

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: 768852

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 768852
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: BRL-XX-100-MP
Description: 100W MP ROUND 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: 3178.2 lumens
Efficiency: 40.2%
Efficacy: 31.8 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Medium - Semi-Cutoff
BUG Rating: B2 - U3 - G2

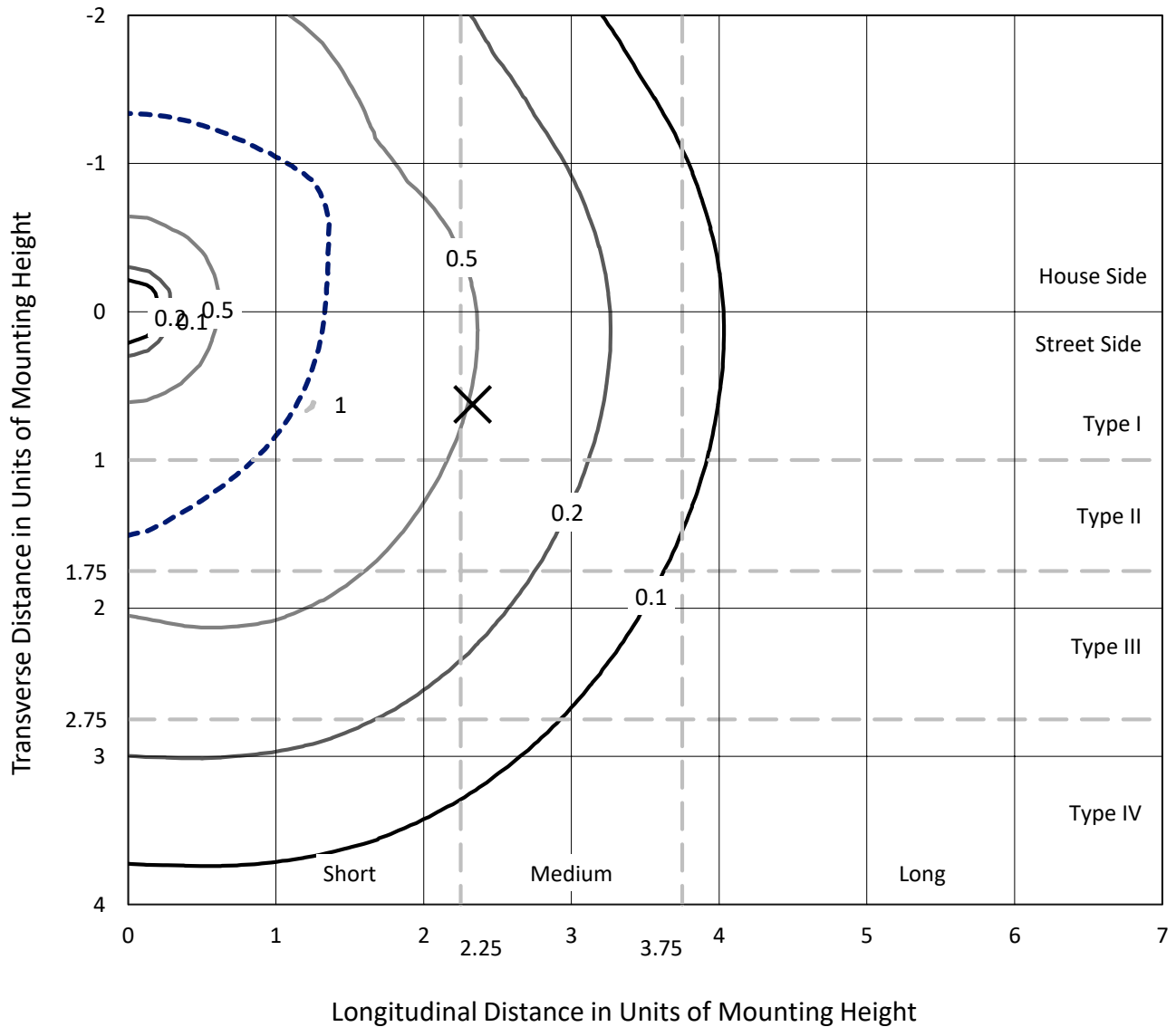
Input Watts (W): 100
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

