

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: P366901

Luminaire Tested: **MSA-SA1C-730-U-T3-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-11)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1C-730-U-T3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4218 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

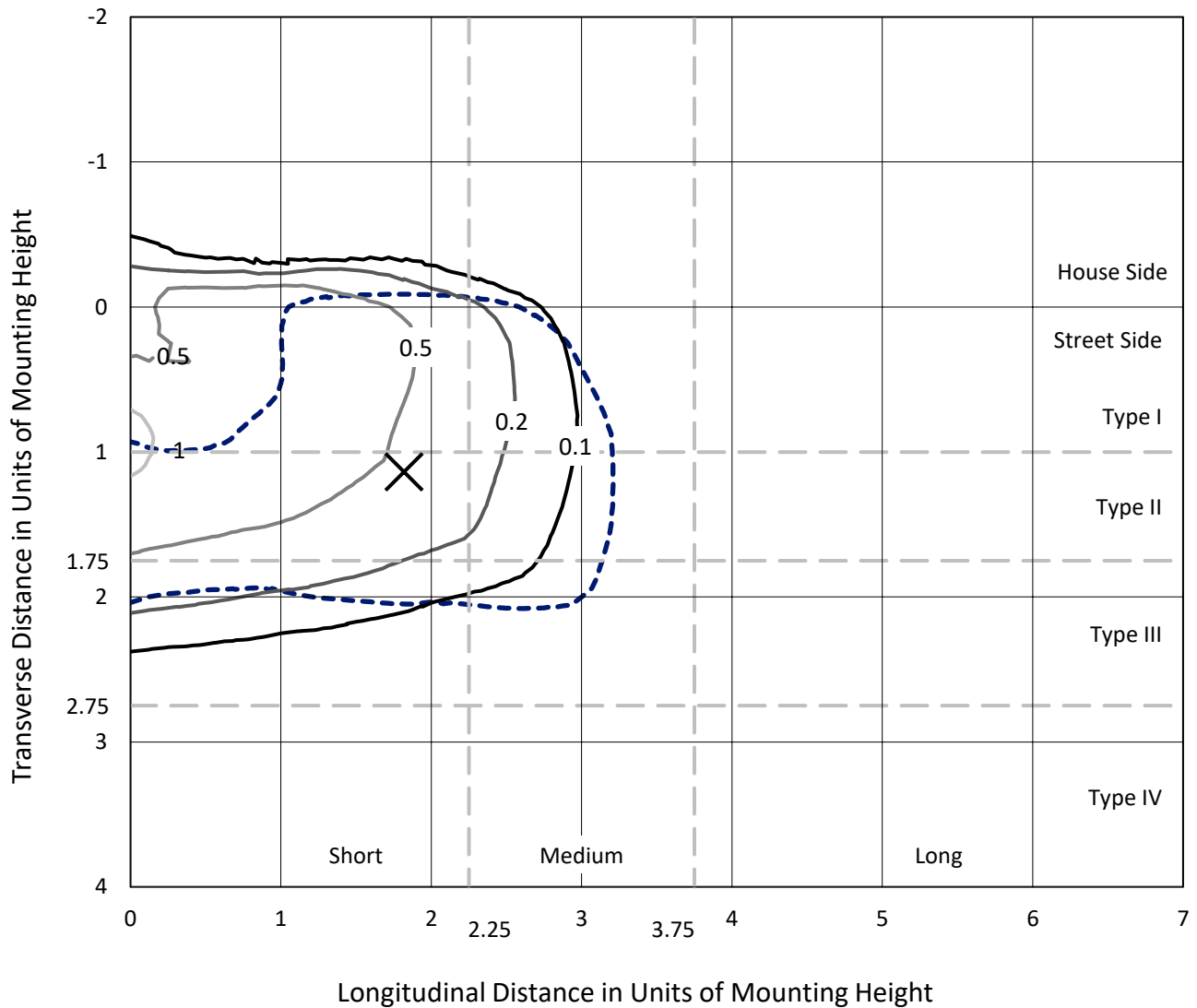
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366901
 CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

