

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: P596407

Luminaire Tested: **MSA-SA4A-722-U-T4W-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596407
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-SA4A-722-U-T4W-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) 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: 8592 lumens
Efficiency: N/A
Efficacy: 66.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

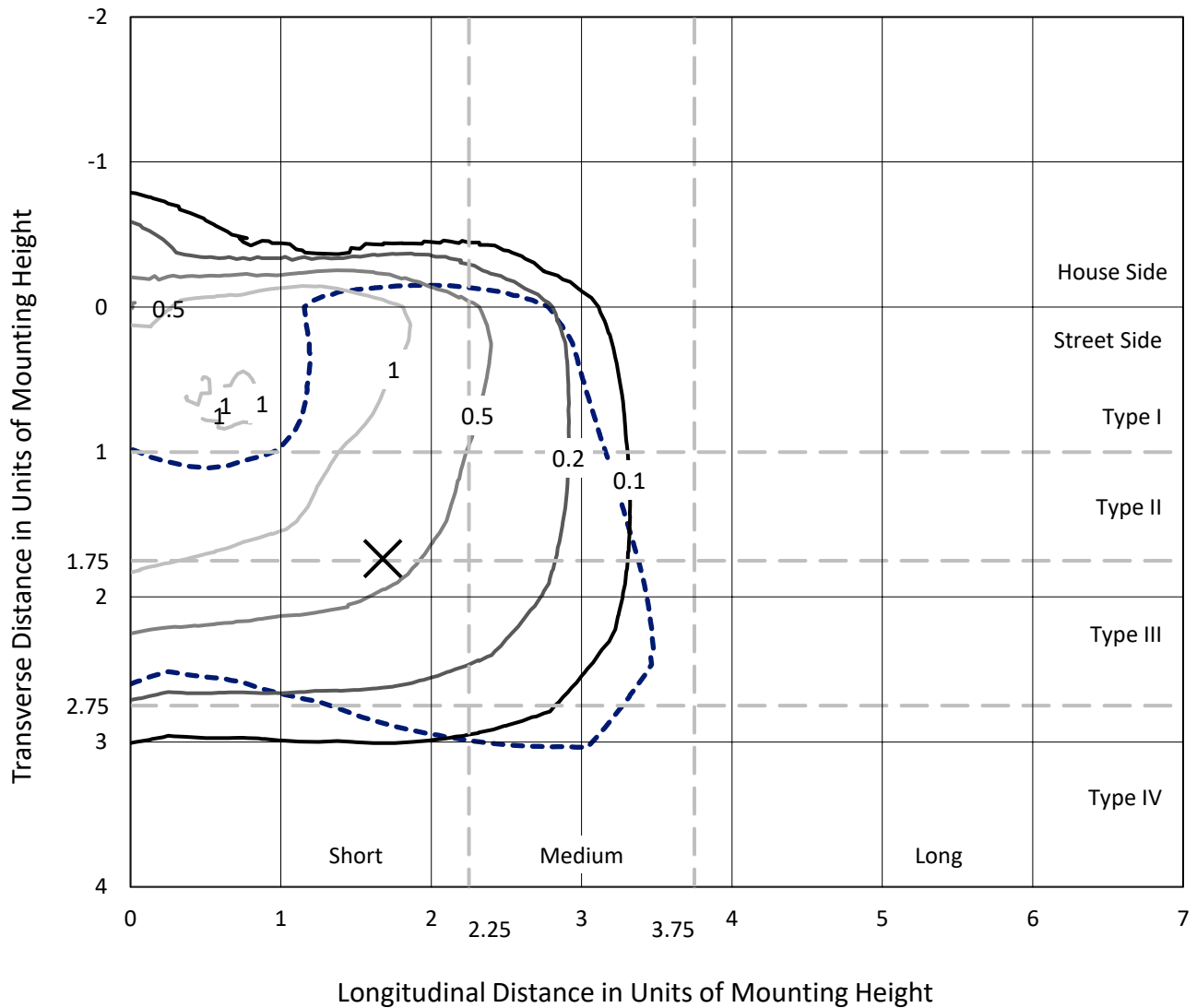
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