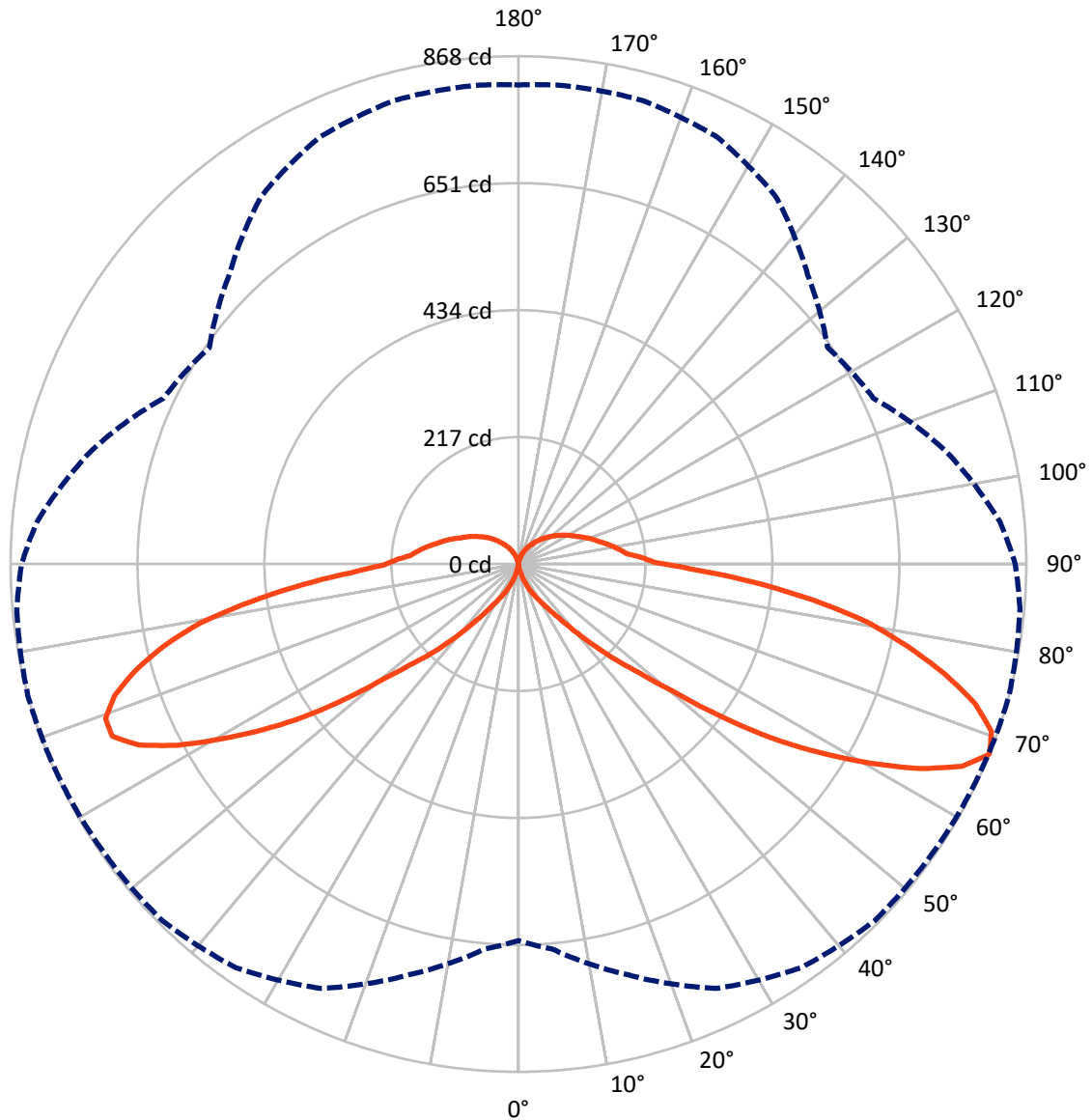
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1 fc
 Type V - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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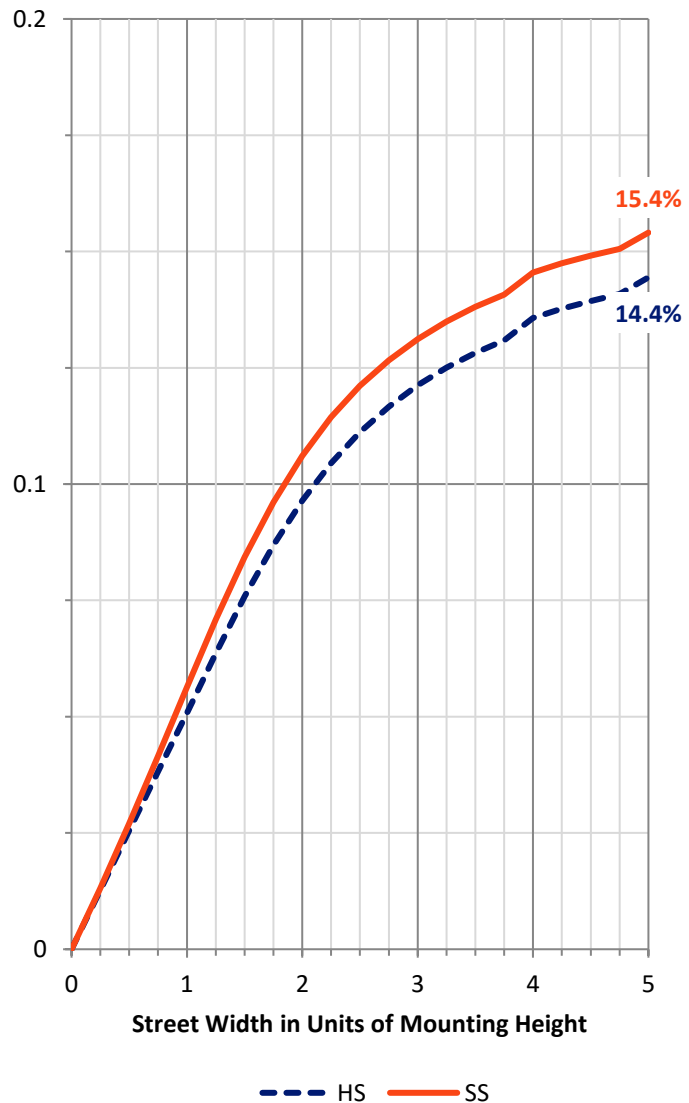
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1237.6	308.5	1546.1
	% Lamp	15.7	3.9	19.6
Street Side	Lumens	1318.9	313.3	1632.2
	% Lamp	16.7	4.0	20.7
Total	Lumens	2556.5	621.7	3178.2
	% Lamp	32.4	7.9	40.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.2	0.0	0.0
10°-20°	5.7	0.2	0.1
20°-30°	24.8	0.8	0.3
30°-40°	67.3	2.1	0.9
40°-50°	175.4	5.5	2.2
50°-60°	425.9	13.4	5.4
60°-70°	728.9	22.9	9.2
70°-80°	720.3	22.7	9.1
80°-90°	408.2	12.8	5.2
90°-100°	203.8	6.4	2.6
100°-110°	150.6	4.7	1.9
110°-120°	108.5	3.4	1.4
120°-130°	74.5	2.3	0.9
130°-140°	47.0	1.5	0.6
140°-150°	25.8	0.8	0.3
150°-160°	11.3	0.4	0.1
160°-170°	3.2	0.1	0.0
170°-180°	0.4	0.0	0.0
0°-90°	2556.5	80.4	32.4
0°-180°	3178.2	100.0	40.2



