

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: P597045

Luminaire Tested: **MSA-SA3B-835-U-T4W-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597045
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-15)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-835-U-T4W-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9136 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

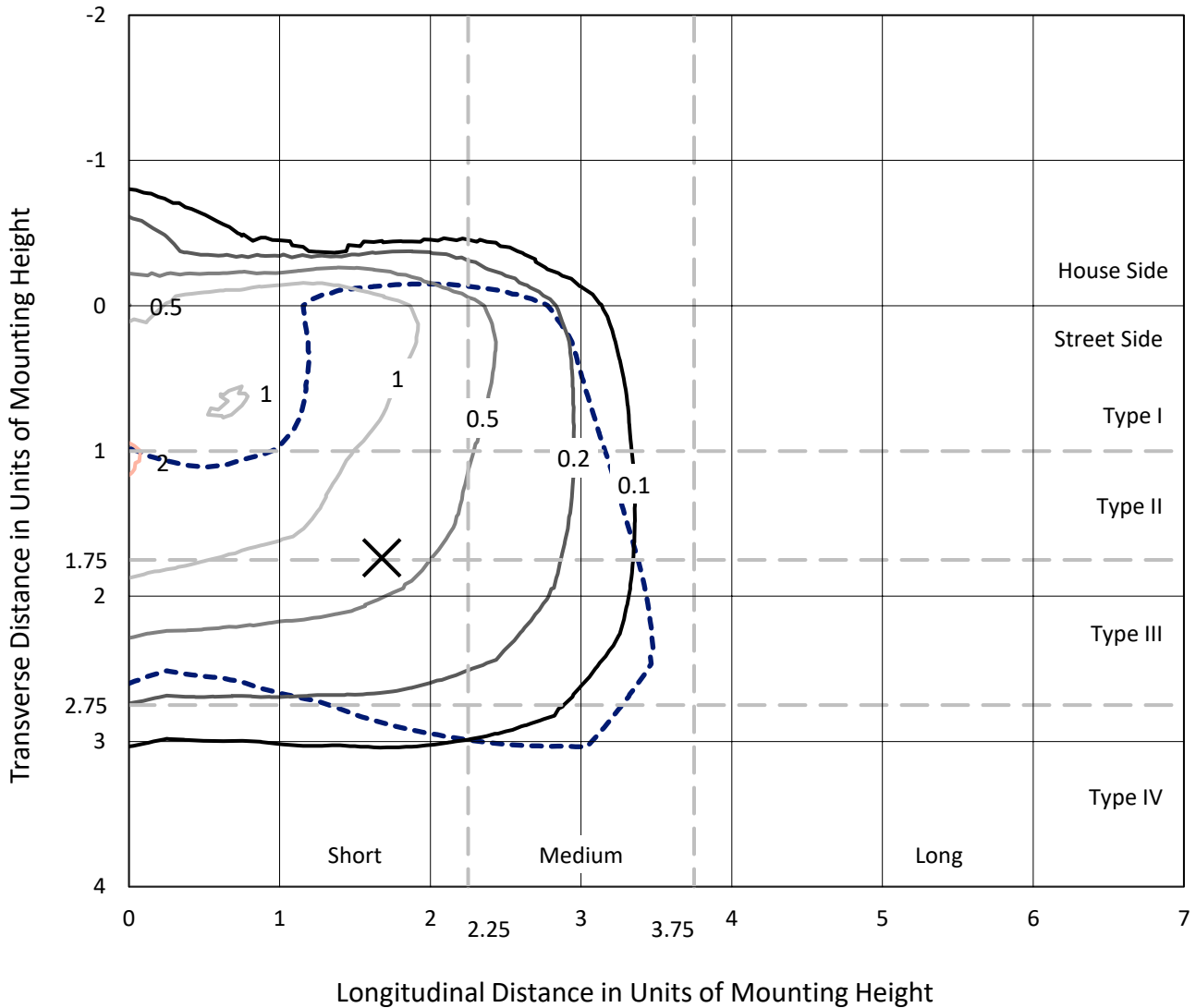
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

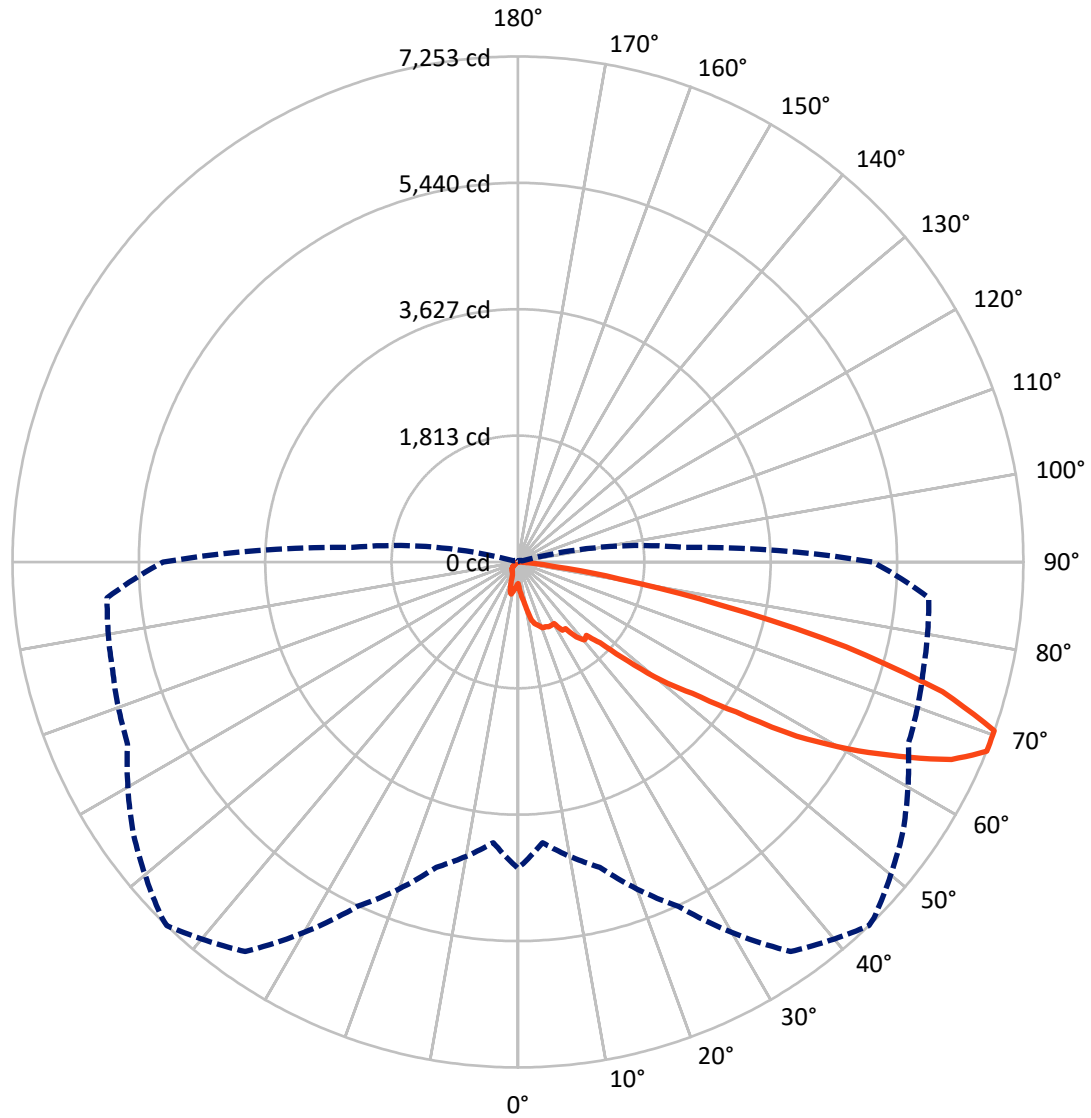
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	928.0	0.0	928.0
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	8208.0	0.0	8208.0
	% Fixture	89.8	0.0	89.8
Total	Lumens	9136.0	0.0	9136.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	0.5
10°-20°	191.0	2.1
20°-30°	338.4	3.7
30°-40°	550.0	6.0
40°-50°	1100.5	12.0
50°-60°	2257.8	24.7
60°-70°	3101.6	33.9
70°-80°	1457.8	16.0
80°-90°	93.4	1.0
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°	9136.0	100.0
0°-180°	9136.0	100.0

Coefficient of Utilization

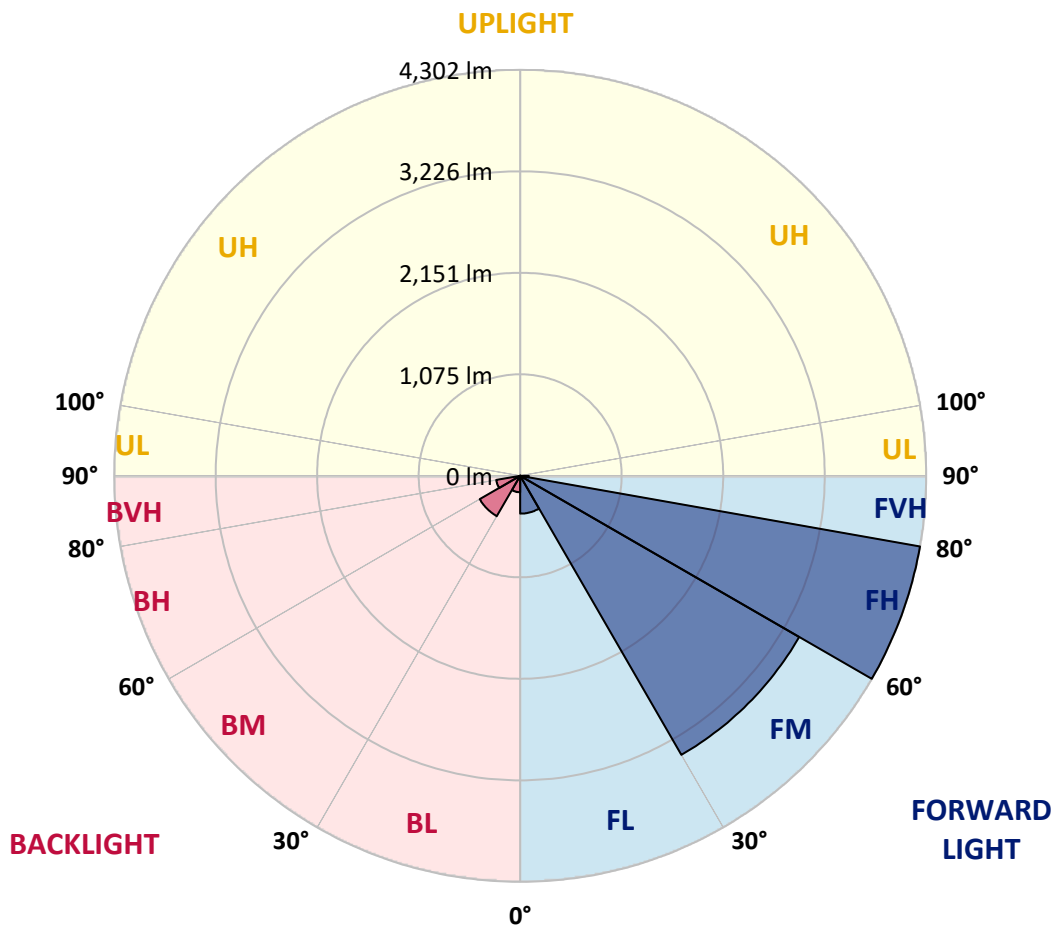


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	400.7	4.4			
FM (30°-60°)	3414.0	37.4			
FH (60°-80°)	4301.8	47.1			G2/5000
FVH (80°-90°)	91.5	1.0			G1/100
BL (0°-30°)	174.3	1.9	B1/500		
BM (30°-60°)	494.4	5.4	B1/1000		
