

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: P565314

Luminaire Tested: **MSA-SA4C-730-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565314
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-SA4C-730-U-T1
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19812 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B4 - U0 - G4

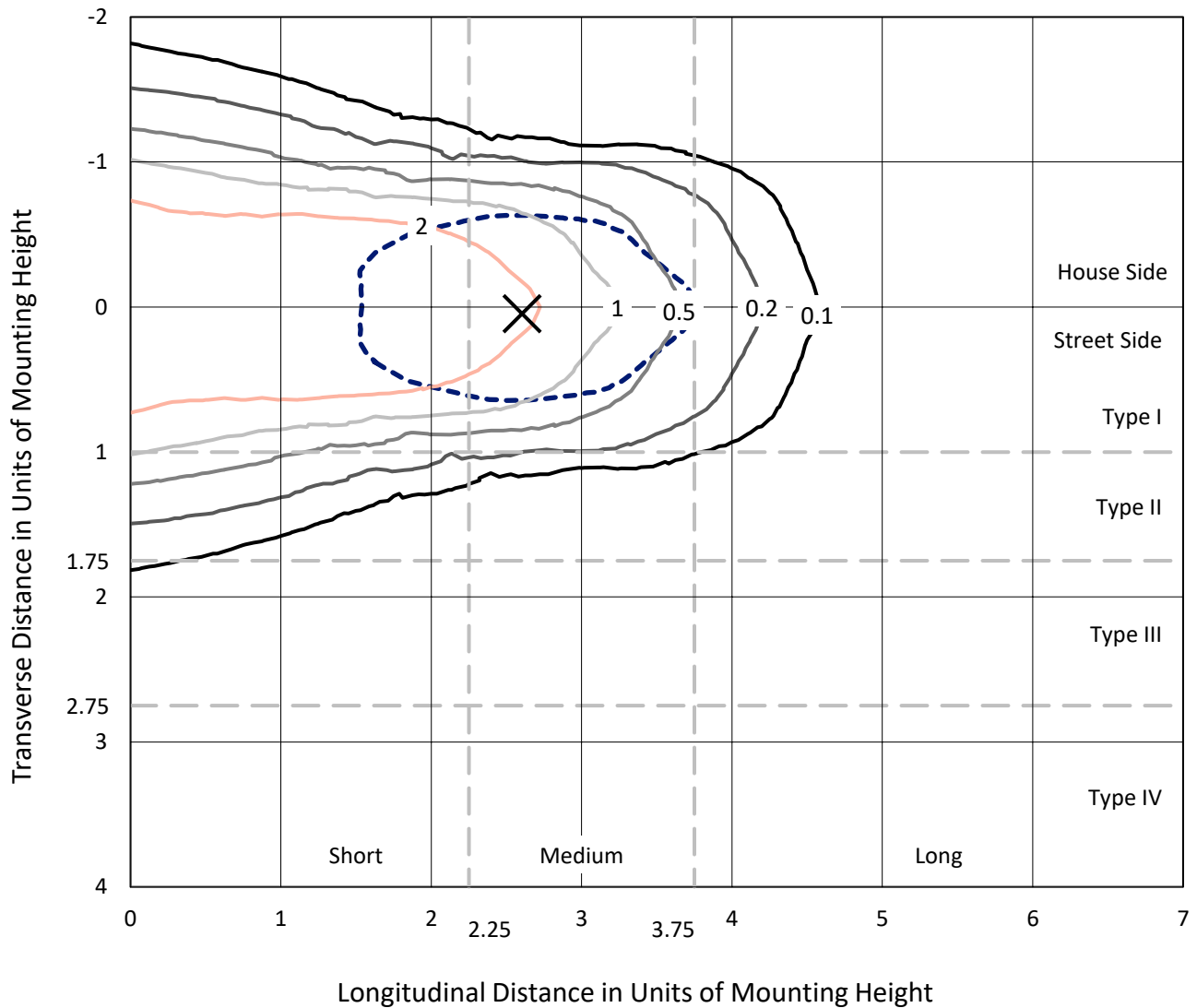
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P565314
 CATALOG NUMBER: MSA-SA4C-730-U-T1

