

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: LUMARK

Report Number: P881553

Luminaire Tested: **NAV-SB1A-735-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS 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: 3134 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

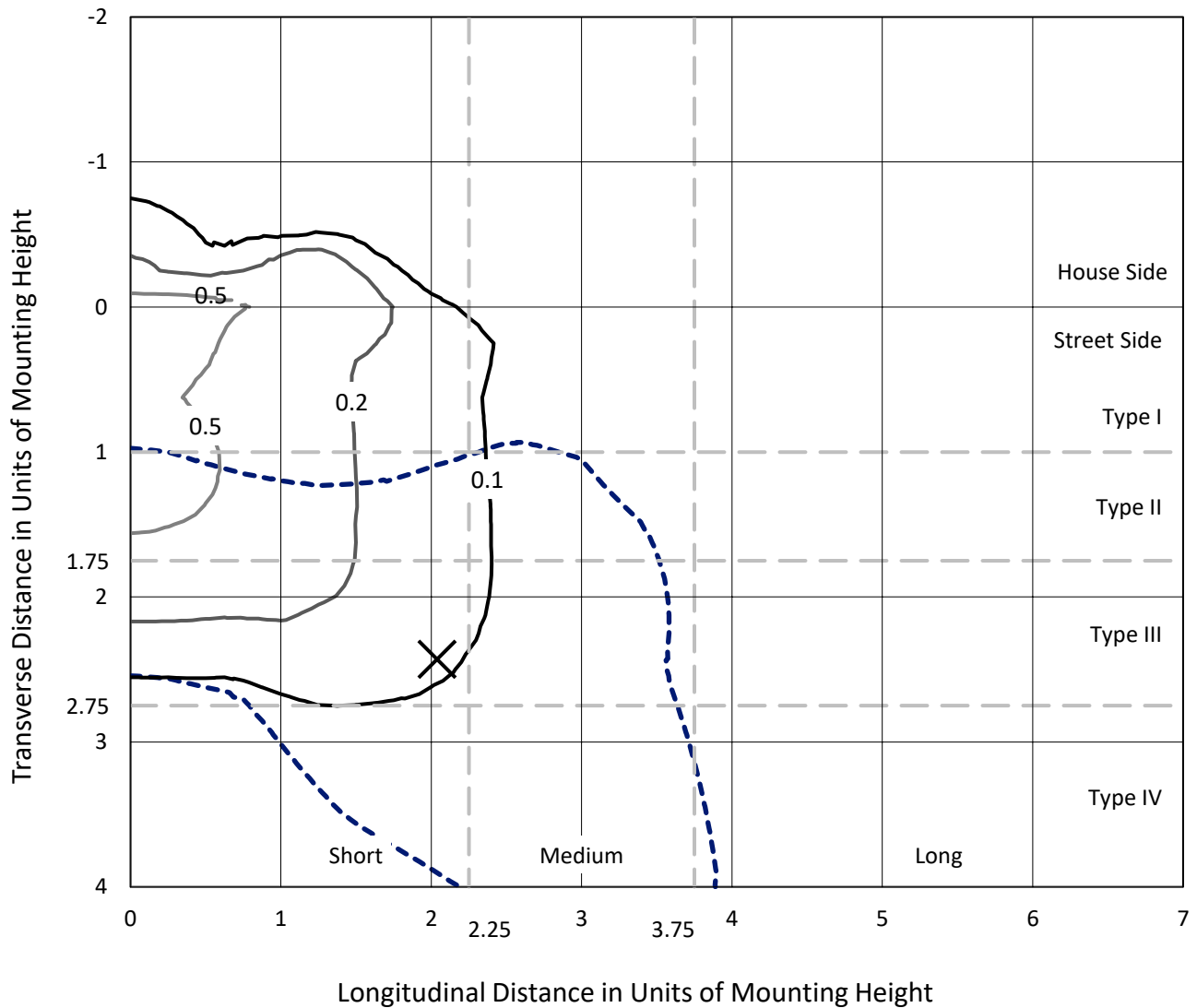
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

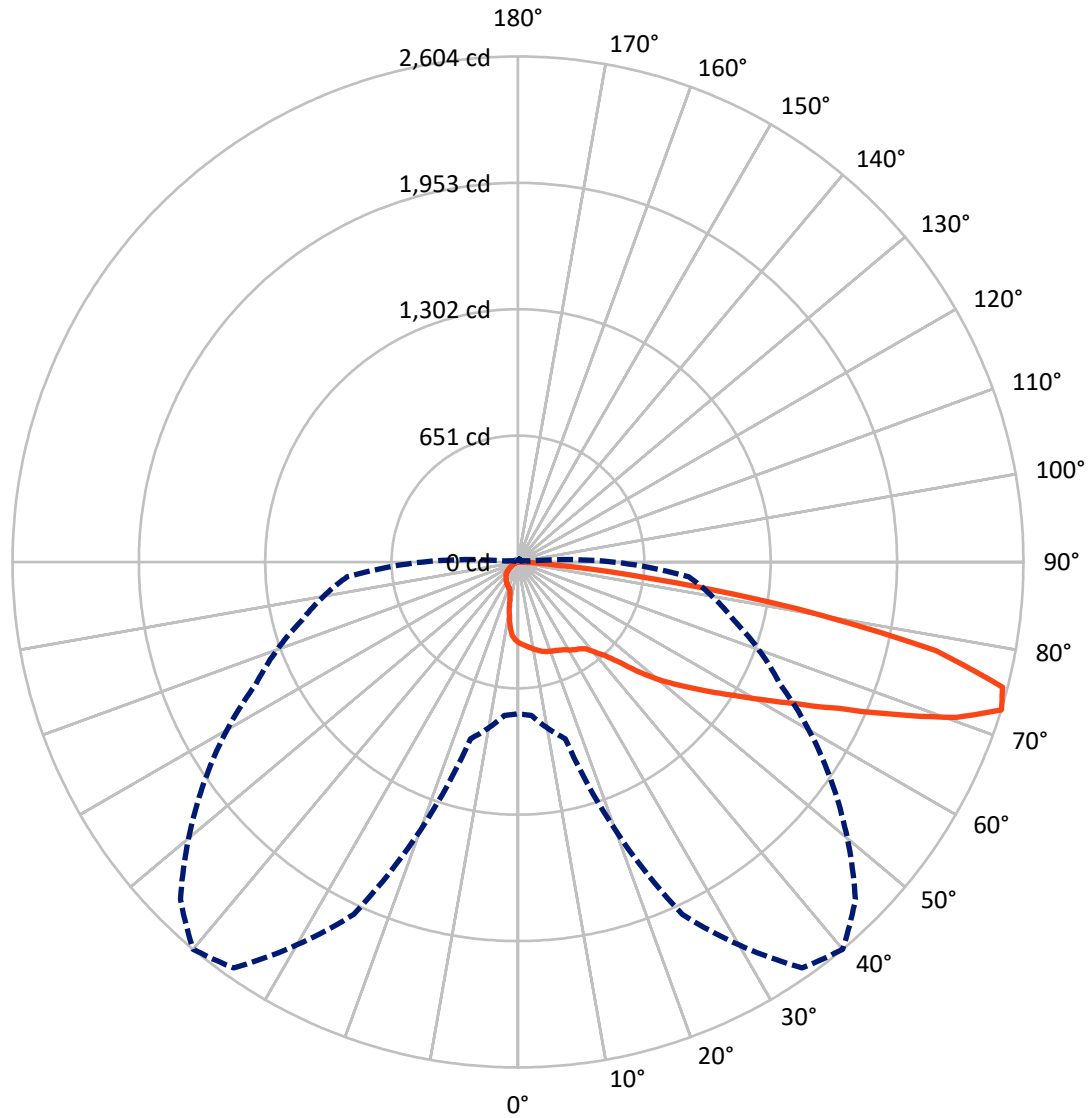
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	404.7	0.0	404.7
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2729.3	0.0	2729.3
	% Fixture	87.1	0.0	87.1
Total	Lumens	3134.0	0.0	3134.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	1.2
10°-20°	102.9	3.3
20°-30°	166.5	5.3
30°-40°	245.9	7.8
40°-50°	413.8	13.2
50°-60°	642.5	20.5
60°-70°	803.9	25.7
70°-80°	658.2	21.0
80°-90°	62.4	2.0
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°	3134.0	100.0
0°-180°	3134.0	100.0

Coefficient of Utilization



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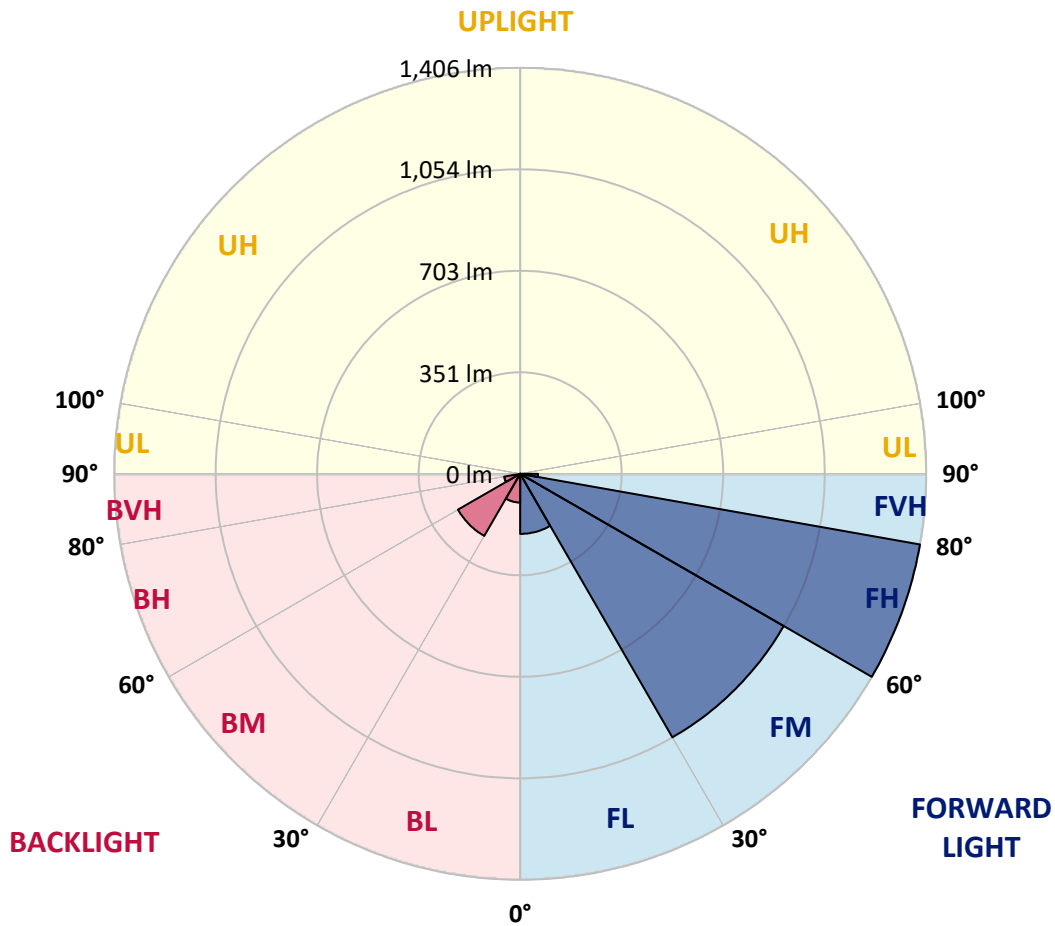
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	208.0	6.6			
FM (30°-60°)	1053.6	33.6			
FH (60°-80°)	1405.7	44.9			G1/1800
FVH (80°-90°)	61.9	2.0			G1/100
BL (0°-30°)	99.3	3.2	B0/110		
BM (30°-60°)	248.5	7.9	B1/1000		
