

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: P597023

Luminaire Tested: **MSA-SA3A-835-U-T4W-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597023
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-SA3A-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: 7290 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

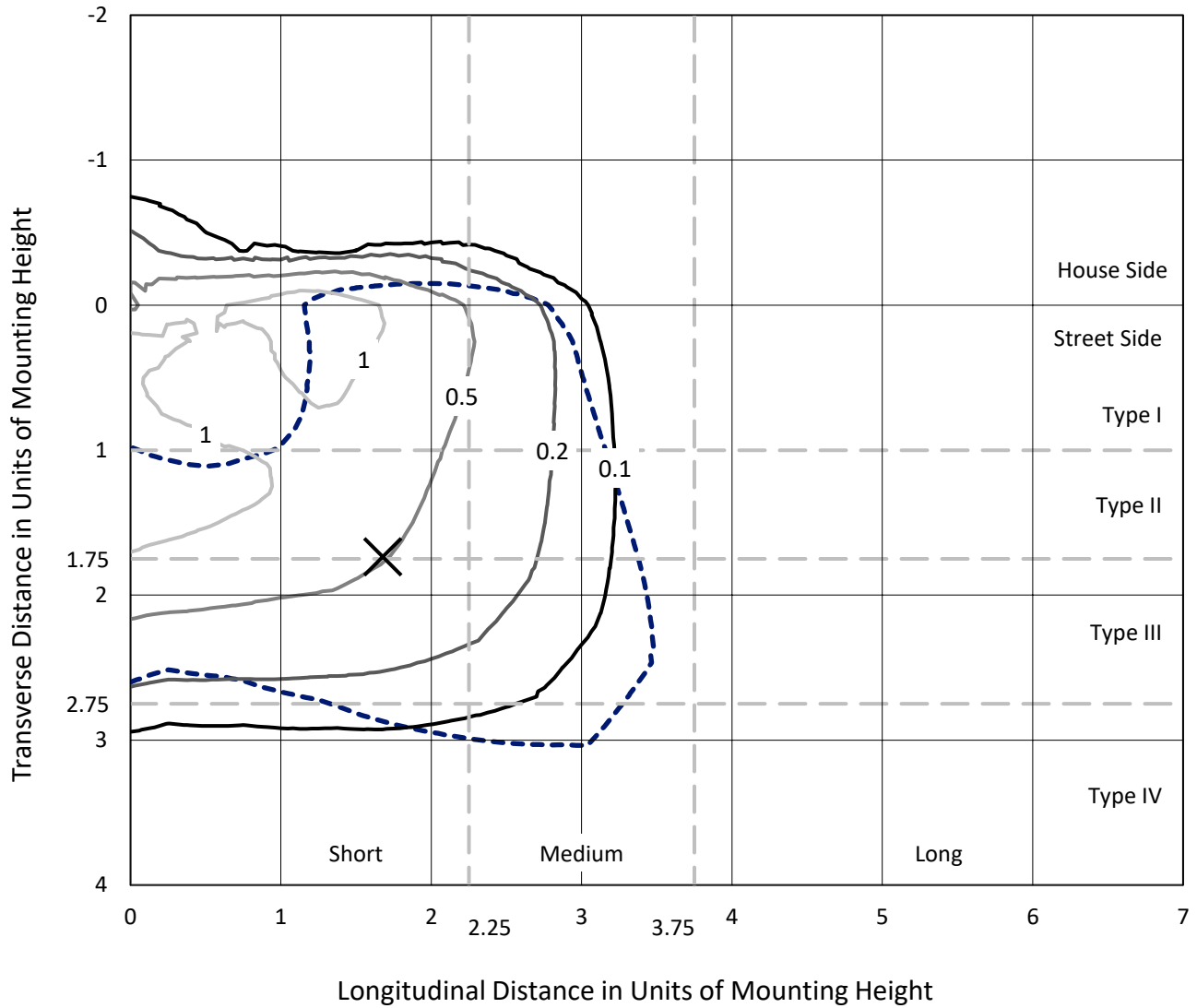
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

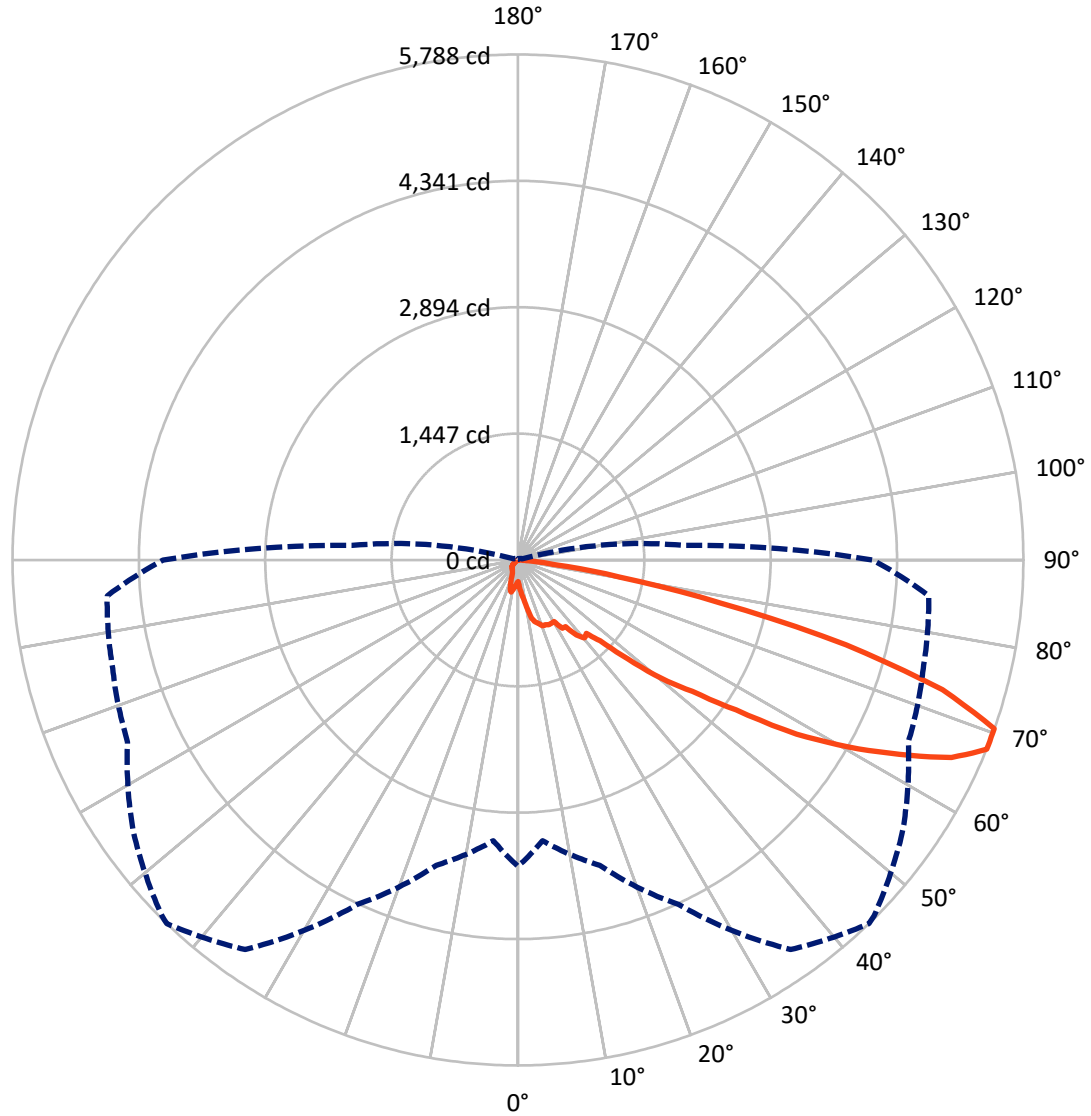
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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	740.5	0.0	740.5
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	6549.5	0.0	6549.5
	% Fixture	89.8	0.0	89.8
Total	Lumens	7290.0	0.0	7290.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	0.5
10°-20°	152.4	2.1
20°-30°	270.0	3.7
30°-40°	438.8	6.0
40°-50°	878.2	12.0
50°-60°	1801.6	24.7
60°-70°	2474.9	33.9
70°-80°	1163.2	16.0
80°-90°	74.5	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°	7290.0	100.0
0°-180°	7290.0	100.0

Coefficient of Utilization

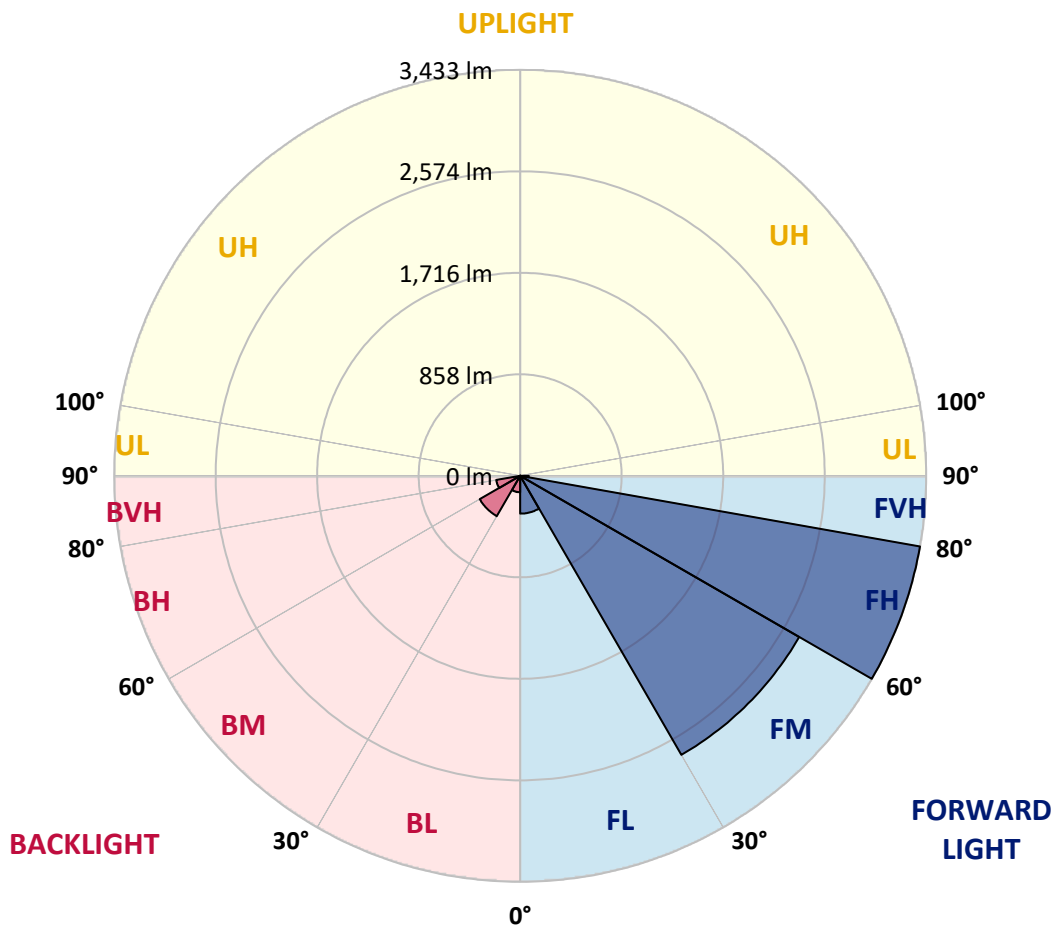


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	319.8	4.4			
FM (30°-60°)	2724.2	37.4			
FH (60°-80°)	3432.6	47.1			G2/5000
FVH (80°-90°)	73.0	1.0			G1/100
BL (0°-30°)	139.0	1.9	B1/500		
BM (30°-60°)	394.5	5.4	B1/1000		