BH (60°-80°)	257.5	2.8	B1/500		G1/500
BVH (80°-90°)	1.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8
2.5°	391.4	378.8	360.7	364.7	366.8	372.3	372.8	365.7	345.6	340.1	364.7
5°	548.6	517.9	512.3	500.8	477.6	465.0	462.0	474.6	458.4	453.4	460.0
7.5°	700.8	674.6	645.8	630.2	581.9	552.1	550.6	555.7	558.7	541.1	550.1
10°	802.0	773.3	767.3	730.5	688.7	681.6	678.6	659.4	643.8	630.7	586.9
12.5°	893.7	893.2	904.3	851.4	844.8	851.9	849.4	780.9	765.2	710.3	697.7
15°	1015.6	1045.8	998.0	953.7	897.2	921.4	914.9	871.0	860.5	823.2	769.3
17.5°	1142.1	1150.1	1070.0	1002.0	987.4	955.7	962.2	946.6	893.2	922.9	869.5
20°	1145.1	1162.7	1077.1	964.7	1009.6	1008.1	1008.6	993.5	922.9	992.4	943.6
22.5°	1187.4	1144.1	1064.5	993.0	1001.0	1008.6	1016.6	998.0	982.9	1000.0	1009.1
25°	1170.3	1153.2	1076.6	1029.2	1021.7	1027.7	1029.7	1053.4	1043.8	1085.1	1062.5
27.5°	1214.6	1189.9	1052.9	1061.5	1034.8	1027.7	1015.6	1094.7	1122.9	1090.2	1150.6
30°	1290.7	1287.2	1093.7	1106.3	1085.6	1023.7	1055.9	1159.2	1194.5	1174.3	1247.9
32.5°	1409.6	1421.7	1213.1	1131.5	1142.1	1169.8	1157.7	1159.2	1248.4	1293.2	1351.6
35°	1578.3	1571.8	1329.5	1227.2	1171.8	1176.3	1193.5	1275.6	1390.9	1387.9	1449.9
37.5°	1909.8	1838.3	1535.5	1324.9	1341.6	1364.2	1351.6	1462.0	1473.1	1477.1	1625.2
40°	2398.5	2303.3	1860.5	1531.0	1370.8	1471.0	1465.0	1492.2	1566.3	1594.0	1810.1