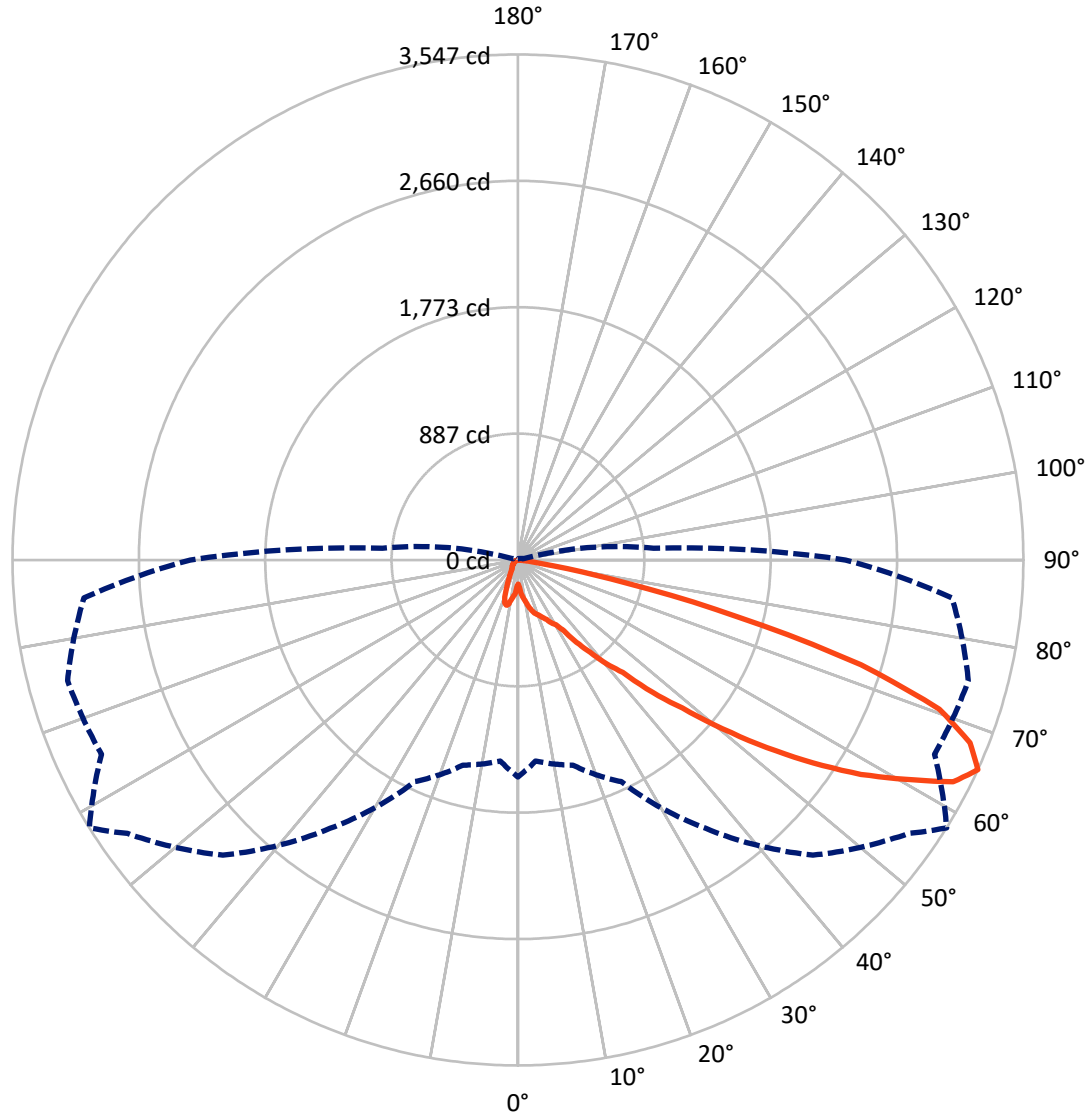
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

REPORT NUMBER: P366901
CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P366901

CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	416.2	0.0	416.2
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	3801.8	0.0	3801.8
	% Fixture	90.1	0.0	90.1
Total	Lumens	4218.0	0.0	4218.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	0.6
10°-20°	86.6	2.1
20°-30°	167.6	4.0
30°-40°	334.4	7.9
40°-50°	683.6	16.2
50°-60°	1212.5	28.7
60°-70°	1278.3	30.3
70°-80°	414.4	9.8
80°-90°	16.9	0.4
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°	4218.0	100.0
0°-180°	4218.0	100.0

