

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: P596879

Luminaire Tested: **MSA-SA1C-835-U-SL4-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596879
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-21)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1C-835-U-SL4-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4276 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G2

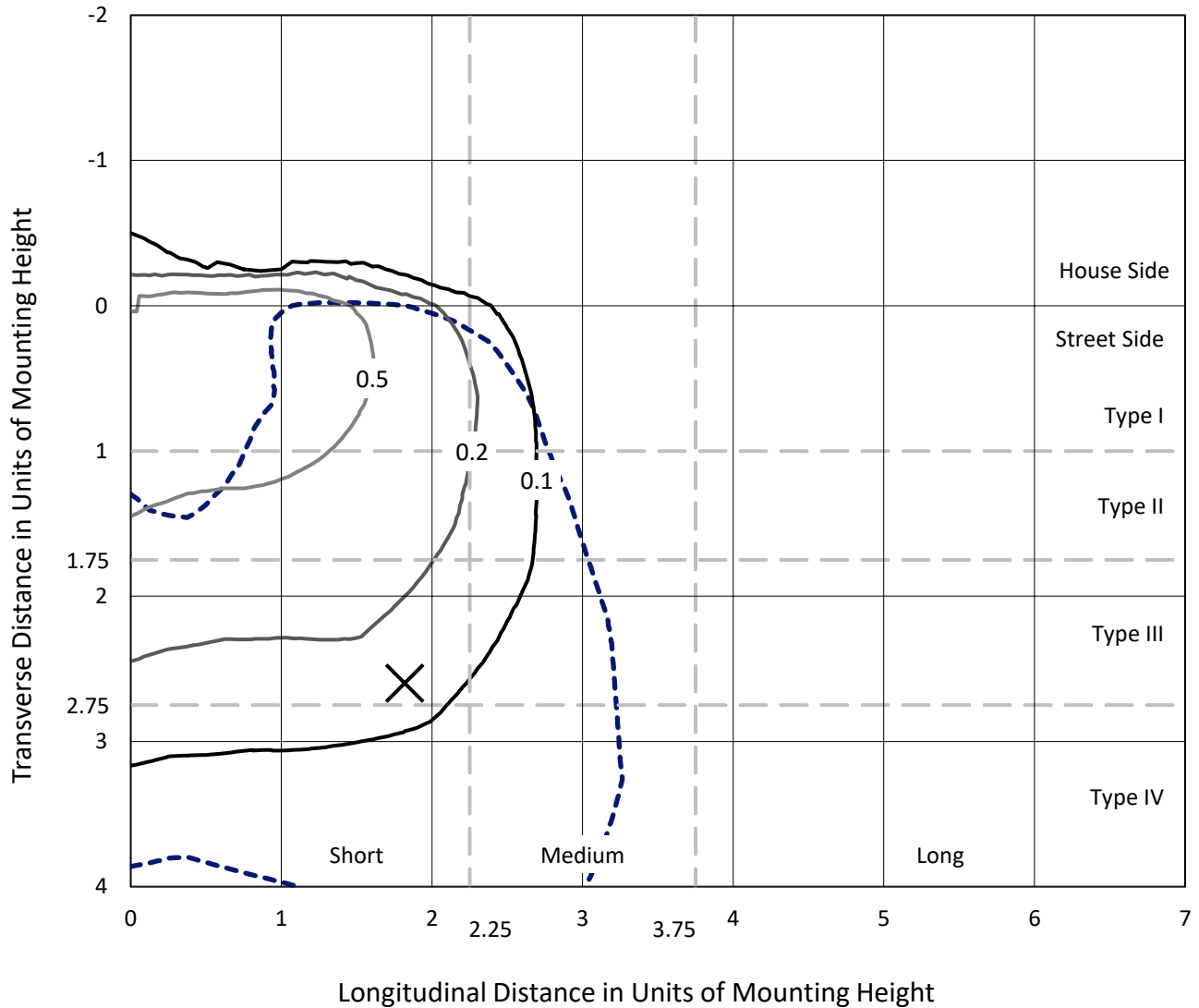
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

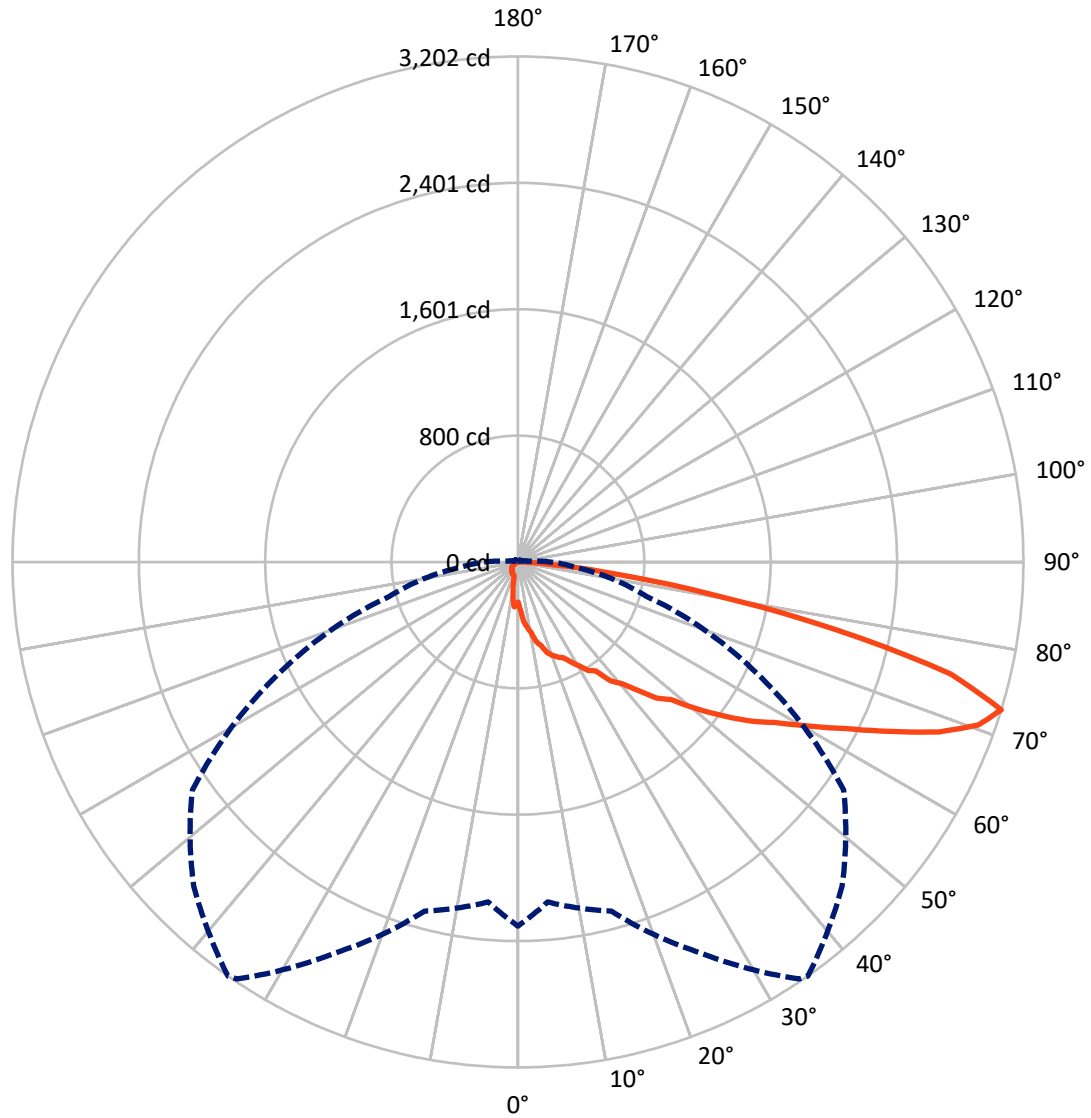
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	333.5	0.0	333.5
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	3942.5	0.0	3942.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	4276.0	0.0	4276.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	0.8
10°-20°	109.4	2.6
20°-30°	199.3	4.7
30°-40°	343.7	8.0
40°-50°	611.0	14.3
50°-60°	911.8	21.3
60°-70°	1165.0	27.2
70°-80°	810.5	19.0
80°-90°	92.7	2.2
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°	4276.0	100.0
0°-180°	4276.0	100.0

Coefficient of Utilization



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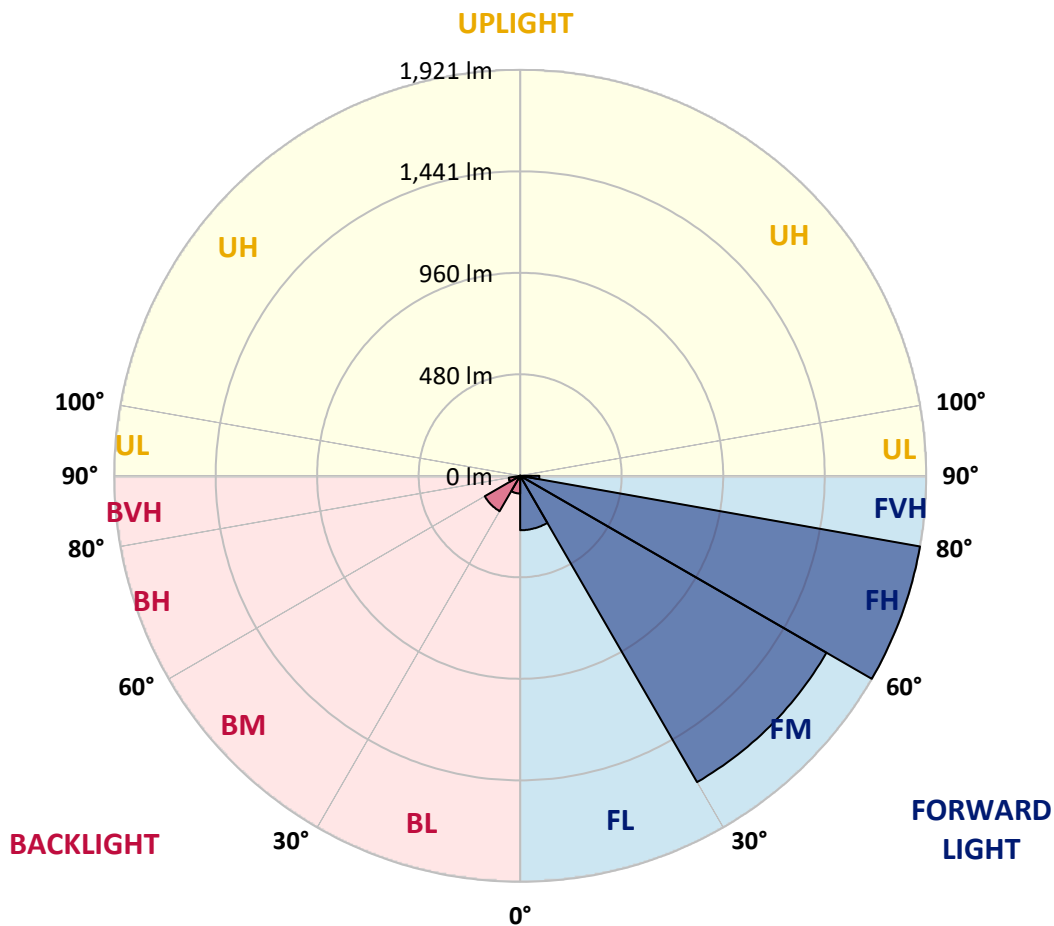
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	257.3	6.0			
FM (30°-60°)	1673.2	39.1			
FH (60°-80°)	1920.8	44.9			G2/5000