42.5°	3042.3	2914.4	2432.3	1909.8	1511.8	1442.8	1480.1	1531.5	1780.4	1859.5	2096.2
45°	3753.7	3494.7	3002.5	2449.9	1865.5	1651.4	1679.6	1775.3	2120.4	2251.4	2512.9
47.5°	4214.6	3986.9	3567.3	2928.5	2234.3	2121.9	2124.4	2145.1	2519.9	2762.7	3113.4
50°	4615.1	4372.8	3983.4	3428.7	2886.7	2674.1	2625.7	2530.5	3028.7	3360.7	3749.6
52.5°	5180.4	4897.2	4399.5	4015.6	3630.7	3130.0	3112.9	3145.1	3628.7	3977.9	4402.0
55°	5690.2	5346.1	4871.1	4629.2	4479.1	3800.0	3814.6	3868.5	4399.0	4583.9	4982.4
57.5°	5915.4	5542.6	5298.3	5189.4	5109.3	4715.4	4666.0	4633.8	5006.6	5077.1	5590.5
60°	6063.0	5708.3	5597.5	5622.7	5865.5	5447.4	5402.5	5215.1	5509.3	5567.3	6135.5
62.5°	5969.8	5646.4	5670.0	5880.1	6419.2	6144.1	6014.6	5701.3	5920.4	5967.3	6527.0
65°	5382.9	5045.9	5350.1	5858.5	6841.3	6834.8	6774.8	6150.2	6148.1	6208.1	6557.2
67.5°	4397.0	4043.3	4535.5	5452.4	6823.7	7253.4	7225.2	6745.6	6180.9	6020.7	5917.4
70°	3056.9	2750.1	3308.3	4502.8	6215.6	7250.4	7205.1	7145.6	5921.9	5182.4	4587.9
72.5°	1588.4	1419.7	1939.6	3102.8	4954.7	6370.3	6519.9	6422.2	5056.4	3765.3	2701.8
75°	539.5	484.1	800.0	1646.9	3293.7	4864.5	5039.8	4940.6	3434.3	2020.2	1068.5
77.5°	209.1	194.5	286.7	668.5	1652.4	2964.2	3154.7	3053.4	1841.8	740.1	251.4
80°	118.9	114.9	158.2	301.3	728.5	1474.6	1608.6	1458.9	664.0	249.4	65.5
82.5°	50.4	51.9	88.2	162.7	366.2	520.4	580.4	529.5	278.1	170.8	24.2
