

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: P881693

Luminaire Tested: **NAV-SB1B-722-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881693
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-SB1B-722-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA 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: 3135 lumens
Efficiency: N/A
Efficacy: 78.8 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

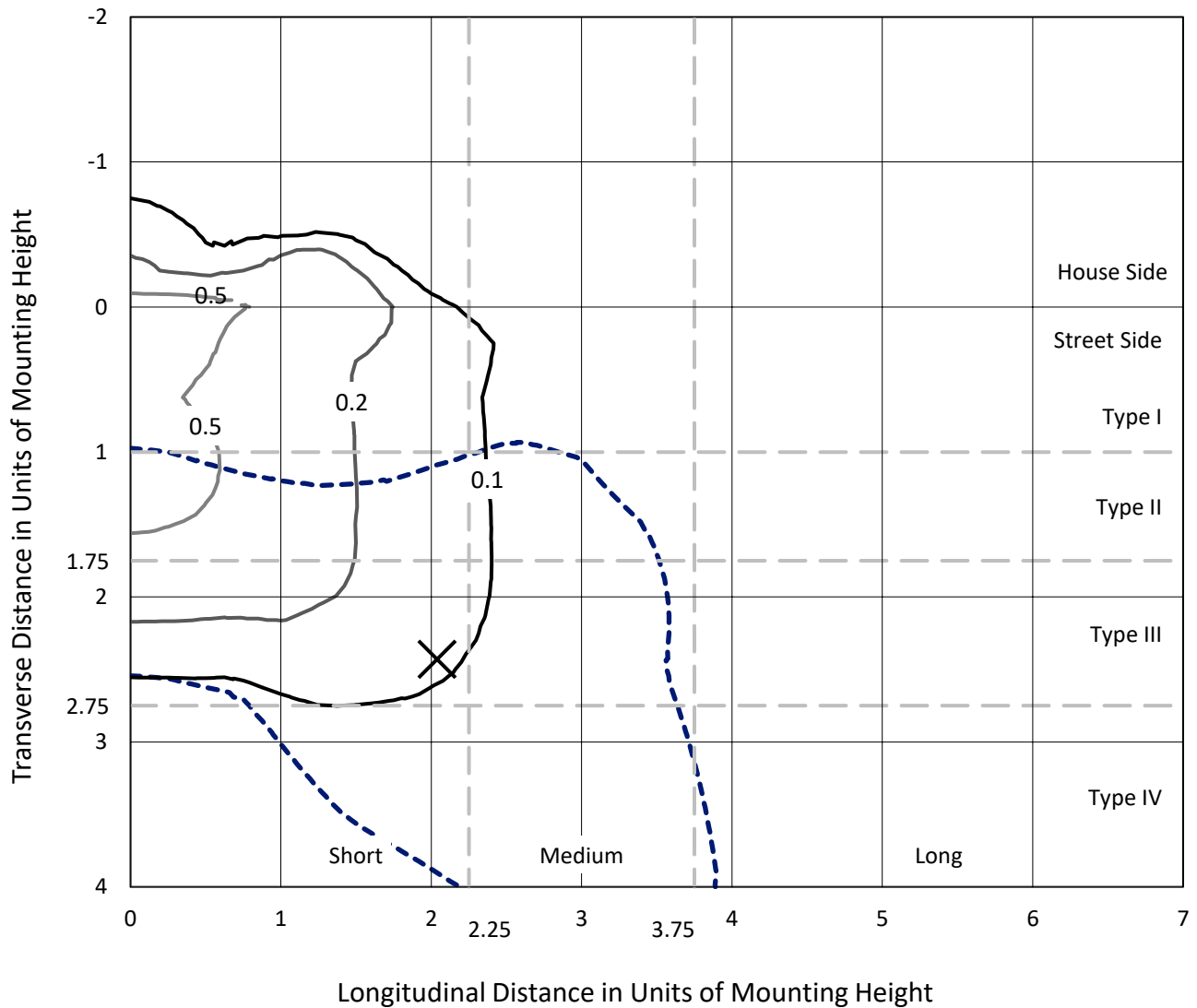
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

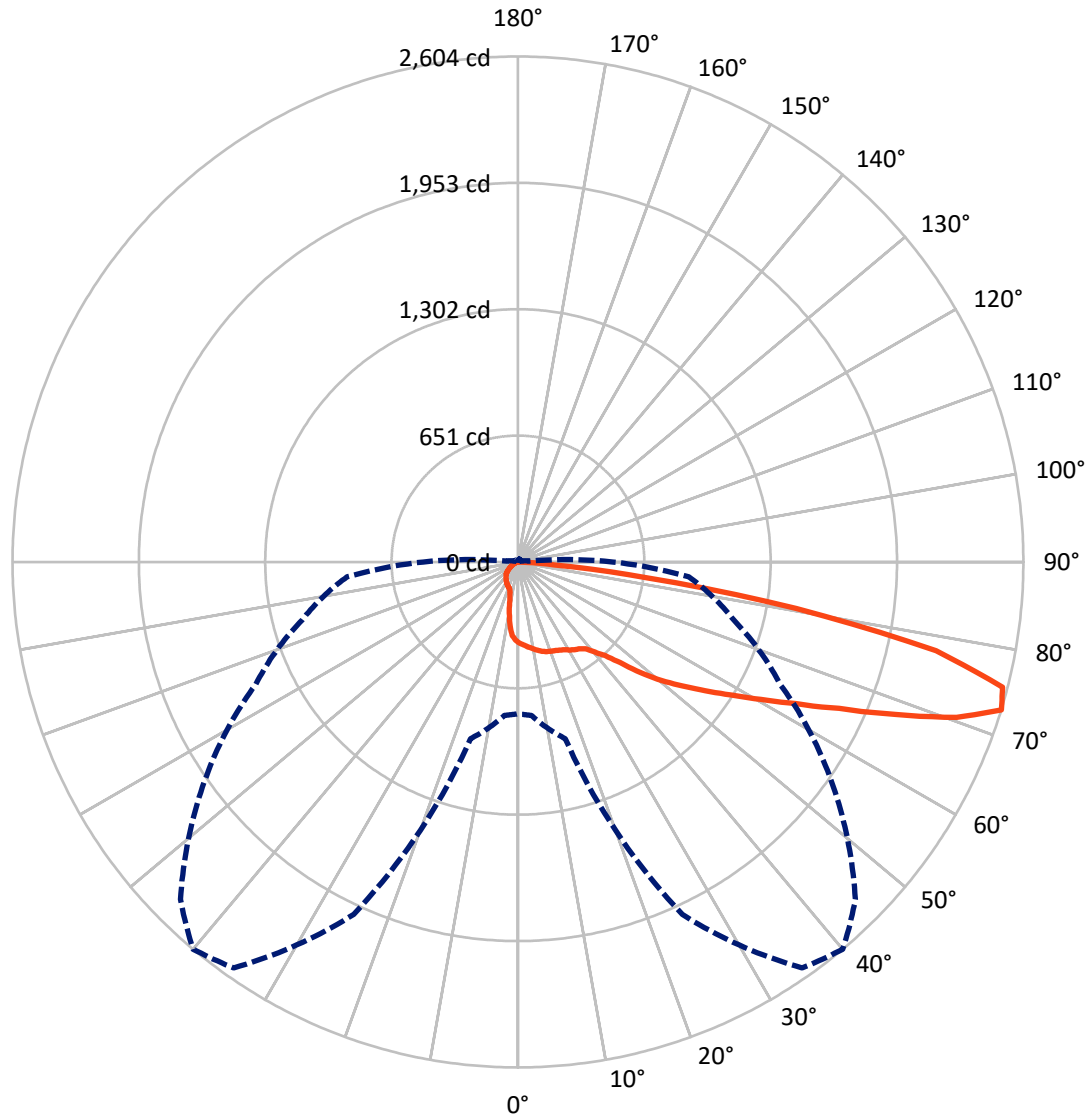
✕ Max cd
 - - - 1/2 Max cd



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	404.9	0.0	404.9
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2730.1	0.0	2730.1
	% Fixture	87.1	0.0	87.1
Total	Lumens	3135.0	0.0	3135.0
	% 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°	166.6	5.3
30°-40°	245.9	7.8
40°-50°	413.9	13.2
50°-60°	642.7	20.5
60°-70°	804.2	25.7
70°-80°	658.4	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°	3135.0	100.0
0°-180°	3135.0	100.0

Coefficient of Utilization



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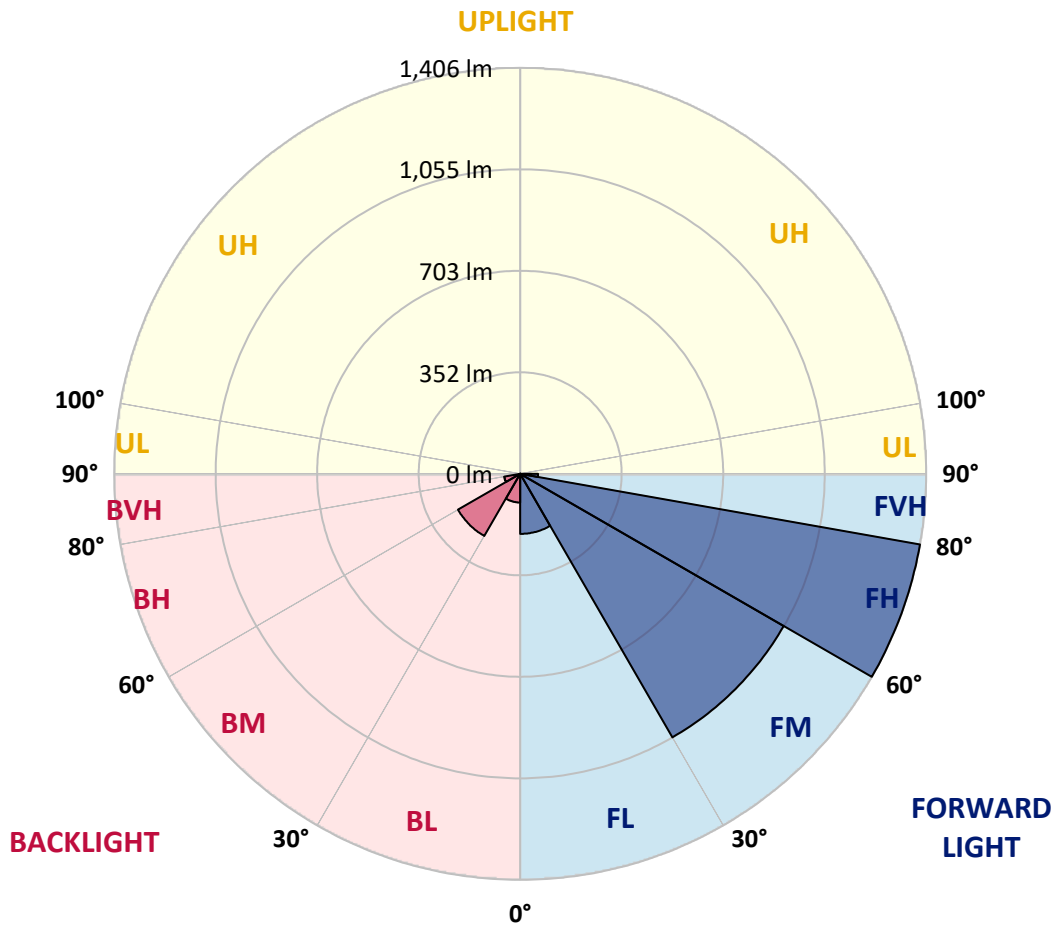
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	208.1	6.6			
