



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TESTLAB] Photopia 2017.2.1 see: www.ltioptics.com/ies

[ISSUE DATE]

[TEST DATE] Mon Oct 30 12:18:43 2017

[TEST] 1

[MANUFACT] BEGHELLI

[LUMCAT]

[LUMINAIRE] BS400LEDHTLOWT30120-277V

[LAMP] LED 0.195W White 5630 package (65mA)

[LAMPCAT] SPMWHT541MP5WAT0S5

[OTHER]

IESNA:LM-63-2002

[TEST] 6,552

[TESTLAB] CSA Group

[ISSUE DATE] 7/24/2013 1:09:24 PM

[OTHER] Luminous shape: Rectangle

[OTHER] Luminous dimensions (feet)

[OTHER] 0 - 180 Axis: 4.2

[OTHER] 90 - 270 Axis: 0.6

[OTHER] Height: 0.1

CHARACTERISTICS

Lumens Per Lamp	24.88 (192 lamps)
Total Lamp Lumens	4776.96
Luminaire Lumens	3571
Total Luminaire Efficiency	75 %
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	30
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.80
Spacing Criterion (90-270)	1.82
Spacing Criterion (Diagonal)	1.98
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.45 ft
Luminous Width (90-270)	1.45 ft
Luminous Height	0.27 ft

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3428	3362	3413
55	4032	3715	4029
65	4898	4211	4857
75	5632	4722	5604
85	6285	5014	6279

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0.0	461.76	461.76	461.76	461.76	461.76	461.76	461.76	461.76	461.76	461.76
2.5	452.75	450.53	461.22	470.83	444.78	456.01	458.08	467.89	461.17	468.11
5.0	455.08	464.12	470.18	470.36	465.84	478.00	468.06	469.00	460.43	464.90
7.5	470.26	474.58	473.11	468.31	469.23	471.90	475.55	474.37	477.68	467.85
10.0	486.54	485.27	486.95	482.76	480.79	478.09	480.26	480.91	476.76	480.61
12.5	494.95	495.08	492.75	493.16	495.78	490.79	488.79	495.66	494.04	498.15
15.0	502.61	506.79	513.22	509.24	505.94	506.78	509.67	503.67	507.97	508.53
17.5	513.27	521.62	516.46	515.45	522.29	520.88	518.39	520.54	526.82	525.00
20.0	531.30	526.01	526.55	528.67	525.38	533.38	539.17	535.58	537.10	535.23
22.5	533.15	531.71	532.86	539.56	536.57	545.64	545.18	550.89	552.29	553.85
25.0	538.56	543.40	539.68	549.60	547.80	553.40	559.57	559.41	563.29	567.57
27.5	543.43	547.04	548.16	553.84	558.40	560.71	562.56	570.56	574.07	574.26
30.0	546.89	549.38	551.82	560.61	560.60	567.77	571.96	579.10	577.16	578.86
32.5	553.04	550.15	555.28	557.49	567.16	573.31	582.00	580.43	586.86	589.44
35.0	555.08	553.67	555.58	562.45	570.10	577.35	582.76	590.48	588.21	591.80
37.5	554.03	559.36	560.70	566.61	572.47	578.04	585.42	587.35	593.17	590.70
40.0	554.24	561.57	563.33	567.24	575.16	582.82	585.44	589.29	591.26	589.46
42.5	560.95	564.84	566.03	574.25	575.63	580.22	584.10	585.89	590.15	589.93
45.0	565.39	565.57	568.37	572.87	578.45	581.07	584.26	585.57	587.55	590.70
47.5	566.48	569.13	572.01	574.54	576.46	579.30	585.23	583.58	589.33	587.07
50.0	570.45	570.13	570.98	575.67	578.76	581.35	584.90	582.47	585.11	586.75
52.5	571.72	570.65	573.25	574.07	580.05	577.87	581.33	581.56	578.69	578.56
55.0	575.78	575.07	574.03	577.78	579.29	576.93	579.81	578.36	574.16	576.81
57.5	576.72	580.13	573.96	577.48	578.13	575.38	577.44	574.44	570.57	572.83
60.0	576.74	575.49	576.66	577.09	573.54	572.43	568.61	569.03	564.61	564.38
62.5	573.16	574.46	573.71	572.60	569.56	566.69	566.71	560.40	561.21	554.02
65.0	569.93	565.48	567.88	564.18	562.00	559.81	554.39	551.83	550.35	548.01
67.5	554.57	556.32	552.80	556.53	553.10	548.74	542.56	539.37	537.26	538.60
70.0	541.89	539.01	539.70	538.40	536.07	532.33	528.57	525.68	526.83	522.53
72.5	519.48	515.49	516.48	518.10	514.03	511.73	509.98	503.97	502.04	503.45
75.0	486.35	486.37	490.69	488.66	489.53	487.79	483.21	480.63	479.91	477.20
77.5	451.78	455.07	453.62	458.22	454.64	456.75	453.74	449.74	450.05	450.20
80.0	416.17	416.80	417.32	422.07	422.89	423.86	418.78	419.28	418.64	420.21
82.5	378.31	377.07	376.60	380.08	382.38	381.81	384.87	386.76	382.64	382.18
85.0	337.66	337.49	338.19	340.44	343.40	347.42	345.02	346.46	346.35	345.38
87.5	299.14	296.71	295.75	299.98	302.91	304.35	305.13	306.40	308.36	307.39
90.0	260.87	259.93	258.93	261.24	264.91	266.60	270.29	269.00	267.22	272.07
92.5	226.19	224.79	225.18	227.43	228.12	229.99	232.44	233.43	232.82	233.14
95.0	195.57	194.42	194.10	194.66	195.80	195.54	197.52	199.12	199.71	200.52
97.5	167.19	167.72	165.81	165.13	165.37	166.62	166.91	166.88	168.53	167.53
100.0	143.11	141.73	138.93	139.94	138.36	139.10	138.30	140.83	140.79	140.17
102.5	119.51	120.69	118.34	116.19	114.23	113.98	113.60	114.08	114.38	113.66
105.0	101.51	101.17	98.32	96.10	93.92	92.63	92.21	92.07	91.55	92.01
107.5	84.02	82.64	82.25	78.13	76.00	74.17	73.34	72.18	72.40	71.98
110.0	69.59	68.21	66.58	64.95	60.90	59.11	57.20	56.15	55.65	55.83
112.5	56.52	54.92	53.34	51.99	48.72	45.87	43.92	41.88	42.01	41.70
115.0	44.58	43.78	43.07	41.06	38.88	34.91	32.47	31.57	30.44	29.25
117.5	34.04	34.15	33.18	31.71	28.93	26.98	23.90	22.33	21.45	21.01
120.0	27.43	26.90	24.98	23.87	22.53	20.33	17.66	14.80	13.86	13.87
122.5	19.72	19.69	19.48	18.02	16.23	14.44	12.52	10.53	8.31	8.07
125.0	14.15	14.04	13.71	12.43	11.66	10.21	8.41	6.66	4.53	3.89
127.5	10.23	9.89	9.25	8.75	7.77	6.59	5.04	3.51	2.33	1.90
130.0	6.58	7.02	6.56	5.44	5.00	3.85	2.75	1.90	1.31	1.29
132.5	4.19	3.96	3.70	3.54	2.67	2.09	1.27	1.18	1.11	1.30

