

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: P596503

Luminaire Tested: **MSA-SA1B-827-U-SL3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1B-827-U-SL3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3057 lumens
Efficiency: N/A
Efficacy: 69.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

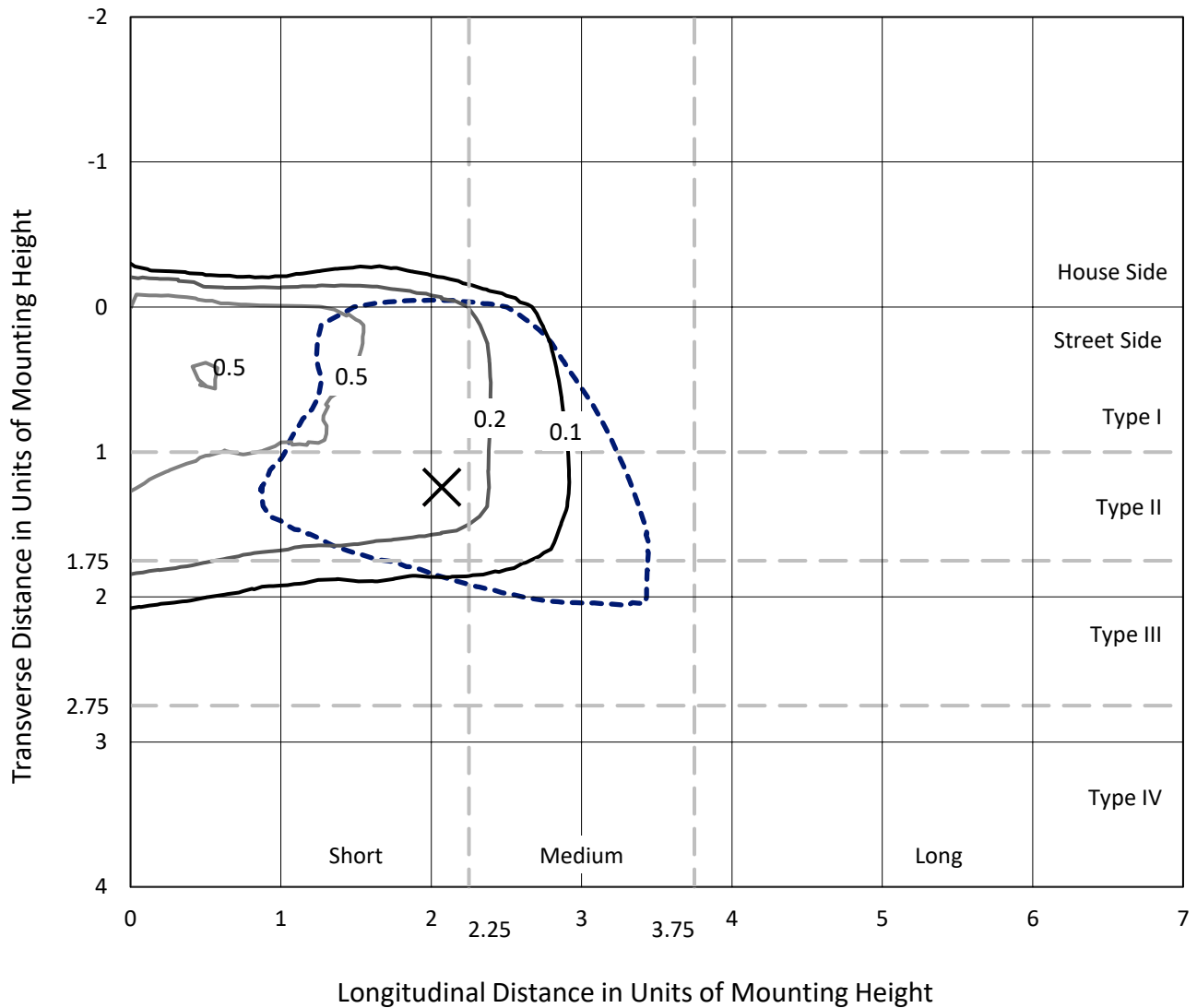
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

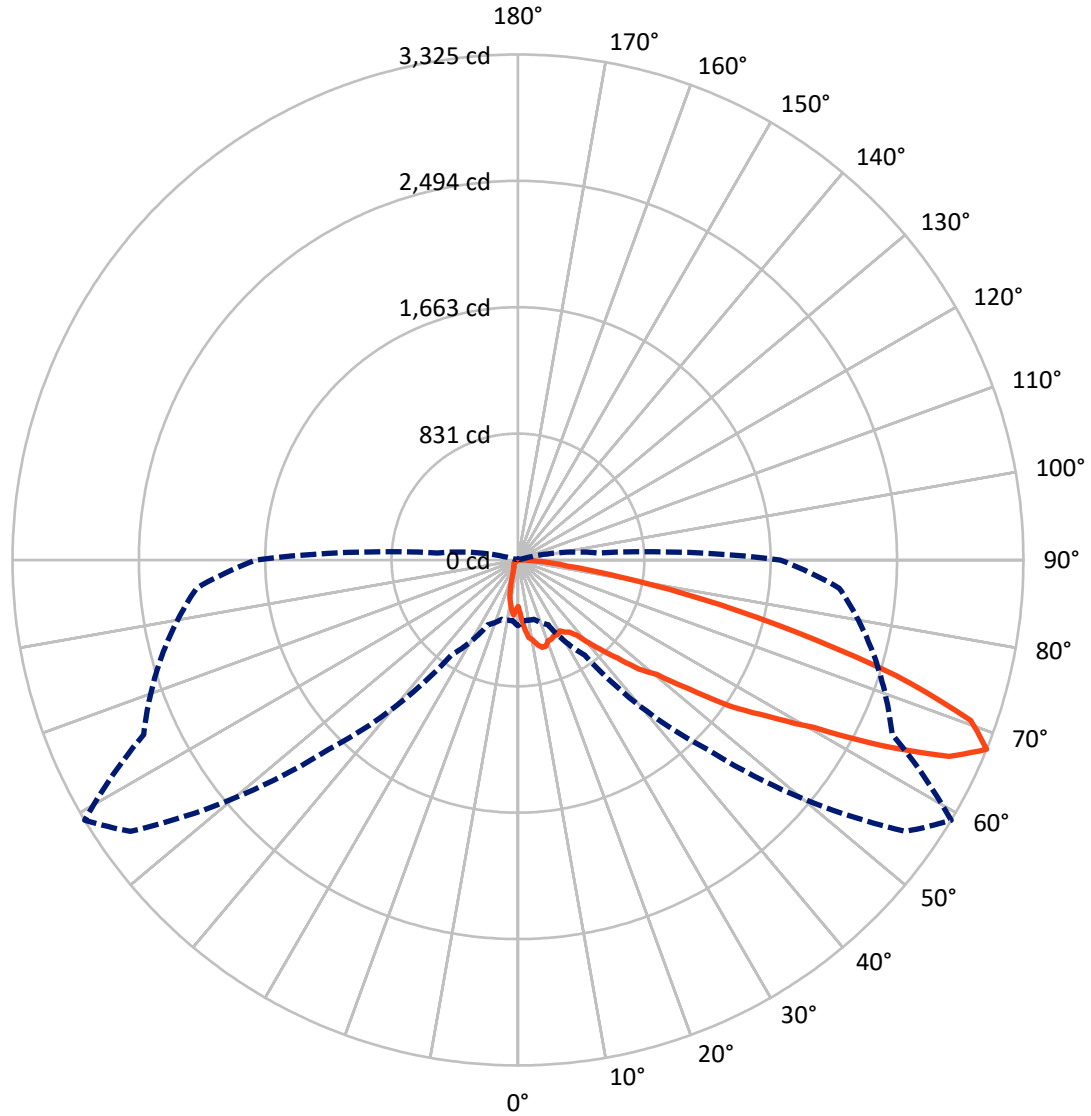
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	260.0	0.0	260.0
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	2797.0	0.0	2797.0
	% Fixture	91.5	0.0	91.5
Total	Lumens	3057.0	0.0	3057.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.2	1.2
10°-20°	104.7	3.4
20°-30°	155.8	5.1
30°-40°	240.3	7.9
40°-50°	428.9	14.0
50°-60°	763.2	25.0
60°-70°	888.8	29.1
70°-80°	395.3	12.9
80°-90°	42.9	1.4
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°	3057.0	100.0
0°-180°	3057.0	100.0

Coefficient of Utilization



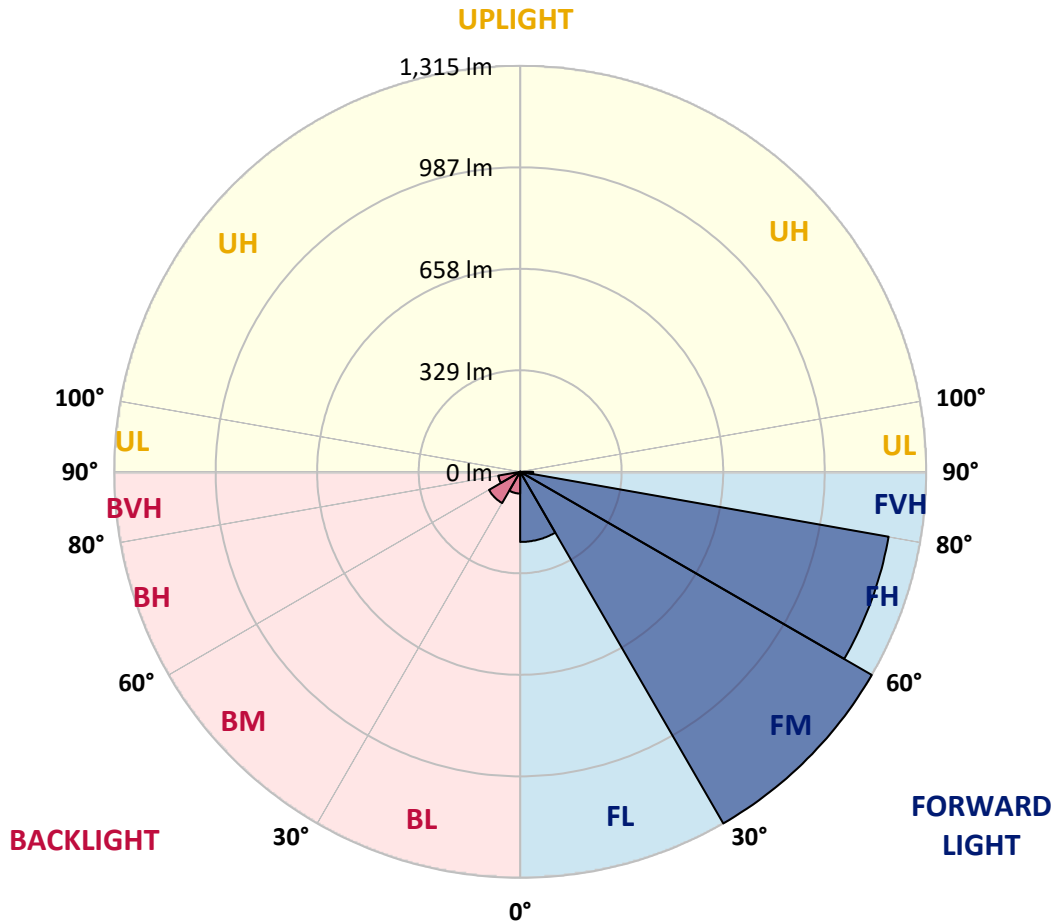
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	227.4	7.4			
FM (30°-60°)	1315.4	43.0			
FH (60°-80°)	1212.1	39.6			G1/1800
FVH (80°-90°)	42.2	1.4			G1/100
BL (0°-30°)	70.3	2.3	B0/110		
BM (30°-60°)	116.9	3.8	B0/220		
