

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: 768858

Luminaire Tested: **BSL-XX-100-MP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 768858
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: BSL-XX-100-MP
Description: 100W MP SQUARE ARCHITECTURAL BOLLARD WITH STACKED LOUVERS
Light Source: 100 WATT PULSE-START COATED ED-17 VBD BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 7900 (1 lamp)
Luminaire Lumens: 3323.6 lumens
Efficiency: 42.1%
Efficacy: 33.2 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U3 - G2

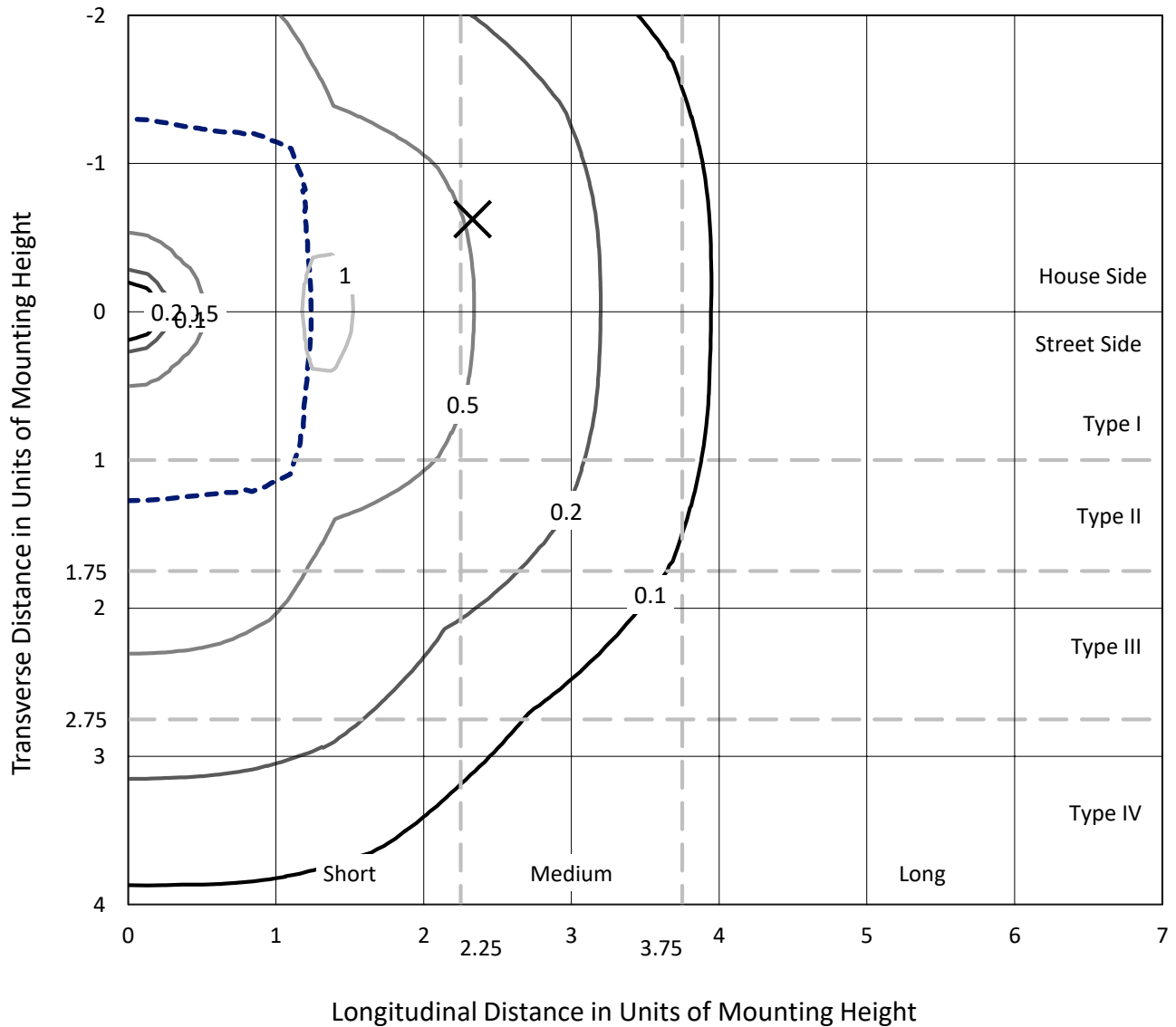
Input Watts (W): 100
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: 768858
 CATALOG NUMBER: BSL-XX-100-MP