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

CANDELA TABULATION - (Cont.)

135.0	2.12	2.07	1.95	1.47	1.26	1.06	1.20	1.11	1.06	1.04
137.5	1.01	1.06	0.97	1.09	0.92	0.97	0.98	0.96	0.95	0.98
140.0	0.82	0.94	0.86	0.92	1.04	0.92	0.92	0.81	0.78	0.94
142.5	0.83	0.80	0.76	0.90	0.81	0.83	0.85	0.82	0.83	0.86
145.0	0.64	0.72	0.75	0.71	0.75	0.72	0.75	0.75	0.72	0.80
147.5	0.86	0.78	0.61	0.70	0.61	0.57	0.62	0.59	0.70	0.71
150.0	0.58	0.49	0.53	0.51	0.50	0.55	0.52	0.59	0.63	0.58
152.5	0.45	0.47	0.48	0.49	0.45	0.50	0.40	0.53	0.50	0.49
155.0	0.43	0.49	0.37	0.40	0.43	0.50	0.50	0.49	0.40	0.42
157.5	0.28	0.37	0.26	0.33	0.39	0.35	0.21	0.39	0.38	0.39
160.0	0.26	0.32	0.24	0.31	0.35	0.18	0.24	0.27	0.25	0.25
162.5	0.18	0.24	0.26	0.16	0.21	0.13	0.15	0.24	0.15	0.19
165.0	0.14	0.17	0.15	0.12	0.13	0.09	0.12	0.17	0.10	0.09
167.5	0.09	0.09	0.10	0.09	0.10	0.08	0.08	0.11	0.08	0.07
170.0	0.06	0.06	0.08	0.05	0.07	0.08	0.06	0.07	0.05	0.04
172.5	0.00	0.04	0.04	0.02	0.08	0.00	0.02	0.08	0.01	0.11
175.0	0.00	0.05	0.00	0.02	0.06	0.04	0.00	0.08	0.04	0.11
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
180.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

