

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: P212614

Luminaire Tested: **MPW-AF-D-U-ASYM-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P212614
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14376)
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MPW-AF-D-U-ASYM-7050
Description: WOODBRIDGE LED POST-TOP LUMINAIRE
(1) 70 CRI, 5000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND ASYMMETRIC OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4226 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.58')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U3 - G2

Input Watts (W): 58
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: 28.75 FT

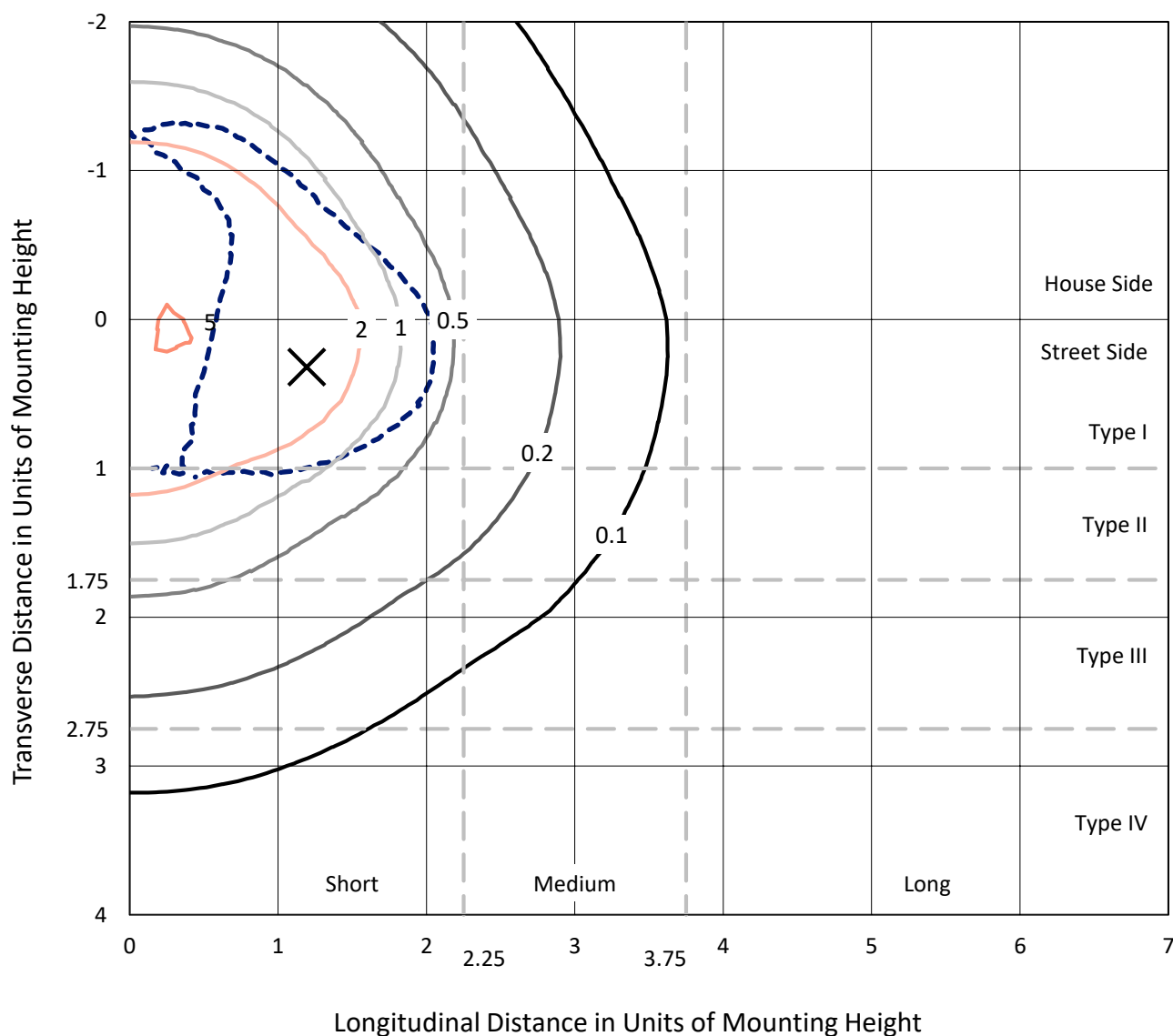


REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

