1.64	1.51	1.30	1.26	1.27	1.26
165.0	1.22	1.20	1.18	1.33	1.39	1.33	1.18	1.20	1.22	1.20
167.5	1.07	1.05	1.01	1.13	1.19	1.13	1.01	1.05	1.07	1.05
170.0	1.01	0.96	0.95	1.07	1.04	1.07	0.95	0.96	1.01	0.96
172.5	1.06	1.00	0.99	0.99	1.02	0.99	0.99	1.00	1.06	1.00
175.0	1.11	1.02	0.97	1.02	1.03	1.02	0.97	1.02	1.11	1.02
177.5	1.18	1.13	0.94	0.98	1.00	0.98	0.94	1.13	1.18	1.13
180.0	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

**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	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33	3443.33
2.5	3466.93	3465.78	3465.95	3465.78	3466.93	3457.56	3451.97
5.0	3522.69	3503.16	3494.06	3503.16	3522.69	3535.98	3542.11
7.5	3611.47	3564.68	3539.55	3564.68	3611.47	3646.88	3662.34
10.0	3720.93	3649.20	3605.01	3649.20	3720.93	3778.88	3800.81
12.5	3849.83	3747.57	3693.77	3747.57	3849.83	3920.17	3944.31
15.0	3988.55	3865.10	3800.89	3865.10	3988.55	4075.07	4100.09
17.5	4147.43	4005.74	3938.16	4005.74	4147.43	4248.51	4272.60
20.0	4337.07	4173.69	4086.38	4173.69	4337.07	4446.58	4472.91
22.5	4549.32	4363.11	4258.80	4363.11	4549.32	4680.85	4708.86
25.0	4785.70	4582.26	4482.59	4582.26	4785.70	4914.77	4920.32
27.5	4983.57	4829.95	4761.03	4829.95	4983.57	5063.68	5039.98
30.0	5076.77	5058.16	5026.40	5058.16	5076.77	5072.54	5035.36
32.5	5070.41	5215.93	5274.06	5215.93	5070.41	4994.26	4933.51
35.0	5045.36	5314.40	5410.42	5314.40	5045.36	4904.30	4822.89
37.5	5049.06	5374.16	5506.43	5374.16	5049.06	4857.84	4747.51
40.0	5088.67	5428.03	5548.94	5428.03	5088.67	4826.94	4714.60
42.5	5115.98	5487.39	5685.07	5487.39	5115.98	4791.02	4647.66
45.0	5101.00	5605.59	5801.67	5605.59	5101.00	4724.90	4525.84
47.5	5023.33	5624.28	5731.49	5624.28	5023.33	4606.67	4313.49
50.0	4907.57	5386.05	4960.40	5386.05	4907.57	4416.52	3980.20
52.5	4710.48	4485.45	4186.86	4485.45	4710.48	4140.48	3570.16
55.0	4205.24	3311.54	2718.57	3311.54	4205.24	3731.86	3124.38
57.5	3486.84	2158.91	2306.47	2158.91	3486.84	3241.52	2668.09
60.0	2371.89	1531.49	1535.53	1531.49	2371.89	2642.22	2100.37
62.5	1230.24	1380.85	1908.59	1380.85	1230.24	1948.83	1357.49
65.0	590.75	1400.65	1385.15	1400.65	590.75	1218.07	733.01
67.5	547.18	1261.58	1026.17	1261.58	547.18	682.61	469.22
70.0	621.20	635.33	562.52	635.33	621.20	465.20	407.61
72.5	453.12	398.74	365.22	398.74	453.12	349.26	334.20
75.0	335.14	289.60	278.54	289.60	335.14	239.83	243.58
77.5	267.00	222.00	231.03	222.00	267.00	172.33	187.93
80.0	191.53	206.75	229.60	206.75	191.53	137.89	140.81

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PHOTOMETRIC FILENAME : APX16LL40-UNV-W.IES**