FVH (80°-90°)	91.2	2.1			G1/100
BL (0°-30°)	83.9	2.0	B0/110		
BM (30°-60°)	193.4	4.5	B0/220		
BH (60°-80°)	54.7	1.3	B0/110		G0/110
BVH (80°-90°)	1.6	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7
2.5°	324.2	311.5	290.8	292.3	301.6	303.5	306.3	299.0	292.6	281.2	303.3
5°	415.3	397.0	385.4	381.8	376.4	376.8	363.7	368.4	367.1	375.5	385.6
7.5°	466.7	456.6	441.9	437.9	418.1	415.9	399.8	421.5	423.7	420.7	437.2
10°	487.1	473.8	475.5	460.2	450.3	452.9	455.5	457.2	460.0	462.8	442.6
12.5°	499.1	501.5	524.9	509.0	518.9	518.9	536.3	517.8	518.5	498.3	501.7
15°	553.3	566.4	555.9	555.7	544.9	547.7	567.9	553.3	560.8	554.8	531.6
17.5°	621.2	623.8	603.8	595.0	604.7	604.9	596.3	595.6	569.4	613.7	585.5
20°	642.9	657.5	629.2	594.8	635.0	633.0	632.4	622.3	578.7	640.1	616.9
22.5°	702.0	681.2	661.8	639.3	655.0	655.0	652.6	630.5	613.5	637.8	647.7
25°	720.5	723.1	698.0	690.6	691.1	671.7	670.0	660.6	644.2	685.7	665.9
27.5°	784.2	783.1	722.7	743.1	717.1	717.3	669.8	691.1	693.9	688.1	710.2
30°	846.7	864.1	773.0	798.8	771.5	763.3	716.9	735.8	740.7	734.1	762.0
32.5°	926.5	952.0	863.5	838.1	796.4	819.6	787.6	742.9	767.4	826.9	842.6
35°	1010.9	1023.4	929.0	893.6	846.5	846.3	845.2	848.9	875.9	943.0	956.3
37.5°	1162.7	1133.2	1047.9	966.6	977.2	953.8	937.4	954.6	982.8	1093.3	1150.2