BH (60°-80°)	56.4	1.8	B0/110		G0/110
BVH (80°-90°)	0.5	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-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0
2.5°	427.5	429.1	428.2	426.3	425.8	424.9	423.7	423.2	421.6	420.2	418.5
5°	439.5	441.2	440.0	437.4	436.2	435.0	433.4	432.0	428.7	425.6	421.8
7.5°	452.7	454.2	452.7	449.0	447.1	445.7	443.3	441.2	437.4	432.9	428.2
10°	467.4	468.5	466.4	461.5	458.4	456.3	454.2	451.8	448.2	443.3	437.6
12.5°	481.1	482.5	479.2	473.3	469.7	467.6	465.2	463.4	459.8	455.1	449.2
15°	493.6	495.7	490.0	483.7	479.6	478.0	475.6	474.5	472.1	468.8	463.4
17.5°	503.0	504.4	498.5	491.0	486.5	485.3	483.7	484.4	483.9	482.2	478.7
20°	511.0	512.0	504.2	495.0	490.0	490.3	489.8	492.2	493.1	493.1	492.9
22.5°	521.0	521.2	511.3	499.7	493.8	495.5	496.2	498.8	500.7	502.5	506.8
25°	533.9	533.5	521.7	505.8	500.7	503.0	504.7	505.6	507.7	510.8	520.5
27.5°	553.3	551.9	536.8	515.8	509.6	511.7	514.8	514.3	513.4	515.8	532.0
30°	577.8	575.9	555.9	529.7	524.0	525.9	526.9	522.6	515.8	517.9	542.2
32.5°	616.8	613.5	585.6	545.3	536.5	538.7	537.5	528.7	518.6	520.7	552.3
35°	684.5	676.5	637.1	577.8	550.7	548.3	545.5	537.0	524.5	522.4	560.8
37.5°	828.5	814.4	747.1	641.3	582.8	567.5	558.7	550.2	530.9	522.4	570.5
40°	990.9	976.5	898.9	747.6	636.1	610.2	589.4	565.8	537.5	525.4	585.6