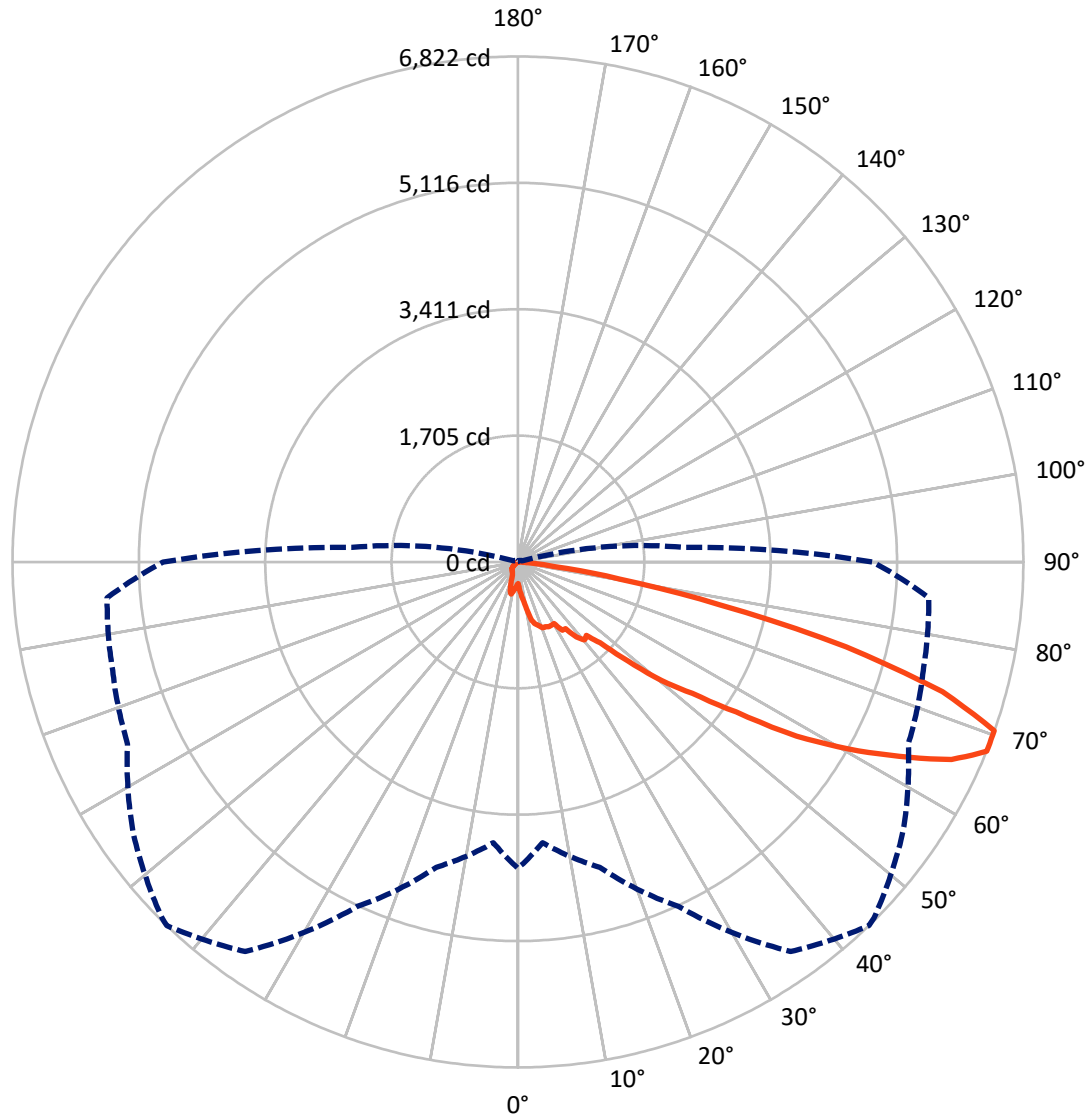
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - N/A

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CATALOG NUMBER: MSA-SA4A-722-U-T4W-HSS

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	872.8	0.0	872.8
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	7719.2	0.0	7719.2
	% Fixture	89.8	0.0	89.8
Total	Lumens	8592.0	0.0	8592.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.5
10°-20°	179.6	2.1
20°-30°	318.2	3.7
30°-40°	517.2	6.0
40°-50°	1035.0	12.0
50°-60°	2123.4	24.7
60°-70°	2916.9	33.9
70°-80°	1371.0	16.0
80°-90°	87.8	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°	8592.0	100.0
0°-180°	8592.0	100.0