Iso-Footcandle Lines of Horizontal Illumination

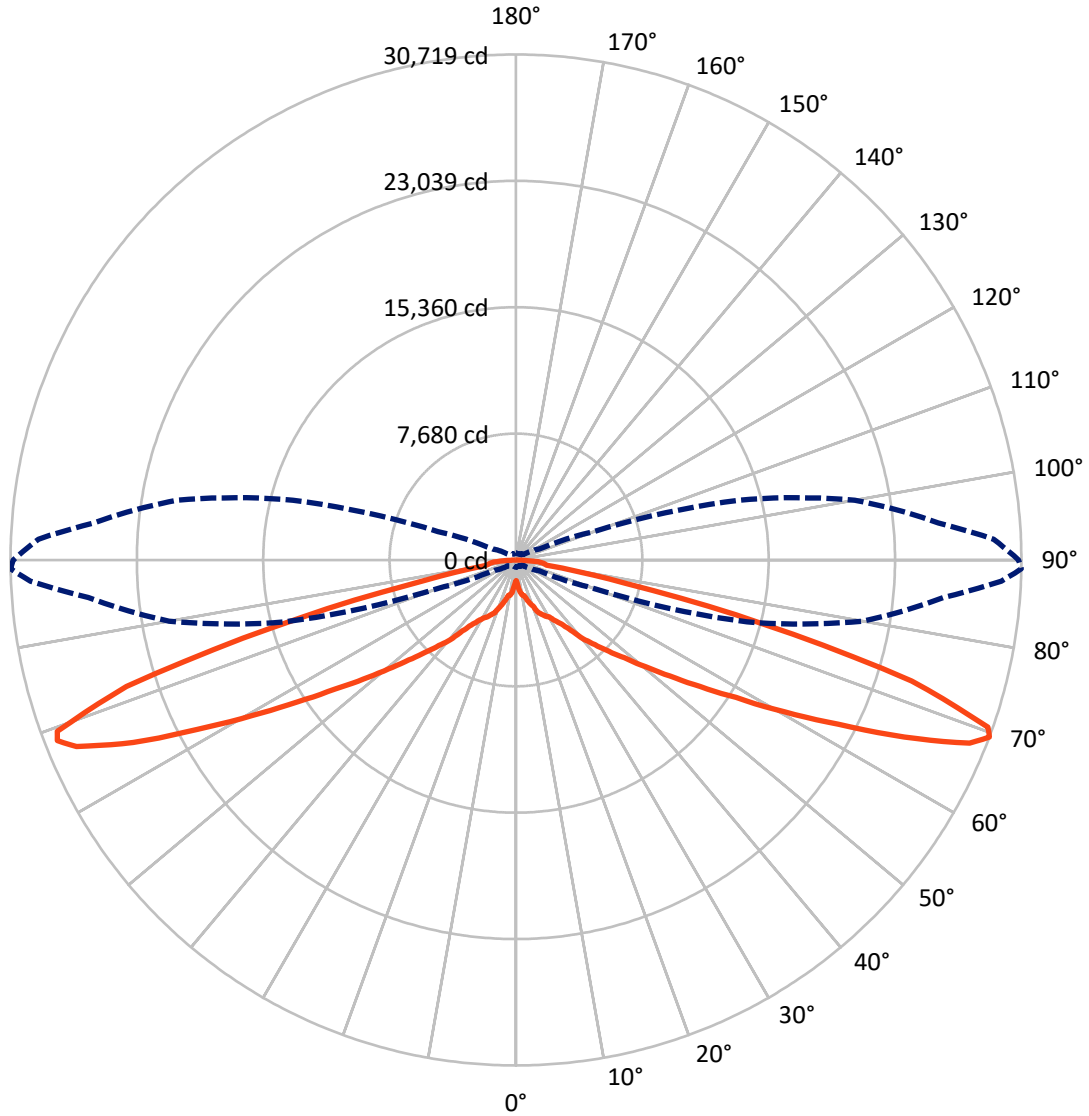
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type I - Medium - N/A

REPORT NUMBER: P565314
CATALOG NUMBER: MSA-SA4C-730-U-T1

Luminous Intensity Polar Plot



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

REPORT NUMBER: P565314
 CATALOG NUMBER: MSA-SA4C-730-U-T1

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9905.8	0.0	9905.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9906.2	0.0	9906.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	19812.0	0.0	19812.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	0.8
10°-20°	726.5	3.7
20°-30°	1449.4	7.3
30°-40°	2192.1	11.1
40°-50°	3182.0	16.1
50°-60°	4180.6	21.1
60°-70°	5099.7	25.7
70°-80°	2578.3	13.0
80°-90°	245.8	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°	19812.0	100.0
0°-180°	19812.0	100.0