Coefficient of Utilization



REPORT NUMBER: P366901

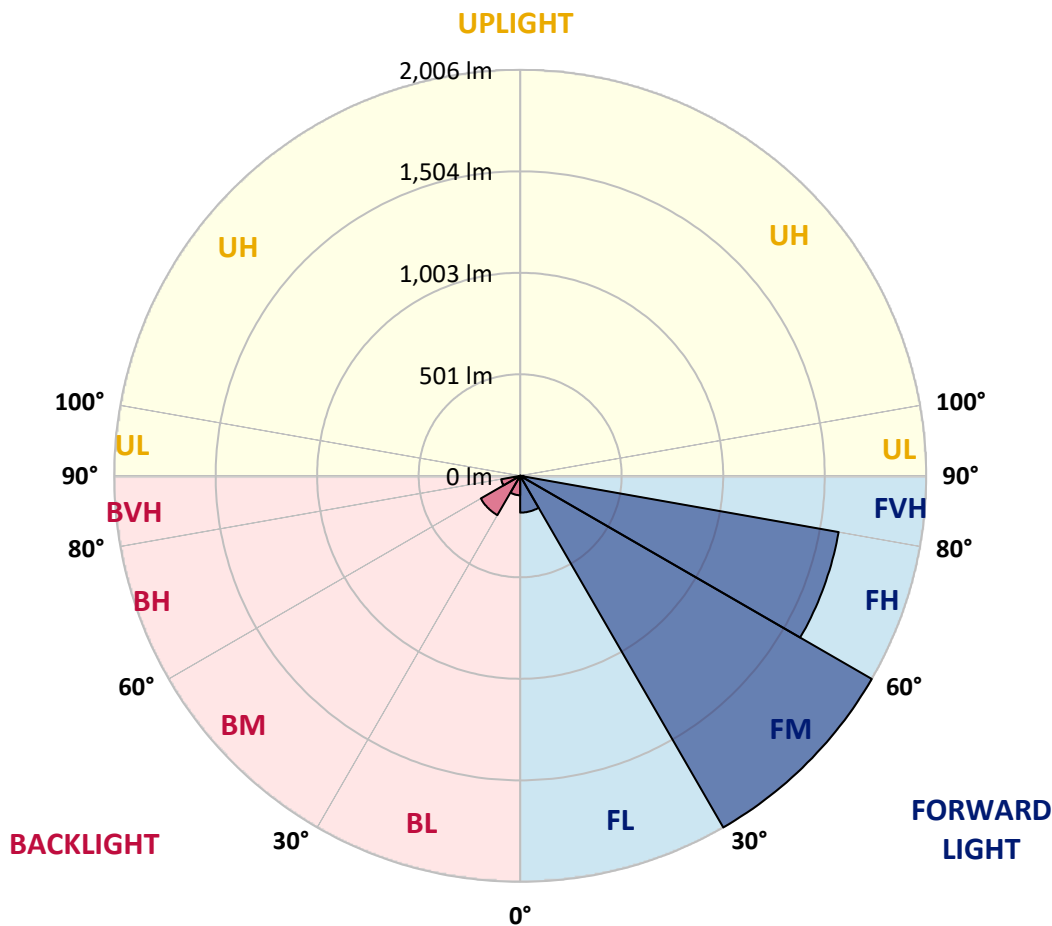
CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	182.0	4.3			
FM (30°-60°)	2005.9	47.6			
FH (60°-80°)	1597.7	37.9			G1/1800
FVH (80°-90°)	16.2	0.4			G1/100
BL (0°-30°)	95.9	2.3	B0/110		
BM (30°-60°)	224.6	5.3	B1/1000		
BH (60°-80°)	95.0	2.3	B0/110		G0/110
BVH (80°-90°)	0.7	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-G1

