

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: STREETWORKS

Report Number: P212583

Luminaire Tested: **MPB-AF-D-U-ASYM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P212583
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25987)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MPB-AF-D-U-ASYM
Description: BRECKENRIDGE LED POST-TOP LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND ASYMMETRIC OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4560.3 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.62')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U4 - G3

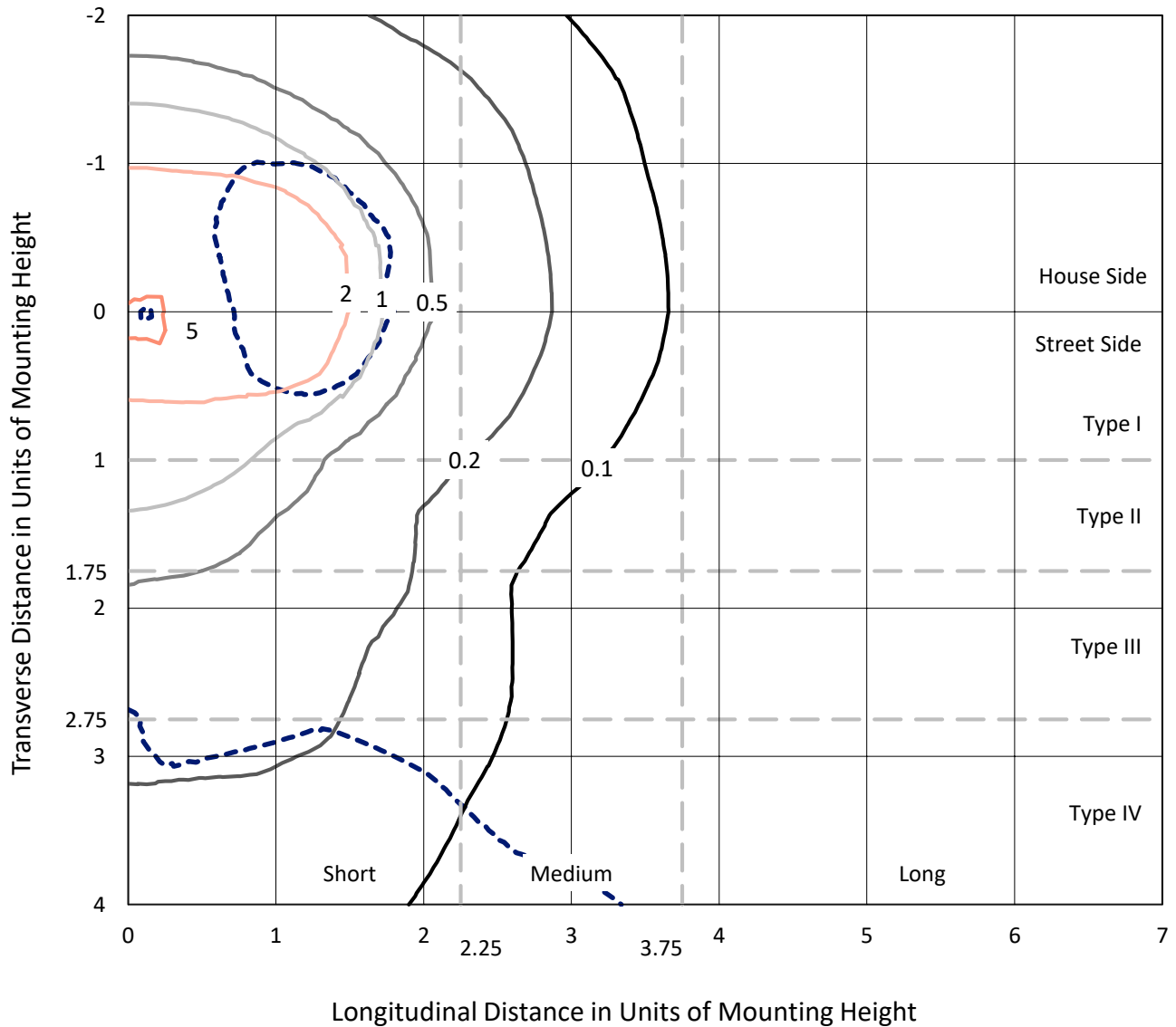
Input Watts (W): 58
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P212583
 CATALOG NUMBER: MPB-AF-D-U-ASYM