40°	1247.4	1226.1	1105.9	1057.8	1005.6	1014.2	1058.4	1056.5	1131.5	1247.2	1332.5
42.5°	1329.7	1309.5	1191.3	1152.4	1085.3	1108.7	1128.1	1152.6	1306.3	1492.9	1539.7
45°	1403.0	1343.7	1260.3	1261.8	1227.0	1229.8	1263.9	1286.5	1508.8	1700.1	1733.0
47.5°	1447.3	1398.5	1318.5	1317.0	1314.9	1301.8	1462.8	1483.4	1670.2	1897.4	1900.4
50°	1509.6	1448.6	1378.5	1379.8	1429.4	1457.2	1649.3	1647.2	1826.0	2062.1	1992.6
52.5°	1587.2	1512.6	1435.5	1492.9	1569.6	1614.7	1770.8	1834.4	1993.5	2165.4	2028.7
55°	1686.5	1593.2	1518.9	1592.4	1759.8	1777.2	1889.7	2024.0	2176.0	2271.0	2040.3
57.5°	1803.0	1691.7	1631.5	1749.9	1917.0	1917.4	2062.7	2226.1	2288.0	2314.0	2027.2
60°	1928.6	1798.7	1738.1	1844.7	2090.2	2107.8	2255.1	2337.6	2401.7	2335.7	2003.8
62.5°	2039.1	1895.7	1848.6	1973.9	2280.2	2321.9	2422.7	2410.9	2483.8	2363.0	1944.3
65°	2170.6	2021.2	1990.3	2175.3	2528.3	2585.7	2611.0	2541.0	2511.3	2341.9	1789.3
67.5°	2300.9	2161.1	2160.3	2398.7	2853.5	2873.3	2846.6	2724.3	2479.3	2156.2	1505.3
70°	2392.7	2242.6	2299.2	2643.3	3149.1	3093.6	2981.4	2811.0	2248.0	1652.6	983.4
72.5°	2306.5	2161.8	2289.3	2730.3	3185.6	3201.5	2903.4	2518.0	1670.2	845.2	356.0
75°	1752.7	1664.2	1987.7	2422.3	2828.4	2832.0	2423.4	1776.0	822.4	229.6	98.4
77.5°	882.8	854.7	1258.1	1719.6	2063.6	2057.5	1665.0	951.4	264.6	76.3	49.7