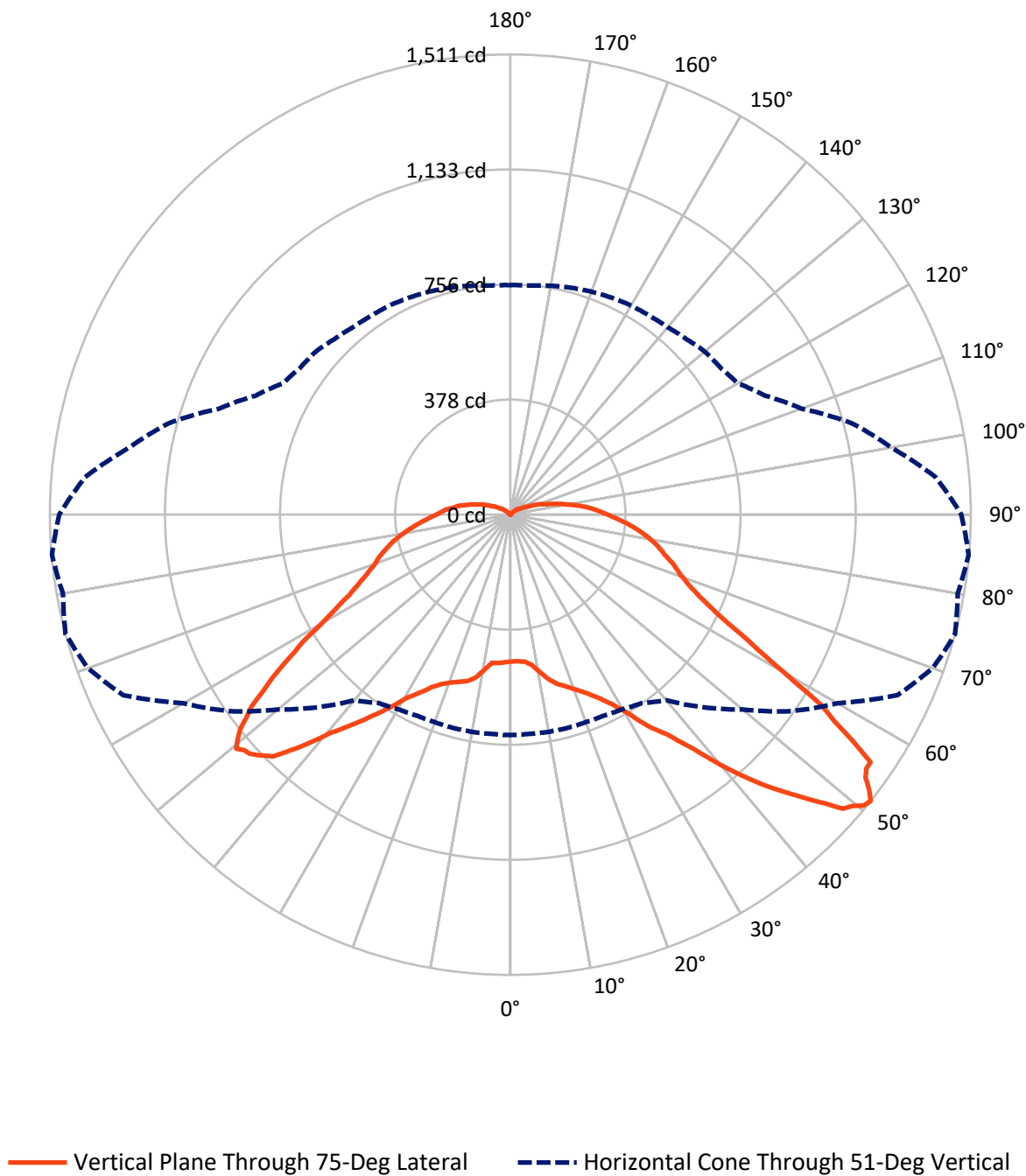


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P212614

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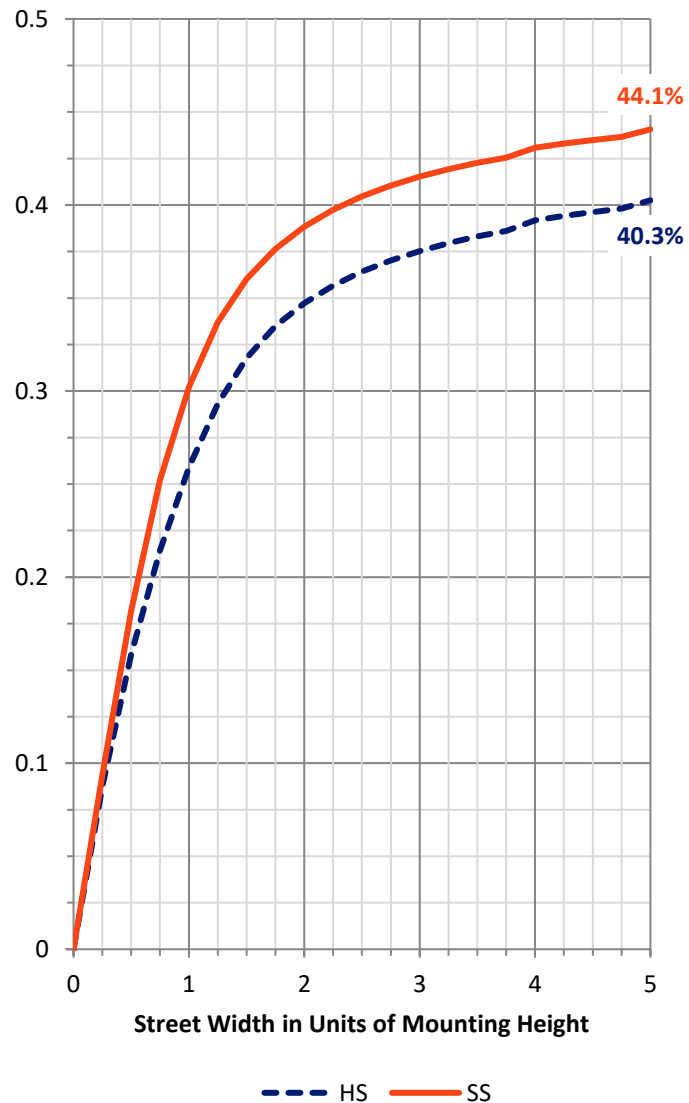
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1797.6	250.5	2048.1
	% Fixture	42.5	5.9	48.5
Street Side	Lumens	1945.4	232.5	2177.9
	% Fixture	46.0	5.5	51.5
Total	Lumens	3743.0	483.0	4226.0
	% Fixture	88.6	11.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	1.1
10°-20°	152.7	3.6
20°-30°	279.5	6.6
30°-40°	461.3	10.9
40°-50°	717.9	17.0
50°-60°	775.3	18.3
60°-70°	539.9	12.8
70°-80°	435.8	10.3
80°-90°	334.2	7.9
90°-100°	238.3	5.6
100°-110°	143.6	3.4
110°-120°	68.4	1.6
120°-130°	27.2	0.6
130°-140°	5.3	0.1
140°-150°	0.1	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3743.0	88.6
0°-180°	4226.0	100.0