Iso-Footcandle Lines of Horizontal Illumination

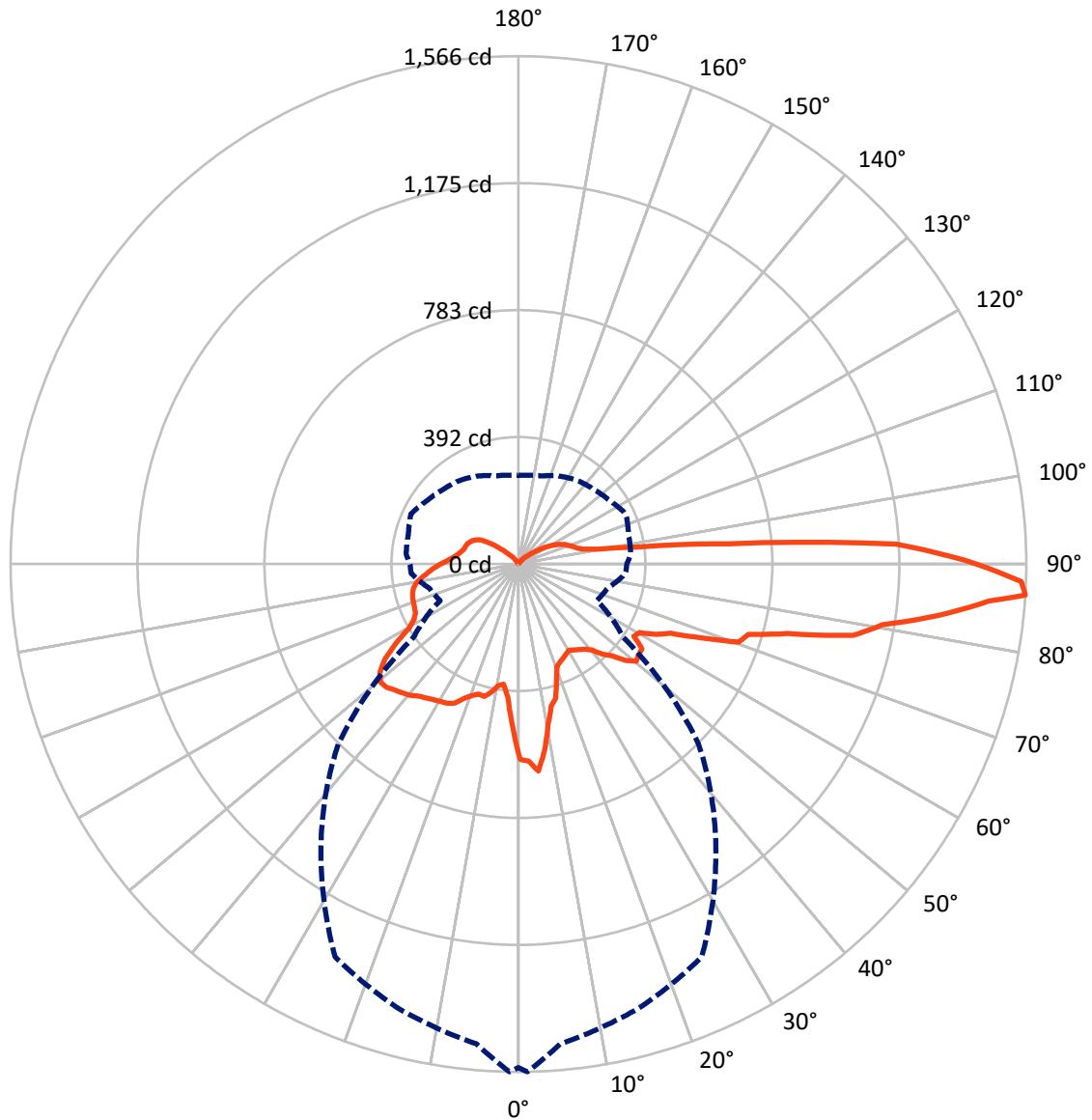
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P212583
CATALOG NUMBER: MPB-AF-D-U-ASYM

