

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: P367279

Luminaire Tested: **MSA-SA2B-727-U-T4W-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367279
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-15)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-727-U-T4W-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) 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: 6280 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

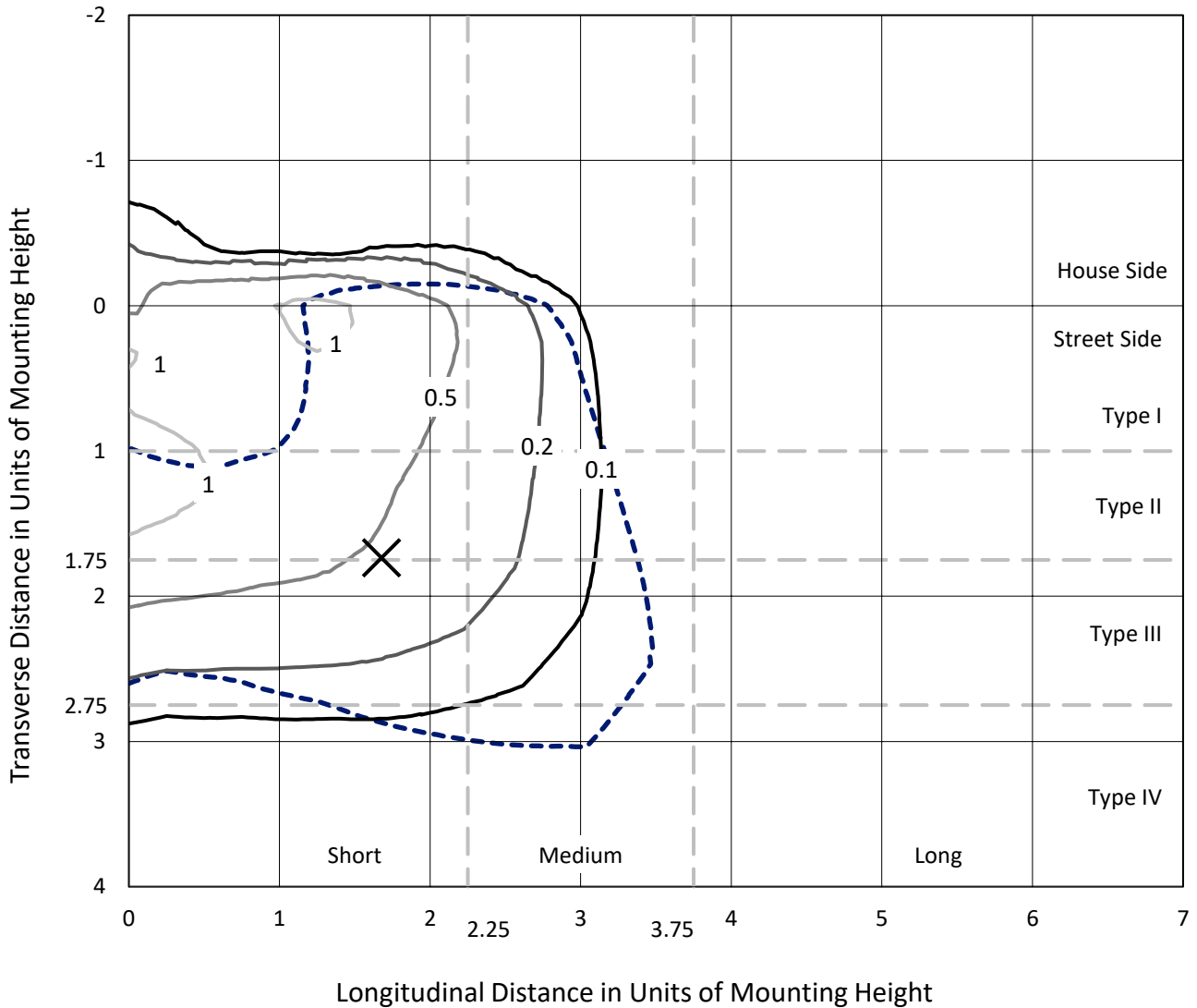
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

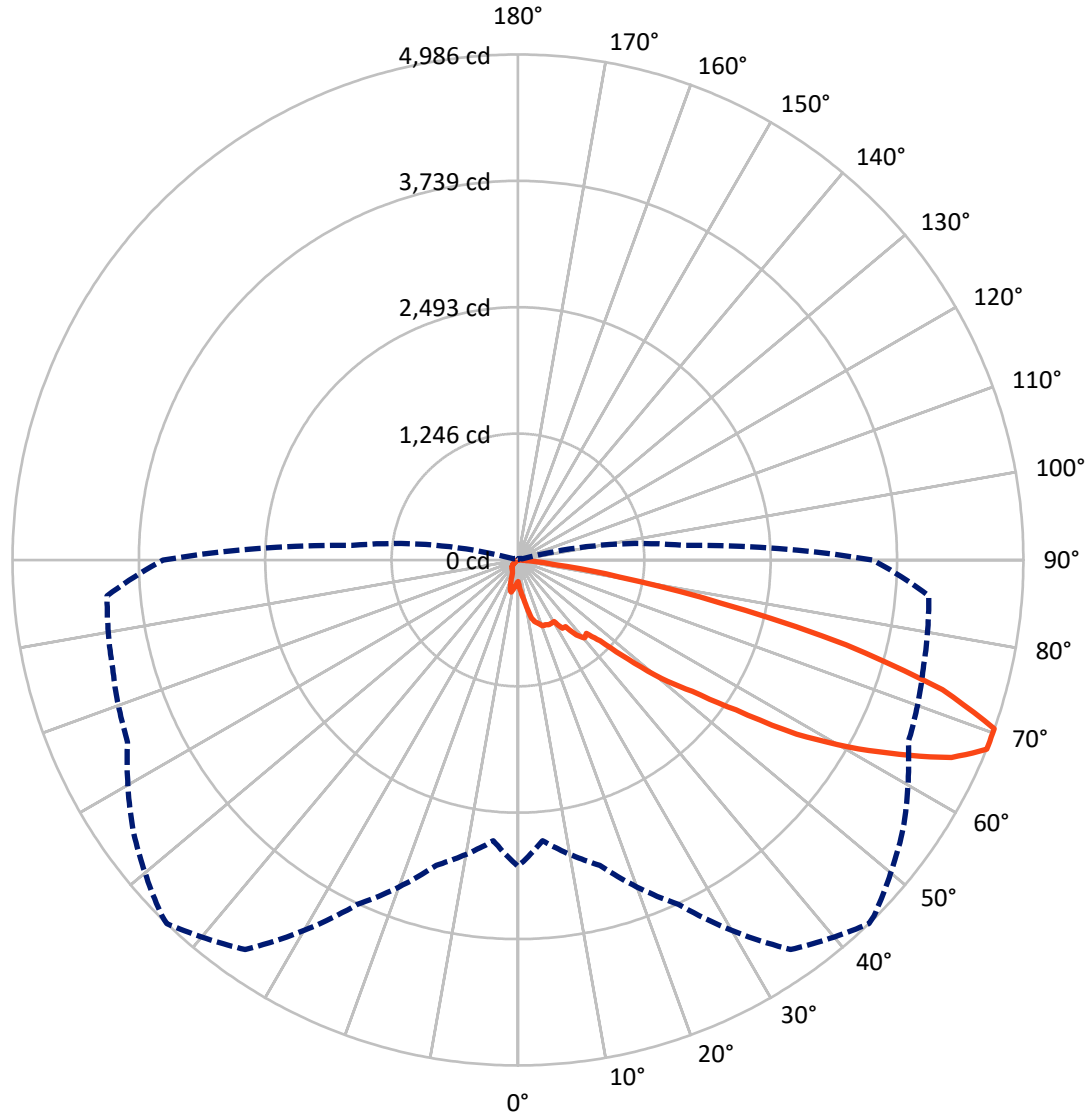
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 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	637.9	0.0	637.9
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	5642.1	0.0	5642.1
	% Fixture	89.8	0.0	89.8
Total	Lumens	6280.0	0.0	6280.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.4	0.5
10°-20°	131.3	2.1
20°-30°	232.6	3.7
30°-40°	378.0	6.0
40°-50°	756.5	12.0
50°-60°	1552.0	24.7
60°-70°	2132.0	33.9
70°-80°	1002.1	16.0
80°-90°	64.2	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°	6280.0	100.0
0°-180°	6280.0	100.0

Coefficient of Utilization

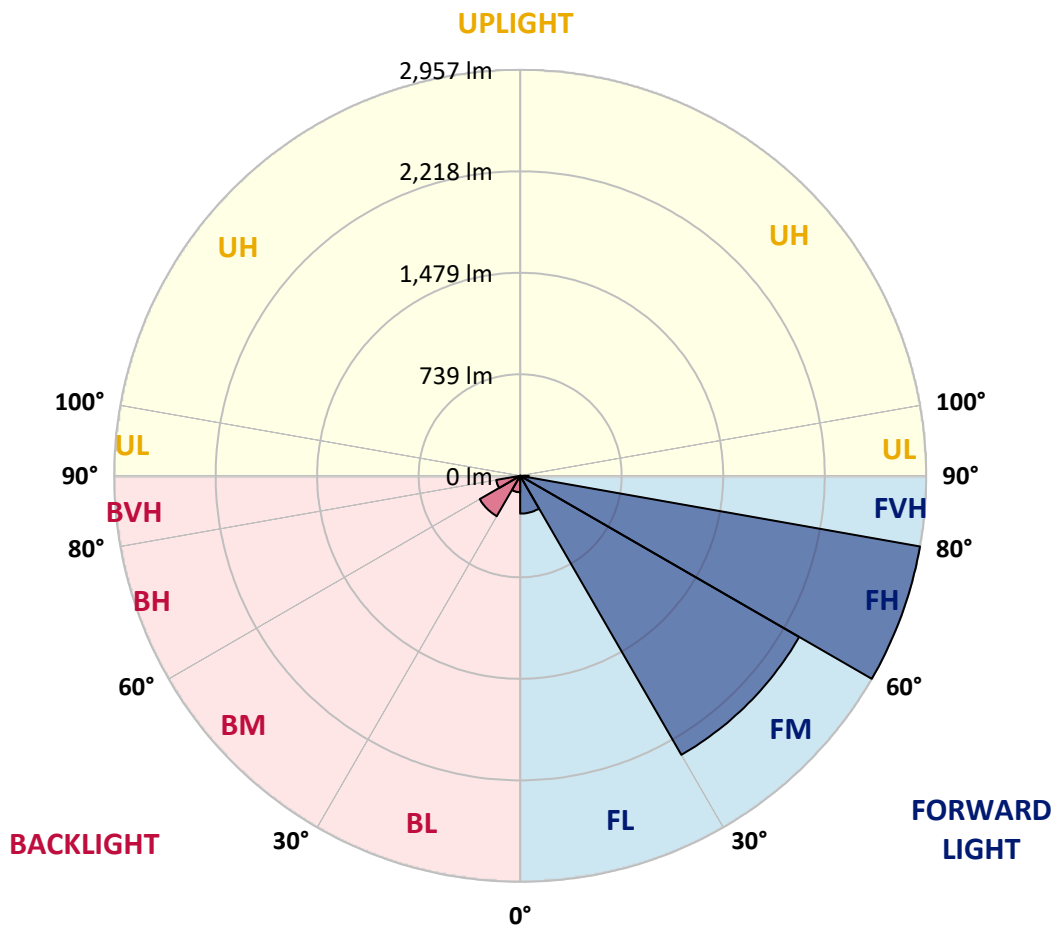


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	275.5	4.4			
FM (30°-60°)	2346.7	37.4			
FH (60°-80°)	2957.0	47.1			G2/5000
