

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: INVUE

Report Number: P565351

Luminaire Tested: **MSA-SA1D-740-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-334-1)
Test Lab: INNOVATIONS CENTER
Issue Date: 8/19/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1D-740-U-T1
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6200 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

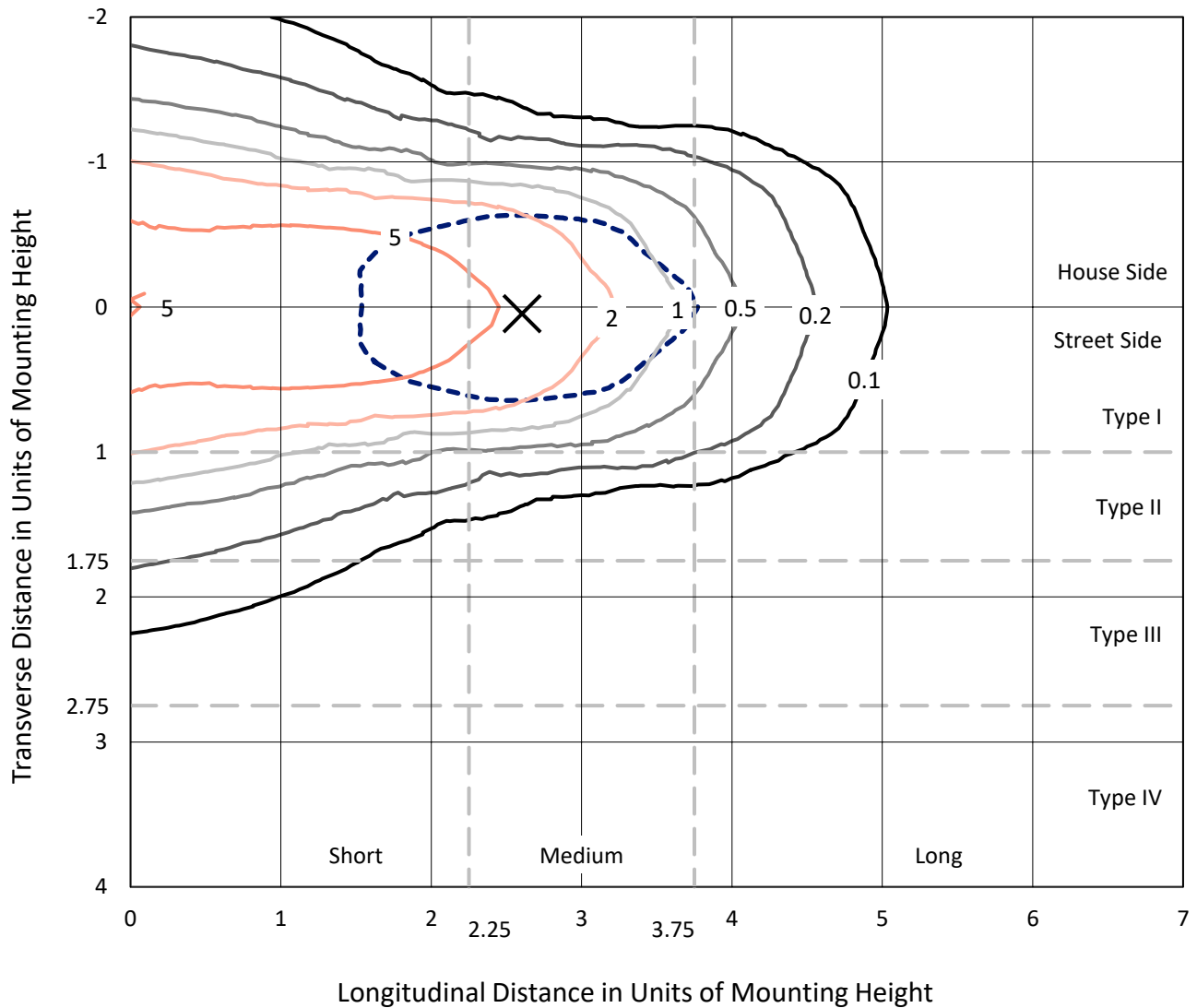
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P565351
 CATALOG NUMBER: MSA-SA1D-740-U-T1