Coefficient of Utilization



REPORT NUMBER: P212614

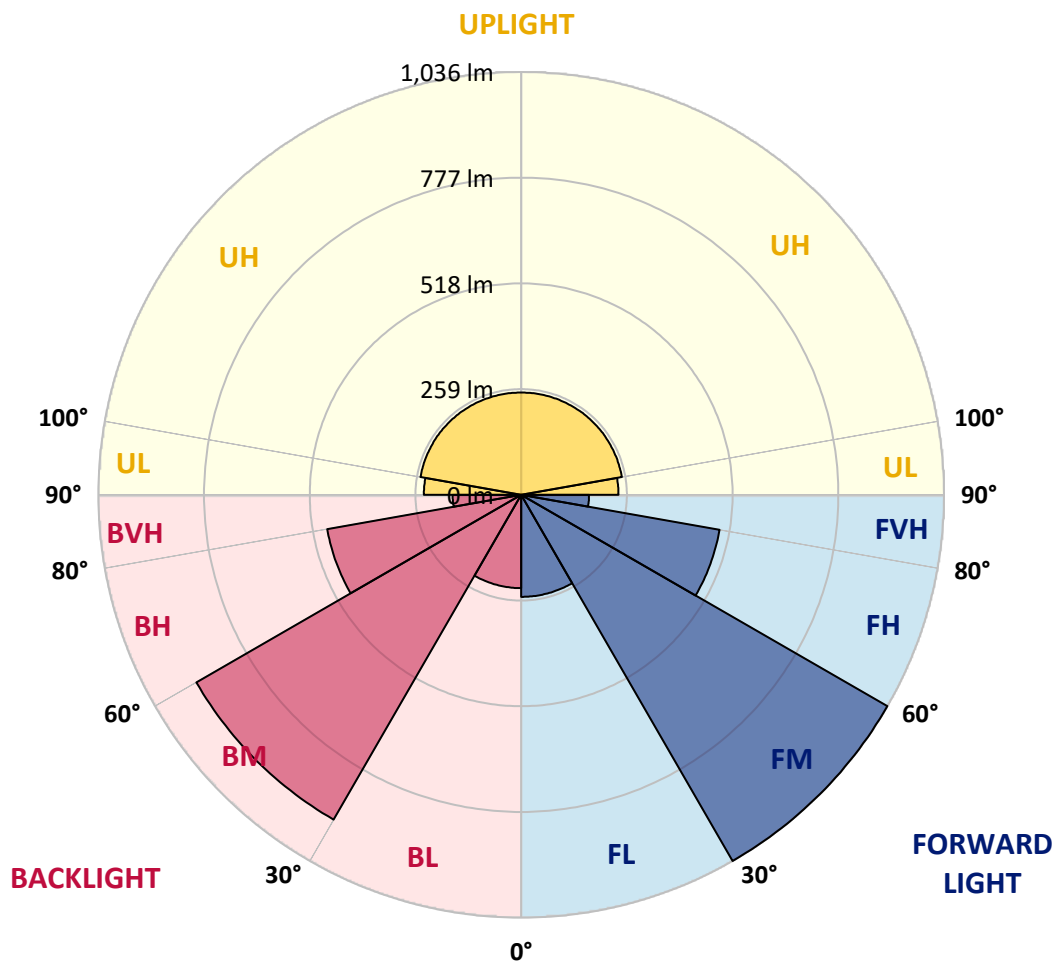
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	250.0	5.9			
FM	(30°-60°)	1035.7	24.5			
FH	(60°-80°)	493.4	11.7			G0/660
FVH	(80°-90°)	166.3	3.9			G2/225
BL	(0°-30°)	228.6	5.4	B1/500		
BM	(30°-60°)	918.8	21.7	B1/1000		
BH	(60°-80°)	482.4	11.4	B1/500		G1/500
BVH	(80°-90°)	167.9	4.0			G2/225
UL	(90°-100°)	238.3	5.6		U3/500	
UH	(100°-180°)	250.5	5.9		U3/500	