Coefficient of Utilization

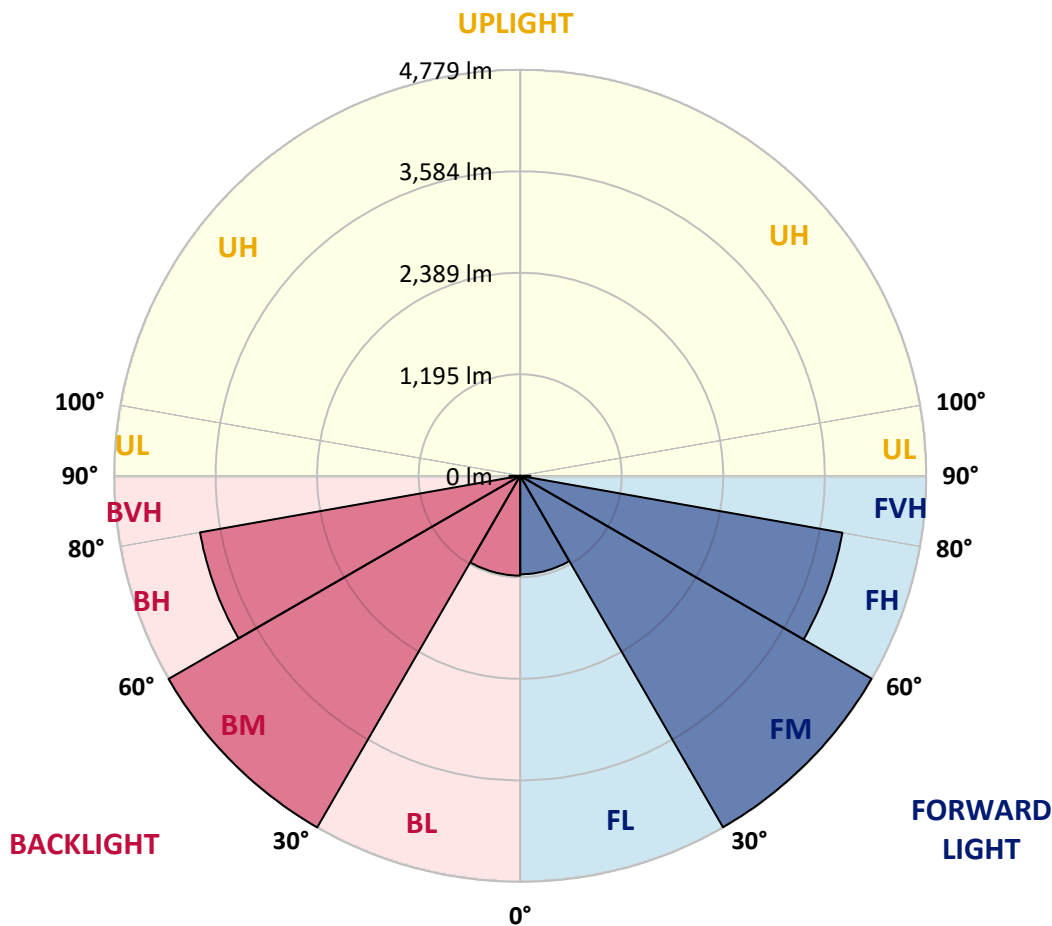


REPORT NUMBER: P565314
 CATALOG NUMBER: MSA-SA4C-730-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1158.6	5.8			
FM (30°-60°)	4775.8	24.1			
FH (60°-80°)	3851.3	19.4			G2/5000
FVH (80°-90°)	120.5	0.6			G2/225
BL (0°-30°)	1174.9	5.9	B3/2500		
BM (30°-60°)	4778.9	24.1	B3/5000		
BH (60°-80°)	3826.7	19.3	B4/5000		G4/5000
BVH (80°-90°)	125.2	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type I Medium