Iso-Footcandle Lines of Horizontal Illumination

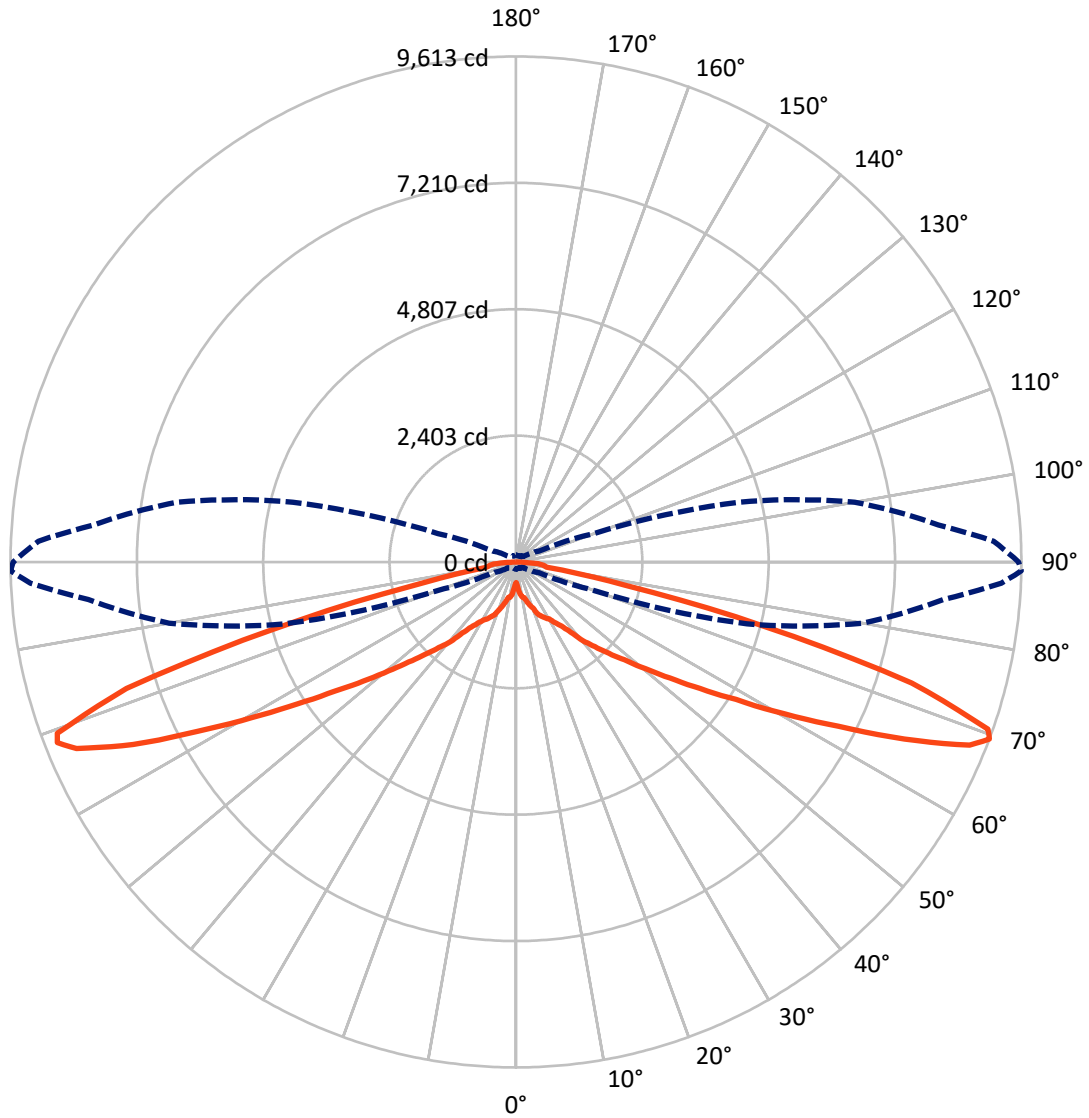
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
 Type I - Medium - N/A

REPORT NUMBER: P565351
CATALOG NUMBER: MSA-SA1D-740-U-T1

Luminous Intensity Polar Plot



— Vertical Plane Through 89-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P565351
 CATALOG NUMBER: MSA-SA1D-740-U-T1