Luminous Intensity Polar Plot



— Vertical Plane Through 1-Deg Lateral - - - Horizontal Cone Through 86-Deg Vertical

REPORT NUMBER: P212583

CATALOG NUMBER: MPB-AF-D-U-ASYM

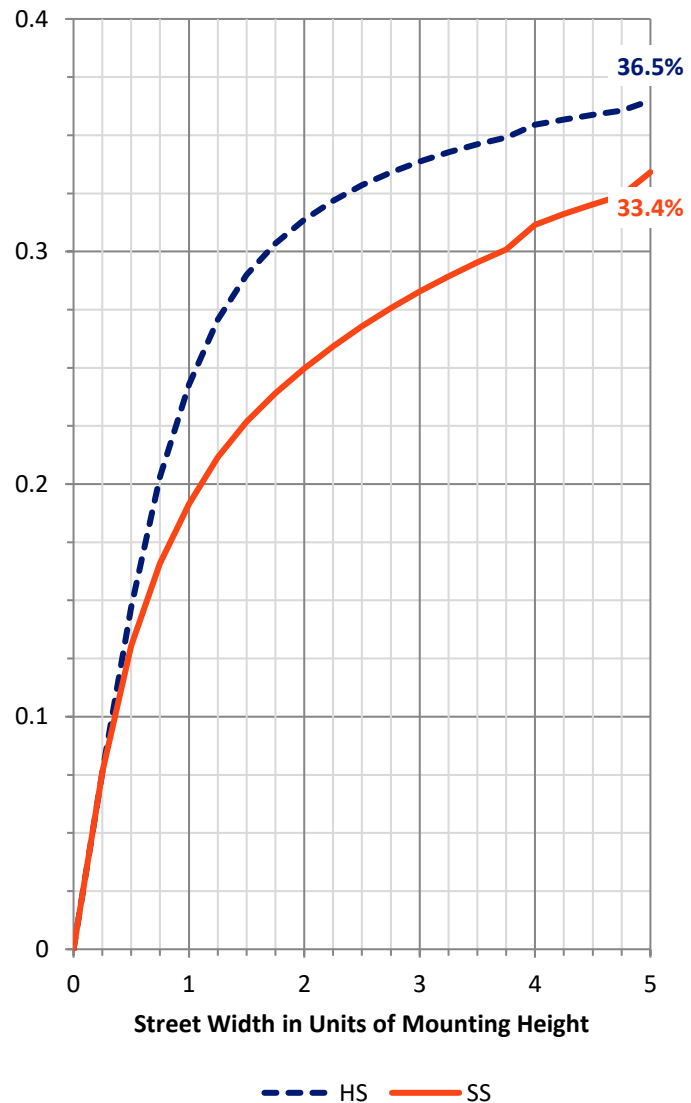
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1763.3	432.2	2195.5
	% Fixture	38.7	9.5	48.1
Street Side	Lumens	1854.8	510.0	2364.8
	% Fixture	40.7	11.2	51.9
Total	Lumens	3618.1	942.2	4560.3
	% Fixture	79.3	20.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	1.3
10°-20°	140.3	3.1
20°-30°	217.8	4.8
30°-40°	348.7	7.6
40°-50°	576.1	12.6
50°-60°	622.1	13.6
60°-70°	475.8	10.4
70°-80°	561.7	12.3
80°-90°	618.0	13.6
90°-100°	375.2	8.2
100°-110°	191.0	4.2
110°-120°	185.8	4.1
120°-130°	136.5	3.0
130°-140°	43.3	0.9
140°-150°	9.6	0.2
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	3618.1	79.3
0°-180°	4560.3	100.0