80°	446.9	424.3	535.5	927.7	1225.5	1234.5	950.7	426.0	133.5	41.5	34.4
82.5°	274.5	260.5	293.0	419.8	594.8	609.2	360.7	269.8	82.8	24.5	31.4
85°	53.1	55.9	168.3	210.2	237.5	231.9	106.8	222.0	24.9	14.6	22.8
87.5°	0.0	0.9	38.9	68.6	68.8	61.0	24.3	49.2	3.4	4.1	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°	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7	254.7
2.5°	307.0	303.7	276.9	273.9	274.5	270.0	268.5	259.0	256.7	271.3	273.9
5°	381.3	359.8	334.9	325.9	311.9	288.3	284.8	278.8	272.1	274.7	272.8
7.5°	426.9	398.3	371.7	324.2	284.8	250.4	244.8	234.5	224.2	224.4	231.1
10°	434.2	410.1	373.4	315.6	270.6	227.6	190.2	163.2	150.9	139.9	143.2
12.5°	476.6	454.2	386.5	313.0	250.0	182.9	133.9	107.5	95.9	92.0	91.6
15°	510.5	492.9	408.8	305.0	204.2	128.8	95.9	88.1	86.0	89.6	88.6
17.5°	561.0	529.2	406.5	272.1	155.6	97.8	88.3	87.3	89.9	92.0	92.6
20°	583.2	537.4	390.4	220.5	116.5	89.6	86.2	84.0	88.8	95.2	93.9
22.5°	605.5	551.4	371.4	180.6	93.7	85.8	83.8	82.1	85.8	92.0	93.5
25°	615.6	573.7	350.4	141.0	87.1	81.3	80.0	80.6	83.6	89.2	88.6
27.5°	666.6	576.3	310.2	111.3	84.3	78.0	78.0	79.5	79.5	87.1	86.4
30°	698.4	619.9	277.5	93.7	81.0	73.5	76.1	76.7	75.7	83.8	84.5
32.5°	754.3	632.0	245.7	86.0	75.9	72.9	72.4	72.9	73.7	81.7	81.9
35°	840.3	691.3	202.3	83.0	73.3	69.6	66.6	69.0	71.1	77.0	78.0