REPORT NUMBER: P565314

CATALOG NUMBER: MSA-SA4C-730-U-T1

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9
2.5°	1472.7	1302.9	1288.1	1247.5	1277.0	1288.1	1262.3	1225.4	1266.0	1288.1	1247.5
5°	1856.5	1605.5	1520.6	1450.5	1310.3	1251.2	1310.3	1461.6	1480.0	1572.3	1546.5
7.5°	2044.7	2004.1	1897.1	1664.6	1439.4	1313.9	1472.7	1690.4	1801.1	1889.7	1982.0
10°	2185.0	2162.8	1974.6	1808.5	1716.2	1723.6	1727.3	1797.4	1893.4	2041.0	2092.7
12.5°	2218.2	2210.8	2240.4	2203.4	2210.8	2251.4	2210.8	2192.4	2247.7	2295.7	2244.0
15°	2432.3	2428.6	2439.7	2447.0	2594.7	2657.4	2594.7	2539.3	2498.7	2458.1	2543.0
17.5°	2579.9	2561.5	2565.1	2635.3	2801.4	2974.8	2941.6	2867.8	2775.5	2830.9	2901.0
20°	2661.1	2627.9	2650.0	2679.6	2960.1	3152.0	3174.1	3074.5	3019.1	3089.2	3148.3
22.5°	2738.6	2686.9	2609.4	2639.0	2897.3	3174.1	3281.2	3255.3	3295.9	3318.1	3307.0
25°	2646.3	2679.6	2594.7	2679.6	2941.6	3196.3	3410.4	3561.7	3565.4	3554.3	3635.5
27.5°	2591.0	2565.1	2421.2	2639.0	2856.7	3015.4	3561.7	3816.3	3893.9	3657.6	3816.3
30°	2495.0	2535.6	2340.0	2520.9	2797.7	3063.4	3735.1	4100.5	3986.1	3956.6	3993.5
32.5°	2436.0	2410.1	2317.9	2417.5	2627.9	3207.4	3845.9	4266.6	4410.6	4340.4	4333.1
35°	2340.0	2358.5	2214.5	2321.5	2616.8	3085.6	3919.7	4683.7	4905.1	4849.8	4805.5
37.5°	2354.8	2292.0	2188.7	2266.2	2546.7	3152.0	4104.2	5086.0	5436.6	5466.2	5263.2
40°	2244.0	2207.1	2052.1	2181.3	2413.8	3111.4	4148.5	5543.7	6137.9	6270.8	5979.2
42.5°	2085.3	2037.4	1948.8	2092.7	2336.3	2912.1	4211.3	6093.6	6850.2	7127.0	6861.3
45°	1856.5	1793.8	1749.5	1941.4	2166.5	2860.4	4144.8	6551.3	7533.0	7913.2	7905.8
47.5°	1579.7	1539.1	1516.9	1719.9	2026.3	2731.2	4008.3	6839.2	8009.2	8983.5	8835.9
50°	1266.0	1236.4	1232.7	1446.8	1790.1	2465.5	3853.3	6983.1	8732.6	9965.3	10094.5
52.5°	1015.0	992.8	989.1	1162.6	1498.5	2107.5	3528.5	7093.8	9422.8	11080.0	11744.3
55°	793.5	771.4	775.1	919.0	1192.1	1723.6	3033.9	6968.3	10028.1	12220.4	13479.0
57.5°	649.6	627.4	631.1	712.3	911.6	1317.6	2417.5	6695.2	10301.2	13630.3	15501.6
60°	572.1	549.9	538.9	575.8	701.3	992.8	1797.4	5632.2	10345.5	14800.3	17697.7
62.5°	531.5	509.3	498.3	509.3	579.5	760.3	1295.5	4462.2	10090.8	15800.6	19709.2
65°	494.6	476.1	461.4	472.4	509.3	605.3	944.9	3056.0	8758.4	16258.2	21170.8
67.5°	454.0	439.2	424.4	439.2	465.0	509.3	734.5	1934.0	6566.0	15664.0	21779.8
69°	431.8	409.7	402.3	413.4	439.2	468.7	634.8	1542.8	4993.7	14534.6	21410.7
70°	409.7	394.9	383.8	402.3	424.4	446.6	572.1	1310.3	3916.0	13084.1	20495.3
72.5°	361.7	350.6	343.2	361.7	380.2	394.9	468.7	933.8	2269.9	8909.7	16254.5
75°	317.4	306.3	302.7	317.4	332.2	339.6	394.9	642.2	1339.8	4661.6	9751.2
77.5°	265.7	251.0	254.7	273.1	284.2	287.9	332.2	461.4	789.8	2111.2	4517.6
80°	195.6	195.6	210.4	225.1	225.1	225.1	265.7	335.9	479.8	970.7	1875.0
82.5°	136.6	140.3	143.9	166.1	169.8	155.0	203.0	243.6	299.0	424.4	649.6
85°	77.5	81.2	84.9	99.7	103.3	92.3	132.9	155.0	173.5	210.4	339.6
87.5°	29.5	33.2	44.3	51.7	55.4	40.6	62.7	73.8	73.8	88.6	151.3
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: P565314