BUG Rating: B1-U3-G2

Type II Short



REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	479.4	479.4	479.4	479.4	480.8	479.4	480.8	479.4	480.8	480.8	482.1
5°	463.2	463.2	465.9	465.9	467.3	468.6	471.3	471.3	474.0	475.4	476.7
7.5°	471.3	472.7	472.7	471.3	472.7	475.4	476.7	479.4	483.5	486.2	490.2
10°	487.5	486.2	487.5	487.5	488.9	491.6	495.6	501.0	503.7	509.1	514.5
12.5°	506.4	506.4	509.1	509.1	511.8	515.9	522.6	525.3	529.4	536.1	541.5
15°	529.4	529.4	530.7	532.1	534.8	540.2	545.6	549.7	552.4	556.4	560.5
17.5°	555.1	557.8	559.1	561.8	563.2	567.2	569.9	571.3	572.6	574.0	578.0
20°	576.7	576.7	579.4	582.1	584.8	591.5	592.9	592.9	591.5	594.2	596.9
22.5°	576.7	575.3	582.1	591.5	598.3	605.0	609.1	611.8	614.5	613.1	617.2
25°	564.5	565.9	572.6	583.4	598.3	610.4	621.2	628.0	634.7	636.1	641.5
27.5°	582.1	582.1	588.8	598.3	610.4	623.9	637.4	650.9	660.4	669.8	676.6
30°	596.9	599.6	607.7	619.9	629.3	642.8	657.7	673.9	687.4	699.6	709.0
32.5°	623.9	625.3	630.7	638.8	652.3	668.5	686.1	705.0	725.2	740.1	754.9
35°	653.6	649.6	649.6	656.3	667.1	682.0	702.3	726.6	764.4	784.6	804.9
37.5°	676.6	676.6	677.9	682.0	687.4	698.2	717.1	746.8	791.4	837.3	857.6
40°	711.7	711.7	710.4	714.4	719.8	729.3	745.5	773.8	811.6	887.3	939.9
42.5°	737.4	736.0	737.4	742.8	744.1	750.9	767.1	798.1	838.7	908.9	1000.7
45°	752.2	752.2	750.9	753.6	757.6	765.7	776.5	807.6	860.3	931.8	1026.4
46°	753.6	753.6	752.2	754.9	759.0	765.7	775.2	804.9	863.0	938.6	1027.7
47°	752.2	749.5	749.5	750.9	753.6	759.0	768.4	794.1	856.2	927.8	1029.1
48°	748.2	746.8	748.2	750.9	750.9	757.6	765.7	790.0	848.1	926.4	1046.6
49°	745.5	745.5	746.8	748.2	750.9	754.9	765.7	788.7	836.0	925.1	1035.8
50°	740.1	740.1	741.4	744.1	742.8	744.1	754.9	772.5	815.7	914.3	1022.3
51°	723.9	722.5	723.9	725.2	725.2	727.9	737.4	754.9	795.4	894.0	995.3
52°	703.6	703.6	705.0	707.7	709.0	711.7	719.8	736.0	773.8	872.4	971.0
53°	673.9	676.6	683.4	683.4	686.1	690.1	699.6	715.8	750.9	836.0	939.9
54°	659.0	661.7	668.5	672.5	675.2	683.4	692.8	706.3	736.0	807.6	929.1
55°	625.3	628.0	633.4	640.1	642.8	650.9	660.4	676.6	707.7	772.5	880.5
56°	599.6	601.0	607.7	611.8	613.1	617.2	625.3	636.1	663.1	715.8	818.4
57°	576.7	574.0	578.0	583.4	584.8	588.8	596.9	605.0	628.0	677.9	768.4
58°	542.9	537.5	542.9	547.0	549.7	553.7	561.8	568.6	588.8	634.7	714.4
59°	515.9	518.6	524.0	528.0	530.7	534.8	538.8	547.0	564.5	601.0	676.6
60°	497.0	498.3	501.0	505.1	507.8	511.8	515.9	522.6	538.8	571.3	638.8
61°	480.8	480.8	484.8	488.9	488.9	492.9	495.6	501.0	515.9	542.9	603.7
62°	467.3	464.6	468.6	474.0	474.0	478.1	479.4	484.8	497.0	519.9	575.3
63°	451.1	452.4	453.8	459.2	459.2	463.2	463.2	470.0	478.1	499.7	549.7
64°	436.2	440.3	438.9	443.0	444.3	445.7	448.4	452.4	460.5	482.1	526.7
65°	430.8	430.8	434.9	436.2	437.6	440.3	443.0	447.0	455.1	472.7	519.9
66°	422.7	422.7	425.4	428.1	428.1	430.8	434.9	438.9	445.7	461.9	505.1
67°	414.6	414.6	416.0	418.7	418.7	420.0	424.1	428.1	436.2	452.4	492.9
68°	406.5	406.5	407.8	409.2	409.2	410.6	414.6	420.0	428.1	443.0	482.1
69°	401.1	395.7	399.7	399.7	399.7	402.4	403.8	409.2	420.0	436.2	471.3
70°	387.6	388.9	390.3	391.6	391.6	390.3	391.6	398.4	407.8	424.1	459.2
72.5°	370.0	371.4	372.7	372.7	371.4	371.4	372.7	376.8	384.9	401.1	433.5



REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
75°	344.4	347.1	347.1	347.1	344.4	344.4	345.7	348.4	353.8	368.7	397.0
77.5°	328.2	326.8	328.2	326.8	325.5	325.5	324.1	325.5	329.5	343.0	368.7
80°	309.3	305.2	306.6	303.9	303.9	302.5	299.8	299.8	303.9	320.1	340.3
82.5°	285.0	283.6	285.0	283.6	280.9	278.2	275.5	276.9	280.9	287.7	309.3
85°	263.3	266.0	264.7	262.0	257.9	255.2	252.5	253.9	255.2	260.6	280.9
87.5°	247.1	245.8	247.1	243.1	240.4	237.7	235.0	233.6	235.0	240.4	251.2
90°	232.3	232.3	230.9	229.6	225.5	224.2	220.1	218.8	218.8	224.2	237.7
92.5°	221.5	220.1	217.4	217.4	212.0	208.0	206.6	205.3	203.9	209.3	221.5
95°	203.9	202.6	202.6	201.2	197.2	194.5	191.8	190.4	191.8	194.5	205.3
97.5°	178.3	182.3	178.3	178.3	174.2	172.9	171.5	168.8	168.8	172.9	181.0
100°	167.5	166.1	164.8	163.4	162.1	160.7	159.4	158.0	158.0	162.1	167.5
102.5°	151.3	147.2	147.2	141.8	141.8	141.8	140.5	140.5	141.8	147.2	149.9
105°	126.9	125.6	125.6	124.2	124.2	122.9	122.9	121.5	124.2	125.6	131.0
107.5°	108.0	108.0	108.0	106.7	106.7	106.7	106.7	106.7	106.7	109.4	113.4
110°	91.8	90.5	91.8	90.5	91.8	90.5	90.5	90.5	93.2	94.5	101.3
112.5°	72.9	74.3	75.6	74.3	74.3	75.6	75.6	75.6	77.0	78.3	81.0
115°	60.8	56.7	56.7	58.1	56.7	58.1	58.1	60.8	60.8	63.5	63.5
117.5°	47.3	47.3	47.3	48.6	48.6	48.6	50.0	51.3	51.3	52.7	54.0
120°	35.1	36.5	33.8	37.8	35.1	36.5	36.5	37.8	41.9	39.2	40.5
122.5°	28.4	28.4	28.4	29.7	29.7	29.7	29.7	31.1	31.1	31.1	32.4
125°	23.0	24.3	25.7	25.7	24.3	25.7	25.7	25.7	27.0	29.7	29.7
127.5°	18.9	17.6	18.9	18.9	20.3	20.3	18.9	18.9	20.3	20.3	21.6
130°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	14.9	14.9	14.9	14.9
132.5°	4.1	5.4	5.4	5.4	5.4	6.8	5.4	6.8	6.8	5.4	6.8
135°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1	2.7	1.4	2.7
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.4	1.4	1.4	0.0	1.4	2.7	1.4	1.4	1.4	0.0	1.4
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	482.1	482.1	483.5	482.1	482.1	482.1	483.5	483.5	483.5	484.8	484.8
5°	476.7	480.8	480.8	483.5	484.8	486.2	487.5	486.2	487.5	487.5	488.9
7.5°	491.6	491.6	495.6	495.6	497.0	497.0	498.3	494.3	494.3	492.9	490.2
10°	519.9	522.6	524.0	525.3	524.0	522.6	519.9	519.9	519.9	517.2	515.9
12.5°	544.3	549.7	552.4	555.1	553.7	553.7	551.0	549.7	549.7	549.7	547.0
15°	565.9	569.9	574.0	576.7	576.7	575.3	576.7	572.6	572.6	568.6	564.5
17.5°	583.4	588.8	591.5	595.6	592.9	591.5	590.2	586.1	583.4	579.4	574.0
20°	602.3	606.4	610.4	614.5	613.1	610.4	606.4	602.3	596.9	592.9	584.8
22.5°	622.6	628.0	633.4	636.1	636.1	633.4	628.0	623.9	615.8	609.1	599.6
25°	646.9	653.6	660.4	663.1	664.4	661.7	653.6	648.2	641.5	632.0	622.6
27.5°	683.4	692.8	699.6	702.3	702.3	700.9	694.2	688.8	677.9	669.8	656.3
30°	718.5	734.7	746.8	759.0	753.6	748.2	744.1	736.0	722.5	709.0	691.5
32.5°	775.2	795.4	817.1	826.5	826.5	822.5	813.0	804.9	794.1	773.8	746.8
35°	831.9	857.6	883.2	887.3	885.9	884.6	876.5	876.5	865.7	833.3	802.2
37.5°	887.3	937.2	967.0	976.4	975.1	975.1	962.9	958.9	935.9	900.8	864.3
40°	954.8	1025.0	1083.1	1099.3	1095.3	1088.5	1072.3	1064.2	1034.5	980.5	929.1
42.5°	1037.2	1111.5	1196.5	1224.9	1210.0	1197.9	1197.9	1174.9	1147.9	1091.2	1022.3
45°	1108.8	1170.9	1296.5	1338.3	1315.4	1291.1	1300.5	1291.1	1258.7	1187.1	1112.8
46°	1126.3	1201.9	1349.1	1389.7	1361.3	1335.6	1346.4	1332.9	1297.8	1222.2	1129.0
47°	1152.0	1230.3	1388.3	1435.6	1404.5	1365.4	1392.4	1374.8	1328.9	1249.2	1146.6
48°	1164.1	1253.3	1426.1	1469.3	1457.2	1403.2	1434.2	1404.5	1370.8	1268.1	1161.4
49°	1157.4	1250.6	1428.8	1486.9	1473.4	1436.9	1458.5	1427.5	1366.7	1287.0	1166.8
50°	1152.0	1249.2	1423.4	1493.6	1501.8	1477.4	1477.4	1454.5	1380.2	1270.8	1183.0
51°	1125.0	1238.4	1401.8	1474.7	1511.2	1490.9	1509.9	1480.1	1401.8	1269.5	1160.1
52°	1085.8	1220.8	1378.9	1458.5	1484.2	1472.0	1507.2	1495.0	1411.3	1269.5	1133.1
53°	1049.3	1203.3	1337.0	1430.2	1450.4	1428.8	1457.2	1465.3	1369.4	1257.3	1091.2
54°	1012.9	1152.0	1320.8	1451.8	1435.6	1407.2	1446.4	1445.0	1345.1	1191.1	1054.7
55°	962.9	1084.4	1254.6	1399.1	1434.2	1408.6	1439.6	1412.6	1284.3	1130.4	996.7
56°	904.8	1027.7	1146.6	1287.0	1349.1	1374.8	1401.8	1365.4	1224.9	1081.7	948.0
57°	842.7	942.6	1043.9	1164.1	1260.0	1280.3	1299.2	1278.9	1142.5	1012.9	894.0
58°	783.3	871.1	958.9	1069.6	1199.2	1231.7	1231.7	1216.8	1069.6	952.1	840.0
59°	742.8	819.8	894.0	998.0	1085.8	1103.4	1114.2	1106.1	999.4	892.7	796.8
60°	699.6	767.1	841.4	930.5	994.0	1003.4	1006.1	987.2	906.2	825.2	738.7
61°	659.0	722.5	783.3	861.6	919.7	931.8	931.8	907.5	840.0	761.7	692.8
62°	628.0	683.4	734.7	800.8	857.6	872.4	865.7	846.8	787.3	714.4	655.0
63°	599.6	650.9	696.9	750.9	796.8	810.3	803.5	790.0	738.7	676.6	623.9
64°	574.0	619.9	661.7	709.0	749.5	761.7	749.5	740.1	696.9	637.4	590.2
65°	561.8	605.0	641.5	682.0	713.1	719.8	711.7	696.9	661.7	613.1	567.2
66°	548.3	587.5	621.2	655.0	679.3	686.1	679.3	664.4	630.7	587.5	545.6
67°	533.4	569.9	602.3	633.4	653.6	657.7	653.6	640.1	606.4	565.9	526.7
68°	521.3	556.4	584.8	613.1	629.3	634.7	633.4	618.5	582.1	545.6	509.1
69°	510.5	542.9	572.6	595.6	611.8	613.1	613.1	599.6	565.9	530.7	495.6
70°	498.3	529.4	555.1	579.4	592.9	595.6	595.6	582.1	552.4	515.9	478.1
72.5°	474.0	501.0	528.0	547.0	560.5	564.5	568.6	555.1	521.3	487.5	452.4



REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
75°	440.3	464.6	490.2	507.8	522.6	526.7	532.1	522.6	488.9	455.1	424.1
77.5°	406.5	430.8	456.5	478.1	494.3	499.7	503.7	494.3	460.5	429.5	395.7
80°	372.7	394.3	422.7	443.0	460.5	464.6	470.0	455.1	429.5	394.3	363.3
82.5°	341.7	361.9	387.6	407.8	425.4	432.2	429.5	418.7	390.3	359.2	332.2
85°	309.3	328.2	351.1	368.7	386.2	390.3	388.9	376.8	352.5	325.5	301.2
87.5°	282.3	299.8	318.7	330.9	347.1	349.8	348.4	336.3	316.0	294.4	272.8
90°	259.3	274.2	291.7	301.2	312.0	320.1	317.4	305.2	286.3	268.7	247.1
92.5°	243.1	253.9	267.4	276.9	283.6	289.0	289.0	278.2	262.0	244.4	228.2
95°	220.1	229.6	241.7	248.5	253.9	260.6	260.6	252.5	239.0	225.5	212.0
97.5°	194.5	201.2	208.0	213.4	217.4	222.8	220.1	216.1	208.0	197.2	187.7
100°	172.9	175.6	179.6	183.7	185.0	189.1	190.4	189.1	183.7	178.3	172.9
102.5°	154.0	156.7	156.7	158.0	158.0	156.7	158.0	156.7	155.3	156.7	151.3
105°	131.0	133.7	131.0	128.3	128.3	129.6	131.0	132.3	132.3	133.7	132.3
107.5°	116.1	116.1	114.8	112.1	112.1	112.1	112.1	112.1	114.8	116.1	114.8
110°	99.9	97.2	97.2	95.9	94.5	94.5	95.9	94.5	95.9	98.6	99.9
112.5°	82.4	81.0	79.7	78.3	75.6	77.0	79.7	79.7	82.4	83.7	83.7
115°	63.5	64.8	66.2	62.1	60.8	60.8	60.8	63.5	64.8	64.8	67.5
117.5°	54.0	55.4	54.0	54.0	52.7	52.7	54.0	54.0	56.7	59.4	59.4
120°	41.9	40.5	40.5	43.2	40.5	41.9	43.2	41.9	41.9	45.9	48.6
122.5°	33.8	35.1	35.1	33.8	35.1	36.5	35.1	36.5	35.1	36.5	37.8
125°	31.1	31.1	31.1	31.1	31.1	32.4	33.8	33.8	32.4	32.4	33.8
127.5°	23.0	24.3	24.3	25.7	25.7	25.7	27.0	27.0	25.7	25.7	25.7
130°	17.6	17.6	18.9	23.0	20.3	20.3	21.6	20.3	21.6	21.6	18.9
132.5°	6.8	8.1	8.1	9.5	10.8	12.2	12.2	12.2	10.8	12.2	10.8
135°	4.1	2.7	4.1	5.4	4.1	6.8	6.8	5.4	6.8	6.8	6.8
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.7	1.4	1.4	1.4	1.4	0.0	0.0	0.0	1.4	2.7	1.4
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P212614

CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1	482.1
2.5°	484.8	484.8	483.5	484.8	486.2	484.8	484.8	484.8	483.5	484.8	484.8
5°	488.9	488.9	490.2	488.9	490.2	490.2	490.2	488.9	487.5	487.5	484.8
7.5°	488.9	487.5	488.9	488.9	487.5	483.5	479.4	475.4	472.7	471.3	470.0
10°	513.2	509.1	503.7	497.0	490.2	483.5	478.1	471.3	464.6	461.9	456.5
12.5°	538.8	533.4	525.3	521.3	513.2	506.4	497.0	488.9	480.8	470.0	464.6
15°	559.1	555.1	548.3	540.2	528.0	517.2	506.4	497.0	488.9	482.1	475.4
17.5°	572.6	565.9	557.8	545.6	537.5	528.0	518.6	510.5	503.7	495.6	488.9
20°	579.4	571.3	563.2	556.4	548.3	538.8	532.1	522.6	514.5	503.7	497.0
22.5°	592.9	584.8	579.4	567.2	557.8	551.0	544.3	536.1	526.7	514.5	502.4
25°	611.8	602.3	591.5	582.1	575.3	567.2	556.4	541.5	530.7	519.9	511.8
27.5°	644.2	630.7	615.8	606.4	596.9	583.4	571.3	560.5	549.7	538.8	526.7
30°	671.2	649.6	634.7	622.6	605.0	594.2	582.1	569.9	557.8	548.3	540.2
32.5°	721.2	692.8	668.5	650.9	632.0	618.5	606.4	596.9	584.8	574.0	564.5
35°	767.1	734.7	705.0	677.9	660.4	646.9	632.0	618.5	606.4	595.6	587.5
37.5°	815.7	772.5	736.0	710.4	692.8	676.6	661.7	648.2	637.4	628.0	619.9
40°	876.5	819.8	777.9	749.5	727.9	710.4	694.2	679.3	669.8	660.4	653.6
42.5°	958.9	875.1	826.5	795.4	765.7	746.8	729.3	718.5	709.0	698.2	692.8
45°	1014.2	926.4	857.6	818.4	794.1	777.9	767.1	754.9	752.2	741.4	732.0
46°	1027.7	929.1	865.7	818.4	800.8	786.0	773.8	767.1	761.7	753.6	744.1
47°	1026.4	926.4	861.6	818.4	802.2	791.4	781.9	780.6	769.8	761.7	757.6
48°	1025.0	939.9	869.7	827.9	814.3	800.8	791.4	786.0	780.6	772.5	764.4
49°	1022.3	934.5	871.1	836.0	823.8	808.9	798.1	791.4	784.6	777.9	771.1
50°	1023.7	933.2	868.4	842.7	831.9	818.4	804.9	795.4	790.0	783.3	775.2
51°	1016.9	923.7	861.6	841.4	833.3	815.7	803.5	796.8	792.7	786.0	779.2
52°	1002.1	914.3	854.9	833.3	827.9	810.3	796.8	791.4	787.3	780.6	773.8
53°	962.9	876.5	821.1	806.2	799.5	787.3	783.3	780.6	777.9	773.8	765.7
54°	922.4	845.4	803.5	790.0	784.6	775.2	769.8	773.8	769.8	769.8	761.7
55°	888.6	817.1	783.3	771.1	765.7	757.6	752.2	753.6	753.6	752.2	744.1
56°	857.6	798.1	764.4	750.9	745.5	738.7	736.0	736.0	736.0	733.3	726.6
57°	817.1	767.1	745.5	736.0	730.6	723.9	723.9	722.5	719.8	715.8	713.1
58°	773.8	722.5	702.3	691.5	690.1	684.7	686.1	687.4	687.4	683.4	682.0
59°	730.6	686.1	665.8	659.0	653.6	653.6	655.0	656.3	657.7	657.7	653.6
60°	682.0	641.5	625.3	621.2	619.9	619.9	619.9	623.9	626.6	628.0	628.0
61°	645.5	609.1	592.9	588.8	588.8	588.8	590.2	594.2	595.6	596.9	595.6
62°	611.8	578.0	563.2	561.8	561.8	563.2	563.2	567.2	567.2	568.6	567.2
63°	579.4	549.7	538.8	534.8	537.5	537.5	536.1	540.2	544.3	542.9	540.2
64°	547.0	522.6	511.8	510.5	509.1	510.5	509.1	513.2	514.5	514.5	517.2
65°	530.7	507.8	495.6	492.9	495.6	494.3	498.3	499.7	501.0	502.4	501.0
66°	513.2	491.6	482.1	476.7	478.1	478.1	482.1	483.5	486.2	484.8	488.9
67°	498.3	475.4	465.9	463.2	463.2	463.2	464.6	468.6	470.0	472.7	472.7
68°	482.1	461.9	455.1	452.4	452.4	451.1	452.4	456.5	457.8	460.5	461.9
69°	468.6	449.7	443.0	438.9	441.6	438.9	440.3	447.0	445.7	448.4	456.5
70°	456.5	437.6	432.2	432.2	429.5	430.8	430.8	433.5	434.9	440.3	438.9
72.5°	433.5	417.3	409.2	410.6	410.6	410.6	411.9	414.6	416.0	420.0	422.7