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3099.9	0.0	3099.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3100.1	0.0	3100.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	6200.0	0.0	6200.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	0.8
10°-20°	227.3	3.7
20°-30°	453.6	7.3
30°-40°	686.0	11.1
40°-50°	995.8	16.1
50°-60°	1308.3	21.1
60°-70°	1595.9	25.7
70°-80°	806.9	13.0
80°-90°	76.9	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6200.0	100.0
0°-180°	6200.0	100.0

Coefficient of Utilization

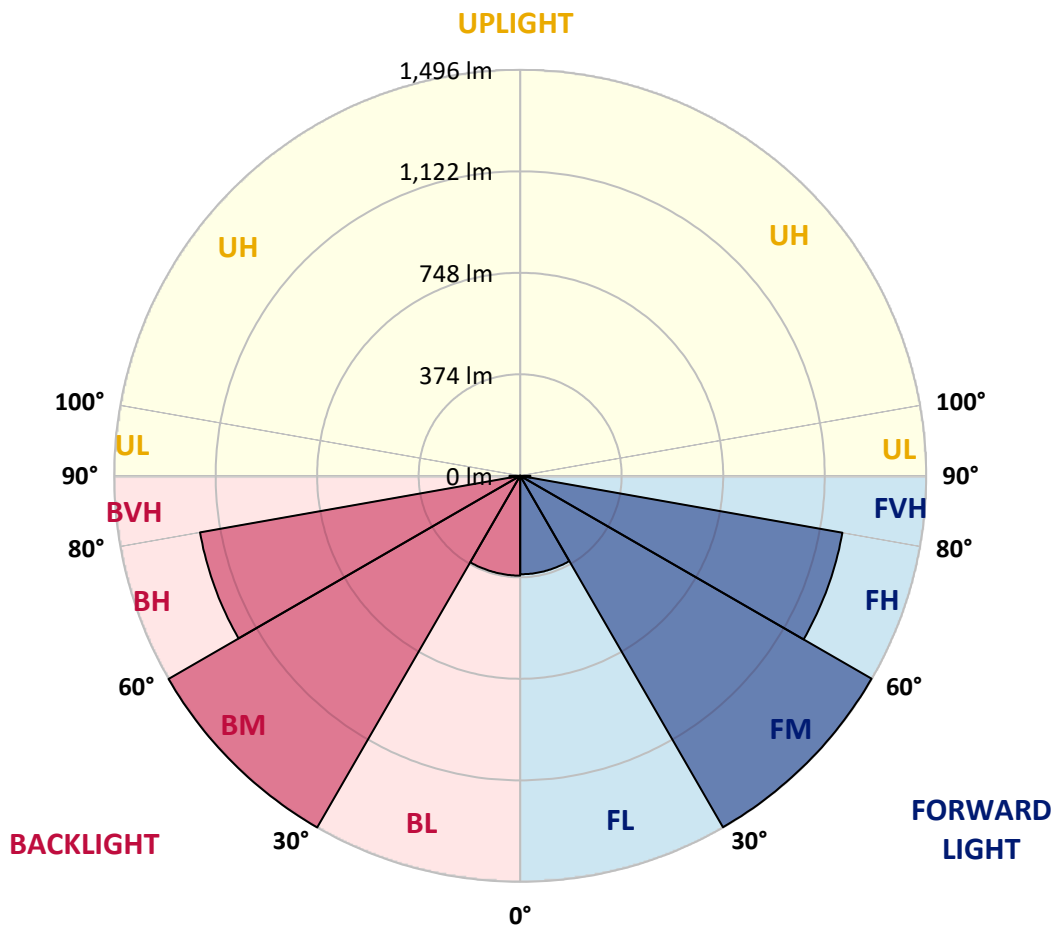


REPORT NUMBER: P565351
 CATALOG NUMBER: MSA-SA1D-740-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	362.6	5.8			
FM (30°-60°)	1494.5	24.1			
FH (60°-80°)	1205.2	19.4			G1/1800
FVH (80°-90°)	37.7	0.6			G1/100
BL (0°-30°)	367.7	5.9	B1/500		
BM (30°-60°)	1495.5	24.1	B2/2500		
BH (60°-80°)	1197.5	19.3	B3/2500		G3/2500
BVH (80°-90°)	39.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type I Medium