FVH (80°-90°)	62.9	1.0			G1/100
BL (0°-30°)	119.8	1.9	B1/500		
BM (30°-60°)	339.8	5.4	B1/1000		
BH (60°-80°)	177.0	2.8	B1/500		G1/500
BVH (80°-90°)	1.3	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°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	269.1	260.4	247.9	250.7	252.1	255.9	256.3	251.4	237.6	233.7	250.7
5°	377.1	356.0	352.2	344.2	328.3	319.6	317.6	326.2	315.1	311.7	316.2
7.5°	481.7	463.7	443.9	433.2	400.0	379.5	378.5	382.0	384.0	371.9	378.2
10°	551.3	531.6	527.4	502.1	473.4	468.5	466.5	453.3	442.6	433.6	403.4
12.5°	614.3	614.0	621.6	585.2	580.7	585.6	583.9	536.8	526.0	488.3	479.6
15°	698.1	718.9	686.0	655.5	616.7	633.4	628.9	598.7	591.5	565.8	528.8
17.5°	785.0	790.6	735.5	688.8	678.7	656.9	661.4	650.7	614.0	634.4	597.7
20°	787.1	799.2	740.4	663.2	694.0	692.9	693.3	682.9	634.4	682.2	648.6
22.5°	816.2	786.4	731.7	682.5	688.1	693.3	698.8	686.0	675.6	687.4	693.6
25°	804.4	792.7	740.0	707.5	702.3	706.4	707.8	724.1	717.5	745.9	730.3
27.5°	834.9	817.9	723.8	729.6	711.3	706.4	698.1	752.5	771.9	749.4	790.9
30°	887.2	884.8	751.8	760.5	746.3	703.7	725.8	796.8	821.1	807.2	857.8
32.5°	968.9	977.2	833.9	777.8	785.0	804.1	795.8	796.8	858.1	888.9	929.1
35°	1084.9	1080.4	913.9	843.6	805.5	808.6	820.4	876.8	956.1	954.0	996.6
37.5°	1312.8	1263.6	1055.5	910.8	922.2	937.8	929.1	1004.9	1012.6	1015.3	1117.1