BH (60°-80°)	72.0	2.4	B0/110		G0/110
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9
2.5°	398.7	383.7	362.4	368.7	374.4	379.9	370.9	365.8	363.3	341.3	368.9
5°	489.6	470.9	461.1	458.6	452.4	438.7	461.6	451.4	454.8	459.1	468.1
7.5°	517.3	508.8	494.7	500.0	476.4	474.4	506.2	515.0	526.6	518.7	529.5
10°	503.1	488.4	495.0	493.2	492.2	513.0	535.3	535.7	553.1	561.4	524.7
12.5°	474.9	476.6	500.4	498.6	529.5	571.0	576.1	570.7	599.0	584.5	578.9
15°	493.6	507.6	494.4	498.9	509.9	561.7	579.8	596.6	623.3	632.0	594.4
17.5°	516.2	517.6	493.6	488.0	515.8	539.9	582.6	596.4	599.0	675.0	629.2
20°	504.0	515.9	487.3	452.1	495.2	528.0	571.3	567.0	584.6	687.7	637.1
22.5°	536.5	519.5	482.8	456.3	470.9	500.7	537.4	565.8	592.2	657.4	647.3
25°	539.6	533.4	500.7	477.2	474.7	482.3	533.4	551.7	593.2	684.6	638.7
27.5°	574.4	567.3	500.4	502.8	479.5	456.2	513.9	556.8	610.0	668.1	657.1
30°	619.3	619.9	533.7	541.0	507.9	470.2	529.8	541.6	621.5	694.5	670.7
32.5°	664.8	683.5	599.5	561.0	550.6	523.7	510.0	564.4	608.9	739.7	704.8
35°	734.0	746.7	653.7	619.2	578.4	547.8	563.9	583.4	654.0	799.6	749.5
37.5°	851.2	828.3	750.9	690.8	681.1	635.9	643.9	626.4	700.0	870.2	838.0
40°	917.1	896.4	815.9	786.6	724.4	731.4	706.0	716.2	766.7	943.7	918.7
