



IES INDOOR REPORT

PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_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 13:02:00 2017

[TEST] 1

[MANUFAC] BEGHELLI

[LUMCAT]

[LUMINAIRE] BS400LEDHTLOWT50120-277V

[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	26.33 (192 lamps)
Total Lamp Lumens	5055.36
Luminaire Lumens	3779
Total Luminaire Efficiency	75 %
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	30
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.82
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 : BS400LEDHTLOWT50120-277V_S.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3649	3544	3608
55	4262	3918	4263
65	5172	4465	5139
75	5968	5016	5911
85	6616	5344	6597

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_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	485.41	485.41	485.41	485.41	485.41	485.41	485.41	485.41	485.41	485.41
2.5	479.37	488.51	474.19	486.84	482.44	486.00	490.94	478.21	473.04	490.19
5.0	486.69	498.29	491.16	493.87	500.56	493.92	488.22	484.87	494.72	487.26
7.5	492.51	495.36	495.89	502.44	505.44	492.67	498.64	502.27	495.75	497.92
10.0	508.75	511.13	512.31	514.78	503.45	506.35	510.79	510.27	502.00	510.67
12.5	533.17	521.12	521.29	521.93	520.68	526.67	525.13	519.87	518.47	525.83
15.0	538.33	538.59	534.27	536.55	533.78	534.94	533.38	535.94	538.35	538.24
17.5	546.84	552.69	545.57	545.89	545.05	552.38	551.45	554.59	554.08	552.37
20.0	559.15	555.80	554.62	558.16	562.08	566.58	568.42	570.40	571.35	569.31
22.5	570.18	563.46	564.80	565.88	570.56	574.21	581.94	581.49	583.08	587.11
25.0	566.12	570.87	571.87	576.07	576.76	585.83	585.94	595.13	594.39	599.08
27.5	578.01	576.48	579.96	585.66	586.51	593.79	599.02	601.56	604.88	613.10
30.0	578.88	583.42	583.67	588.91	594.32	598.21	607.75	614.01	611.85	613.48
32.5	587.02	586.98	591.65	593.95	598.90	605.41	613.28	620.71	621.24	619.83
35.0	585.22	585.80	588.36	594.39	605.04	610.00	619.55	622.26	623.73	627.33
37.5	590.59	591.15	594.03	603.50	605.56	610.14	614.41	621.03	628.61	625.00
40.0	595.08	596.68	597.15	603.75	609.77	618.72	618.03	623.95	626.36	628.37
42.5	595.14	600.30	599.09	601.36	611.42	614.93	621.95	624.75	626.50	626.69
45.0	601.91	596.97	598.74	607.38	610.02	614.23	619.03	621.28	620.60	622.66
47.5	602.27	600.14	600.09	604.80	612.92	616.45	621.37	617.38	617.97	622.04
50.0	604.75	599.96	606.05	608.47	612.75	616.28	619.55	615.38	614.15	620.24
52.5	604.69	606.09	612.06	609.68	612.03	613.83	615.78	615.68	613.88	612.11
55.0	608.72	607.70	610.96	611.80	613.20	611.93	611.94	606.68	608.66	608.42
57.5	614.37	609.58	610.96	611.33	608.05	608.74	610.02	607.49	604.88	600.58
60.0	608.79	607.02	607.60	606.09	610.98	602.57	603.07	599.39	597.44	596.22
62.5	603.29	603.70	605.61	604.96	604.01	601.69	595.42	594.43	589.72	589.47
65.0	601.71	600.83	600.74	599.79	596.64	595.30	586.30	581.53	582.58	581.09
67.5	588.26	589.16	587.43	586.64	582.41	579.01	574.62	570.75	566.09	568.43
70.0	568.67	571.08	568.80	571.17	567.21	561.41	561.08	552.81	552.36	551.14
72.5	544.40	544.02	546.16	545.91	545.48	545.37	538.55	537.42	531.32	532.70
75.0	515.31	514.63	514.62	516.41	515.88	514.30	510.33	512.09	506.10	506.90
77.5	478.13	480.86	482.16	484.79	485.32	481.46	481.81	478.48	475.89	474.20
80.0	441.57	441.01	440.79	444.06	446.00	446.92	444.39	444.42	441.62	443.42
82.5	400.50	400.69	400.40	403.16	405.06	404.82	408.74	406.62	406.29	404.11
85.0	355.48	356.92	357.71	362.54	362.52	363.03	366.19	367.17	366.43	368.15
87.5	316.27	313.90	315.76	318.73	319.94	322.73	324.09	325.63	327.31	326.98
90.0	273.14	275.90	275.63	276.13	278.86	282.04	284.22	284.54	285.84	287.15
92.5	238.99	238.90	238.56	239.62	242.92	244.09	245.68	246.23	248.25	249.47
95.0	206.16	206.94	206.04	205.38	207.37	208.04	212.06	210.75	212.53	212.83
97.5	180.38	177.69	175.37	174.49	174.30	174.18	176.67	177.19	179.41	178.46
100.0	152.87	149.51	148.34	148.56	147.35	145.91	146.17	149.37	149.19	149.05
102.5	125.49	127.68	126.12	122.66	119.07	120.53	120.36	121.20	121.42	121.07
105.0	106.82	105.80	103.75	101.26	99.84	98.73	96.59	97.64	97.41	96.82
107.5	87.55	88.83	85.69	83.15	80.62	77.78	77.58	77.04	77.41	77.31
110.0	73.14	72.57	71.15	67.90	64.28	62.04	60.89	59.02	59.38	58.68
112.5	58.87	56.98	57.98	54.16	51.87	48.77	46.32	44.54	43.84	43.42
115.0	46.97	46.68	45.23	42.75	40.65	36.89	34.67	33.28	32.56	31.37
117.5	36.79	36.18	35.66	33.08	31.10	28.49	25.31	23.73	22.32	21.69
120.0	28.93	28.52	27.16	24.96	23.30	21.51	18.48	15.88	15.00	14.89
122.5	21.39	21.27	20.56	18.97	16.82	15.63	12.69	10.78	9.28	8.76
125.0	15.08	15.90	14.91	13.34	12.27	10.80	8.40	6.74	4.84	4.47
127.5	10.66	10.66	10.41	9.14	8.12	6.88	5.27	3.97	2.61	1.82
130.0	7.53	7.61	6.93	5.91	5.06	3.91	2.94	2.07	1.35	1.30
132.5	4.24	4.23	3.83	3.34	2.79	1.99	1.55	1.29	1.20	1.14