42.5°	1160.4	1144.6	1064.8	879.3	712.4	659.0	620.3	578.3	548.3	534.9	605.7
45°	1349.7	1329.9	1225.5	1016.6	823.1	740.2	670.1	604.0	567.2	551.6	633.1
47.5°	1549.4	1523.7	1385.8	1150.0	942.3	852.6	761.2	650.1	595.1	576.7	670.1
50°	1726.4	1700.9	1551.3	1289.5	1053.7	959.5	865.1	713.8	636.8	612.1	719.9
52.5°	1853.7	1834.3	1701.9	1433.5	1169.6	1059.8	959.3	787.9	689.7	657.4	778.7
55°	1938.9	1921.2	1808.6	1569.9	1304.4	1170.3	1052.1	868.4	753.5	711.7	843.6
57.5°	1990.6	1980.4	1885.8	1691.7	1438.0	1291.2	1158.3	956.9	828.5	775.6	916.1
60°	2009.0	2000.7	1933.7	1807.9	1599.4	1436.3	1283.1	1056.8	919.6	848.3	990.4
62.5°	1959.9	1961.5	1968.1	1945.5	1769.6	1606.3	1432.8	1176.7	1020.7	930.7	1060.3
65°	1728.8	1742.5	1868.1	2098.0	1995.1	1819.2	1623.3	1323.0	1136.3	1024.4	1115.8
67.5°	1431.4	1451.2	1607.5	2187.2	2235.3	2095.6	1888.6	1509.5	1274.2	1119.8	1136.8
70°	1095.7	1117.0	1306.3	2168.5	2460.3	2397.7	2216.7	1746.7	1417.0	1185.9	1083.2
72.5°	782.0	792.9	942.1	2002.6	2552.6	2603.6	2458.4	1971.4	1489.9	1149.3	883.5
75°	549.5	547.6	646.5	1612.7	2408.8	2578.6	2373.7	1849.9	1348.3	913.0	544.8
77.5°	239.3	239.8	322.9	979.4	1922.6	2202.3	1973.1	1158.7	939.9	483.9	229.9
80°	62.1	64.0	118.5	389.9	1157.6	1453.6	1203.4	509.4	434.3	118.0	43.9
82.5°	22.0	23.4	54.5	122.5	427.0	666.6	535.8	162.9	113.3	33.8	11.8