42.5°	985.8	966.0	895.5	874.7	815.4	786.6	775.2	811.9	869.0	1066.2	1034.3
45°	1054.9	1004.6	974.7	985.1	958.5	901.5	888.2	920.8	980.7	1216.6	1156.3
47.5°	1113.1	1070.7	1048.2	1043.4	1033.1	1112.2	1058.0	1072.4	1098.8	1349.8	1308.3
50°	1218.0	1176.2	1141.1	1131.4	1181.8	1294.0	1210.4	1182.6	1235.5	1510.6	1484.4
52.5°	1369.6	1316.3	1260.4	1260.6	1355.8	1417.4	1457.0	1408.1	1418.0	1687.5	1675.9
55°	1491.4	1423.7	1377.5	1414.0	1555.9	1590.5	1741.7	1698.8	1686.0	1851.6	1837.3
57.5°	1508.1	1427.0	1405.0	1469.1	1663.4	1883.8	2046.5	1939.3	1919.7	1988.9	2017.2
60°	1352.1	1266.0	1282.6	1385.7	1698.3	2062.6	2326.3	2238.9	2114.0	2149.7	2169.2
62.5°	1008.4	939.7	986.2	1122.7	1563.5	2182.4	2650.3	2690.8	2339.3	2270.4	2266.3
65°	654.3	611.3	641.8	753.7	1183.2	2168.7	2939.7	3115.6	2516.9	2368.9	2296.8
67.5°	432.8	400.1	404.5	470.7	765.1	1763.8	3112.8	3325.3	2716.5	2424.8	2122.0
70°	322.6	296.9	298.4	334.3	454.2	1163.2	2871.5	3159.9	2789.4	2231.1	1712.7
72.5°	232.6	215.5	229.9	269.8	361.9	615.1	2140.3	2602.3	2432.4	1759.8	1154.0
75°	161.1	149.8	173.4	225.7	330.3	381.9	1414.3	1873.3	1704.8	1104.1	521.6
77.5°	89.3	85.9	119.8	183.9	299.8	313.0	866.4	1230.9	945.6	395.8	124.1
80°	39.0	37.8	58.0	138.1	252.0	282.8	487.7	682.5	372.0	70.6	40.1