REPORT NUMBER: P565351

CATALOG NUMBER: MSA-SA1D-740-U-T1

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	460.9	407.7	403.1	390.4	399.6	403.1	395.0	383.5	396.2	403.1	390.4
5°	581.0	502.4	475.9	453.9	410.0	391.6	410.0	457.4	463.2	492.0	484.0
7.5°	639.9	627.2	593.7	520.9	450.5	411.2	460.9	529.0	563.7	591.4	620.2
10°	683.8	676.8	617.9	566.0	537.1	539.4	540.6	562.5	592.5	638.7	654.9
12.5°	694.2	691.9	701.1	689.5	691.9	704.6	691.9	686.1	703.4	718.4	702.3
15°	761.2	760.0	763.5	765.8	812.0	831.6	812.0	794.7	782.0	769.2	795.8
17.5°	807.4	801.6	802.7	824.7	876.7	930.9	920.6	897.5	868.6	885.9	907.8
20°	832.8	822.4	829.3	838.5	926.3	986.4	993.3	962.1	944.8	966.8	985.2
22.5°	857.0	840.9	816.6	825.8	906.7	993.3	1026.8	1018.7	1031.4	1038.4	1034.9
25°	828.2	838.5	812.0	838.5	920.6	1000.2	1067.2	1114.6	1115.8	1112.3	1137.7
27.5°	810.8	802.7	757.7	825.8	894.0	943.7	1114.6	1194.3	1218.5	1144.6	1194.3
30°	780.8	793.5	732.3	788.9	875.5	958.7	1168.9	1283.2	1247.4	1238.2	1249.7
32.5°	762.3	754.2	725.4	756.5	822.4	1003.7	1203.5	1335.2	1380.3	1358.3	1356.0
35°	732.3	738.1	693.0	726.5	818.9	965.6	1226.6	1465.7	1535.0	1517.7	1503.8
37.5°	736.9	717.3	684.9	709.2	797.0	986.4	1284.4	1591.6	1701.3	1710.6	1647.1
40°	702.3	690.7	642.2	682.6	755.4	973.7	1298.2	1734.8	1920.8	1962.4	1871.1
42.5°	652.6	637.6	609.9	654.9	731.1	911.3	1317.9	1906.9	2143.7	2230.3	2147.2
45°	581.0	561.3	547.5	607.5	678.0	895.1	1297.1	2050.2	2357.4	2476.4	2474.1
47.5°	494.3	481.6	474.7	538.2	634.1	854.7	1254.4	2140.3	2506.4	2811.3	2765.1
50°	396.2	386.9	385.8	452.8	560.2	771.6	1205.8	2185.3	2732.8	3118.6	3159.0
52.5°	317.6	310.7	309.5	363.8	468.9	659.5	1104.2	2220.0	2948.8	3467.4	3675.3
55°	248.3	241.4	242.6	287.6	373.1	539.4	949.4	2180.7	3138.2	3824.3	4218.1
57.5°	203.3	196.4	197.5	222.9	285.3	412.3	756.5	2095.2	3223.7	4265.5	4851.1
60°	179.0	172.1	168.6	180.2	219.5	310.7	562.5	1762.6	3237.5	4631.6	5538.3
62.5°	166.3	159.4	155.9	159.4	181.3	237.9	405.4	1396.4	3157.8	4944.7	6167.8
65°	154.8	149.0	144.4	147.8	159.4	189.4	295.7	956.4	2740.9	5087.9	6625.2
67.5°	142.1	137.4	132.8	137.4	145.5	159.4	229.8	605.2	2054.8	4901.9	6815.8
69°	135.1	128.2	125.9	129.4	137.4	146.7	198.7	482.8	1562.7	4548.5	6700.3
70°	128.2	123.6	120.1	125.9	132.8	139.8	179.0	410.0	1225.5	4094.6	6413.8
72.5°	113.2	109.7	107.4	113.2	119.0	123.6	146.7	292.2	710.3	2788.2	5086.7
75°	99.3	95.9	94.7	99.3	104.0	106.3	123.6	201.0	419.3	1458.8	3051.6
77.5°	83.2	78.5	79.7	85.5	88.9	90.1	104.0	144.4	247.2	660.7	1413.7
80°	61.2	61.2	65.8	70.5	70.5	70.5	83.2	105.1	150.2	303.8	586.8
82.5°	42.7	43.9	45.0	52.0	53.1	48.5	63.5	76.2	93.6	132.8	203.3
85°	24.3	25.4	26.6	31.2	32.3	28.9	41.6	48.5	54.3	65.8	106.3
87.5°	9.2	10.4	13.9	16.2	17.3	12.7	19.6	23.1	23.1	27.7	47.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P565351