FM (30°-60°)	1053.9	33.6			
FH (60°-80°)	1406.2	44.9			G1/1800
FVH (80°-90°)	62.0	2.0			G1/100
BL (0°-30°)	99.4	3.2	B0/110		
BM (30°-60°)	248.6	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°	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1
2.5°	427.6	429.3	428.3	426.4	426.0	425.0	423.8	423.4	421.7	420.3	418.6
5°	439.7	441.3	440.1	437.5	436.4	435.2	433.5	432.1	428.8	425.7	421.9
7.5°	452.9	454.3	452.9	449.1	447.2	445.8	443.4	441.3	437.5	433.0	428.3
10°	467.5	468.7	466.6	461.6	458.5	456.4	454.3	451.9	448.4	443.4	437.8
12.5°	481.2	482.6	479.3	473.4	469.9	467.8	465.4	463.5	460.0	455.2	449.3
15°	493.7	495.9	490.2	483.8	479.8	478.1	475.8	474.6	472.2	468.9	463.5
17.5°	503.2	504.6	498.7	491.1	486.6	485.5	483.8	484.5	484.0	482.4	478.9
20°	511.2	512.1	504.4	495.1	490.2	490.4	489.9	492.3	493.3	493.3	493.0
22.5°	521.1	521.4	511.4	499.9	494.0	495.6	496.3	498.9	500.8	502.7	507.0
25°	534.1	533.6	521.8	506.0	500.8	503.2	504.8	505.8	507.9	511.0	520.6
27.5°	553.5	552.0	536.9	515.9	509.8	511.9	515.0	514.5	513.6	515.9	532.2
30°	578.0	576.1	556.1	529.9	524.2	526.1	527.0	522.8	515.9	518.0	542.4
32.5°	617.0	613.7	585.8	545.4	536.7	538.8	537.6	528.9	518.8	520.9	552.5
35°	684.7	676.7	637.3	578.0	550.9	548.5	545.7	537.2	524.7	522.5	561.0