BH (60°-80°)	205.5	2.8	B1/500		G1/500
BVH (80°-90°)	1.5	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°	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6
2.5°	312.3	302.3	287.8	291.0	292.6	297.1	297.5	291.8	275.8	271.3	291.0
5°	437.8	413.2	408.8	399.6	381.1	371.0	368.6	378.7	365.8	361.8	367.0
7.5°	559.2	538.3	515.3	502.9	464.3	440.6	439.4	443.4	445.8	431.7	439.0
10°	640.0	617.1	612.2	582.9	549.5	543.9	541.5	526.2	513.7	503.3	468.3
12.5°	713.1	712.7	721.6	679.4	674.1	679.8	677.8	623.1	610.6	566.8	556.8
15°	810.4	834.5	796.3	761.0	715.9	735.2	730.0	695.0	686.6	656.8	613.8
17.5°	911.3	917.7	853.8	799.6	787.9	762.6	767.8	755.3	712.7	736.4	693.8
20°	913.7	927.8	859.4	769.8	805.6	804.4	804.8	792.7	736.4	791.9	752.9
22.5°	947.5	912.9	849.4	792.3	798.7	804.8	811.2	796.3	784.3	797.9	805.2
25°	933.8	920.1	859.0	821.3	815.2	820.1	821.7	840.6	832.9	865.9	847.8
27.5°	969.2	949.5	840.2	847.0	825.7	820.1	810.4	873.5	896.0	869.9	918.1
30°	1029.9	1027.1	872.7	882.8	866.3	816.8	842.6	925.0	953.1	937.0	995.7
32.5°	1124.8	1134.4	968.0	902.9	911.3	933.4	923.8	925.0	996.1	1031.9	1078.5
35°	1259.4	1254.2	1060.8	979.2	935.0	938.6	952.3	1017.8	1109.9	1107.5	1156.9
37.5°	1523.9	1466.9	1225.3	1057.2	1070.5	1088.6	1078.5	1166.6	1175.4	1178.6	1296.8
40°	1913.9	1837.9	1484.5	1221.6	1093.8	1173.8	1169.0	1190.7	1249.8	1271.9	1444.3