Type III Short





REPORT NUMBER: P366901
 CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9
2.5°	206.1	200.0	190.2	191.9	193.8	197.6	194.5	191.7	188.6	184.5	200.0
5°	248.9	238.7	237.7	235.6	233.9	233.7	237.5	236.3	238.0	245.6	253.4
7.5°	264.6	260.3	252.2	255.5	250.3	246.3	263.1	268.6	279.0	282.6	303.0
10°	262.9	256.7	260.0	261.7	265.3	280.0	290.7	296.6	305.6	325.1	321.1
12.5°	270.5	276.0	279.5	279.8	298.0	325.1	332.7	337.7	353.9	361.5	381.4
15°	295.9	304.9	299.2	301.6	307.5	340.6	358.4	369.3	392.1	416.8	421.8
17.5°	332.2	337.9	326.1	317.5	333.9	352.0	384.3	395.7	410.1	467.8	478.5
20°	378.1	387.8	362.2	328.2	349.8	371.2	406.3	411.8	427.2	502.5	519.4
22.5°	485.2	470.7	431.5	378.6	372.1	381.6	415.1	436.5	462.6	522.0	561.2
25°	590.9	585.9	528.2	469.0	426.3	404.9	449.3	461.2	503.9	568.3	589.9
27.5°	708.4	718.4	622.0	586.1	502.3	432.5	470.7	500.4	551.0	585.2	637.2
30°	863.5	847.6	734.5	698.7	603.0	508.2	526.0	527.9	602.3	640.7	690.1
32.5°	985.1	995.3	853.3	798.2	721.7	624.8	567.6	592.3	645.5	731.2	778.0
35°	1116.7	1115.7	977.3	903.2	803.2	720.1	690.8	708.9	775.6	872.8	885.1
37.5°	1313.3	1296.4	1133.0	1024.5	939.5	868.5	846.2	822.2	891.1	983.7	1030.0
40°	1498.8	1440.6	1289.6	1160.8	1052.1	1023.1	942.3	957.1	977.5	1099.8	1227.8
42.5°	1686.2	1650.1	1448.2	1340.4	1206.7	1137.8	1085.1	1078.2	1175.3	1320.2	1452.5
45°	1933.4	1822.9	1661.5	1566.7	1411.9	1342.8	1300.2	1325.7	1413.0	1624.6	1712.8
47.5°	2140.9	2039.3	1900.6	1756.7	1594.2	1671.9	1592.1	1552.0	1671.9	1890.6	2007.7
50°	2319.3	2206.0	2065.7	1959.0	1932.7	2007.2	1845.7	1860.5	1938.4	2195.3	2261.3
52.5°	2449.0	2329.7	2207.2	2155.7	2263.7	2301.2	2220.3	2187.7	2258.5	2455.1	2487.2
55°	2546.6	2424.5	2328.8	2399.8	2608.8	2596.4	2624.9	2513.8	2581.5	2726.1	2710.9
57.5°	2552.5	2407.9	2351.8	2466.1	2752.9	2944.1	3027.5	2838.4	2876.9	2937.9	2903.8
60°	2365.8	2221.9	2217.4	2379.6	2794.7	3034.1	3216.5	3124.4	3072.8	3118.2	3053.4
62.5°	1993.9	1893.2	1940.3	2119.6	2639.2	2984.5	3317.2	3428.1	3227.4	3237.7	3145.5
65°	1522.5	1416.8	1490.5	1716.3	2299.1	2928.9	3345.7	3546.9	3224.6	3271.6	3057.2
67.5°	1008.4	947.1	1030.5	1279.3	1827.9	2585.5	3331.0	3422.2	3122.2	3138.9	2729.2
70°	520.6	505.6	573.1	769.5	1229.0	1986.3	3186.4	3136.5	2914.4	2704.0	2105.1
72.5°	166.7	167.4	232.3	351.5	662.6	1209.3	2449.2	2517.6	2332.1	1978.0	1285.3
75°	73.9	72.7	97.1	147.5	276.2	542.2	1521.6	1595.4	1452.0	1088.2	540.3
77.5°	53.2	51.5	62.2	86.2	136.8	183.8	713.4	769.9	658.3	377.1	123.7
80°	37.5	37.3	45.1	60.6	85.5	81.7	225.4	252.7	202.3	91.4	36.3