Iso-Footcandle Lines of Horizontal Illumination

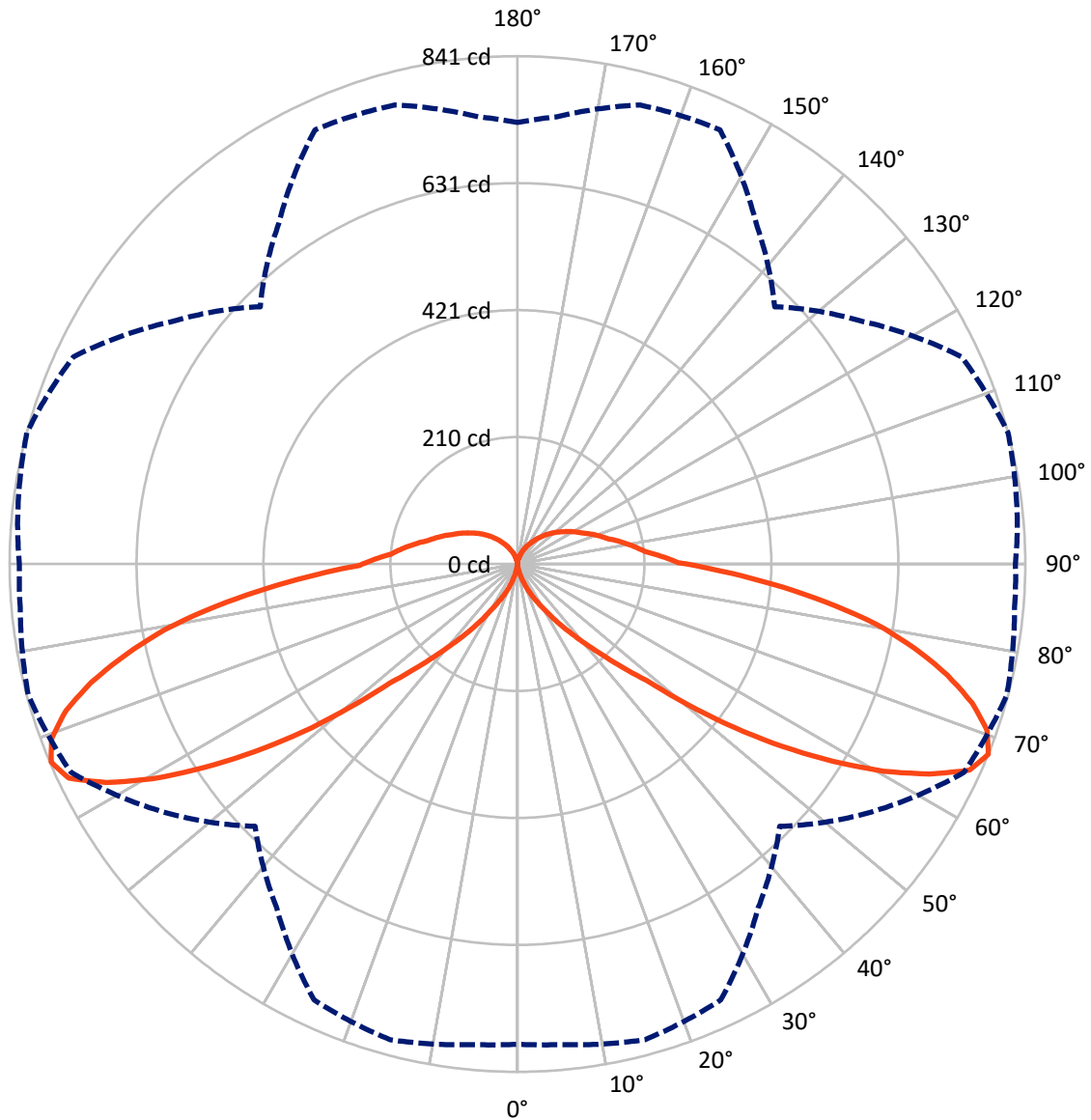
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.1 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: 768858
CATALOG NUMBER: BSL-XX-100-MP

Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: 768858

CATALOG NUMBER: BSL-XX-100-MP

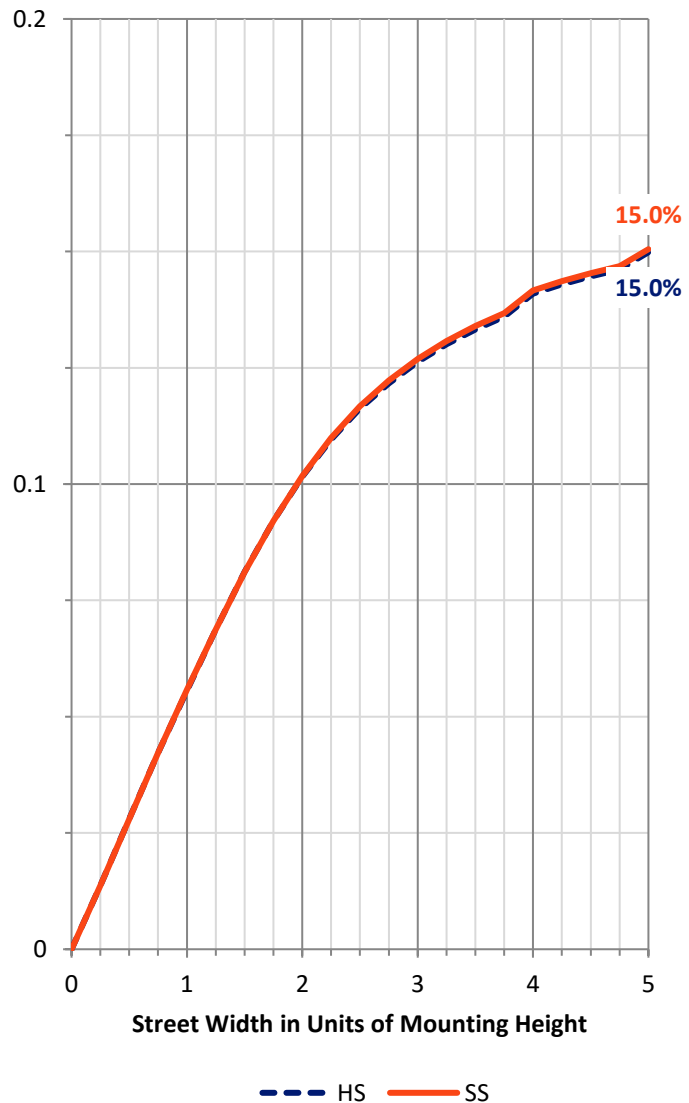
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1293.0	365.3	1658.3
	% Lamp	16.4	4.6	21.0
Street Side	Lumens	1305.2	360.0	1665.3
	% Lamp	16.5	4.6	21.1
Total	Lumens	2598.2	725.4	3323.6
	% Lamp	32.9	9.2	42.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.3	0.0	0.0
10°-20°	6.6	0.2	0.1
20°-30°	29.6	0.9	0.4
30°-40°	79.5	2.4	1.0
40°-50°	184.3	5.5	2.3
50°-60°	423.7	12.7	5.4
60°-70°	710.7	21.4	9.0
70°-80°	720.1	21.7	9.1
80°-90°	443.5	13.3	5.6
90°-100°	244.5	7.4	3.1
100°-110°	175.1	5.3	2.2
110°-120°	124.0	3.7	1.6
120°-130°	85.2	2.6	1.1
130°-140°	54.0	1.6	0.7
140°-150°	30.0	0.9	0.4
150°-160°	13.4	0.4	0.2
160°-170°	4.0	0.1	0.1
170°-180°	0.5	0.0	0.0
0°-90°	2598.2	78.2	32.9
0°-180°	3323.6	100.0	42.1