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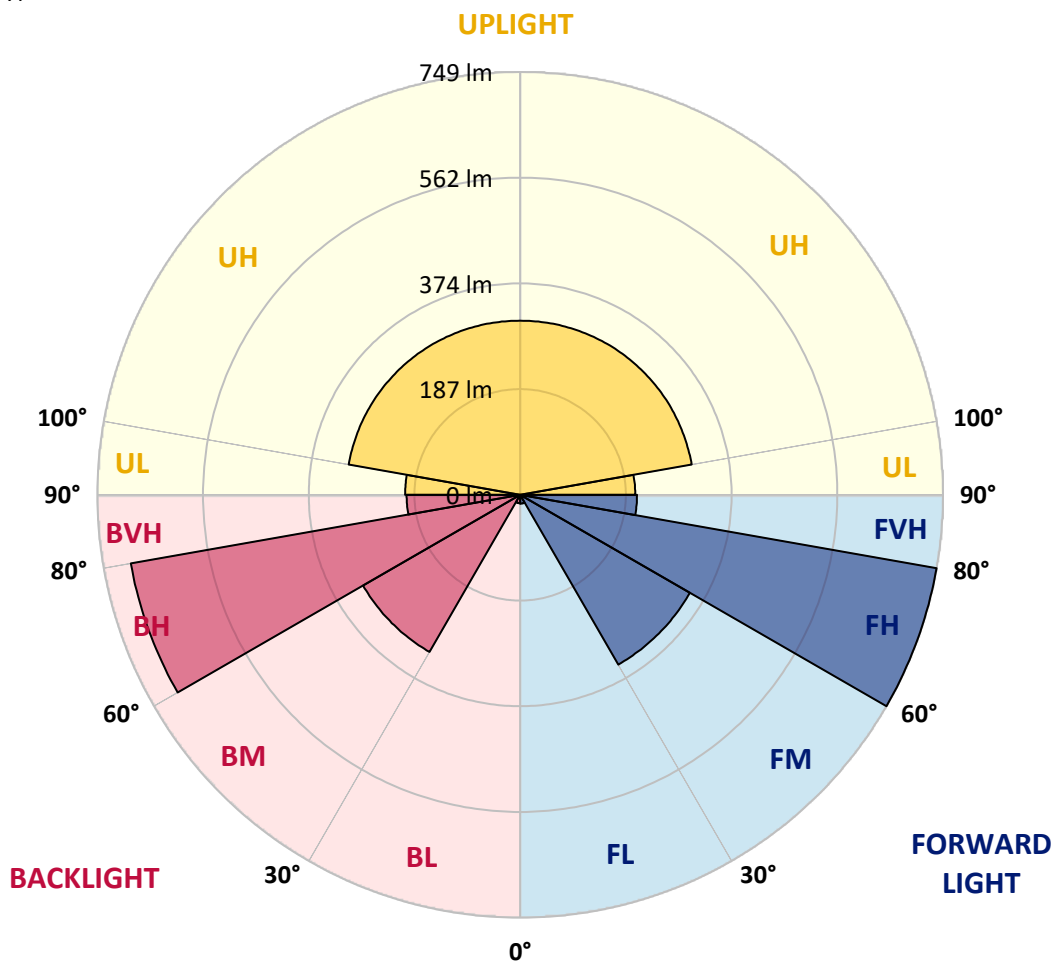
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	15.8	0.2			
FM (30°-60°)	347.3	4.4			
FH (60°-80°)	748.9	9.5			G1/1800
FVH (80°-90°)	207.0	2.6			G2/225
BL (0°-30°)	14.8	0.2	B0/110		
BM (30°-60°)	321.3	4.1	B1/1000		
BH (60°-80°)	700.3	8.9	B2/1000		G1/1800
BVH (80°-90°)	201.2	2.5			G2/225
UL (90°-100°)	203.8	2.6		U3/500	
UH (100°-180°)	308.5	3.9		U3/500	
Trapped Light	4721.8	59.8			