**CANDELA TABULATION - (Cont.)**

82.5	164.37	211.17	236.62	211.17	164.37	123.99	103.26
85.0	161.12	218.39	246.76	218.39	161.12	107.31	73.15
87.5	169.36	194.62	210.33	194.62	169.36	88.47	47.98
90.0	130.78	144.76	160.67	144.76	130.78	67.87	25.49
92.5	80.68	88.61	105.35	88.61	80.68	58.56	24.07
95.0	43.75	70.18	78.71	70.18	43.75	39.25	29.12
97.5	39.53	60.19	64.68	60.19	39.53	27.74	36.98
100.0	38.04	55.26	61.65	55.26	38.04	27.26	35.81
102.5	34.87	49.50	53.26	49.50	34.87	27.18	33.67
105.0	34.35	42.32	46.78	42.32	34.35	27.44	30.63
107.5	33.31	41.57	44.60	41.57	33.31	28.00	27.50
110.0	31.88	40.39	43.63	40.39	31.88	27.48	24.93
112.5	30.32	38.57	41.82	38.57	30.32	26.65	22.44
115.0	28.93	36.23	39.53	36.23	28.93	27.22	21.96
117.5	27.37	33.04	36.69	33.04	27.37	28.19	23.59
120.0	25.94	30.08	33.97	30.08	25.94	28.61	24.12
122.5	24.91	26.86	30.63	26.86	24.91	26.63	22.79
125.0	24.26	24.47	27.49	24.47	24.26	22.32	20.58
127.5	25.66	23.38	25.70	23.38	25.66	18.62	18.05
130.0	28.53	23.50	24.76	23.50	28.53	15.60	15.50
132.5	20.75	25.14	25.82	25.14	20.75	13.00	13.08
135.0	15.94	27.21	28.53	27.21	15.94	10.35	10.73
137.5	12.66	22.96	24.70	22.96	12.66	8.32	8.62
140.0	9.88	16.73	22.07	16.73	9.88	6.51	6.81
142.5	7.43	13.58	16.17	13.58	7.43	5.07	5.34
145.0	5.37	11.19	13.13	11.19	5.37	3.86	4.23
147.5	3.76	8.93	10.65	8.93	3.76	2.92	3.27
150.0	2.15	6.82	8.38	6.82	2.15	2.21	2.54
152.5	1.71	5.05	6.28	5.05	1.71	1.63	1.92
155.0	1.61	3.12	4.47	3.12	1.61	1.47	1.45
157.5	1.51	1.78	2.84	1.78	1.51	1.40	1.36
160.0	1.34	1.64	1.80	1.64	1.34	1.33	1.33
162.5	1.30	1.51	1.64	1.51	1.30	1.26	1.27
165.0	1.18	1.33	1.39	1.33	1.18	1.20	1.22
167.5	1.01	1.13	1.19	1.13	1.01	1.05	1.07
170.0	0.95	1.07	1.04	1.07	0.95	0.96	1.01
172.5	0.99	0.99	1.02	0.99	0.99	1.00	1.06
175.0	0.97	1.02	1.03	1.02	0.97	1.02	1.11
177.5	0.94	0.98	1.00	0.98	0.94	1.13	1.18
180.0	0.99	0.99	0.99	0.99	0.99	0.99	0.99

**IES INDOOR REPORT**  
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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1480.47	N.A.	9.40
0-30	3677.54	N.A.	23.30
0-40	6879.1	N.A.	43.50
0-60	13955.71	N.A.	88.30
0-80	15453.86	N.A.	97.80
0-90	15622.69	N.A.	98.90
10-90	15280.5	N.A.	96.70
20-40	5398.63	N.A.	34.20
20-50	9329.26	N.A.	59.00
40-70	8244.83	N.A.	52.20
60-80	1498.17	N.A.	9.50
70-80	329.94	N.A.	2.10
80-90	168.82	N.A.	1.10
90-110	105.90	N.A.	0.70
90-120	136.54	N.A.	0.90
90-130	158.49	N.A.	1.00
90-150	176.96	N.A.	1.10
90-180	178.60	N.A.	1.10
110-180	72.70	N.A.	0.50
0-180	15801.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	342.18
10-20	1138.28
20-30	2197.07
30-40	3201.56
40-50	3930.63
50-60	3145.98
60-70	1168.23
70-80	329.94
80-90	168.82
90-100	66.96
100-110	38.94
110-120	30.64
120-130	21.95
130-140	13.64
140-150	4.83
150-160	1.19
160-170	0.36
170-180	0.10