REPORT NUMBER: 768858

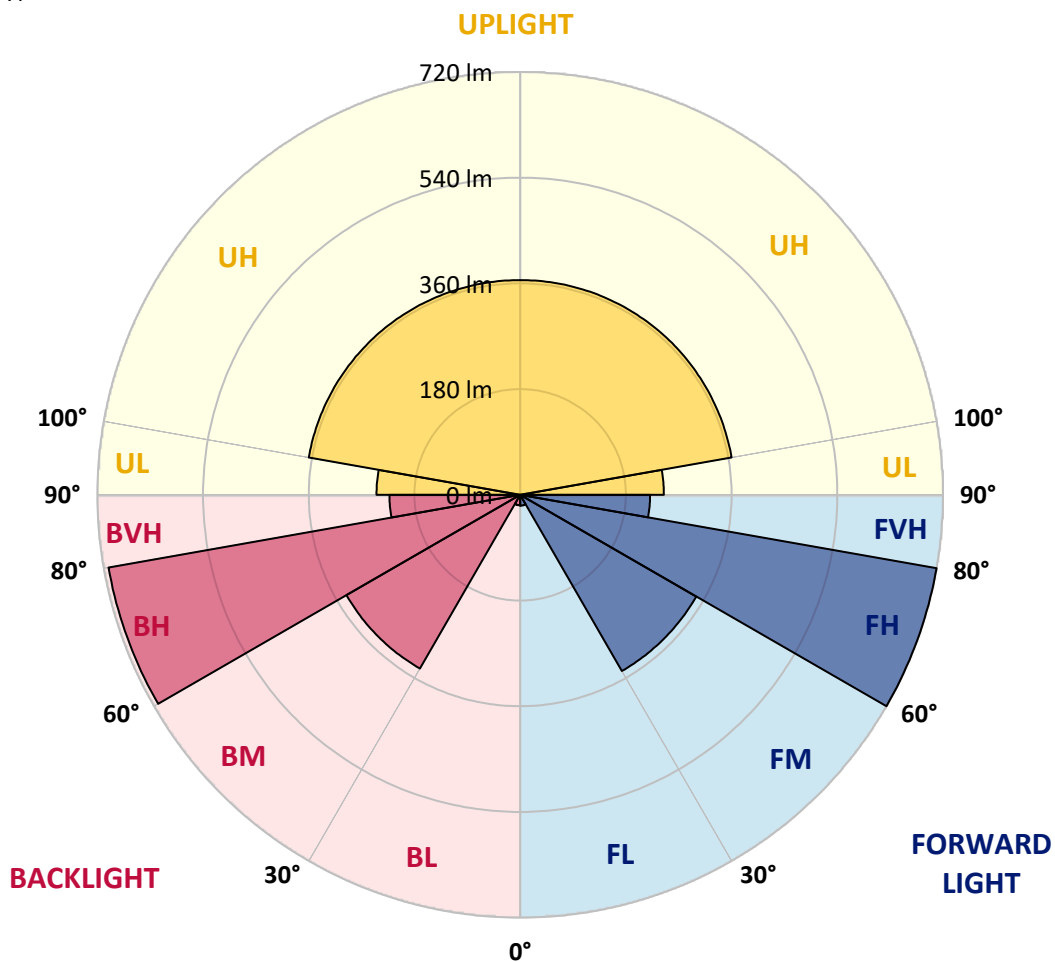
CATALOG NUMBER: BSL-XX-100-MP

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	18.5	0.2			
FM (30°-60°)	346.1	4.4			
FH (60°-80°)	719.5	9.1			G1/1800
FVH (80°-90°)	221.1	2.8			G2/225
BL (0°-30°)	17.9	0.2	B0/110		
BM (30°-60°)	341.4	4.3	B1/1000		
BH (60°-80°)	711.3	9.0	B2/1000		G1/1800
BVH (80°-90°)	222.4	2.8			G2/225
UL (90°-100°)	244.5	3.1		U3/500	
UH (100°-180°)	365.3	4.6		U3/500	
Trapped Light	4576.4	57.9			