85°	11.1	13.6	41.8	90.7	153.7	148.6	155.7	172.8	170.8	125.4	10.6
87.5°	0.0	0.0	13.1	24.7	36.8	24.2	19.1	33.8	52.4	50.4	4.5
90°	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°	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8
2.5°	369.3	364.2	332.5	330.5	332.5	327.0	326.4	314.9	315.9	342.1	344.1
5°	460.0	434.8	407.6	399.0	390.9	372.8	382.9	382.9	382.9	399.5	404.5
7.5°	542.1	508.3	470.0	437.8	406.6	383.9	399.5	410.6	417.1	438.8	448.9
10°	579.3	546.1	511.8	466.0	441.8	433.3	415.1	405.5	417.1	412.6	418.1
12.5°	658.9	628.7	569.8	522.4	504.3	475.1	421.7	384.4	359.7	355.7	354.7
15°	736.5	717.9	638.8	575.3	512.3	444.8	353.7	304.3	278.1	273.6	274.1
17.5°	834.8	808.1	691.7	600.5	493.7	372.3	273.0	230.7	228.7	239.8	240.8
20°	900.3	856.4	718.4	579.9	432.2	281.6	213.6	203.5	219.6	239.8	237.8
22.5°	962.7	915.4	753.7	561.7	335.0	213.6	196.5	197.5	211.1	232.7	238.3
25°	1004.0	986.9	797.0	519.4	255.4	184.9	187.9	195.5	207.1	227.7	227.7
27.5°	1128.5	1048.4	791.9	437.3	196.5	172.3	179.3	188.9	195.0	219.6	222.2
30°	1204.0	1177.8	818.1	353.7	172.3	156.2	169.8	178.3	182.4	210.6	211.6
32.5°	1296.7	1238.8	849.9	261.0	160.2	155.2	152.1	158.7	170.3	195.0	196.5
35°	1409.6	1392.4	804.5	205.0	156.2	145.1	139.0	142.6	150.1	166.8	170.3
37.5°	1639.8	1538.0	777.3	175.8	156.2	141.6	135.0	125.9	127.0	138.5	145.1