40°	1648.7	1583.3	1278.9	1052.4	942.3	1011.2	1007.0	1025.7	1076.6	1095.7	1244.2
42.5°	2091.3	2003.3	1671.9	1312.8	1039.2	991.8	1017.4	1052.7	1223.8	1278.2	1440.9
45°	2580.2	2402.2	2063.9	1684.0	1282.3	1135.2	1154.5	1220.3	1457.6	1547.6	1727.3
47.5°	2897.1	2740.6	2452.1	2013.0	1535.8	1458.6	1460.3	1474.5	1732.2	1899.1	2140.1
50°	3172.4	3005.8	2738.1	2356.9	1984.3	1838.1	1804.9	1739.4	2081.9	2310.1	2577.5
52.5°	3560.9	3366.3	3024.2	2760.3	2495.7	2151.5	2139.7	2161.9	2494.4	2734.3	3025.9
55°	3911.4	3674.9	3348.3	3182.1	3078.9	2612.1	2622.1	2659.2	3023.8	3150.9	3424.8
57.5°	4066.2	3809.9	3642.0	3567.2	3512.1	3241.3	3207.4	3185.2	3441.5	3489.9	3842.8
60°	4167.6	3923.9	3847.7	3865.0	4031.9	3744.5	3713.7	3584.8	3787.1	3826.9	4217.5
62.5°	4103.6	3881.3	3897.5	4041.9	4412.5	4223.4	4134.4	3919.0	4069.6	4101.9	4486.6
65°	3700.2	3468.5	3677.6	4027.1	4702.7	4698.2	4657.0	4227.6	4226.2	4267.4	4507.4
67.5°	3022.5	2779.4	3117.7	3747.9	4690.6	4985.9	4966.5	4636.9	4248.7	4138.6	4067.6
70°	2101.3	1890.4	2274.1	3095.2	4272.6	4983.9	4952.7	4911.8	4070.7	3562.3	3153.7
72.5°	1091.9	975.9	1333.2	2132.8	3405.8	4378.9	4481.7	4414.6	3475.8	2588.2	1857.2
75°	370.9	332.8	549.9	1132.0	2264.1	3343.8	3464.3	3396.1	2360.7	1388.6	734.5
77.5°	143.7	133.7	197.0	459.5	1135.8	2037.6	2168.5	2098.9	1266.1	508.7	172.8