REPORT NUMBER: P212583

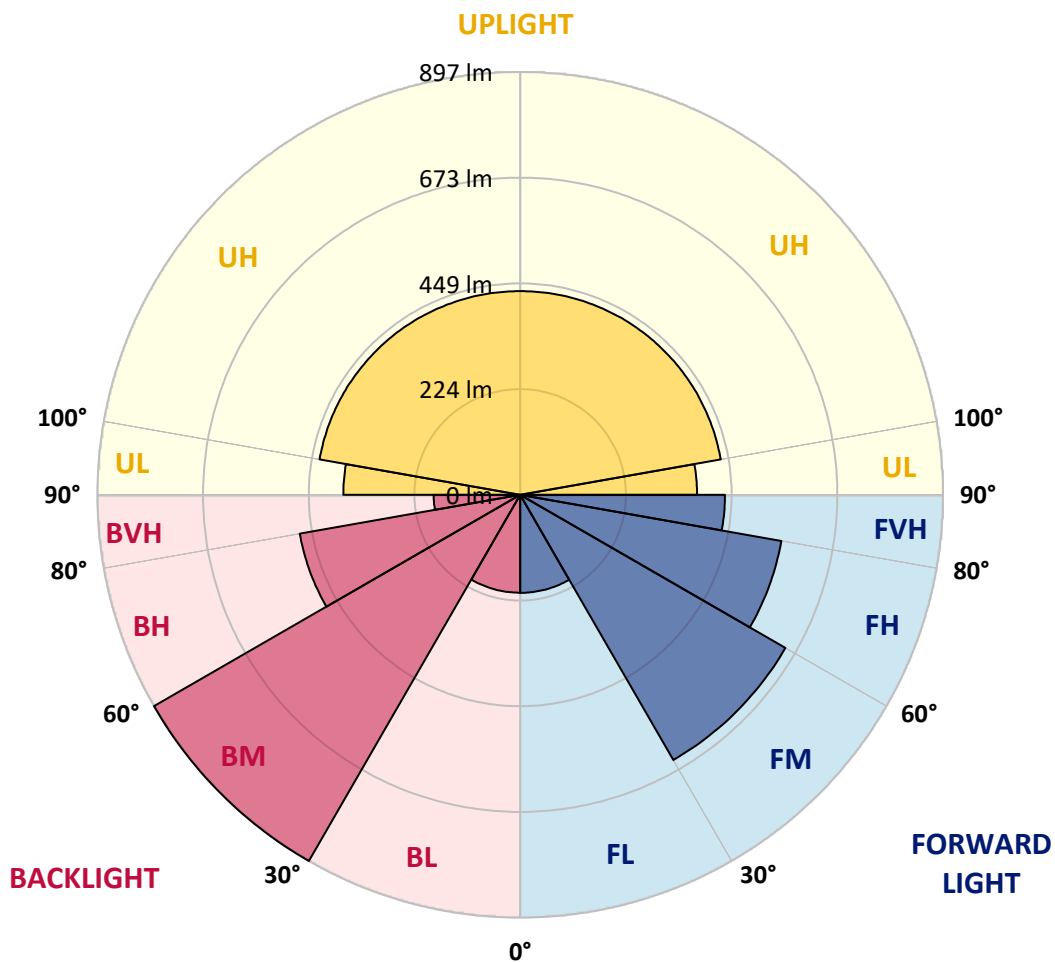
CATALOG NUMBER: MPB-AF-D-U-ASYM

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	208.0	4.6			
FM	(30°-60°)	649.7	14.2			
FH	(60°-80°)	562.6	12.3			G0/660
FVH	(80°-90°)	434.4	9.5			G3/500
BL	(0°-30°)	207.7	4.6	B1/500		
BM	(30°-60°)	897.2	19.7	B1/1000		
BH	(60°-80°)	474.8	10.4	B1/500		G1/500
BVH	(80°-90°)	183.6	4.0			G2/225
UL	(90°-100°)	375.2	8.2		U3/500	
UH	(100°-180°)	432.2	9.5		U3/500	