BUG Rating: B2-U3-G2

Type V Medium





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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°	1.8	1.3	0.9	1.8	2.2	1.8	1.3	1.3	1.3	1.3	1.3
10°	5.3	5.3	5.3	5.7	5.7	6.2	6.6	6.2	6.2	5.7	5.3
12.5°	11.4	11.4	11.4	11.9	11.9	12.3	12.7	12.3	12.3	11.4	11.9
15°	17.6	17.6	17.6	18.5	18.5	19.3	18.9	19.3	18.5	17.6	17.6
17.5°	25.5	25.5	25.5	26.4	27.3	27.7	27.7	27.7	26.8	26.4	25.9
20°	34.3	34.3	34.3	34.7	35.2	35.6	36.0	35.6	35.2	34.7	34.3
22.5°	43.1	43.1	43.1	44.0	44.0	44.8	44.4	44.4	44.4	44.0	43.5
25°	51.9	52.3	52.7	53.2	54.1	54.5	54.5	54.5	54.1	53.6	52.7
27.5°	61.5	62.4	62.4	63.3	63.3	64.2	63.3	63.3	63.7	63.3	62.9
30°	73.0	73.8	73.0	73.8	74.3	73.8	74.3	74.3	74.3	74.3	73.4
32.5°	86.2	86.6	86.6	87.0	87.5	86.6	87.0	87.0	87.5	87.0	86.6
35°	103.7	104.2	104.2	104.2	104.2	103.7	103.3	103.3	103.3	103.3	103.3
37.5°	126.6	126.6	127.0	127.5	127.0	126.6	125.7	126.2	126.2	126.2	125.7
40°	150.3	151.2	153.4	154.3	154.7	155.2	155.2	155.6	155.6	154.7	154.3
42.5°	176.7	178.5	182.4	187.3	188.1	189.9	190.8	191.2	190.8	189.9	188.6
45°	205.7	207.9	216.7	224.2	228.6	230.8	232.5	233.4	232.5	229.4	228.1
47.5°	237.4	241.3	251.4	263.7	271.2	275.2	277.4	277.4	277.4	272.1	269.4
50°	280.4	285.3	304.2	323.5	333.6	338.5	341.5	341.5	339.8	332.7	328.3
52.5°	338.5	344.2	374.1	401.8	422.0	430.8	436.5	436.0	431.2	419.8	412.3
55°	399.1	407.9	447.5	484.4	512.5	524.0	530.5	530.1	524.4	511.2	503.3
57.5°	457.1	469.0	518.2	566.6	596.5	611.0	614.9	613.6	608.8	594.3	585.1
60°	513.4	530.1	589.4	649.2	682.2	695.8	697.6	695.8	691.0	677.8	666.4
62.5°	565.3	583.7	654.5	720.0	757.4	772.3	772.7	771.0	769.7	757.8	745.5
65°	611.0	629.9	705.5	777.6	816.7	833.8	831.6	830.8	833.0	821.1	810.5
67.5°	643.5	660.2	727.0	800.0	841.8	861.1	862.9	865.5	867.7	860.2	848.8
70°	647.0	661.1	717.8	785.9	827.7	847.0	848.8	851.4	857.6	853.2	842.2
72.5°	620.7	634.3	684.0	747.2	784.2	800.4	803.1	807.5	815.8	814.5	805.7
75°	572.3	585.5	635.6	690.5	722.6	737.1	740.2	744.2	753.0	753.4	745.9
77.5°	512.5	526.6	576.3	621.5	648.8	662.4	667.7	673.0	680.9	680.0	673.4
80°	450.1	462.9	505.1	545.9	569.7	586.8	594.3	599.1	606.2	603.5	597.4
82.5°	371.0	380.7	414.5	451.4	472.5	487.5	496.3	502.9	507.7	507.2	501.5
85°	303.3	307.7	331.9	356.5	373.2	385.5	393.8	399.6	404.8	404.4	399.1
87.5°	243.5	247.0	258.0	269.4	279.6	289.2	297.6	302.0	305.1	304.6	302.4
90°	209.2	211.4	215.8	219.8	222.0	226.4	231.2	234.3	235.2	236.0	236.9
95°	179.3	180.2	182.4	182.9	182.4	181.1	182.0	182.9	185.5	188.1	188.1
105°	139.8	140.7	141.1	140.2	139.8	139.3	140.2	142.0	143.3	144.2	143.3
115°	106.4	106.8	107.7	107.3	107.7	107.3	107.7	109.0	109.4	109.9	109.4
125°	81.8	81.3	81.8	82.6	83.1	83.1	83.1	84.0	84.0	84.0	83.5
135°	58.9	58.9	59.3	59.8	59.8	61.1	61.5	62.0	61.1	61.5	61.5
145°	38.7	39.6	39.1	40.0	40.9	40.4	40.4	41.3	41.3	41.3	40.9
155°	22.9	23.3	23.3	23.7	23.7	24.6	24.6	24.2	25.1	25.1	24.2
165°	7.9	8.4	8.8	8.8	8.8	8.8	9.2	9.2	9.7	9.2	8.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	0.9	0.9	8.8	4.8	2.2	2.2	2.6	2.6	2.2	2.2	2.6
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5