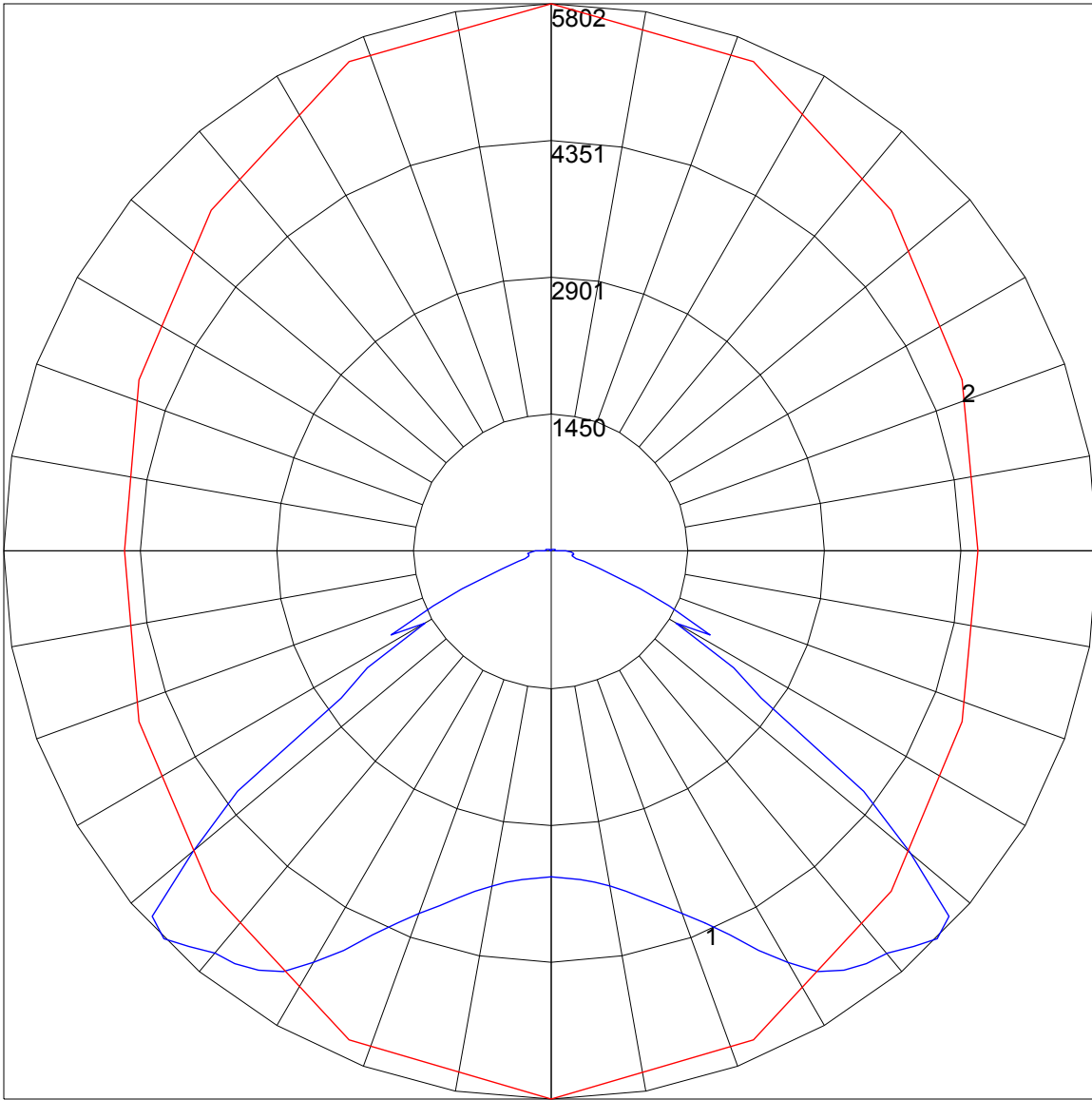
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	119	119	119	119	116	116	116	116	110	110	110	106	106	106	101	101	101	99
1	110	105	102	98	107	103	100	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	51	43	37	63	51	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

POLAR GRAPH



Maximum Candela = 5801.67 Located At Horizontal Angle = 90, Vertical Angle = 45  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (45) (Through Max. Cd.)