

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: P596962

Luminaire Tested: **MSA-SA2C-835-U-RW**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-7)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-835-U-RW
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10444 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

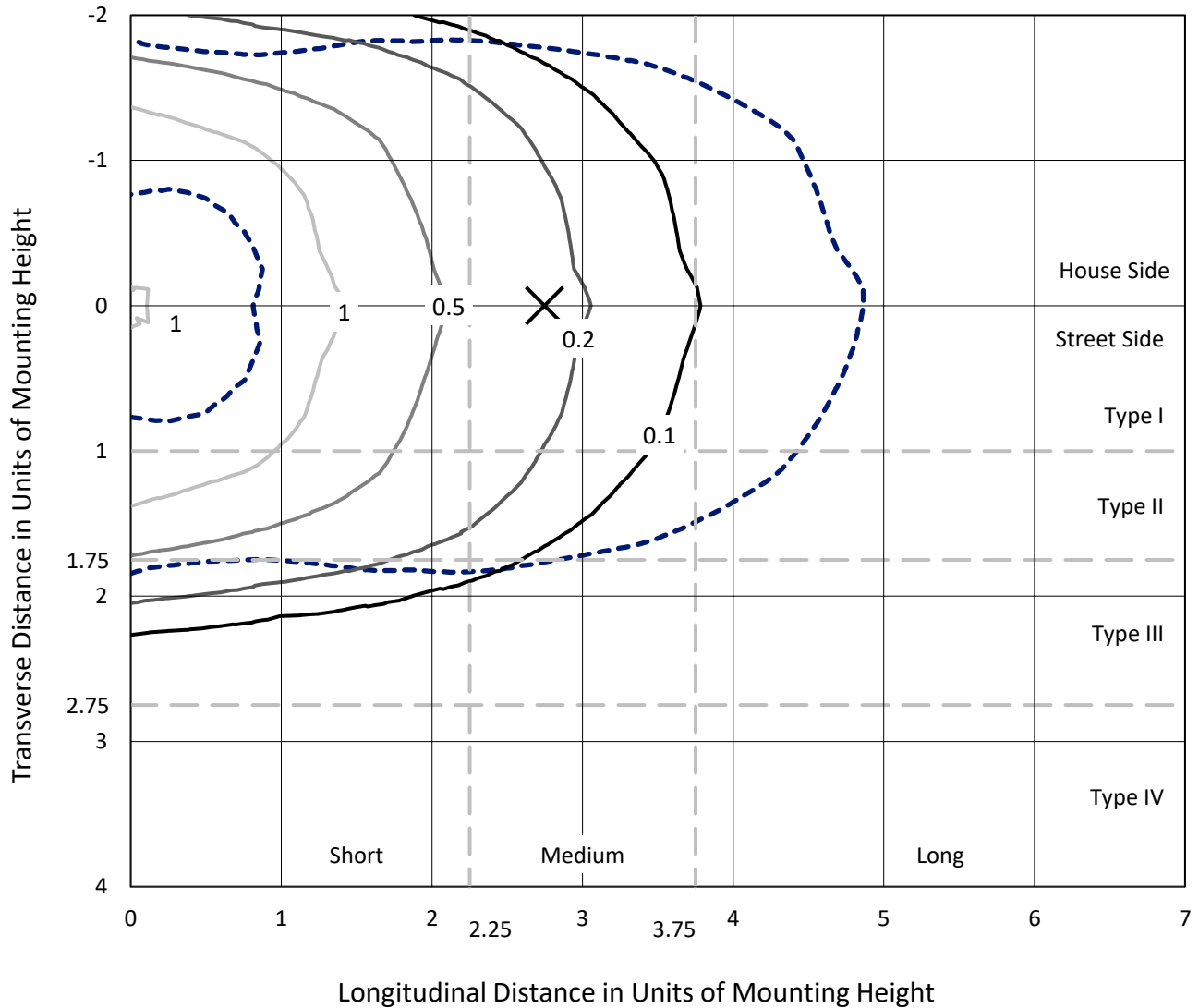
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596962
 CATALOG NUMBER: MSA-SA2C-835-U-RW