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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°	0.9	1.3	0.9	0.4	0.4	0.9	0.4	0.9	0.9	0.9
10°	5.7	4.8	4.8	4.4	4.4	4.8	4.8	4.8	4.8	5.3
12.5°	11.0	10.1	10.1	9.7	10.1	11.0	11.0	11.4	11.4	11.4
15°	17.1	16.7	16.3	15.4	16.3	16.7	17.1	17.6	17.6	17.6
17.5°	25.1	25.1	24.2	24.2	24.2	24.6	25.1	25.5	25.5	26.4
20°	33.8	32.5	32.1	32.1	32.5	32.1	32.5	33.0	33.4	33.4
22.5°	42.6	41.8	40.4	40.9	40.9	41.3	41.3	42.2	41.3	41.3
25°	53.2	51.4	50.5	50.1	49.7	50.5	50.5	50.5	51.0	51.0
27.5°	62.4	60.7	60.2	59.3	59.8	59.8	59.8	59.8	59.3	58.9
30°	73.4	71.6	69.9	69.9	69.9	69.9	70.8	69.9	69.9	69.5
32.5°	86.2	83.5	82.6	81.8	82.2	82.2	82.6	82.2	81.3	81.8
35°	102.4	101.1	98.9	97.6	98.0	98.9	99.8	99.8	98.9	100.2
37.5°	125.3	122.2	120.9	119.1	119.1	120.4	122.2	122.2	122.6	122.2
40°	153.4	149.9	147.7	145.5	146.4	147.3	149.4	150.3	150.8	150.3
42.5°	186.4	182.0	177.1	174.5	174.5	178.0	180.7	182.9	184.2	184.6
45°	224.6	216.7	207.0	204.0	206.6	212.7	217.6	220.7	222.9	222.4
47.5°	264.2	251.0	237.8	233.0	240.4	250.1	258.0	261.5	264.6	265.5
50°	321.3	301.1	279.1	274.3	289.7	306.8	317.4	322.6	325.3	325.3
52.5°	402.2	372.7	338.5	329.2	353.0	378.5	394.7	404.4	407.0	407.9
55°	489.2	449.2	400.9	389.4	421.1	455.8	478.2	490.5	495.8	496.7
57.5°	568.8	519.1	461.5	446.6	484.0	526.6	554.7	567.5	573.6	573.2
60°	647.5	588.6	521.8	503.3	545.5	594.3	627.2	642.6	647.9	647.0
62.5°	723.5	659.3	580.2	558.7	608.3	663.3	697.6	713.4	716.5	714.7
65°	788.1	718.2	629.4	606.2	661.5	725.7	760.0	775.8	776.7	774.5
67.5°	825.9	753.8	669.4	644.8	698.9	766.6	804.4	819.8	821.1	818.5
70°	820.2	753.0	679.1	656.7	703.3	767.5	804.8	817.6	818.9	816.7
72.5°	785.1	724.8	658.9	638.7	679.6	735.4	768.8	777.1	775.4	772.7
75°	730.1	678.2	615.8	594.7	631.2	680.9	706.4	712.5	709.9	707.7
77.5°	663.3	621.1	560.9	538.9	574.9	617.1	636.5	640.0	637.8	634.7
80°	587.7	552.5	500.7	477.8	507.2	544.2	562.2	567.5	566.6	564.4
82.5°	492.3	461.1	418.5	399.1	422.9	452.3	467.7	472.1	470.3	468.6
85°	393.0	370.1	338.5	326.6	343.3	364.0	376.3	378.5	377.1	378.9
87.5°	298.9	286.6	269.0	263.3	272.1	281.8	287.0	287.5	287.0	287.5
90°	236.0	230.8	221.1	217.6	218.9	219.8	217.6	214.9	215.4	214.5
95°	187.7	185.1	181.1	178.9	179.8	179.3	178.0	174.1	172.3	173.2
105°	144.2	142.4	140.7	139.8	139.3	138.5	137.6	136.7	136.3	137.1
115°	109.0	107.7	106.8	105.9	106.8	106.4	105.5	105.1	105.1	105.5
125°	83.5	82.6	81.8	80.9	80.9	81.8	81.3	81.3	81.8	81.8
135°	60.7	60.7	58.9	58.9	59.3	59.3	59.3	59.8	59.8	59.8
145°	40.4	40.0	39.6	39.6	39.6	39.6	40.0	40.0	40.0	39.6
155°	24.2	23.7	23.7	23.7	24.2	24.2	24.2	24.2	23.7	24.6
165°	9.2	8.8	9.2	8.8	9.2	9.2	9.2	8.8	9.2	9.7



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	2.2	0.9	6.6	1.8	2.2	0.9	0.9	0.9	0.9	0.9
180°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

(END OF REPORT)