80°	81.7	79.0	108.7	207.1	500.7	1013.6	1105.7	1002.9	456.4	171.4	45.0
82.5°	34.6	35.7	60.6	111.9	251.8	357.7	398.9	364.0	191.2	117.4	16.6
85°	7.6	9.3	28.7	62.3	105.6	102.2	107.0	118.8	117.4	86.2	7.3
87.5°	0.0	0.0	9.0	17.0	25.3	16.6	13.2	23.2	36.0	34.6	3.1
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°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	253.8	250.4	228.6	227.2	228.6	224.7	224.4	216.4	217.1	235.1	236.5
5°	316.2	298.9	280.2	274.3	268.7	256.3	263.2	263.2	263.2	274.6	278.1
7.5°	372.6	349.4	323.1	300.9	279.5	263.9	274.6	282.2	286.7	301.6	308.5
10°	398.2	375.4	351.8	320.3	303.7	297.8	285.3	278.8	286.7	283.6	287.4
12.5°	453.0	432.2	391.7	359.1	346.6	326.6	289.8	264.2	247.3	244.5	243.8
15°	506.3	493.5	439.1	395.5	352.2	305.8	243.1	209.2	191.2	188.0	188.4
17.5°	573.8	555.5	475.5	412.8	339.4	255.9	187.7	158.6	157.2	164.8	165.5
20°	618.8	588.7	493.8	398.6	297.1	193.6	146.8	139.9	151.0	164.8	163.5
22.5°	661.8	629.2	518.1	386.1	230.3	146.8	135.1	135.7	145.1	160.0	163.8
25°	690.2	678.4	547.8	357.0	175.6	127.1	129.2	134.4	142.3	156.5	156.5
27.5°	775.7	720.6	544.4	300.6	135.1	118.4	123.3	129.9	134.0	151.0	152.7
30°	827.6	809.6	562.4	243.1	118.4	107.4	116.7	122.6	125.4	144.8	145.4
32.5°	891.4	851.5	584.2	179.4	110.1	106.7	104.6	109.1	117.0	134.0	135.1
35°	968.9	957.2	553.0	140.9	107.4	99.7	95.6	98.0	103.2	114.6	117.0