BUG Rating: B2-U3-G2

Type V Short





REPORT NUMBER: 768858

CATALOG NUMBER: BSL-XX-100-MP

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	2.6	2.6	2.2	3.1	2.6	2.6	3.1	3.5	3.1	3.5	4.0
10°	7.0	7.0	7.0	6.2	7.0	7.0	7.0	7.9	8.8	8.8	8.8
12.5°	13.2	13.6	12.7	12.3	11.9	11.4	12.3	12.7	14.1	14.5	14.9
15°	22.0	22.4	21.5	20.7	19.8	19.3	19.8	20.7	21.5	22.4	22.4
17.5°	32.5	32.1	30.8	31.2	29.9	29.9	29.0	29.0	29.9	30.8	30.8
20°	41.3	41.3	40.4	41.3	40.4	40.4	39.1	38.2	39.1	39.6	40.4
22.5°	51.9	51.9	51.4	52.3	53.2	53.2	51.0	49.2	49.7	50.1	50.5
25°	62.4	62.0	61.5	62.9	65.1	65.5	64.2	61.1	60.2	61.1	60.7
27.5°	73.8	73.4	73.8	75.6	78.2	79.6	77.8	73.8	72.1	73.4	73.8
30°	87.9	87.5	87.5	89.2	91.9	92.7	91.9	88.4	86.2	88.4	89.2
32.5°	104.6	104.6	104.6	105.5	105.9	107.7	107.7	105.9	104.6	107.3	107.3
35°	124.0	124.0	123.5	124.4	123.5	123.1	125.7	127.9	125.7	127.5	127.9
37.5°	144.2	144.2	144.6	146.4	144.2	142.0	146.4	150.3	149.0	150.3	150.3
40°	167.9	167.0	167.5	168.8	166.2	165.3	170.5	175.8	174.9	174.9	176.3
42.5°	196.9	196.0	195.6	193.8	189.4	192.1	195.6	204.4	206.2	207.0	207.9
45°	233.8	232.5	231.6	227.3	218.5	220.2	225.9	238.7	244.4	245.7	247.5
47.5°	279.6	278.7	273.4	265.5	253.6	250.1	262.0	278.7	288.4	297.6	301.5
50°	357.8	355.6	341.5	309.9	292.3	283.1	302.0	327.5	366.6	379.3	383.7
52.5°	442.2	439.6	425.9	385.9	334.5	324.4	346.4	409.7	452.3	464.2	467.7
55°	518.7	516.9	508.1	465.5	395.6	371.4	412.7	489.7	535.8	545.9	549.9
57.5°	594.3	593.4	585.9	539.8	460.7	426.8	480.0	567.5	619.3	629.9	631.6
60°	670.8	669.4	665.5	612.3	521.3	484.4	545.9	645.3	700.2	705.9	708.1
62.5°	741.1	740.2	739.8	684.0	585.9	532.3	611.0	715.6	771.0	772.3	774.5
65°	786.8	790.3	799.6	752.1	644.8	574.9	667.7	775.4	823.7	817.1	818.0
67.5°	795.6	799.1	815.8	796.9	695.4	614.5	716.0	816.3	839.1	826.8	825.1
70°	771.9	774.9	798.2	800.4	715.6	647.0	735.4	820.2	823.7	804.8	803.1
72.5°	720.0	724.0	756.5	773.6	702.9	648.3	721.3	797.8	786.4	757.4	754.3
75°	651.4	657.6	699.3	728.8	666.8	625.9	688.8	755.2	732.3	696.3	692.3
77.5°	583.7	590.3	631.2	663.7	612.7	579.3	636.5	691.9	665.1	632.5	628.6
80°	519.6	524.8	559.1	589.0	543.3	513.8	568.3	618.9	593.4	567.0	564.0
82.5°	432.5	438.2	475.6	504.2	470.8	443.1	491.9	528.3	504.2	474.7	471.6
85°	346.4	354.3	389.9	418.9	398.7	383.3	414.9	439.6	414.9	385.1	379.8
87.5°	269.0	275.6	309.0	340.7	336.3	331.9	348.1	357.4	331.9	303.3	296.3
90°	213.6	218.9	248.8	281.3	290.1	294.1	297.1	292.3	261.5	236.5	229.9
95°	181.1	183.7	204.0	225.9	235.6	239.1	239.1	230.3	209.7	191.6	190.3
105°	140.7	141.5	150.8	162.6	171.0	173.6	172.3	165.3	153.8	146.4	146.4
115°	109.0	109.4	116.0	123.5	129.2	131.9	130.5	125.3	117.8	112.5	111.2
125°	82.6	84.8	89.7	94.5	98.5	100.7	98.9	95.4	90.5	85.7	85.7
135°	61.5	62.0	66.4	69.9	71.6	73.0	72.1	70.3	66.8	62.9	62.9
145°	42.2	41.8	44.4	46.6	48.8	49.2	48.8	47.0	44.4	41.8	42.2
155°	24.6	24.6	25.9	28.1	29.0	29.9	29.5	27.7	25.9	25.1	25.1
165°	11.4	11.4	11.9	12.3	12.7	12.7	12.3	12.3	11.4	11.4	11.0



REPORT NUMBER: 768858

CATALOG NUMBER: BSL-XX-100-MP

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0.9	0.9	1.3	0.9	4.4	4.4	1.3	1.3	0.9	9.7	4.8
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5