Iso-Footcandle Lines of Horizontal Illumination

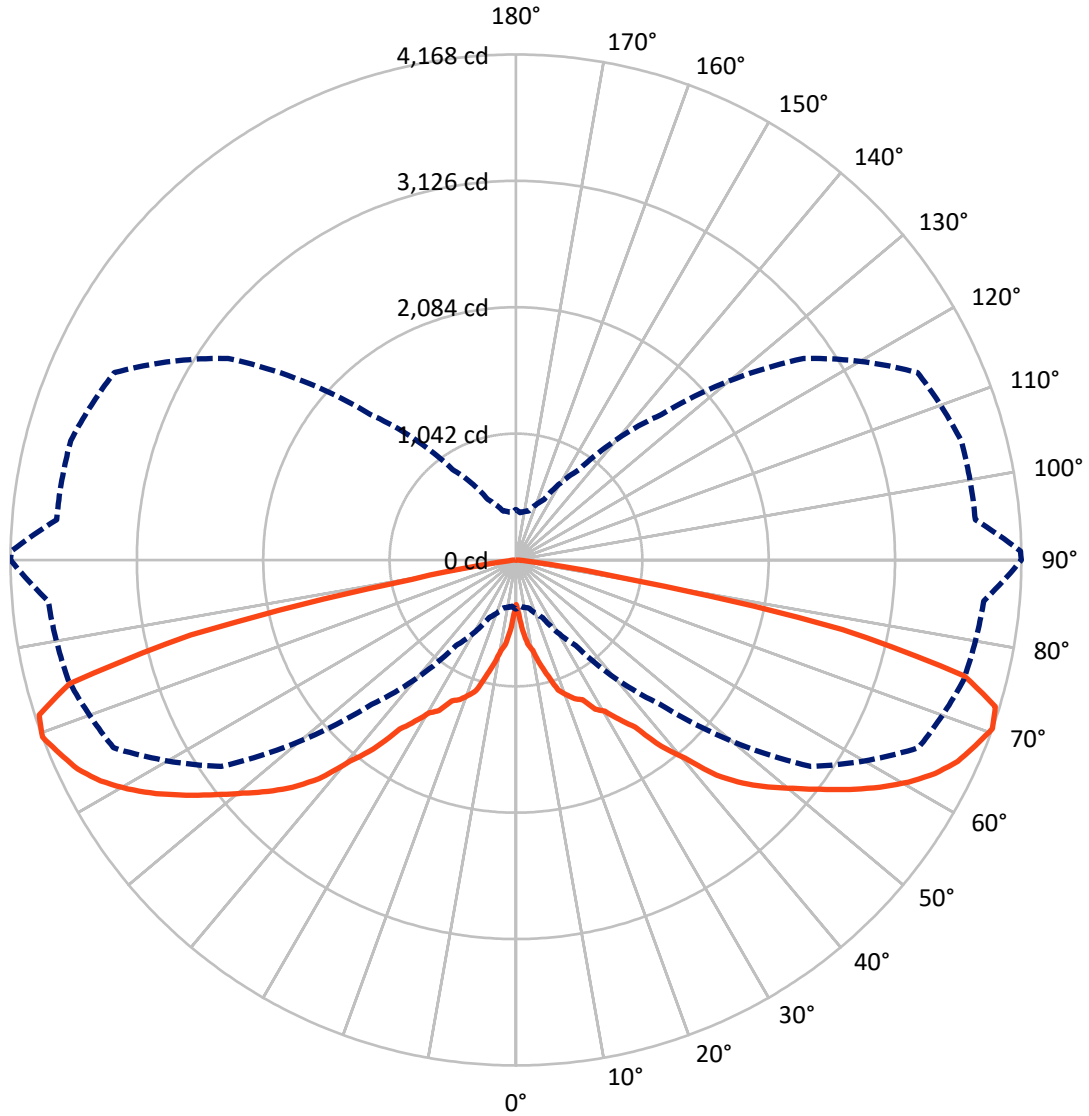
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