37.5°	828.8	814.6	747.3	641.5	583.0	567.6	558.9	550.4	531.0	522.5	570.7
40°	991.2	976.8	899.1	747.8	636.3	610.4	589.6	566.0	537.6	525.6	585.8
42.5°	1160.8	1144.9	1065.1	879.5	712.6	659.2	620.5	578.5	548.5	535.0	605.9
45°	1350.1	1330.3	1225.9	1017.0	823.4	740.5	670.3	604.2	567.4	551.8	633.3
47.5°	1549.9	1524.2	1386.3	1150.4	942.6	852.9	761.5	650.3	595.3	576.8	670.3
50°	1727.0	1701.5	1551.8	1289.9	1054.0	959.8	865.4	714.0	637.1	612.3	720.2
52.5°	1854.3	1834.9	1702.4	1434.0	1170.0	1060.2	959.6	788.2	689.9	657.6	779.0
55°	1939.5	1921.8	1809.2	1570.4	1304.8	1170.7	1052.4	868.7	753.7	711.9	843.9
57.5°	1991.2	1981.0	1886.4	1692.3	1438.4	1291.6	1158.6	957.2	828.8	775.9	916.4
60°	2009.6	2001.4	1934.3	1808.4	1600.0	1436.8	1283.5	1057.1	919.9	848.6	990.8
62.5°	1960.5	1962.2	1968.8	1946.1	1770.2	1606.8	1433.2	1177.1	1021.0	931.0	1060.7
65°	1729.3	1743.0	1868.7	2098.6	1995.7	1819.8	1623.8	1323.5	1136.7	1024.8	1116.1
67.5°	1431.8	1451.7	1608.0	2187.9	2236.1	2096.3	1889.2	1510.0	1274.6	1120.2	1137.2
70°	1096.1	1117.3	1306.7	2169.2	2461.1	2398.5	2217.4	1747.3	1417.4	1186.3	1083.6
72.5°	782.3	793.1	942.4	2003.2	2553.4	2604.4	2459.2	1972.1	1490.4	1149.7	883.8
75°	549.7	547.8	646.7	1613.2	2409.6	2579.4	2374.4	1850.5	1348.7	913.3	545.0