**Vert.
Angles**

Horizontal Angles

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
0.0	461.76	461.76	461.76	461.76	461.76	461.76	461.76	461.76	461.76
2.5	462.03	447.72	467.81	474.31	472.01	455.59	468.31	453.16	470.46
5.0	461.83	455.76	467.18	467.52	453.98	467.18	464.09	464.12	468.79
7.5	466.95	473.83	466.61	473.96	469.28	477.38	475.91	473.04	471.01
10.0	479.24	480.96	482.49	476.59	487.43	482.93	484.05	481.99	485.17
12.5	489.13	498.46	492.53	493.78	488.99	489.97	488.08	494.87	497.24
15.0	508.63	510.59	510.56	502.65	505.08	500.04	505.26	502.80	499.56
17.5	519.48	523.40	521.61	521.31	518.55	516.18	514.47	514.38	512.37
20.0	539.43	535.47	536.64	527.88	525.27	529.00	524.34	525.32	525.43
22.5	552.50	547.59	544.27	542.03	541.32	535.19	535.03	533.83	537.13
25.0	563.53	559.86	556.90	552.68	545.76	544.66	536.75	539.24	531.67
27.5	574.72	573.28	568.40	561.51	555.55	548.98	545.63	545.61	539.86
30.0	578.33	579.21	572.03	569.08	564.14	557.78	554.61	548.13	551.20
32.5	582.46	582.52	579.52	570.40	565.84	560.62	553.18	552.91	550.05
35.0	586.40	587.61	583.69	575.03	572.38	563.91	557.22	556.12	552.65
37.5	594.64	589.72	582.19	578.64	575.12	569.57	559.63	558.67	558.34
40.0	591.18	587.69	586.07	582.33	577.49	568.94	562.29	564.68	555.28
42.5	590.33	591.26	587.17	582.71	577.57	573.32	567.60	566.48	565.50
45.0	587.17	586.09	583.95	583.47	578.16	569.47	567.06	565.63	562.88
47.5	586.02	586.87	580.44	579.58	579.76	575.50	572.84	567.05	565.16
50.0	584.01	585.37	582.24	583.05	579.74	577.98	576.98	572.67	571.03
52.5	580.10	582.56	578.66	581.72	579.67	579.34	575.74	577.04	573.96
55.0	574.10	577.29	579.49	580.58	578.42	577.57	576.15	577.34	575.42
57.5	572.36	574.19	573.93	580.02	575.93	578.19	578.08	576.61	575.96
60.0	565.52	571.14	569.45	573.26	577.57	577.34	575.92	577.70	578.19
62.5	557.77	560.71	564.83	565.04	571.39	572.95	571.88	570.20	570.65
65.0	548.62	552.29	553.11	558.51	563.26	563.73	559.81	565.40	565.10
67.5	534.86	540.32	543.77	546.56	551.21	554.81	552.71	555.03	553.88
70.0	520.62	521.95	526.09	528.73	531.76	533.57	534.56	531.70	540.21
72.5	502.73	503.72	503.22	510.40	511.41	511.82	509.18	509.54	514.00
75.0	477.01	478.17	478.93	482.71	484.52	487.44	482.38	477.87	483.88
77.5	449.30	451.22	452.85	452.69	455.33	451.48	451.16	450.04	448.76
80.0	416.37	415.72	419.79	418.42	419.61	413.28	414.77	411.94	411.25

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

CANDELA TABULATION - (Cont.)