Coefficient of Utilization

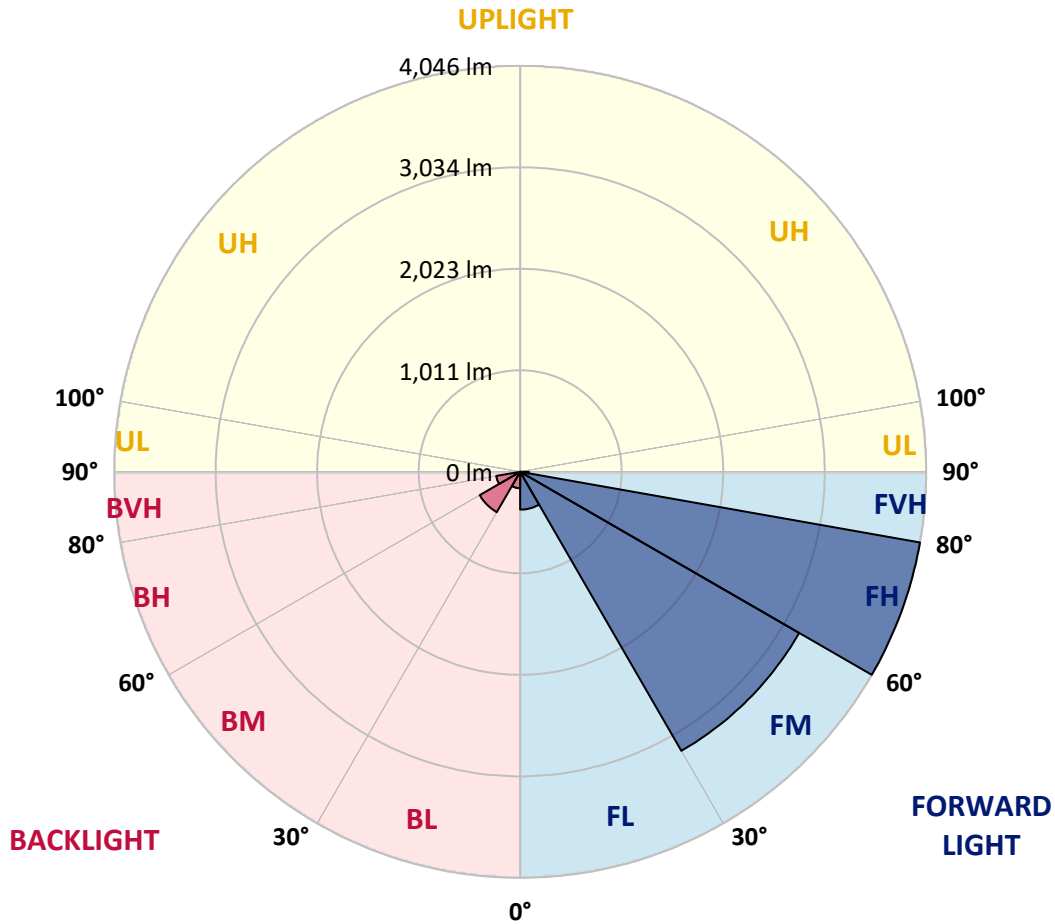


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	376.9	4.4			
FM (30°-60°)	3210.7	37.4			
FH (60°-80°)	4045.7	47.1			G2/5000
FVH (80°-90°)	86.0	1.0			G1/100
BL (0°-30°)	163.9	1.9	B1/500		
BM (30°-60°)	464.9	5.4	B1/1000		
BH (60°-80°)	242.2	2.8	B1/500		G1/500
BVH (80°-90°)	1.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type IV Short