77.5°	239.4	239.9	323.0	979.7	1923.2	2203.0	1973.7	1159.1	940.2	484.0	230.0
80°	62.1	64.0	118.5	390.1	1157.9	1454.0	1203.7	509.5	434.5	118.1	43.9
82.5°	22.0	23.4	54.5	122.5	427.1	666.8	536.0	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°	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1	415.1
2.5°	417.2	415.6	412.0	408.3	404.7	401.4	400.5	396.9	395.3	395.5	395.3
5°	419.3	416.3	409.4	401.2	392.7	383.0	375.0	363.6	353.9	352.8	352.1
7.5°	425.0	420.1	409.0	392.9	371.7	345.0	320.2	295.6	281.7	274.1	273.7
10°	433.8	427.1	410.1	379.4	334.3	286.6	249.1	218.2	202.4	195.0	193.6
12.5°	444.1	436.8	412.0	356.5	286.2	223.6	183.0	164.1	160.8	160.3	160.1
15°	458.8	450.8	414.2	325.6	234.0	170.2	151.6	151.8	154.4	155.8	155.6
17.5°	475.1	467.0	411.1	287.8	182.5	145.5	145.0	147.1	150.9	152.3	152.1
20°	491.6	484.0	400.2	243.4	147.6	138.6	140.5	142.9	146.6	148.5	148.5
22.5°	508.6	502.0	383.0	196.2	133.2	133.6	136.0	138.4	142.6	144.7	144.7
25°	526.8	521.1	360.1	157.3	127.0	128.4	131.5	134.4	138.8	141.4	141.4
27.5°	545.2	541.0	334.1	131.3	121.4	123.0	126.6	130.3	134.8	137.9	138.1
30°	565.3	562.9	313.3	121.6	115.9	117.4	121.4	125.6	130.6	134.4	134.8