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_S.IES

CANDELA TABULATION - (Cont.)

135.0	2.13	2.11	2.01	1.71	1.49	1.26	1.12	1.27	1.05	1.10
137.5	1.12	1.06	1.05	0.99	1.08	1.14	1.02	1.02	1.02	0.99
140.0	1.04	1.01	1.00	1.02	0.96	1.04	0.93	0.97	1.04	0.99
142.5	0.76	0.83	0.80	0.86	0.79	0.93	0.98	0.82	0.88	0.95
145.0	0.75	0.73	0.72	0.75	0.75	0.73	0.73	0.80	0.79	0.71
147.5	0.65	0.71	0.63	0.62	0.56	0.57	0.76	0.75	0.69	0.64
150.0	0.52	0.53	0.50	0.65	0.59	0.59	0.54	0.61	0.60	0.69
152.5	0.55	0.51	0.53	0.48	0.49	0.61	0.65	0.43	0.50	0.48
155.0	0.40	0.41	0.39	0.51	0.48	0.40	0.47	0.38	0.43	0.42
157.5	0.29	0.27	0.40	0.44	0.28	0.34	0.32	0.41	0.39	0.38
160.0	0.21	0.26	0.26	0.35	0.24	0.23	0.28	0.21	0.30	0.17
162.5	0.17	0.23	0.16	0.24	0.27	0.18	0.20	0.22	0.19	0.15
165.0	0.17	0.14	0.10	0.07	0.19	0.13	0.22	0.10	0.17	0.12
167.5	0.14	0.10	0.17	0.09	0.08	0.07	0.11	0.12	0.11	0.17
170.0	0.08	0.09	0.14	0.07	0.03	0.14	0.03	0.12	0.02	0.07
172.5	0.04	0.07	0.03	0.05	0.04	0.02	0.04	0.02	0.04	0.03
175.0	0.01	0.04	0.04	0.05	0.04	0.08	0.10	0.04	0.09	0.00
177.5	0.00	0.06	0.00	0.00	0.07	0.00	0.06	0.06	0.00	0.00
180.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