42.5°	2427.6	2325.5	1940.8	1523.9	1206.4	1151.3	1181.0	1222.0	1420.6	1483.7	1672.7
45°	2995.2	2788.6	2395.8	1954.9	1488.6	1317.7	1340.2	1416.6	1692.0	1796.5	2005.1
47.5°	3363.0	3181.3	2846.5	2336.8	1782.8	1693.2	1695.2	1711.7	2010.7	2204.5	2484.3
50°	3682.6	3489.3	3178.5	2735.9	2303.4	2133.8	2095.2	2019.2	2416.7	2681.7	2992.0
52.5°	4133.6	3907.7	3510.6	3204.2	2897.1	2497.5	2483.9	2509.6	2895.5	3174.1	3512.6
55°	4540.5	4265.9	3886.8	3693.9	3574.1	3032.2	3043.9	3086.9	3510.2	3657.7	3975.7
57.5°	4720.1	4422.7	4227.7	4140.9	4077.0	3762.6	3723.2	3697.5	3995.0	4051.2	4460.9
60°	4837.9	4554.9	4466.5	4486.6	4680.3	4346.7	4310.9	4161.4	4396.1	4442.4	4895.8
62.5°	4763.6	4505.5	4524.4	4692.0	5122.1	4902.6	4799.3	4549.3	4724.2	4761.5	5208.2
65°	4295.2	4026.3	4269.1	4674.7	5459.0	5453.8	5405.9	4907.5	4905.9	4953.7	5232.3
67.5°	3508.5	3226.4	3619.1	4350.7	5444.9	5787.8	5765.3	5382.6	4932.0	4804.2	4721.7
70°	2439.3	2194.5	2639.9	3593.0	4959.7	5785.4	5749.2	5701.8	4725.4	4135.2	3660.9
72.5°	1267.5	1132.8	1547.7	2475.8	3953.5	5083.1	5202.5	5124.5	4034.8	3004.5	2155.9
75°	430.5	386.3	638.4	1314.1	2628.2	3881.6	4021.5	3942.3	2740.3	1612.0	852.6
77.5°	166.8	155.2	228.7	533.4	1318.5	2365.3	2517.2	2436.4	1469.7	590.5	200.6
80°	94.9	91.7	126.2	240.4	581.3	1176.6	1283.5	1164.2	529.8	199.0	52.3