REPORT NUMBER: 768858

CATALOG NUMBER: BSL-XX-100-MP

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	4.0	3.5	3.5	2.6	2.6	2.6	2.6	2.6	2.2	3.5
10°	9.7	8.4	7.9	7.5	7.0	6.6	6.6	6.6	6.2	7.0
12.5°	14.5	14.1	12.7	11.9	11.4	11.0	11.0	11.4	11.4	10.5
15°	22.0	21.1	20.7	19.8	18.5	18.5	18.9	19.3	19.8	20.2
17.5°	30.8	29.9	29.0	28.6	27.7	27.7	28.6	28.6	29.5	29.0
20°	40.0	39.1	38.2	37.4	38.2	38.2	37.8	38.2	38.2	37.8
22.5°	50.1	49.7	48.8	48.8	50.1	50.1	49.7	49.2	48.8	48.4
25°	61.1	60.7	59.3	61.5	63.3	62.4	60.2	58.5	58.5	58.9
27.5°	73.8	72.5	72.1	75.6	76.0	74.7	73.0	70.3	70.3	69.5
30°	88.8	86.6	86.6	89.2	89.7	88.8	85.3	83.1	83.5	82.6
32.5°	106.8	104.2	104.2	104.2	104.2	103.3	101.5	99.3	99.3	98.5
35°	127.0	124.4	124.0	120.9	119.6	119.6	120.0	118.2	117.8	117.8
37.5°	149.9	147.3	146.4	142.0	136.7	139.8	141.5	139.3	137.6	138.0
40°	175.8	173.2	171.4	164.4	159.1	162.2	164.8	162.2	160.4	160.0
42.5°	207.9	204.8	200.0	189.0	185.5	185.9	190.3	189.9	188.6	188.1
45°	246.6	243.5	234.7	219.8	214.5	214.5	222.4	225.1	223.3	222.4
47.5°	298.9	287.9	274.7	255.4	244.8	248.4	261.1	269.4	277.4	277.8
50°	381.5	365.7	322.6	295.4	278.7	287.9	315.6	344.6	349.4	349.0
52.5°	465.5	450.1	404.4	338.9	319.1	334.1	393.4	422.4	422.9	421.1
55°	548.1	533.6	484.8	404.8	364.8	399.6	472.1	498.5	493.2	491.4
57.5°	632.1	616.7	561.8	469.9	424.6	463.7	548.1	574.5	563.5	559.1
60°	709.4	696.7	635.6	533.2	481.3	527.5	621.1	648.8	628.6	622.4
62.5°	774.5	766.1	706.8	598.2	527.0	590.8	691.9	717.4	688.3	680.4
65°	822.0	823.3	768.3	654.1	566.2	643.5	752.1	769.2	731.0	720.0
67.5°	831.2	841.3	811.9	699.8	602.6	689.2	793.8	787.2	743.7	731.4
70°	807.9	825.1	818.5	721.3	632.5	710.8	801.8	775.4	728.8	716.5
72.5°	760.4	787.7	793.0	711.2	638.2	699.8	778.0	742.4	687.9	675.2
75°	700.7	735.8	753.0	677.8	618.9	667.7	738.0	692.7	631.6	619.8
77.5°	638.7	673.4	692.7	629.4	578.0	618.0	673.8	626.8	569.2	558.2
80°	571.4	602.6	621.1	564.0	514.7	553.0	599.6	556.0	506.4	496.7
82.5°	479.6	513.8	532.3	488.3	446.2	478.7	511.2	473.0	423.3	415.8
85°	387.7	422.9	442.6	414.1	385.1	407.5	427.7	391.6	348.1	339.3
87.5°	304.6	337.1	359.1	348.1	334.5	342.9	348.1	314.7	277.4	269.0
90°	236.5	265.9	293.2	297.6	294.9	294.1	284.4	251.0	220.7	214.5
95°	192.5	212.7	231.2	239.1	240.0	238.7	229.0	206.6	185.5	183.7
105°	148.6	156.0	165.7	173.2	174.9	173.2	165.3	153.4	143.7	142.4
115°	114.3	119.1	126.2	131.0	133.2	131.0	126.2	118.2	112.1	110.8
125°	87.0	91.9	96.3	100.7	102.4	100.7	96.7	91.9	86.6	85.3
135°	64.2	68.1	71.2	73.4	74.7	73.8	72.1	68.1	65.1	63.3
145°	43.1	45.3	48.4	50.1	51.0	50.5	49.2	46.6	43.5	43.1
155°	25.5	27.3	29.5	30.8	32.1	31.2	29.9	28.6	26.8	26.4
165°	11.9	12.3	13.2	13.6	14.1	14.5	14.5	13.6	13.2	13.2



REPORT NUMBER: 768858

CATALOG NUMBER: BSL-XX-100-MP

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	0.9	5.7	7.5	1.8	1.8	6.2	1.8	2.2	1.8	1.8
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

(END OF REPORT)