CATALOG NUMBER: MSA-SA1D-740-U-T1

CANDELA DISTRIBUTION (continued):

	85°	87.5°	89°	90°	92.5°	95°	100°	105°	110°	115°	125°
0°	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	417.0	425.0	440.1	443.5	430.8	417.0	385.8	405.4	413.5	398.5	403.1
5°	516.3	533.6	552.1	530.2	516.3	507.1	492.0	493.2	485.1	458.5	414.7
7.5°	628.3	608.7	622.6	637.6	615.6	616.8	630.6	601.8	579.8	534.8	452.8
10°	680.3	680.3	683.8	683.8	674.5	674.5	673.4	627.2	600.6	581.0	557.9
12.5°	683.8	682.6	696.5	686.1	688.4	690.7	696.5	717.3	710.3	684.9	705.7
15°	779.6	775.0	779.6	778.5	782.0	792.3	787.7	783.1	784.3	802.7	833.9
17.5°	869.7	872.0	867.4	875.5	875.5	882.4	898.6	882.4	868.6	903.2	927.5
20°	973.7	965.6	947.1	961.0	964.4	965.6	992.2	972.5	952.9	965.6	994.5
22.5°	1078.8	1077.6	1079.9	1081.1	1085.7	1068.4	1032.6	1026.8	1039.5	1022.2	1025.7
25°	1143.5	1144.6	1150.4	1151.6	1131.9	1150.4	1163.1	1125.0	1125.0	1121.5	1098.4
27.5°	1222.0	1204.7	1211.6	1220.9	1212.8	1217.4	1202.4	1146.9	1205.8	1213.9	1121.5
30°	1275.1	1267.1	1259.0	1268.2	1276.3	1297.1	1254.4	1248.6	1253.2	1295.9	1174.7
32.5°	1387.2	1398.7	1383.7	1368.7	1383.7	1379.1	1360.6	1352.5	1410.3	1353.7	1211.6
35°	1491.1	1495.8	1496.9	1494.6	1503.8	1487.7	1487.7	1517.7	1535.0	1473.8	1223.2
37.5°	1741.8	1725.6	1692.1	1675.9	1704.8	1729.1	1657.5	1693.3	1686.3	1582.4	1309.8
40°	1922.0	1958.9	1969.3	1964.7	1969.3	1900.0	1915.0	1941.6	1910.4	1738.3	1279.8
42.5°	2185.3	2208.4	2200.3	2189.9	2194.5	2181.8	2136.8	2235.0	2122.9	1912.7	1326.0
45°	2425.5	2477.5	2481.0	2445.2	2474.1	2429.0	2447.5	2482.1	2369.0	2043.2	1313.3
47.5°	2712.0	2819.4	2779.0	2779.0	2807.9	2710.8	2754.7	2800.9	2500.6	2131.0	1244.0
50°	3135.9	3193.6	3191.3	3180.9	3193.6	3141.7	3134.7	3129.0	2702.8	2214.2	1201.2
52.5°	3615.2	3693.8	3663.7	3675.3	3692.6	3594.4	3671.8	3460.4	2955.7	2245.4	1104.2
55°	4227.4	4281.7	4251.6	4192.7	4271.3	4208.9	4234.3	3822.0	3131.3	2156.4	942.5
57.5°	4956.2	4983.9	4934.3	4928.5	4980.5	4913.5	4870.7	4228.5	3222.5	2089.4	753.1
60°	5807.5	5894.1	5862.9	5813.2	5860.6	5801.7	5478.3	4573.9	3204.0	1776.4	583.3
62.5°	6828.5	6916.3	6881.6	6848.1	6878.2	6724.5	6048.9	4846.5	3120.9	1408.0	426.2
65°	7671.7	8067.8	8119.8	8121.0	7975.4	7619.7	6503.9	4952.7	2682.0	982.9	311.9
67.5°	8226.1	9049.6	9306.0	9213.6	8879.8	8067.8	6687.6	4744.8	2071.0	621.4	233.3
69°	8162.5	9242.5	9613.3	9561.3	9092.3	8060.9	6544.4	4394.9	1582.4	494.3	197.5
70°	7869.2	9084.3	9524.3	9547.4	8957.2	7751.4	6289.1	3992.9	1279.8	421.6	181.3
72.5°	6279.9	7485.7	7872.6	8023.9	7438.3	6207.1	5157.2	2817.1	741.5	294.5	146.7
75°	3890.1	4539.2	4860.3	4948.1	4593.5	3865.9	3130.1	1567.4	451.6	207.9	123.6
77.5°	1744.1	1932.4	2117.2	2117.2	1978.6	1764.9	1434.5	757.7	256.4	147.8	104.0
80°	584.4	606.4	590.2	596.0	572.9	550.9	576.4	326.9	158.2	110.9	84.3
82.5°	397.3	499.0	530.2	530.2	497.8	392.7	221.8	150.2	97.0	79.7	64.7
85°	323.4	395.0	423.9	436.6	411.2	331.5	116.7	72.8	57.8	50.8	43.9
87.5°	108.6	101.6	95.9	93.6	98.2	102.8	57.8	31.2	26.6	24.3	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P565351
 CATALOG NUMBER: MSA-SA1D-740-U-T1