82.5°	16.7	16.1	24.8	83.1	183.1	236.5	300.8	328.5	128.0	21.8	22.8
85°	2.9	3.3	9.9	43.8	111.4	120.1	217.8	194.4	64.4	10.4	16.3
87.5°	0.0	0.0	1.5	8.5	20.9	34.4	94.4	68.1	12.2	3.4	2.8
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°	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9	305.9
2.5°	372.7	364.1	331.1	326.9	322.4	315.8	313.3	299.1	297.2	315.5	315.5
5°	463.9	432.9	401.5	376.8	354.6	324.0	315.3	306.3	299.1	297.2	302.9
7.5°	512.0	474.3	424.9	361.9	310.8	266.4	247.8	234.8	220.3	224.6	226.9
10°	509.4	469.3	406.3	325.4	268.7	219.6	172.4	144.9	129.6	122.0	121.0
12.5°	535.3	497.5	393.8	296.3	224.0	156.2	108.5	88.8	77.5	77.7	76.8
15°	550.3	509.1	379.2	259.4	157.7	100.5	75.2	70.9	69.3	71.0	70.1
17.5°	576.7	521.3	346.3	204.5	108.5	75.8	69.2	67.5	69.5	73.1	72.1
20°	574.7	500.1	299.4	144.1	80.2	68.3	65.5	62.8	67.0	70.7	70.1
22.5°	572.9	479.4	255.2	106.3	67.0	62.2	59.9	58.8	61.0	65.3	66.2
25°	556.5	469.2	210.5	79.9	60.7	56.5	55.4	54.5	55.3	58.8	58.7
27.5°	576.6	443.3	162.5	67.0	56.2	51.2	50.3	48.8	47.2	50.3	50.8
30°	572.4	446.9	127.4	59.0	51.7	45.0	45.4	42.1	39.3	42.1	42.1
32.5°	587.6	420.9	102.0	53.6	47.2	42.4	38.5	35.1	33.1	34.8	35.1
35°	609.7	422.0	79.9	50.2	43.3	37.8	33.1	29.7	27.9	28.6	29.1