REPORT NUMBER: P596962
CATALOG NUMBER: MSA-SA2C-835-U-RW

Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P596962

CATALOG NUMBER: MSA-SA2C-835-U-RW

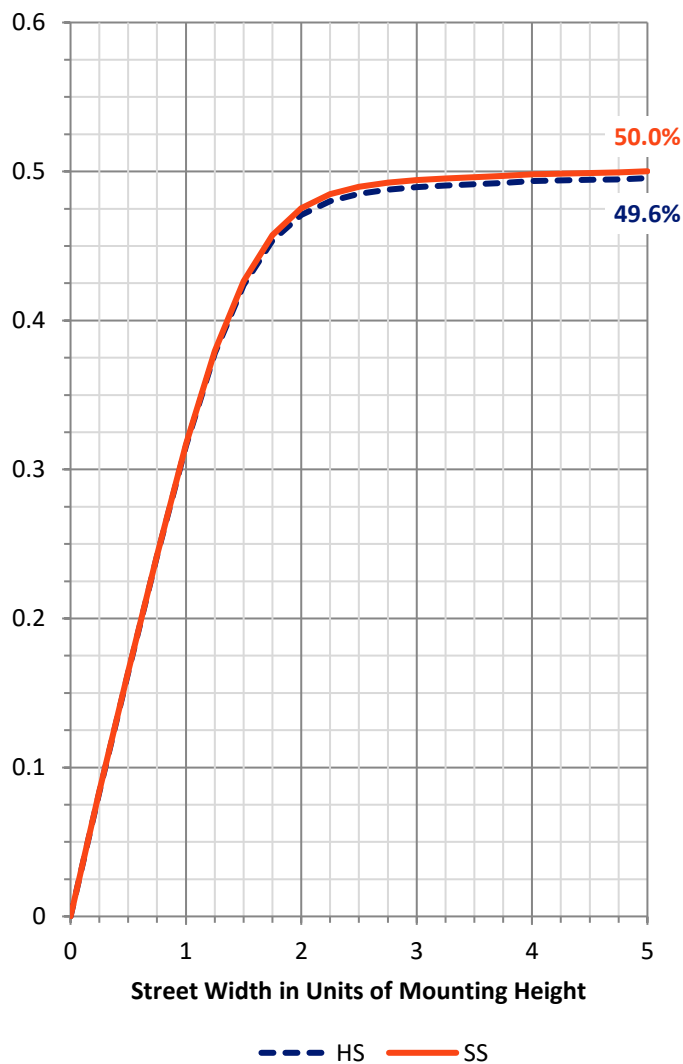
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5202.6	0.0	5202.6
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	5241.3	0.0	5241.3
	% Fixture	50.2	0.0	50.2
Total	Lumens	10444.0	0.0	10444.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	0.5
10°-20°	253.4	2.4
20°-30°	548.0	5.2
30°-40°	1045.5	10.0
40°-50°	1899.2	18.2
50°-60°	2668.0	25.5
60°-70°	2547.4	24.4
70°-80°	1307.3	12.5
80°-90°	119.9	1.1
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°	10444.0	100.0
0°-180°	10444.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596962