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	485.41	485.41	485.41	485.41	485.41	485.41	485.41	485.41	485.41
2.5	483.48	484.12	497.83	488.80	482.93	487.48	491.67	487.46	470.72
5.0	479.86	494.96	502.73	496.47	500.66	496.68	494.01	488.21	484.89
7.5	497.91	499.52	494.90	500.35	498.69	496.03	500.06	499.39	498.14
10.0	509.60	505.88	512.58	511.62	512.67	504.66	508.91	508.07	511.47
12.5	523.97	520.18	523.22	521.49	524.90	518.74	522.56	518.18	528.91
15.0	538.26	539.02	537.86	535.41	536.04	539.56	535.61	531.59	529.87
17.5	551.08	546.76	550.47	547.60	548.00	548.08	545.51	543.17	542.84
20.0	563.34	566.14	559.40	563.85	559.70	552.79	560.03	555.17	549.13
22.5	580.51	580.07	577.48	574.23	568.88	564.71	562.20	566.34	562.80
25.0	594.27	590.88	590.96	581.67	577.04	577.41	570.86	572.00	570.83
27.5	609.16	603.99	597.55	593.74	587.18	585.47	578.70	576.72	572.76
30.0	615.22	615.32	601.58	595.28	594.47	591.33	582.04	577.92	579.15
32.5	621.61	614.13	613.29	606.06	600.97	594.90	585.69	585.51	587.62
35.0	627.96	620.24	619.91	609.84	598.55	596.17	589.20	587.41	583.24
37.5	627.61	627.48	618.01	615.51	608.95	600.55	595.01	590.66	587.68
40.0	625.35	626.15	620.41	615.55	610.34	598.98	596.69	595.01	586.33
42.5	622.94	621.25	622.34	613.30	607.12	604.05	601.22	595.61	592.73
45.0	623.09	621.57	620.63	616.40	612.20	607.77	601.70	599.90	595.04
47.5	616.87	621.63	618.63	619.31	616.23	606.22	603.25	601.59	601.80
50.0	615.30	619.14	617.89	617.50	614.22	610.73	606.25	604.49	605.03
52.5	612.39	616.24	612.90	616.99	613.81	611.64	609.07	607.07	607.61
55.0	609.93	610.36	614.44	614.13	615.15	611.26	610.98	610.07	608.84
57.5	602.34	605.62	608.27	611.06	612.81	613.03	608.48	610.17	614.75
60.0	595.20	598.90	600.48	606.17	606.95	609.19	608.64	608.79	611.73
62.5	590.57	590.24	601.17	599.80	607.49	604.99	605.51	608.50	607.41
65.0	581.70	582.60	588.50	591.33	596.28	596.05	596.71	598.21	597.95
67.5	566.44	567.97	576.41	580.38	582.64	582.53	586.12	582.51	584.95
70.0	552.50	554.54	558.54	563.22	566.65	568.54	565.61	564.30	564.02
72.5	527.75	532.27	535.90	540.11	539.29	544.14	541.02	541.00	540.52
75.0	502.74	505.39	507.54	514.05	513.64	513.36	507.84	512.33	510.45
77.5	475.89	478.38	477.94	479.09	477.16	478.33	476.44	473.95	473.28
80.0	441.65	443.93	440.81	441.45	444.26	441.53	437.06	436.54	431.02

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_S.IES

CANDELA TABULATION - (Cont.)