REPORT NUMBER: P212614
CATALOG NUMBER: MPW-AF-D-U-ASYM-7050

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
75°	401.1	387.6	383.5	383.5	383.5	386.2	386.2	387.6	394.3	397.0	397.0	0°
77.5°	378.1	364.6	360.6	360.6	363.3	364.6	367.3	370.0	372.7	378.1	379.5	2.5°
80°	347.1	336.3	334.9	336.3	339.0	341.7	344.4	351.1	353.8	355.2	363.3	5°
82.5°	320.1	309.3	309.3	312.0	316.0	318.7	324.1	326.8	329.5	333.6	336.3	7.5°
85°	289.0	280.9	283.6	286.3	293.1	294.4	297.1	302.5	306.6	307.9	312.0	10°
87.5°	262.0	257.9	259.3	263.3	267.4	274.2	276.9	279.6	285.0	287.7	287.7	12.5°
90°	240.4	236.3	240.4	245.8	249.8	252.5	256.6	259.3	263.3	264.7	266.0	15°
92.5°	222.8	220.1	224.2	229.6	233.6	235.0	237.7	244.4	245.8	248.5	248.5	17.5°
95°	206.6	205.3	209.3	213.4	217.4	221.5	224.2	228.2	232.3	233.6	233.6	20°
97.5°	183.7	182.3	186.4	194.5	195.8	197.2	199.9	202.6	208.0	209.3	208.0	22.5°
100°	171.5	170.2	171.5	176.9	178.3	183.7	185.0	189.1	190.4	193.1	191.8	25°
102.5°	148.6	149.9	152.6	152.6	158.0	158.0	162.1	164.8	166.1	170.2	175.6	27.5°
105°	132.3	132.3	133.7	133.7	136.4	137.8	137.8	141.8	144.5	144.5	145.9	30°
107.5°	116.1	116.1	117.5	118.8	120.2	120.2	121.5	124.2	124.2	126.9	126.9	32.5°
110°	99.9	102.6	101.3	101.3	101.3	104.0	105.3	105.3	106.7	108.0	108.0	35°
112.5°	85.1	85.1	85.1	86.4	87.8	87.8	89.1	89.1	90.5	91.8	91.8	37.5°
115°	68.9	68.9	70.2	68.9	67.5	68.9	68.9	70.2	71.6	70.2	78.3	40°
117.5°	60.8	59.4	58.1	59.4	58.1	58.1	58.1	59.4	60.8	60.8	63.5	42.5°
120°	44.6	44.6	44.6	44.6	47.3	44.6	44.6	43.2	45.9	44.6	45.9	45°
122.5°	37.8	36.5	36.5	36.5	36.5	36.5	36.5	37.8	36.5	37.8	36.5	46°
125°	32.4	32.4	35.1	32.4	31.1	32.4	32.4	32.4	32.4	33.8	39.2	47°
127.5°	25.7	27.0	25.7	25.7	25.7	27.0	25.7	25.7	27.0	28.4	27.0	48°
130°	21.6	18.9	20.3	20.3	20.3	20.3	20.3	20.3	21.6	24.3	23.0	49°
132.5°	10.8	10.8	10.8	12.2	13.5	13.5	12.2	13.5	13.5	14.9	13.5	50°
135°	8.1	9.5	6.8	6.8	9.5	8.1	10.8	9.5	9.5	9.5	8.1	51°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52°
140°	2.7	2.7	1.4	1.4	1.4	2.7	1.4	2.7	1.4	2.7	2.7	53°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	59°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69°
												70°
												72.5°



NUMBER: P212614

NUMBER: MPW-AF-D-U-ASYM-7050

REPORT NUMBER: P

CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
482.1	482.1	482.1	482.1
484.8	482.1	483.5	483.5
484.8	484.8	484.8	482.1
467.3	468.6	467.3	467.3
453.8	451.1	449.7	448.4
461.9	460.5	459.2	459.2
471.3	468.6	467.3	467.3
482.1	479.4	475.4	480.8
491.6	487.5	483.5	483.5
494.3	490.2	486.2	484.8
501.0	494.3	490.2	490.2
518.6	511.8	509.1	507.8
530.7	525.3	518.6	517.2
556.4	551.0	548.3	545.6
582.1	576.7	574.0	571.3
615.8	607.7	603.7	602.3
648.2	641.5	637.4	641.5
686.1	679.3	676.6	673.9
726.6	718.5	710.4	710.4
737.4	730.6	726.6	725.2
748.2	741.4	733.3	730.6
760.3	750.9	744.1	744.1
763.0	756.3	749.5	746.8
768.4	763.0	754.9	753.6
771.1	763.0	754.9	753.6
767.1	760.3	753.6	752.2
761.7	753.6	745.5	750.9
754.9	748.2	741.4	740.1
740.1	733.3	726.6	726.6
722.5	717.1	710.4	707.7
709.0	698.2	688.8	690.1
675.2	669.8	663.1	661.7
648.2	646.9	642.8	641.5
625.3	621.2	618.5	617.2
591.5	591.5	586.1	584.8
565.9	563.2	560.5	560.5
542.9	540.2	538.8	540.2
517.2	518.6	514.5	517.2
503.7	505.1	503.7	501.0
488.9	490.2	487.5	488.9
476.7	476.7	475.4	474.0
465.9	465.9	463.2	463.2
452.4	455.1	453.8	452.4
444.3	444.3	445.7	441.6
424.1	426.8	426.8	426.8

CANDELA DISTRIBUTION:

	165°
75°	399.7
77.5°	382.2
80°	360.6
82.5°	337.6
85°	313.3
87.5°	287.7
90°	268.7
92.5°	248.5
95°	236.3
97.5°	210.7
100°	194.5
102.5°	170.2
105°	145.9
107.5°	126.9
110°	108.0
112.5°	93.2
115°	72.9
117.5°	62.1
120°	47.3
122.5°	39.2
125°	35.1
127.5°	27.0
130°	21.6
132.5°	13.5
135°	10.8
137.5°	0.0
140°	2.7
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0



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MPW-AF-D-U-ASYM-7050

TION (continued):

[illegible]

(END OF REPORT)