BUG Rating: B1-U4-G3

Type IV Short





REPORT NUMBER: P212583

CATALOG NUMBER: MPB-AF-D-U-ASYM

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3
2.5°	610.1	608.9	606.2	610.1	614.1	643.9	663.5	660.8	637.4	627.1	619.2
5°	650.5	641.4	634.8	645.3	645.3	699.9	727.2	686.9	679.0	698.6	677.8
7.5°	582.8	580.2	577.6	589.3	611.4	707.7	723.3	815.7	843.0	810.5	806.6
10°	498.3	502.2	498.3	560.7	647.8	714.2	627.1	650.5	693.4	707.7	638.7
12.5°	444.9	450.1	455.3	495.6	519.0	498.3	538.6	554.2	581.5	577.6	549.0
15°	424.1	429.3	426.7	408.5	434.5	472.2	504.7	536.0	567.2	537.3	537.3
17.5°	391.6	379.8	377.3	359.1	404.6	456.6	516.5	559.3	551.6	597.1	637.4
20°	342.2	338.2	338.2	347.4	386.4	450.1	558.1	654.4	719.4	668.7	607.5
22.5°	329.1	327.9	333.1	348.6	386.4	418.9	467.1	508.6	515.2	509.9	508.6
25°	321.3	321.3	326.5	344.7	359.1	383.8	442.3	478.7	481.3	507.4	507.4
27.5°	317.4	313.5	313.5	331.7	351.3	388.9	420.2	454.0	471.0	522.9	608.9
30°	309.6	308.3	309.6	327.9	357.7	382.5	422.8	451.4	476.2	528.1	552.9
32.5°	313.5	316.1	312.2	325.2	348.6	382.5	429.3	474.9	493.1	584.1	627.1
35°	324.0	324.0	318.8	325.2	343.4	377.3	434.5	503.5	537.3	655.7	719.4
37.5°	329.1	333.1	331.7	342.2	361.6	388.9	437.1	528.1	597.1	706.3	824.8
40°	348.6	348.6	350.0	368.2	382.5	400.7	438.4	541.1	675.1	767.5	957.5
42.5°	375.9	379.8	374.7	373.4	385.0	409.8	438.4	536.0	771.4	859.9	1112.3
45°	398.0	403.2	399.4	408.5	407.2	426.7	438.4	524.3	800.0	961.4	1248.9
47.5°	448.8	443.7	448.8	451.4	439.7	447.5	454.0	521.7	793.6	1081.1	1324.3
50°	469.6	471.0	467.1	459.2	456.6	448.8	455.3	503.5	771.4	1161.8	1372.5
52.5°	468.3	464.4	469.6	457.9	448.8	446.2	435.8	472.2	728.5	1122.7	1256.7
55°	467.1	461.9	452.8	437.1	421.5	418.9	413.7	438.4	628.3	940.6	1103.2
57.5°	420.2	420.2	415.0	415.0	402.0	388.9	388.9	381.2	525.6	762.3	948.4
60°	428.0	429.3	424.1	431.9	422.8	386.4	391.6	340.8	439.7	576.3	693.4
62.5°	482.6	477.4	465.7	465.7	454.0	394.1	366.8	329.1	396.8	491.7	578.9
65°	519.0	515.2	516.5	525.6	512.6	438.4	408.5	333.1	381.2	471.0	547.7
67.5°	603.6	606.2	610.1	634.8	589.3	496.9	455.3	342.2	374.7	467.1	539.9
70°	750.6	720.7	698.6	643.9	625.7	513.8	467.1	351.3	369.5	467.1	534.7
72.5°	732.4	741.5	729.8	750.6	745.4	599.8	480.1	365.6	365.6	459.2	533.4
75°	867.7	856.0	882.0	963.9	875.5	689.5	558.1	381.2	355.2	444.9	522.9
77.5°	1060.3	1056.3	1026.4	1003.0	950.9	729.8	647.8	424.1	330.4	415.0	493.1
80°	1150.0	1137.0	1157.8	1111.0	1086.3	840.4	638.7	405.9	301.8	377.3	447.5
82.5°	1310.0	1303.5	1316.5	1441.4	1238.5	962.7	702.5	415.0	282.3	337.0	396.8
85°	1449.2	1455.8	1498.6	1451.8	1345.2	1051.2	742.9	433.2	271.9	299.2	350.0
86°	1553.2	1566.3	1485.6	1420.6	1337.3	1061.5	785.7	394.1	266.7	284.9	331.7
87.5°	1532.5	1552.0	1523.4	1496.1	1395.9	1095.4	802.7	351.3	261.5	264.1	305.8
90°	1419.3	1376.4	1423.2	1466.1	1285.3	988.7	722.0	362.9	238.0	236.8	269.2
92.5°	1172.1	1166.9	1138.3	1129.2	1018.7	797.5	606.2	303.1	218.6	212.1	239.4
95°	694.7	653.1	631.0	742.9	675.1	614.1	446.2	282.3	196.4	190.0	210.7
97.5°	388.9	375.9	361.6	412.4	429.3	385.0	288.8	206.8	174.3	174.3	190.0
100°	262.8	252.4	248.5	249.8	270.6	249.8	208.2	169.1	157.4	163.9	175.6
102.5°	204.3	203.0	199.1	201.6	205.5	192.5	174.3	160.0	154.8	163.9	170.4
105°	186.1	186.1	182.1	180.9	184.7	173.0	163.9	154.8	157.4	170.4	174.3
107.5°	174.3	175.6	170.4	170.4	170.4	163.9	156.1	152.2	162.6	179.5	183.4