40°	1833.8	1802.5	701.3	170.8	149.1	136.5	120.4	109.3	101.8	105.3	107.8
42.5°	2189.9	2045.3	603.0	168.3	142.6	123.4	102.3	90.7	79.1	80.1	84.1
45°	2622.2	2310.3	515.4	165.7	138.0	110.3	86.1	72.5	60.5	61.0	65.0
47.5°	3199.5	2696.7	409.1	158.2	130.0	98.2	69.5	55.4	48.4	49.9	53.4
50°	3855.4	3035.8	323.4	146.6	120.4	86.7	56.4	44.8	42.3	43.8	47.9
52.5°	4441.3	3285.7	267.0	136.0	106.8	70.5	47.4	39.8	38.8	39.8	42.8
55°	4962.2	3430.7	223.2	123.9	91.7	56.9	42.8	36.8	36.3	35.8	37.8
57.5°	5450.9	3472.6	174.3	104.8	74.6	49.4	39.8	34.3	33.2	31.7	33.2
60°	5807.1	3401.0	128.0	84.1	61.0	44.8	37.3	30.7	29.2	26.7	27.7
62.5°	5978.9	3205.1	96.7	67.5	51.9	40.8	33.2	26.7	24.7	21.7	22.2
65°	5815.6	2882.1	76.1	56.9	44.3	34.3	28.2	22.7	20.2	17.1	17.1
67.5°	5092.7	2390.9	64.5	49.4	37.3	29.2	23.2	20.7	16.6	14.1	13.6
70°	3738.1	1719.9	55.4	43.3	32.2	25.2	19.6	18.6	16.1	13.6	12.6
72.5°	2109.8	973.3	47.4	38.3	27.2	21.2	16.6	17.1	15.6	12.6	11.6
75°	805.0	328.0	39.3	31.7	22.2	16.1	14.1	14.1	14.1	10.6	9.1
77.5°	199.5	83.6	31.2	25.7	17.6	10.6	11.6	12.1	12.1	9.1	6.5
80°	54.9	28.2	18.6	18.6	12.6	6.0	8.1	8.1	6.5	3.0	0.0
82.5°	20.2	10.6	6.5	8.1	5.5	2.0	3.0	2.0	1.5	0.0	0.0
85°	8.6	5.5	4.0	4.5	2.5	0.0	0.5	1.0	0.0	0.0	0.0
87.5°	3.5	2.5	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
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)