85°	6.4	7.6	29.3	37.5	88.3	188.4	130.1	31.6	27.9	17.5	3.1
87.5°	0.0	0.9	5.9	5.2	5.2	3.5	6.6	3.5	4.5	2.1	0.9
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°	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0	415.0
2.5°	417.1	415.4	411.9	408.1	404.6	401.3	400.3	396.8	395.1	395.4	395.1
5°	419.2	416.1	409.3	401.0	392.5	382.9	374.8	363.5	353.8	352.7	351.9
7.5°	424.9	419.9	408.8	392.8	371.5	344.9	320.1	295.5	281.6	274.0	273.6
10°	433.6	427.0	410.0	379.3	334.2	286.6	249.0	218.1	202.3	195.0	193.6
12.5°	444.0	436.7	411.9	356.4	286.1	223.5	182.9	164.1	160.7	160.3	160.0
15°	458.6	450.6	414.0	325.5	233.9	170.2	151.5	151.8	154.4	155.8	155.6
17.5°	474.9	466.9	411.0	287.7	182.5	145.4	144.9	147.1	150.8	152.2	152.0
20°	491.4	483.9	400.1	243.4	147.5	138.6	140.4	142.8	146.6	148.5	148.5
22.5°	508.4	501.8	382.9	196.2	133.1	133.6	136.0	138.3	142.6	144.7	144.7
25°	526.6	521.0	360.0	157.2	127.0	128.4	131.5	134.3	138.8	141.4	141.4
27.5°	545.0	540.8	334.0	131.2	121.3	123.0	126.5	130.3	134.8	137.9	138.1
30°	565.1	562.7	313.2	121.6	115.9	117.3	121.3	125.6	130.5	134.3	134.8
32.5°	585.6	585.2	303.1	128.6	110.9	111.9	115.4	119.7	125.8	130.5	131.0
35°	605.9	606.9	297.2	148.7	109.3	106.7	109.1	112.8	120.1	126.0	127.0
37.5°	631.9	634.3	296.9	170.4	113.3	101.5	103.2	105.7	112.1	119.0	120.1