82.5	382.94	382.62	383.90	381.17	380.20	378.50	375.99	373.46	374.68
85.0	343.42	343.98	344.01	342.46	341.27	338.39	334.38	333.21	337.38
87.5	306.23	306.21	306.05	304.21	300.26	299.43	296.21	295.06	296.70
90.0	270.90	267.82	268.19	267.09	265.16	261.47	259.09	258.90	258.87
92.5	233.16	230.29	232.24	229.13	227.32	226.80	226.13	224.58	224.50
95.0	200.83	199.07	198.57	195.32	194.21	193.20	193.14	194.62	193.74
97.5	168.31	166.93	166.95	165.47	165.16	164.38	165.23	166.84	167.81
100.0	140.11	138.49	138.64	138.34	137.68	138.69	140.82	141.49	143.36
102.5	114.25	114.27	113.98	114.24	114.52	116.26	116.99	120.71	120.13
105.0	91.78	91.95	91.38	93.07	93.51	96.03	99.27	100.24	100.29
107.5	72.23	72.91	73.90	73.00	75.26	79.31	81.67	82.99	83.67
110.0	55.81	56.13	57.54	59.20	60.66	64.42	67.05	67.44	67.29
112.5	42.12	42.16	43.45	45.77	48.71	51.79	53.23	54.60	55.49
115.0	30.52	31.72	32.48	34.81	38.64	40.83	42.92	43.80	44.00
117.5	21.32	22.77	24.19	26.80	29.18	32.11	33.44	34.27	35.00
120.0	13.65	14.78	17.71	20.18	22.11	24.22	26.25	26.88	27.38
122.5	8.47	10.15	11.88	14.40	16.23	17.73	19.05	19.94	20.58
125.0	4.54	6.43	8.44	10.33	11.73	12.60	14.04	14.72	14.66
127.5	2.63	3.78	5.27	6.69	7.82	9.11	10.01	9.86	9.86
130.0	1.33	1.94	2.88	4.01	5.04	5.79	6.59	6.76	6.50
132.5	1.12	1.05	1.38	2.10	2.77	3.40	3.80	4.13	4.13
135.0	1.07	1.01	1.07	1.00	1.45	1.56	1.91	2.27	1.96
137.5	0.98	1.03	0.98	0.95	1.02	1.04	1.10	0.98	0.97
140.0	0.94	0.90	0.92	0.97	0.88	0.91	0.83	0.91	0.96
142.5	0.90	0.77	0.88	0.86	0.77	0.81	0.71	0.85	0.74
145.0	0.79	0.85	0.81	0.72	0.75	0.82	0.65	0.74	0.77
147.5	0.77	0.75	0.62	0.55	0.57	0.71	0.72	0.71	0.60
150.0	0.56	0.57	0.60	0.44	0.61	0.53	0.59	0.63	0.51
152.5	0.49	0.57	0.40	0.54	0.46	0.43	0.48	0.50	0.45
155.0	0.31	0.47	0.36	0.48	0.45	0.40	0.38	0.38	0.44
157.5	0.37	0.35	0.27	0.33	0.37	0.28	0.38	0.42	0.37
160.0	0.26	0.26	0.30	0.29	0.19	0.23	0.26	0.24	0.36
162.5	0.16	0.17	0.21	0.23	0.27	0.34	0.29	0.27	0.23
165.0	0.14	0.11	0.10	0.13	0.12	0.15	0.20	0.17	0.26
167.5	0.09	0.05	0.11	0.07	0.09	0.06	0.04	0.08	0.15
170.0	0.04	0.11	0.07	0.04	0.04	0.07	0.09	0.02	0.12
172.5	0.01	0.00	0.04	0.07	0.02	0.03	0.05	0.07	0.08
175.0	0.00	0.04	0.07	0.04	0.04	0.02	0.01	0.07	0.07
177.5	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	189.22	4.00	5.30
0-30	444.28	9.30	12.40
0-40	803.75	16.80	22.50
0-60	1768.9	37.00	49.50
0-80	2828.21	59.20	79.20
0-90	3200.53	67.00	89.60
10-90	3155.58	66.10	88.40
20-40	614.53	12.90	17.20
20-50	1062.28	22.20	29.70
40-70	1517.09	31.80	42.50
60-80	1059.31	22.20	29.70
70-80	507.36	10.60	14.20
80-90	372.32	7.80	10.40
90-110	319.66	6.70	9.00
90-120	358.05	7.50	10.00
90-130	368.06	7.70	10.30
90-150	370.01	7.70	10.40
90-180	370.26	7.80	10.40
110-180	50.60	1.10	1.40
0-180	3570.78	74.80	100.00

Total Luminaire Efficiency = 74.80%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.95
10-20	144.28
20-30	255.06
30-40	359.47
40-50	447.75
50-60	517.40
60-70	551.95
70-80	507.36
80-90	372.32
90-100	216.81
100-110	102.85
110-120	38.39
120-130	10.01
130-140	1.48
140-150	0.47
150-160	0.20
160-170	0.05
170-180	0.00