REPORT NUMBER: P212583

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CANDELA DISTRIBUTION (continued):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
110°	163.9	163.9	160.0	160.0	161.3	154.8	149.6	149.6	167.9	190.0	195.2
112.5°	153.5	154.8	150.9	150.9	150.9	145.7	143.1	148.3	174.3	203.0	210.7
115°	140.5	140.5	137.9	140.5	140.5	137.9	137.9	148.3	188.6	222.5	234.2
117.5°	124.9	124.9	123.6	127.5	128.8	130.1	134.0	149.6	204.3	244.6	262.8
120°	108.0	108.0	108.0	113.1	115.8	119.7	127.5	147.0	213.4	261.5	281.0
122.5°	89.7	89.7	89.7	93.7	97.6	105.4	115.8	136.6	204.3	252.4	274.5
125°	71.5	71.5	72.8	75.5	80.6	88.5	98.9	118.4	175.6	217.3	240.7
127.5°	57.3	57.3	57.3	59.8	63.7	71.5	80.6	97.6	137.9	173.0	195.2
130°	45.5	45.5	45.5	46.9	49.4	54.6	63.7	78.1	105.4	130.1	147.0
132.5°	36.4	35.1	36.4	36.4	39.1	43.0	48.2	57.3	74.2	92.4	105.4
135°	29.9	29.9	29.9	29.9	31.2	32.5	37.7	41.6	50.7	62.4	68.9
137.5°	23.4	23.4	23.4	23.4	24.8	24.8	27.3	31.2	35.1	43.0	49.4
140°	18.2	18.2	18.2	18.2	18.2	19.5	20.8	22.1	26.0	32.5	37.7
142.5°	14.3	14.3	14.3	14.3	14.3	14.3	15.7	16.9	19.5	23.4	27.3
145°	9.1	10.4	9.1	9.1	9.1	9.1	10.4	10.4	13.0	15.7	18.2
147.5°	5.2	6.5	5.2	5.2	5.2	5.2	5.2	6.5	6.5	9.1	10.4
150°	2.6	2.6	2.6	2.6	2.6	1.3	2.6	2.6	2.6	3.9	5.2
152.5°	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	2.6	2.6
155°	0.0	0.0	0.0	1.3	1.3	1.3	0.0	1.3	1.3	2.6	2.6
157.5°	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	2.6	2.6
160°	0.0	0.0	0.0	1.3	1.3	1.3	0.0	1.3	1.3	2.6	2.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3	602.3
2.5°	616.6	616.6	620.5	620.5	616.6	601.0	577.6	554.2	526.8	507.4	502.2
5°	663.5	642.6	620.5	584.1	552.9	546.4	499.5	456.6	431.9	413.7	411.1
7.5°	806.6	780.5	690.8	666.0	624.4	572.4	441.0	398.0	381.2	374.7	373.4
10°	606.2	572.4	519.0	499.5	491.7	463.1	420.2	394.1	385.0	382.5	379.8
12.5°	530.8	513.8	490.4	473.5	461.9	438.4	413.7	398.0	395.5	403.2	404.6
15°	529.5	536.0	524.3	484.0	451.4	431.9	417.6	415.0	416.3	422.8	421.5
17.5°	654.4	628.3	585.4	524.3	477.4	478.7	476.2	437.1	431.9	421.5	418.9
20°	584.1	558.1	552.9	516.5	503.5	461.9	471.0	454.0	444.9	433.2	429.3
22.5°	506.1	494.4	472.2	463.1	459.2	472.2	472.2	457.9	452.8	447.5	446.2
25°	500.8	502.2	528.1	526.8	489.2	495.6	486.5	471.0	471.0	473.5	471.0
27.5°	608.9	576.3	539.9	538.6	522.9	539.9	511.3	489.2	487.8	484.0	481.3