REPORT NUMBER: P596407

CATALOG NUMBER: MSA-SA4A-722-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5
2.5°	368.1	356.3	339.2	343.0	344.9	350.1	350.6	344.0	325.0	319.8	343.0
5°	515.9	487.0	481.8	470.9	449.1	437.3	434.5	446.3	431.1	426.4	432.6
7.5°	659.0	634.4	607.4	592.7	547.2	519.3	517.8	522.6	525.4	508.8	517.4
10°	754.3	727.3	721.6	687.0	647.7	641.0	638.2	620.2	605.5	593.2	552.0
12.5°	840.5	840.0	850.4	800.7	794.5	801.2	798.8	734.4	719.7	668.0	656.2
15°	955.1	983.6	938.6	896.9	843.8	866.5	860.4	819.2	809.2	774.2	723.5
17.5°	1074.1	1081.6	1006.3	942.4	928.6	898.8	904.9	890.2	840.0	868.0	817.7
20°	1076.9	1093.5	1012.9	907.3	949.5	948.0	948.5	934.3	868.0	933.4	887.4
22.5°	1116.7	1076.0	1001.1	933.8	941.4	948.5	956.1	938.6	924.4	940.5	949.0
25°	1100.6	1084.5	1012.5	967.9	960.8	966.5	968.4	990.7	981.7	1020.5	999.2
27.5°	1142.3	1119.1	990.2	998.3	973.2	966.5	955.1	1029.5	1056.1	1025.3	1082.1
30°	1213.8	1210.5	1028.6	1040.4	1021.0	962.7	993.0	1090.2	1123.3	1104.4	1173.6
32.5°	1325.6	1337.0	1140.9	1064.1	1074.1	1100.1	1088.8	1090.2	1174.0	1216.2	1271.2
35°	1484.4	1478.2	1250.3	1154.1	1102.0	1106.3	1122.4	1199.6	1308.1	1305.3	1363.5
37.5°	1796.1	1728.8	1444.1	1246.0	1261.7	1283.0	1271.2	1374.9	1385.3	1389.1	1528.4
40°	2255.7	2166.1	1749.7	1439.8	1289.2	1383.4	1377.8	1403.3	1473.0	1499.0	1702.3
42.5°	2861.2	2740.8	2287.4	1796.1	1421.8	1356.9	1392.0	1440.3	1674.3	1748.7	1971.4
45°	3530.2	3286.6	2823.7	2304.0	1754.4	1553.1	1579.6	1669.6	1994.2	2117.3	2363.2
47.5°	3963.7	3749.5	3354.9	2754.1	2101.2	1995.6	1997.9	2017.4	2369.9	2598.2	2928.0
50°	4340.3	4112.4	3746.2	3224.6	2714.8	2514.8	2469.4	2379.8	2848.4	3160.6	3526.4
52.5°	4871.9	4605.6	4137.5	3776.5	3414.6	2943.6	2927.5	2957.8	3412.7	3741.0	4139.9
55°	5351.4	5027.8	4581.0	4353.6	4212.4	3573.7	3587.5	3638.2	4137.1	4311.0	4685.7
57.5°	5563.2	5212.6	4982.8	4880.4	4805.1	4434.6	4388.2	4357.9	4708.5	4774.8	5257.6
60°	5702.0	5368.4	5264.2	5287.9	5516.3	5123.0	5080.8	4904.6	5181.3	5235.8	5770.2
62.5°	5614.3	5310.2	5332.4	5530.0	6036.9	5778.3	5656.5	5361.8	5567.9	5612.0	6138.3
65°	5062.4	4745.4	5031.6	5509.6	6434.0	6427.8	6371.4	5783.9	5782.0	5838.4	6166.8
67.5°	4135.2	3802.6	4265.5	5127.8	6417.4	6821.5	6795.0	6344.0	5812.8	5662.2	5565.1
70°	2874.9	2586.4	3111.3	4234.7	5845.5	6818.7	6776.0	6720.1	5569.3	4873.8	4314.7
72.5°	1493.8	1335.1	1824.1	2918.0	4659.7	5991.0	6131.7	6039.8	4755.4	3541.1	2540.9
75°	507.4	455.3	752.4	1548.8	3097.6	4574.8	4739.7	4646.4	3229.8	1899.9	1004.9
77.5°	196.6	182.9	269.6	628.7	1554.0	2787.7	2966.8	2871.6	1732.2	696.0	236.4
80°	111.8	108.0	148.8	283.3	685.1	1386.8	1512.8	1372.1	624.4	234.5	61.6