CATALOG NUMBER: MSA-SA4C-730-U-T1

CANDELA DISTRIBUTION (continued):

	85°	87.5°	89°	90°	92.5°	95°	100°	105°	110°	115°	125°
0°	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9
2.5°	1332.4	1358.2	1406.2	1417.3	1376.7	1332.4	1232.7	1295.5	1321.3	1273.3	1288.1
5°	1649.8	1705.2	1764.2	1694.1	1649.8	1620.3	1572.3	1576.0	1550.2	1465.3	1325.0
7.5°	2007.8	1945.1	1989.4	2037.4	1967.2	1970.9	2015.2	1922.9	1852.8	1708.9	1446.8
10°	2173.9	2173.9	2185.0	2185.0	2155.5	2155.5	2151.8	2004.1	1919.2	1856.5	1782.7
12.5°	2185.0	2181.3	2225.6	2192.4	2199.8	2207.1	2225.6	2292.0	2269.9	2188.7	2255.1
15°	2491.3	2476.6	2491.3	2487.6	2498.7	2531.9	2517.2	2502.4	2506.1	2565.1	2664.8
17.5°	2779.2	2786.6	2771.8	2797.7	2797.7	2819.8	2871.5	2819.8	2775.5	2886.3	2963.8
20°	3111.4	3085.6	3026.5	3070.8	3081.9	3085.6	3170.4	3107.7	3045.0	3085.6	3177.8
22.5°	3447.3	3443.6	3451.0	3454.6	3469.4	3414.0	3299.6	3281.2	3321.8	3266.4	3277.5
25°	3653.9	3657.6	3676.1	3679.8	3617.0	3676.1	3716.7	3594.9	3594.9	3583.8	3510.0
27.5°	3904.9	3849.6	3871.7	3901.2	3875.4	3890.2	3842.2	3665.0	3853.3	3879.1	3583.8
30°	4074.7	4048.9	4023.0	4052.6	4078.4	4144.8	4008.3	3989.8	4004.6	4141.1	3753.6
32.5°	4432.7	4469.6	4421.6	4373.7	4421.6	4406.9	4347.8	4322.0	4506.5	4325.7	3871.7
35°	4764.9	4779.7	4783.4	4776.0	4805.5	4753.8	4753.8	4849.8	4905.1	4709.5	3908.6
37.5°	5565.8	5514.1	5407.1	5355.4	5447.7	5525.2	5296.4	5410.8	5388.7	5056.5	4185.4
40°	6141.6	6259.7	6292.9	6278.1	6292.9	6071.5	6119.4	6204.3	6104.7	5554.7	4089.5
42.5°	6983.1	7056.9	7031.1	6997.9	7012.6	6972.0	6828.1	7141.8	6783.8	6112.1	4237.1
45°	7750.8	7916.9	7928.0	7813.5	7905.8	7761.9	7820.9	7931.7	7569.9	6529.1	4196.5
47.5°	8666.1	9009.4	8880.2	8880.2	8972.5	8662.4	8802.7	8950.3	7990.7	6809.6	3975.1
50°	10020.7	10205.2	10197.8	10164.6	10205.2	10039.1	10017.0	9998.5	8636.6	7075.4	3838.5
52.5°	11552.4	11803.4	11707.4	11744.3	11799.7	11485.9	11733.2	11057.8	9444.9	7175.0	3528.5
55°	13508.5	13682.0	13586.0	13397.8	13648.8	13449.5	13530.7	12213.0	10005.9	6890.8	3011.7
57.5°	15837.5	15926.1	15767.3	15748.9	15915.0	15700.9	15564.3	13512.2	10297.5	6676.8	2406.4
60°	18557.6	18834.4	18734.8	18576.1	18727.4	18539.2	17505.7	14615.8	10238.4	5676.5	1863.9
62.5°	21820.4	22100.9	21990.1	21883.1	21979.1	21488.2	19329.0	15486.8	9972.7	4499.2	1361.9
65°	24514.7	25780.6	25946.7	25950.4	25485.4	24348.6	20783.2	15826.4	8570.2	3140.9	996.5
67.5°	26286.3	28917.9	29737.2	29442.0	28375.3	25780.6	21370.1	15162.0	6617.7	1985.7	745.6
69°	26083.3	29534.2	30719.0	30552.9	29054.4	25758.5	20912.4	14043.7	5056.5	1579.7	631.1
70°	25145.8	29028.6	30434.8	30508.6	28622.6	24769.3	20096.7	12759.3	4089.5	1347.2	579.5
72.5°	20067.2	23920.4	25156.9	25640.4	23769.1	19834.7	16479.7	9002.0	2369.5	941.2	468.7
75°	12430.8	14505.1	15531.1	15811.6	14678.5	12353.3	10002.2	5008.5	1443.1	664.4	394.9
77.5°	5573.2	6174.8	6765.3	6765.3	6322.4	5639.6	4584.0	2421.2	819.4	472.4	332.2
80°	1867.6	1937.7	1886.0	1904.5	1830.7	1760.5	1841.7	1044.5	505.6	354.3	269.4
82.5°	1269.7	1594.5	1694.1	1694.1	1590.8	1254.9	708.6	479.8	310.0	254.7	206.7
85°	1033.4	1262.3	1354.5	1395.1	1313.9	1059.3	372.8	232.5	184.5	162.4	140.3
87.5°	346.9	324.8	306.3	299.0	313.7	328.5	184.5	99.7	84.9	77.5	73.8
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: P565314