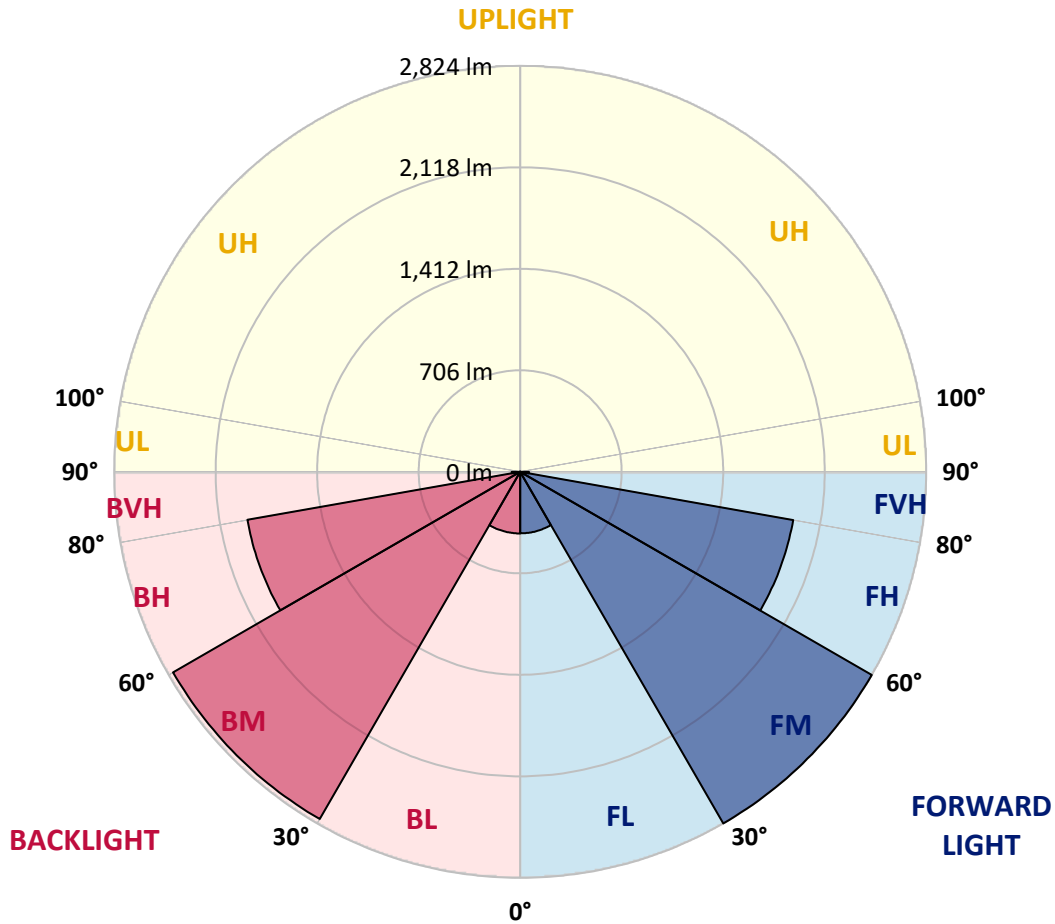
CATALOG NUMBER: MSA-SA2C-835-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	427.9	4.1			
FM (30°-60°)	2824.2	27.0			
FH (60°-80°)	1928.4	18.5			G2/5000
FVH (80°-90°)	60.8	0.6			G1/100
BL (0°-30°)	428.8	4.1	B1/500		
BM (30°-60°)	2788.5	26.7	B3/5000		
BH (60°-80°)	1926.3	18.4	B3/2500		G3/2500
BVH (80°-90°)	59.0	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 III Short