82.5°	40.2	41.4	70.3	129.8	292.2	415.3	463.1	422.5	221.9	136.3	19.3
85°	8.8	10.9	33.4	72.4	122.6	118.6	124.2	137.9	136.3	100.1	8.4
87.5°	0.0	0.0	10.5	19.7	29.3	19.3	15.3	26.9	41.8	40.2	3.6
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°	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6	245.6
2.5°	294.7	290.6	265.3	263.7	265.3	260.9	260.5	251.2	252.0	272.9	274.6
5°	367.0	346.9	325.2	318.4	311.9	297.5	305.5	305.5	305.5	318.8	322.8
7.5°	432.5	405.6	375.1	349.3	324.4	306.3	318.8	327.6	332.8	350.1	358.2
10°	462.3	435.8	408.4	371.8	352.5	345.7	331.2	323.6	332.8	329.2	333.6
12.5°	525.8	501.7	454.6	416.9	402.4	379.1	336.5	306.7	287.0	283.8	283.0
15°	587.7	572.8	509.7	459.1	408.8	355.0	282.2	242.8	221.9	218.3	218.7
17.5°	666.1	644.8	551.9	479.2	393.9	297.1	217.9	184.1	182.5	191.3	192.2
20°	718.4	683.4	573.2	462.7	344.9	224.7	170.4	162.4	175.3	191.3	189.7
22.5°	768.2	730.4	601.4	448.2	267.3	170.4	156.8	157.6	168.4	185.7	190.1
25°	801.2	787.5	635.9	414.4	203.8	147.5	149.9	156.0	165.2	181.7	181.7
27.5°	900.5	836.5	631.9	348.9	156.8	137.5	143.1	150.7	155.6	175.3	177.3
30°	960.8	939.8	652.8	282.2	137.5	124.6	135.5	142.3	145.5	168.0	168.8
32.5°	1034.7	988.5	678.2	208.2	127.8	123.8	121.4	126.6	135.9	155.6	156.8
35°	1124.8	1111.1	642.0	163.6	124.6	115.8	110.9	113.8	119.8	133.1	135.9