82.5°	47.4	48.8	82.9	153.0	344.4	489.4	545.8	497.9	261.5	160.6	22.7
85°	10.4	12.8	39.3	85.3	144.5	139.8	146.4	162.5	160.6	118.0	9.9
87.5°	0.0	0.0	12.3	23.2	34.6	22.7	18.0	31.7	49.3	47.4	4.3
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°	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5	289.5
2.5°	347.3	342.5	312.7	310.8	312.7	307.5	307.0	296.1	297.1	321.7	323.6
5°	432.6	408.9	383.3	375.2	367.7	350.6	360.1	360.1	360.1	375.7	380.4
7.5°	509.8	478.0	442.0	411.7	382.3	361.0	375.7	386.1	392.3	412.7	422.1
10°	544.9	513.6	481.4	438.2	415.5	407.5	390.4	381.4	392.3	388.0	393.2
12.5°	619.7	591.3	535.8	491.3	474.3	446.8	396.6	361.5	338.3	334.5	333.5
15°	692.7	675.1	600.8	541.1	481.8	418.4	332.6	286.2	261.5	257.3	257.7
17.5°	785.1	759.9	650.5	564.7	464.3	350.1	256.8	217.0	215.1	225.5	226.5
20°	846.7	805.4	675.6	545.3	406.5	264.8	200.9	191.4	206.6	225.5	223.6
22.5°	905.4	860.9	708.8	528.3	315.1	200.9	184.8	185.7	198.5	218.9	224.1
25°	944.2	928.1	749.5	488.5	240.2	173.9	176.7	183.8	194.7	214.1	214.1
27.5°	1061.3	985.9	744.8	411.2	184.8	162.0	168.7	177.7	183.4	206.6	208.9
30°	1132.3	1107.7	769.4	332.6	162.0	146.9	159.7	167.7	171.5	198.0	199.0
32.5°	1219.5	1165.0	799.3	245.4	150.7	145.9	143.1	149.2	160.1	183.4	184.8
35°	1325.6	1309.5	756.6	192.8	146.9	136.4	130.8	134.1	141.2	156.8	160.1
37.5°	1542.2	1446.5	731.0	165.4	146.9	133.1	127.0	118.4	119.4	130.3	136.4
40°	1724.6	1695.2	659.5	160.6	140.2	128.4	113.2	102.8	95.7	99.0	101.4
42.5°	2059.5	1923.6	567.1	158.2	134.1	116.1	96.2	85.3	74.4	75.3	79.1
45°	2466.0	2172.8	484.7	155.9	129.8	103.8	81.0	68.2	56.9	57.3	61.1
47.5°	3009.0	2536.2	384.7	148.8	122.2	92.4	65.4	52.1	45.5	46.9	50.2
50°	3625.9	2855.0	304.2	137.9	113.2	81.5	53.1	42.2	39.8	41.2	45.0
52.5°	4176.9	3090.0	251.1	127.9	100.4	66.3	44.5	37.4	36.5	37.4	40.3
55°	4666.8	3226.5	209.9	116.6	86.2	53.5	40.3	34.6	34.1	33.6	35.5
57.5°	5126.3	3265.8	163.9	98.5	70.1	46.4	37.4	32.2	31.3	29.8	31.3
60°	5461.3	3198.5	120.3	79.1	57.3	42.2	35.1	28.9	27.5	25.1	26.1
62.5°	5622.9	3014.2	91.0	63.5	48.8	38.4	31.3	25.1	23.2	20.4	20.8
65°	5469.4	2710.5	71.5	53.5	41.7	32.2	26.5	21.3	19.0	16.1	16.1
67.5°	4789.5	2248.6	60.6	46.4	35.1	27.5	21.8	19.4	15.6	13.3	12.8
70°	3515.5	1617.5	52.1	40.7	30.3	23.7	18.5	17.5	15.2	12.8	11.8
72.5°	1984.2	915.3	44.5	36.0	25.6	19.9	15.6	16.1	14.7	11.8	10.9
75°	757.1	308.4	37.0	29.8	20.8	15.2	13.3	13.3	13.3	9.9	8.5
77.5°	187.6	78.6	29.4	24.2	16.6	9.9	10.9	11.4	11.4	8.5	6.2
80°	51.6	26.5	17.5	17.5	11.8	5.7	7.6	7.6	6.2	2.8	0.0
82.5°	19.0	9.9	6.2	7.6	5.2	1.9	2.8	1.9	1.4	0.0	0.0
85°	8.1	5.2	3.8	4.3	2.4	0.0	0.5	0.9	0.0	0.0	0.0
87.5°	3.3	2.4	1.9	1.9	0.9	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)