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	392.7	392.7	392.7	392.7	392.7	392.7
2.5°	411.2	397.3	403.1	408.9	450.5	481.6
5°	408.9	428.5	472.4	527.8	553.3	615.6
7.5°	420.4	492.0	574.0	631.8	654.9	674.5
10°	562.5	575.2	602.9	658.4	704.6	712.6
12.5°	726.5	723.0	703.4	728.8	705.7	721.9
15°	854.7	816.6	790.0	786.6	778.5	778.5
17.5°	925.2	891.7	854.7	845.5	821.2	840.9
20°	1008.3	950.6	858.2	848.9	840.9	822.4
22.5°	992.2	934.4	838.5	827.0	869.7	867.4
25°	1011.8	934.4	843.2	830.5	850.1	850.1
27.5°	963.3	899.8	833.9	757.7	817.8	831.6
30°	950.6	879.0	802.7	734.6	795.8	783.1
32.5°	1017.6	827.0	751.9	731.1	776.2	766.9
35°	965.6	817.8	739.2	701.1	754.2	745.0
37.5°	987.5	806.2	717.3	684.9	727.7	741.5
40°	982.9	751.9	691.9	650.3	693.0	699.9
42.5°	905.5	710.3	649.1	607.5	629.5	652.6
45°	882.4	684.9	607.5	549.8	550.9	577.5
47.5°	839.7	627.2	531.3	478.2	478.2	500.1
50°	768.1	549.8	444.7	396.2	395.0	412.3
52.5°	661.8	474.7	375.4	322.3	318.8	336.1
55°	541.7	382.3	295.7	261.0	254.1	261.0
57.5°	421.6	298.0	233.3	205.6	204.4	210.2
60°	326.9	233.3	186.0	169.8	172.1	181.3
62.5°	247.2	186.0	158.2	152.5	155.9	165.2
65°	196.4	160.5	144.4	140.9	144.4	153.6
67.5°	159.4	145.5	134.0	129.4	131.7	140.9
69°	146.7	137.4	128.2	122.4	124.7	131.7
70°	139.8	132.8	123.6	117.8	120.1	127.1
72.5°	122.4	119.0	112.0	106.3	107.4	113.2
75°	107.4	105.1	100.5	93.6	93.6	100.5
77.5°	90.1	91.2	86.6	79.7	78.5	82.0
80°	71.6	73.9	71.6	64.7	62.4	62.4
82.5°	52.0	56.6	54.3	47.4	46.2	46.2
85°	32.3	35.8	34.7	30.0	30.0	26.6
87.5°	15.0	19.6	18.5	16.2	15.0	10.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)