82.5°	21.1	21.8	31.3	42.7	52.0	40.8	63.4	69.8	68.2	48.7	15.9
85°	10.2	11.4	20.4	30.9	27.3	15.9	22.6	24.5	28.5	28.3	8.1
87.5°	0.0	0.0	8.3	14.0	7.4	2.4	6.9	7.8	7.6	9.0	1.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P366901
 CATALOG NUMBER: MSA-SA1C-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9	168.9
2.5°	203.1	201.6	183.6	185.0	189.0	187.4	188.8	185.5	181.7	197.1	196.9
5°	256.7	246.0	240.3	235.1	236.1	225.4	231.5	234.4	233.9	242.7	245.1
7.5°	303.7	289.5	278.1	267.2	250.5	235.6	244.8	250.8	254.8	270.0	276.0
10°	325.8	314.2	309.7	288.3	276.4	267.2	256.0	247.9	251.3	247.2	251.3
12.5°	374.3	366.4	349.1	327.5	313.2	294.2	252.7	218.0	196.6	196.9	195.5
15°	418.5	418.0	392.1	356.2	314.9	260.8	195.9	152.2	132.0	126.3	124.4
17.5°	476.2	469.0	421.8	368.8	294.5	201.9	133.5	104.3	102.4	105.7	104.3
20°	513.0	502.5	436.5	350.5	242.7	136.6	100.7	92.4	98.1	102.8	101.6
22.5°	549.8	534.1	447.7	328.2	172.7	100.0	91.0	89.5	93.1	99.0	100.0
25°	570.0	566.9	469.5	286.4	118.3	87.6	87.6	87.2	88.3	92.6	91.9
27.5°	628.6	586.8	453.1	223.5	91.4	80.5	81.7	81.2	76.9	81.2	81.5
30°	665.2	646.0	454.3	159.1	80.5	71.2	74.3	70.5	64.1	67.7	67.0
32.5°	738.8	690.8	450.7	107.3	73.4	67.9	63.2	57.7	53.0	54.4	53.2
35°	824.6	788.0	402.5	86.2	68.4	60.1	52.5	47.0	42.0	43.2	43.0
37.5°	995.1	878.9	362.6	77.7	65.1	55.1	46.3	38.7	36.1	36.8	37.5
40°	1153.0	1030.7	288.3	73.9	59.4	49.2	38.2	32.8	31.1	31.6	32.3
42.5°	1389.1	1151.3	217.8	70.1	53.7	41.6	31.8	28.3	26.6	27.5	28.0
45°	1617.5	1253.9	162.7	66.7	48.9	35.9	26.8	24.5	22.6	23.3	24.2
47.5°	1845.7	1367.9	121.4	61.5	43.7	30.9	23.0	21.4	20.2	20.4	21.6
50°	2050.0	1421.1	95.5	55.1	39.4	26.8	20.9	19.2	18.8	19.0	19.9
52.5°	2200.1	1421.6	80.5	49.4	35.4	23.7	19.7	17.8	17.6	18.0	19.0
55°	2335.7	1383.6	69.8	44.4	31.8	21.6	18.8	17.1	17.1	17.6	18.5
57.5°	2425.7	1313.8	60.6	39.2	28.7	20.4	18.0	16.4	16.1	15.9	16.6
60°	2469.6	1218.5	51.3	34.4	25.9	19.7	17.6	14.5	14.2	13.8	14.2
62.5°	2441.8	1099.3	43.0	29.7	23.0	18.8	15.4	12.6	12.1	11.2	11.9
65°	2299.8	954.5	36.3	25.4	19.9	15.9	13.1	10.7	9.5	8.3	8.1
67.5°	2009.4	775.4	30.4	21.8	17.1	13.1	10.7	9.5	7.4	6.4	6.2
70°	1505.9	529.4	25.2	18.8	14.2	11.2	9.0	8.5	6.9	6.2	5.7
72.5°	883.5	285.7	21.1	16.4	12.1	9.3	7.4	7.8	6.9	5.7	5.2
75°	352.9	95.0	16.9	13.1	9.7	6.6	6.2	6.4	6.2	5.2	4.3
77.5°	80.5	29.9	13.1	10.2	7.6	4.3	5.0	5.5	5.5	4.3	3.1
80°	25.2	11.9	7.6	6.4	5.5	2.4	3.6	3.8	2.6	1.2	0.0
82.5°	8.1	3.3	2.6	2.6	2.4	0.5	0.7	0.5	0.0	0.0	0.0
85°	3.1	2.1	1.7	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	0.9	0.7	0.9	0.5	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)