32.5°	585.8	585.3	303.2	128.7	111.0	111.9	115.5	119.7	125.9	130.6	131.0
35°	606.1	607.1	297.3	148.8	109.3	106.7	109.1	112.9	120.2	126.1	127.0
37.5°	632.1	634.5	297.0	170.5	113.3	101.5	103.2	105.8	112.2	119.0	120.2
40°	670.8	683.3	312.2	189.1	120.4	96.8	97.3	97.8	101.1	106.7	108.6
42.5°	722.3	758.9	366.7	201.9	123.3	92.6	90.9	88.3	87.8	90.9	92.6
45°	786.3	850.3	462.6	209.0	120.4	87.8	83.4	76.5	73.9	76.0	76.0
47.5°	861.6	950.4	576.1	210.6	115.7	81.9	73.9	64.9	62.8	63.5	63.3
50°	935.0	1025.5	676.0	196.9	107.9	74.4	63.5	56.0	54.5	54.8	54.8
52.5°	1000.0	1051.2	704.3	164.6	97.5	65.2	54.5	49.3	48.4	48.4	48.2
55°	1042.9	1023.3	628.1	125.9	84.5	55.7	46.8	44.2	43.7	43.4	43.0
57.5°	1051.9	932.7	474.4	90.9	66.1	47.0	41.6	40.1	39.2	38.3	37.8
60°	1019.8	781.6	302.0	63.5	49.6	40.1	36.8	35.9	34.0	32.1	31.4
62.5°	950.4	590.3	167.2	44.2	39.9	34.2	32.6	31.4	27.9	24.8	23.8
65°	857.1	392.4	73.9	34.5	32.6	28.8	27.9	26.2	22.0	18.4	17.7
67.5°	763.4	226.0	33.3	27.6	26.2	23.6	22.9	21.7	18.7	15.3	14.9
70°	656.4	114.5	22.9	22.0	20.3	17.9	18.7	18.4	15.3	12.5	12.0
72.5°	488.8	56.9	17.2	16.5	14.6	12.8	15.3	15.1	12.0	9.4	9.0
75°	276.7	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	4.3	2.6	2.4
80°	25.3	7.1	4.3	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)