37.5°	683.9	414.5	66.7	47.5	41.9	35.0	30.2	25.7	24.5	25.4	25.8
40°	732.2	434.3	58.8	46.1	38.4	32.2	25.8	22.6	21.5	22.0	22.8
42.5°	823.2	445.3	55.0	44.6	35.1	27.6	22.1	20.3	18.7	19.3	20.0
45°	920.5	464.1	52.0	42.9	32.7	24.1	19.5	18.0	15.9	16.1	16.7
47.5°	1040.2	508.6	48.6	39.9	29.3	22.0	17.3	15.0	13.2	13.0	13.8
50°	1200.9	568.2	45.5	36.2	27.1	20.1	15.2	12.2	10.7	10.2	10.8
52.5°	1372.4	645.3	42.3	33.6	24.5	17.6	13.0	9.9	8.5	8.2	8.7
55°	1542.3	719.3	39.2	31.9	21.7	15.2	11.0	8.2	7.0	6.7	7.0
57.5°	1736.0	799.3	35.1	28.5	19.0	13.2	9.1	6.8	5.7	5.4	5.6
60°	1881.8	827.5	31.7	24.8	16.6	11.6	7.7	5.4	4.6	4.3	4.5
62.5°	1951.0	781.5	28.5	21.5	14.6	10.1	6.5	4.5	3.9	3.6	3.6
65°	1933.0	679.7	25.2	18.4	12.5	8.4	5.1	3.9	3.4	2.9	2.8
67.5°	1725.6	531.9	21.5	15.5	10.5	6.8	4.3	3.7	3.1	2.8	2.3
70°	1368.5	385.1	17.5	12.8	8.8	5.6	3.4	3.4	2.9	2.8	2.2
72.5°	897.0	242.4	14.2	10.4	7.3	4.3	2.6	3.1	2.8	2.8	2.0
75°	388.7	86.7	11.5	8.4	6.0	2.9	2.3	2.8	2.9	2.8	2.3
77.5°	91.0	26.9	9.0	6.7	5.0	2.0	2.3	2.8	2.9	2.6	2.0
80°	34.2	11.5	5.9	4.3	3.9	1.2	2.0	1.7	1.5	1.1	0.3
82.5°	20.7	4.8	3.1	2.2	1.9	0.3	0.9	0.6	0.3	0.3	0.0
85°	14.7	2.3	1.7	1.5	0.9	0.0	0.2	0.0	0.0	0.2	0.0
87.5°	2.0	0.6	0.8	0.8	0.6	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)