REPORT NUMBER: P596962

CATALOG NUMBER: MSA-SA2C-835-U-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6
2.5°	444.0	427.5	406.8	419.0	424.1	433.0	431.7	427.5	409.3	439.8	443.2
5°	555.8	529.5	519.8	518.1	520.6	512.2	539.7	531.6	546.5	574.0	580.3
7.5°	632.8	613.3	592.6	598.9	572.7	568.9	604.4	636.2	644.2	694.6	698.0
10°	669.2	650.2	655.7	651.9	648.9	673.4	689.9	713.2	746.7	751.3	758.5
12.5°	700.1	707.7	731.9	731.0	770.8	814.4	808.0	832.2	837.7	896.1	878.3
15°	778.4	794.1	792.4	807.2	824.6	896.1	896.5	937.6	975.2	998.1	992.2
17.5°	893.1	898.6	875.8	876.6	927.0	956.2	988.8	981.6	1079.8	1124.7	1127.6
20°	961.7	975.7	949.4	914.7	1004.0	1044.2	1062.4	1020.5	1125.5	1186.0	1186.0
22.5°	1081.5	1045.5	1005.7	982.4	1061.2	1103.9	1101.8	1089.9	1145.8	1252.9	1242.8
25°	1147.5	1127.2	1107.3	1113.2	1153.0	1175.0	1204.2	1176.7	1229.2	1308.8	1275.3
27.5°	1272.8	1235.1	1137.4	1215.2	1215.2	1198.7	1260.5	1273.7	1239.4	1368.9	1393.9
30°	1414.6	1401.5	1263.1	1345.6	1320.2	1273.7	1392.2	1383.7	1326.1	1458.2	1446.8
32.5°	1548.8	1592.0	1460.7	1415.4	1453.5	1471.3	1409.1	1434.5	1445.5	1572.9	1567.4
35°	1754.5	1790.9	1616.9	1605.5	1542.0	1525.5	1572.9	1581.4	1582.2	1716.4	1691.9
37.5°	2110.5	2058.0	1886.1	1805.3	1812.5	1792.6	1801.9	1735.0	1744.3	1939.0	1951.3
40°	2370.8	2311.5	2120.2	2062.2	1920.0	2005.1	1929.7	1923.0	1904.3	2156.6	2149.8
42.5°	2658.2	2576.9	2365.3	2287.8	2136.7	2102.0	2067.3	2145.6	2140.5	2374.2	2425.8
45°	2875.3	2711.1	2600.6	2552.4	2461.8	2376.7	2343.7	2378.8	2362.8	2536.3	2626.5
47.5°	3012.5	2869.8	2742.9	2641.3	2554.5	2763.2	2596.0	2549.0	2516.4	2710.7	2797.5
50°	3121.7	2957.0	2807.2	2773.3	2841.9	3026.5	2762.8	2659.0	2698.8	2841.9	2960.0
52.5°	3151.3	2976.9	2842.3	2820.7	3006.1	3039.6	2996.8	2822.4	2811.9	2999.4	3142.0
55°	3060.7	2893.5	2829.6	2947.7	3152.6	3124.7	3189.8	3078.5	3003.6	3160.2	3339.7
57.5°	2827.5	2661.6	2646.3	2816.5	3074.7	3312.6	3344.8	3256.7	3158.5	3324.4	3536.1
60°	2444.4	2292.9	2331.4	2519.4	2908.8	3247.4	3418.4	3338.0	3307.5	3472.6	3718.1
62.5°	1848.0	1729.9	1832.8	2094.8	2605.7	3163.2	3520.0	3507.3	3463.3	3630.1	3878.9
65°	1178.4	1116.2	1221.2	1487.4	2135.4	3009.9	3568.7	3585.6	3626.2	3751.5	4003.4
67.5°	684.9	651.9	715.8	933.8	1520.8	2471.5	3478.1	3721.1	3742.2	3814.2	4085.1
70°	405.1	383.5	409.7	524.4	861.0	1683.8	2966.8	3661.8	3821.8	3871.7	4167.6
72.5°	309.0	288.7	277.2	310.3	449.5	869.8	2005.9	3103.9	3757.9	3833.6	4132.9
75°	267.1	247.6	234.1	237.0	267.5	413.1	1087.4	2220.1	3202.1	3490.8	3817.6
77.5°	229.4	212.1	202.3	201.5	205.3	226.9	454.6	1203.8	2005.5	2509.2	2752.2
80°	183.7	170.2	168.0	168.0	162.5	160.8	226.0	458.0	763.2	905.0	867.7
82.5°	134.2	120.6	134.2	132.5	124.0	117.2	143.9	198.1	235.3	185.8	146.9
85°	90.6	78.3	88.5	90.2	82.1	61.0	86.3	99.0	101.6	63.5	52.5
87.5°	31.7	30.9	49.9	43.6	35.6	20.7	31.7	34.3	36.0	22.4	15.2
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: P596962
 CATALOG NUMBER: MSA-SA2C-835-U-RW