30°	556.8	556.8	565.9	563.3	551.6	542.5	526.8	506.1	498.3	489.2	486.5
32.5°	632.3	637.4	658.3	634.8	606.2	578.9	551.6	521.7	506.1	494.4	493.1
35°	698.6	709.0	767.5	719.4	681.7	623.2	581.5	537.3	513.8	503.5	500.8
37.5°	784.5	793.6	891.1	814.4	754.5	671.3	614.1	555.5	525.6	511.3	509.9
40°	899.0	900.2	1005.6	936.6	866.4	724.7	633.5	569.8	541.1	525.6	524.3
42.5°	1051.2	1043.3	1173.4	1107.0	957.5	763.6	642.6	573.7	546.4	536.0	534.7
45°	1193.0	1182.5	1289.2	1261.9	997.8	788.4	654.4	586.7	555.5	546.4	543.8
47.5°	1287.9	1303.5	1380.3	1373.7	1022.5	798.7	673.9	601.0	567.2	558.1	556.8
50°	1386.8	1405.0	1481.7	1367.3	1038.1	806.6	688.1	611.4	572.4	562.0	559.3
52.5°	1408.9	1414.1	1466.1	1295.7	1004.3	783.2	676.5	598.4	556.8	545.1	541.1
55°	1260.6	1221.6	1391.9	1121.4	915.8	714.2	633.5	560.7	519.0	509.9	504.7
57.5°	1044.6	984.8	1120.1	927.5	781.8	636.2	563.3	504.7	465.7	455.3	450.1
60°	774.1	722.0	815.7	710.3	634.8	522.9	464.4	430.6	399.4	392.9	391.6
62.5°	637.4	612.7	659.6	606.2	546.4	467.1	422.8	394.1	366.8	364.3	364.3
65°	589.3	584.1	611.4	573.7	520.4	450.1	409.8	382.5	356.5	352.5	351.3
67.5°	568.5	569.8	582.8	564.6	517.7	447.5	407.2	378.6	352.5	348.6	347.4
70°	562.0	562.0	562.0	564.6	521.7	447.5	407.2	379.8	351.3	346.1	344.7
72.5°	558.1	558.1	549.0	559.3	517.7	444.9	407.2	378.6	350.0	343.4	342.2
75°	542.5	543.8	532.0	549.0	504.7	439.7	405.9	375.9	346.1	339.5	338.2
77.5°	508.6	511.3	503.5	525.6	482.6	429.3	399.4	370.7	340.8	333.1	331.7
80°	456.6	468.3	464.4	485.3	447.5	408.5	382.5	356.5	327.9	321.3	320.0
82.5°	400.7	415.0	417.6	433.2	403.2	375.9	353.8	333.1	307.0	301.8	300.5
85°	352.5	365.6	370.7	383.8	359.1	340.8	325.2	308.3	287.6	282.3	281.0
86°	334.3	347.4	351.3	365.6	342.2	326.5	314.9	299.2	281.0	274.5	273.2
87.5°	308.3	320.0	326.5	338.2	317.4	305.8	297.9	286.2	269.2	264.1	262.8
90°	271.9	283.6	287.6	294.0	277.1	270.6	268.0	260.1	248.5	243.3	243.3
92.5°	240.7	251.0	255.0	258.9	244.6	239.4	240.7	236.8	228.9	225.0	223.7
95°	212.1	221.2	223.7	227.7	215.9	214.6	221.2	219.8	213.4	209.4	208.2
97.5°	191.2	197.7	200.3	201.6	195.2	197.7	204.3	205.5	201.6	197.7	196.4
100°	177.0	180.9	184.7	187.3	180.9	184.7	192.5	193.8	191.2	188.6	187.3
102.5°	171.8	174.3	180.9	183.4	175.6	177.0	183.4	186.1	183.4	180.9	180.9
105°	175.6	177.0	187.3	191.2	179.5	175.6	178.2	180.9	177.0	175.6	175.6
107.5°	184.7	186.1	200.3	204.3	191.2	180.9	178.2	178.2	175.6	173.0	173.0