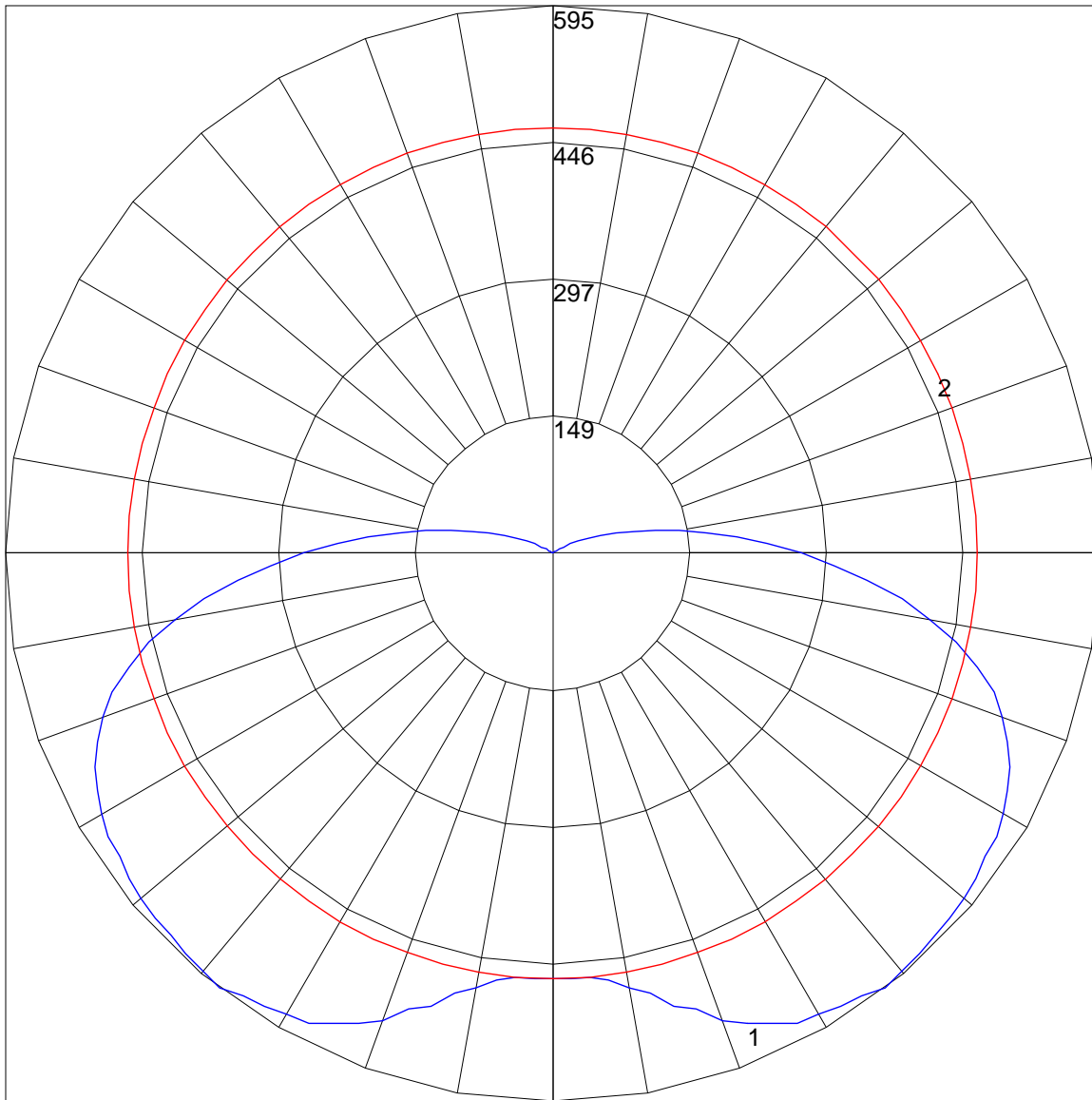
IES INDOOR REPORT
 PHOTOMETRIC FILENAME : BS400LEDHTLOWT30120-277V_S.IES

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	87	87	87	87	84	84	84	84	79	79	79	74	74	74	69	69	69	67
1	76	70	66	61	72	68	63	60	63	59	56	59	56	53	55	52	50	48
2	67	59	52	46	64	57	50	45	52	47	43	49	44	41	45	42	39	36
3	60	50	42	36	57	48	41	35	45	39	34	41	36	32	38	34	31	28
4	54	43	35	29	52	42	34	29	39	32	27	36	31	26	33	29	25	23
5	49	38	30	24	47	37	29	24	34	28	23	32	26	22	29	25	21	19
6	45	34	26	21	43	33	25	20	30	24	19	28	23	19	26	22	18	16
7	42	30	23	18	40	29	22	17	27	21	17	25	20	16	24	19	15	14
8	38	27	20	15	37	26	20	15	25	19	15	23	18	14	22	17	13	12
9	36	25	18	14	34	24	18	13	23	17	13	21	16	12	20	15	12	10
10	33	23	16	12	32	22	16	12	21	15	11	20	15	11	18	14	11	9

POLAR GRAPH



Maximum Candela = 594.64 Located At Horizontal Angle = 50, Vertical Angle = 37.5
1 - Vertical Plane Through Horizontal Angles (50 - 230) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0)