37.5°	1008.4	752.1	164.9	80.6	72.0	66.6	65.6	65.1	69.0	75.7	77.8
40°	1144.4	859.8	134.1	78.7	69.4	64.9	62.1	62.3	65.8	70.7	73.9
42.5°	1337.0	937.6	113.7	75.7	65.8	61.3	58.0	60.0	61.5	66.6	68.8
45°	1497.8	998.0	100.2	73.7	62.1	57.8	55.2	57.4	55.9	58.5	61.5
47.5°	1625.7	1050.7	90.1	69.0	59.8	55.9	52.7	52.0	49.4	50.1	52.9
50°	1696.0	1041.9	81.7	64.3	56.7	54.0	49.4	44.9	41.5	41.3	43.0
52.5°	1720.9	994.8	74.8	60.2	53.1	49.7	44.5	38.3	34.8	33.7	35.3
55°	1727.8	927.1	68.6	55.7	49.7	44.3	38.9	32.2	28.6	26.9	28.4
57.5°	1705.4	822.8	62.6	51.4	45.6	39.1	33.3	26.4	23.0	20.9	22.1
60°	1650.2	690.4	57.2	46.0	41.3	34.6	28.2	21.3	17.6	15.7	16.3
62.5°	1527.9	541.3	51.4	41.1	36.8	30.3	23.6	16.8	13.3	11.6	11.8
65°	1341.7	403.5	44.7	36.3	32.7	26.2	18.9	12.9	10.1	8.6	8.4
67.5°	1069.0	273.4	38.0	31.4	29.0	22.1	15.0	10.1	8.0	6.9	6.4
70°	628.3	137.8	31.6	27.1	24.9	18.5	11.8	8.2	7.3	6.4	6.0
72.5°	207.2	59.5	24.7	22.4	20.6	14.8	9.2	7.5	7.1	6.2	5.8
75°	72.2	34.4	18.3	17.2	16.3	11.2	7.7	6.9	6.9	6.0	5.4
77.5°	47.3	26.7	13.5	12.5	12.3	8.2	6.7	6.4	6.0	4.9	4.1
80°	39.3	15.0	9.5	8.8	8.6	5.2	5.4	4.7	3.7	2.1	0.9
82.5°	36.3	9.0	4.9	5.4	4.9	1.9	3.0	2.6	1.9	0.9	0.0
85°	21.3	4.1	2.8	2.8	2.1	0.4	1.5	1.5	0.9	0.2	0.0
87.5°	2.4	1.9	1.5	1.5	1.1	0.0	0.6	0.4	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)