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CATALOG NUMBER: MPB-AF-D-U-ASYM

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	196.4	200.3	215.9	223.7	208.2	187.3	178.2	177.0	174.3	170.4	171.8
112.5°	213.4	215.9	234.2	244.6	226.4	193.8	178.2	174.3	170.4	167.9	169.1
115°	238.0	236.8	258.9	268.0	243.3	200.3	179.5	170.4	166.5	163.9	163.9
117.5°	266.7	264.1	286.2	286.2	256.2	205.5	179.5	166.5	161.3	158.8	158.8
120°	286.2	281.0	305.8	295.3	257.6	205.5	178.2	161.3	154.8	152.2	150.9
122.5°	282.3	277.1	305.8	282.3	238.0	190.0	166.5	152.2	144.4	141.8	140.5
125°	247.1	241.9	260.1	238.0	200.3	158.8	140.5	128.8	124.9	122.2	122.2
127.5°	200.3	196.4	200.3	186.1	157.4	127.5	113.1	105.4	102.8	101.5	101.5
130°	147.0	148.3	150.9	140.5	118.4	98.9	87.2	81.9	80.6	79.4	79.4
132.5°	106.7	106.7	109.3	102.8	85.8	74.2	67.6	63.7	63.7	62.4	62.4
135°	71.5	72.8	75.5	71.5	61.2	53.3	49.4	48.2	48.2	46.9	46.9
137.5°	50.7	53.3	54.6	50.7	45.5	40.3	36.4	35.1	36.4	35.1	35.1
140°	39.1	40.3	41.6	39.1	33.9	29.9	28.6	27.3	27.3	27.3	27.3
142.5°	29.9	29.9	31.2	28.6	24.8	22.1	20.8	20.8	20.8	20.8	20.8
145°	19.5	20.8	20.8	19.5	16.9	15.7	14.3	13.0	13.0	13.0	13.0
147.5°	10.4	11.7	13.0	11.7	10.4	9.1	7.8	7.8	6.5	6.5	6.5
150°	5.2	5.2	6.5	6.5	5.2	3.9	2.6	2.6	2.6	1.3	1.3
152.5°	2.6	2.6	3.9	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
155°	2.6	2.6	3.9	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
157.5°	2.6	2.6	2.6	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
160°	2.6	2.6	2.6	3.9	2.6	1.3	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)