CANDELA DISTRIBUTION (continued):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6	366.6
2.5°	444.4	439.4	414.0	417.8	427.5	432.2	436.8	417.8	408.5	438.1	435.1
5°	582.0	563.4	542.6	539.7	541.0	522.8	533.3	528.7	530.8	549.8	553.7
7.5°	697.1	674.7	647.2	625.6	588.4	558.7	583.7	596.4	600.2	634.1	646.8
10°	759.4	740.3	732.3	691.6	679.4	675.6	669.6	649.3	671.7	663.7	670.1
12.5°	881.3	877.5	835.6	808.9	811.4	818.6	781.4	761.1	731.9	777.6	761.1
15°	985.0	1001.5	959.6	910.9	886.8	899.0	870.7	841.1	814.8	828.8	811.0
17.5°	1117.5	1117.0	1035.3	983.3	981.2	980.3	938.4	873.2	904.6	894.8	895.7
20°	1187.7	1176.3	1074.7	1014.6	1065.8	1047.6	1009.9	926.1	962.5	974.4	982.0
22.5°	1246.6	1240.2	1117.0	1073.0	1106.0	1106.5	1068.8	1024.8	1020.1	1056.9	1037.0
25°	1287.6	1313.0	1197.0	1186.5	1200.8	1186.5	1149.6	1120.8	1102.2	1157.2	1102.2
27.5°	1385.0	1349.0	1209.3	1269.4	1278.3	1205.9	1252.1	1218.2	1166.6	1234.7	1257.1
30°	1454.4	1475.6	1295.7	1386.2	1375.7	1308.8	1327.8	1326.6	1264.8	1397.7	1382.0
32.5°	1573.8	1548.4	1436.6	1429.4	1454.8	1451.9	1419.7	1435.3	1450.6	1547.1	1570.4
35°	1696.1	1723.2	1526.8	1575.4	1568.3	1522.5	1606.8	1597.0	1642.3	1840.4	1774.8
37.5°	1972.1	1843.0	1729.1	1722.8	1771.0	1778.2	1751.1	1793.9	1891.6	2044.0	2114.3
40°	2152.8	2094.0	1900.5	1908.1	1841.3	1956.4	1880.2	2017.8	2092.3	2349.2	2324.2
42.5°	2426.2	2282.8	2096.9	2122.3	2108.8	2053.3	2153.7	2224.3	2331.0	2527.0	2653.5
45°	2629.8	2433.0	2345.0	2329.3	2327.6	2424.1	2411.4	2524.4	2562.5	2709.8	2814.8
47.5°	2784.3	2617.1	2486.8	2504.5	2452.9	2728.5	2581.6	2616.7	2693.8	2832.6	2954.9
50°	2967.6	2781.4	2633.2	2677.2	2803.0	2908.8	2775.9	2715.8	2753.4	2917.2	3053.5
52.5°	3137.4	2941.4	2778.4	2815.2	3020.5	2972.3	2957.9	2805.9	2801.3	2932.9	3087.8
55°	3335.9	3114.9	2971.0	3087.8	3160.6	3101.0	3078.1	2893.1	2778.8	2852.1	2998.1
57.5°	3530.6	3286.8	3143.7	3167.8	3260.1	3200.8	3029.4	2744.5	2601.9	2616.3	2764.0
60°	3713.0	3444.7	3326.6	3303.3	3376.9	3144.5	2844.4	2472.4	2283.2	2248.5	2376.3
62.5°	3869.2	3576.7	3465.0	3401.5	3471.7	3146.7	2556.2	2035.6	1827.7	1710.1	1809.5
65°	3993.2	3686.3	3606.8	3573.8	3599.2	2955.3	2107.1	1494.6	1239.8	1109.4	1167.4
67.5°	4075.8	3747.7	3711.3	3754.5	3415.9	2461.4	1561.1	956.6	720.8	649.7	686.1
70°	4161.3	3801.9	3800.6	3653.8	2896.5	1696.9	911.7	551.5	419.5	392.0	414.8
72.5°	4132.5	3737.6	3756.6	3195.3	2007.2	907.1	481.3	312.0	284.0	293.8	314.1
75°	3826.9	3398.1	3306.2	2297.1	1138.6	421.6	277.2	236.2	234.5	249.3	269.2
77.5°	2775.9	2366.6	2123.6	1302.0	488.0	228.1	204.0	197.2	197.2	209.1	226.9
80°	915.1	792.0	825.4	503.7	230.7	157.5	159.2	162.1	161.3	164.2	179.0
82.5°	150.3	155.8	240.8	205.7	139.3	107.5	120.2	126.1	127.8	114.3	129.9
85°	53.3	60.1	102.4	95.2	80.4	54.2	79.2	88.5	87.2	76.2	84.2
87.5°	16.5	21.2	37.2	28.8	24.1	14.8	29.6	34.7	43.6	17.8	16.1
90°	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)