40°	670.6	683.1	312.1	189.1	120.4	96.8	97.3	97.7	101.0	106.7	108.6
42.5°	722.1	758.6	366.6	201.8	123.2	92.5	90.9	88.3	87.8	90.9	92.5
45°	786.0	850.0	462.4	208.9	120.4	87.8	83.3	76.5	73.9	76.0	76.0
47.5°	861.3	950.1	575.9	210.6	115.7	81.9	73.9	64.9	62.8	63.5	63.3
50°	934.7	1025.1	675.8	196.9	107.9	74.4	63.5	55.9	54.5	54.8	54.8
52.5°	999.7	1050.9	704.1	164.5	97.5	65.1	54.5	49.3	48.4	48.4	48.2
55°	1042.6	1023.0	627.9	125.8	84.5	55.7	46.7	44.1	43.7	43.4	43.0
57.5°	1051.6	932.4	474.2	90.9	66.1	47.0	41.5	40.1	39.2	38.2	37.8
60°	1019.5	781.3	301.9	63.5	49.6	40.1	36.8	35.9	34.0	32.1	31.4
62.5°	950.1	590.1	167.1	44.1	39.9	34.2	32.6	31.4	27.9	24.8	23.8
65°	856.8	392.3	73.9	34.5	32.6	28.8	27.9	26.2	22.0	18.4	17.7
67.5°	763.1	225.9	33.3	27.6	26.2	23.6	22.9	21.7	18.6	15.3	14.9
70°	656.2	114.5	22.9	22.0	20.3	17.9	18.6	18.4	15.3	12.5	12.0
72.5°	488.6	56.9	17.2	16.5	14.6	12.7	15.3	15.1	12.0	9.4	9.0
75°	276.6	28.1	12.5	11.6	8.7	9.4	12.3	11.6	8.3	6.1	5.7
77.5°	109.8	14.4	8.3	7.1	5.2	6.4	9.0	7.8	4.2	2.6	2.4
80°	25.3	7.1	4.2	3.1	2.4	3.8	4.7	2.8	1.2	0.2	0.0
82.5°	7.1	3.1	1.4	1.2	1.2	1.4	1.2	0.5	0.0	0.0	0.0
85°	2.4	1.4	0.5	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.9	0.5	0.0	0.0	0.0	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)