37.5°	1308.5	1227.3	620.3	140.3	124.6	113.0	107.7	100.5	101.3	110.5	115.8
40°	1463.2	1438.3	559.6	136.3	119.0	108.9	96.1	87.2	81.2	84.0	86.0
42.5°	1747.4	1632.1	481.2	134.3	113.8	98.5	81.6	72.4	63.1	63.9	67.1
45°	2092.3	1843.5	411.2	132.3	110.1	88.0	68.7	57.9	48.2	48.6	51.9
47.5°	2553.0	2151.8	326.4	126.2	103.7	78.4	55.5	44.2	38.6	39.8	42.6
50°	3076.4	2422.4	258.1	117.0	96.1	69.1	45.0	35.8	33.8	35.0	38.2
52.5°	3543.9	2621.8	213.1	108.5	85.2	56.3	37.8	31.8	31.0	31.8	34.2
55°	3959.6	2737.5	178.1	98.9	73.2	45.4	34.2	29.3	28.9	28.5	30.1
57.5°	4349.5	2770.9	139.1	83.6	59.5	39.4	31.8	27.3	26.5	25.3	26.5
60°	4633.7	2713.8	102.1	67.1	48.6	35.8	29.7	24.5	23.3	21.3	22.1
62.5°	4770.8	2557.4	77.2	53.9	41.4	32.6	26.5	21.3	19.7	17.3	17.7
65°	4640.5	2299.8	60.7	45.4	35.4	27.3	22.5	18.1	16.1	13.7	13.7
67.5°	4063.7	1907.8	51.5	39.4	29.7	23.3	18.5	16.5	13.3	11.3	10.9
70°	2982.7	1372.4	44.2	34.6	25.7	20.1	15.7	14.9	12.9	10.9	10.0
72.5°	1683.5	776.6	37.8	30.6	21.7	16.9	13.3	13.7	12.5	10.0	9.2
75°	642.4	261.7	31.4	25.3	17.7	12.9	11.3	11.3	11.3	8.4	7.2
77.5°	159.2	66.7	24.9	20.5	14.1	8.4	9.2	9.6	9.6	7.2	5.2
80°	43.8	22.5	14.9	14.9	10.0	4.8	6.4	6.4	5.2	2.4	0.0
82.5°	16.1	8.4	5.2	6.4	4.4	1.6	2.4	1.6	1.2	0.0	0.0
85°	6.8	4.4	3.2	3.6	2.0	0.0	0.4	0.8	0.0	0.0	0.0
87.5°	2.8	2.0	1.6	1.6	0.8	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)