37.5°	1127.2	1057.2	534.3	120.9	107.4	97.3	92.8	86.6	87.3	95.2	99.7
40°	1260.5	1239.0	482.0	117.4	102.5	93.8	82.8	75.1	70.0	72.4	74.1
42.5°	1505.3	1406.0	414.5	115.7	98.0	84.8	70.3	62.3	54.4	55.1	57.8
45°	1802.5	1588.1	354.3	113.9	94.9	75.8	59.2	49.9	41.6	41.9	44.7
47.5°	2199.3	1853.7	281.2	108.7	89.3	67.5	47.8	38.1	33.2	34.3	36.7
50°	2650.2	2086.8	222.3	100.8	82.8	59.6	38.8	30.8	29.1	30.1	32.9
52.5°	3052.9	2258.5	183.5	93.5	73.4	48.5	32.6	27.4	26.7	27.4	29.4
55°	3411.0	2358.3	153.4	85.2	63.0	39.1	29.4	25.3	24.9	24.6	26.0
57.5°	3746.9	2387.0	119.8	72.0	51.3	33.9	27.4	23.5	22.9	21.8	22.9
60°	3991.7	2337.8	88.0	57.8	41.9	30.8	25.6	21.1	20.1	18.4	19.0
62.5°	4109.8	2203.1	66.5	46.4	35.7	28.0	22.9	18.4	17.0	14.9	15.2
65°	3997.6	1981.1	52.3	39.1	30.5	23.5	19.4	15.6	13.9	11.8	11.8
67.5°	3500.7	1643.5	44.3	33.9	25.6	20.1	15.9	14.2	11.4	9.7	9.3
70°	2569.5	1182.2	38.1	29.8	22.2	17.3	13.5	12.8	11.1	9.3	8.7
72.5°	1450.3	669.0	32.6	26.3	18.7	14.5	11.4	11.8	10.7	8.7	8.0
75°	553.4	225.4	27.0	21.8	15.2	11.1	9.7	9.7	9.7	7.3	6.2
77.5°	137.1	57.5	21.5	17.7	12.1	7.3	8.0	8.3	8.3	6.2	4.5
80°	37.7	19.4	12.8	12.8	8.7	4.2	5.5	5.5	4.5	2.1	0.0
82.5°	13.9	7.3	4.5	5.5	3.8	1.4	2.1	1.4	1.0	0.0	0.0
85°	5.9	3.8	2.8	3.1	1.7	0.0	0.3	0.7	0.0	0.0	0.0
87.5°	2.4	1.7	1.4	1.4	0.7	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)