82.5	404.28	403.68	405.85	404.66	403.01	400.17	397.55	394.03	391.71
85.0	367.12	364.91	366.21	363.85	361.71	357.66	355.56	353.86	354.46
87.5	325.84	325.36	325.66	320.44	319.57	316.82	314.71	313.01	312.05
90.0	285.49	286.01	284.12	281.96	277.57	277.45	276.15	274.70	272.71
92.5	248.99	245.92	245.74	244.42	243.01	239.44	238.21	238.03	236.76
95.0	212.54	210.77	207.62	209.86	207.35	207.28	205.27	205.54	206.66
97.5	178.95	177.33	175.96	174.13	173.69	174.21	175.43	177.15	177.73
100.0	148.36	147.89	146.47	146.87	145.65	147.16	147.37	150.05	152.62
102.5	120.71	120.73	121.63	121.17	120.15	122.90	125.39	127.63	127.04
105.0	96.83	97.58	98.45	98.79	98.62	100.82	104.65	106.41	106.60
107.5	76.53	75.70	76.95	79.57	81.33	83.77	86.39	88.55	89.68
110.0	59.25	59.55	59.64	62.82	64.14	68.21	72.13	72.75	72.48
112.5	44.38	44.67	46.14	48.48	51.99	53.86	57.02	58.52	58.67
115.0	32.45	33.52	35.27	36.76	41.18	43.79	44.94	46.70	46.87
117.5	22.11	23.82	25.06	28.73	31.62	33.23	35.63	36.31	37.65
120.0	14.99	16.22	18.56	21.18	23.24	26.10	27.15	27.87	28.79
122.5	9.14	10.43	13.26	15.29	17.09	19.03	19.98	21.21	20.72
125.0	5.26	7.21	8.38	10.61	12.52	14.15	14.69	15.91	15.26
127.5	2.70	3.96	5.63	7.12	8.31	9.20	10.10	10.68	11.18
130.0	1.33	1.97	3.01	3.95	5.20	6.23	6.44	7.21	7.59
132.5	1.24	1.21	1.46	2.05	2.92	3.73	4.07	4.31	4.60
135.0	1.16	1.12	1.15	1.20	1.20	1.79	2.10	2.23	2.24
137.5	1.00	1.08	1.04	1.18	1.01	1.13	1.10	1.08	0.99
140.0	0.96	0.92	1.03	0.99	1.10	0.99	1.08	0.97	0.95
142.5	0.90	0.84	0.92	0.84	0.94	0.88	0.94	0.80	0.76
145.0	0.85	0.71	0.72	0.69	0.68	0.72	0.81	0.86	0.74
147.5	0.78	0.68	0.66	0.54	0.72	0.67	0.67	0.77	0.72
150.0	0.57	0.52	0.56	0.63	0.49	0.50	0.59	0.56	0.55
152.5	0.53	0.48	0.46	0.47	0.59	0.41	0.46	0.54	0.45
155.0	0.47	0.48	0.54	0.45	0.47	0.40	0.49	0.36	0.46
157.5	0.34	0.23	0.38	0.42	0.36	0.40	0.42	0.33	0.35
160.0	0.32	0.33	0.28	0.35	0.29	0.30	0.33	0.22	0.35
162.5	0.22	0.18	0.20	0.23	0.28	0.25	0.21	0.14	0.29
165.0	0.12	0.07	0.12	0.14	0.19	0.19	0.26	0.10	0.04
167.5	0.12	0.12	0.06	0.08	0.06	0.13	0.18	0.07	0.22
170.0	0.05	0.11	0.02	0.07	0.13	0.05	0.03	0.10	0.09
172.5	0.00	0.00	0.05	0.06	0.11	0.07	0.02	0.00	0.12
175.0	0.06	0.00	0.04	0.02	0.07	0.03	0.04	0.03	0.00
177.5	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

IES INDOOR REPORT
PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_S.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	200.09	4.00	5.30
0-30	469.76	9.30	12.40
0-40	850.44	16.80	22.50
0-60	1871.51	37.00	49.50
0-80	2992.2	59.20	79.20
0-90	3386.56	67.00	89.60
10-90	3339.09	66.10	88.40
20-40	650.35	12.90	17.20
20-50	1124.2	22.20	29.70
40-70	1604.94	31.70	42.50
60-80	1120.69	22.20	29.70
70-80	536.82	10.60	14.20
80-90	394.36	7.80	10.40
90-110	338.84	6.70	9.00
90-120	379.49	7.50	10.00
90-130	390.12	7.70	10.30
90-150	392.18	7.80	10.40
90-180	392.43	7.80	10.40
110-180	53.59	1.10	1.40
0-180	3778.99	74.80	100.00

Total Luminaire Efficiency = 74.80%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.46
10-20	152.63
20-30	269.67
30-40	380.68
40-50	473.85
50-60	547.21
60-70	583.87
70-80	536.82
80-90	394.36
90-100	229.90
100-110	108.94
110-120	40.65
120-130	10.63
130-140	1.56
140-150	0.49
150-160	0.20
160-170	0.05
170-180	0.00