CATALOG NUMBER: MSA-SA4C-730-U-T1

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	1254.9	1254.9	1254.9	1254.9	1254.9	1254.9
2.5°	1313.9	1269.7	1288.1	1306.6	1439.4	1539.1
5°	1306.6	1369.3	1509.6	1686.7	1767.9	1967.2
7.5°	1343.5	1572.3	1834.4	2018.9	2092.7	2155.5
10°	1797.4	1838.0	1926.6	2103.8	2251.4	2277.3
12.5°	2321.5	2310.5	2247.7	2328.9	2255.1	2306.8
15°	2731.2	2609.4	2524.5	2513.5	2487.6	2487.6
17.5°	2956.4	2849.3	2731.2	2701.7	2624.2	2686.9
20°	3222.1	3037.6	2742.3	2712.8	2686.9	2627.9
22.5°	3170.4	2985.9	2679.6	2642.7	2779.2	2771.8
25°	3233.2	2985.9	2694.3	2653.7	2716.5	2716.5
27.5°	3078.2	2875.2	2664.8	2421.2	2613.1	2657.4
30°	3037.6	2808.7	2565.1	2347.4	2543.0	2502.4
32.5°	3251.6	2642.7	2402.7	2336.3	2480.3	2450.7
35°	3085.6	2613.1	2362.1	2240.4	2410.1	2380.6
37.5°	3155.7	2576.2	2292.0	2188.7	2325.2	2369.5
40°	3140.9	2402.7	2210.8	2078.0	2214.5	2236.7
42.5°	2893.6	2269.9	2074.3	1941.4	2011.5	2085.3
45°	2819.8	2188.7	1941.4	1756.8	1760.5	1845.4
47.5°	2683.3	2004.1	1697.8	1528.0	1528.0	1598.1
50°	2454.4	1756.8	1421.0	1266.0	1262.3	1317.6
52.5°	2114.9	1516.9	1199.5	1029.7	1018.7	1074.0
55°	1731.0	1221.7	944.9	834.1	812.0	834.1
57.5°	1347.2	952.2	745.6	657.0	653.3	671.7
60°	1044.5	745.6	594.2	542.6	549.9	579.5
62.5°	789.8	594.2	505.6	487.2	498.3	527.8
65°	627.4	513.0	461.4	450.3	461.4	490.9
67.5°	509.3	465.0	428.1	413.4	420.8	450.3
69°	468.7	439.2	409.7	391.2	398.6	420.8
70°	446.6	424.4	394.9	376.5	383.8	406.0
72.5°	391.2	380.2	358.0	339.6	343.2	361.7
75°	343.2	335.9	321.1	299.0	299.0	321.1
77.5°	287.9	291.6	276.8	254.7	251.0	262.1
80°	228.8	236.2	228.8	206.7	199.3	199.3
82.5°	166.1	180.9	173.5	151.3	147.6	147.6
85°	103.3	114.4	110.7	96.0	96.0	84.9
87.5°	48.0	62.7	59.1	51.7	48.0	33.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)