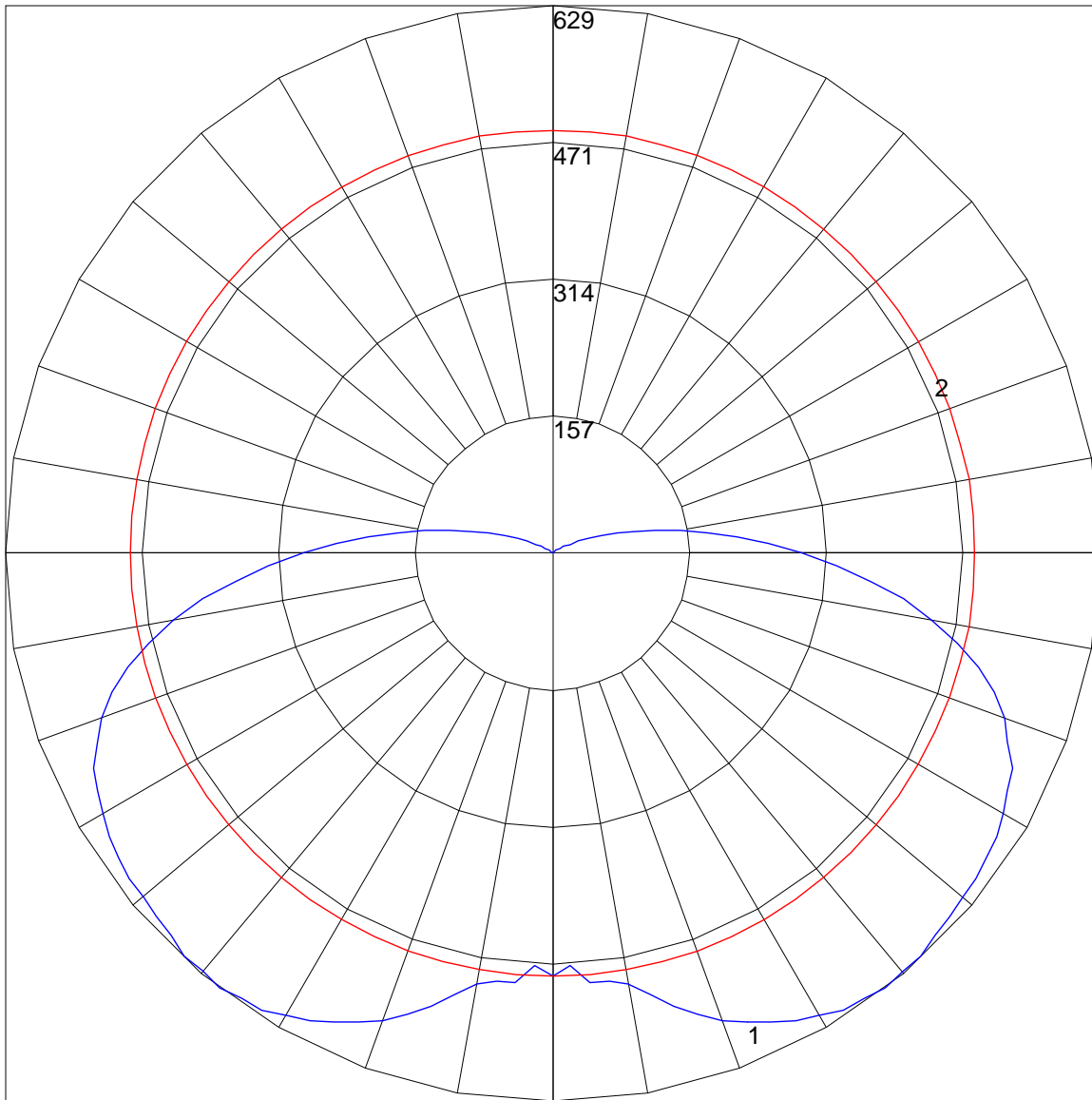
IES INDOOR REPORT
 PHOTOMETRIC FILENAME : BS400LEDHTLOWT50120-277V_S.IES

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 = 628.61 Located At Horizontal Angle = 40, Vertical Angle = 37.5
1 - Vertical Plane Through Horizontal Angles (40 - 220) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0)