

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: P881563

Luminaire Tested: **NAV-SB1A-740-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881563
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-740-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 3379 lumens
Efficiency: N/A
Efficacy: 109.4 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

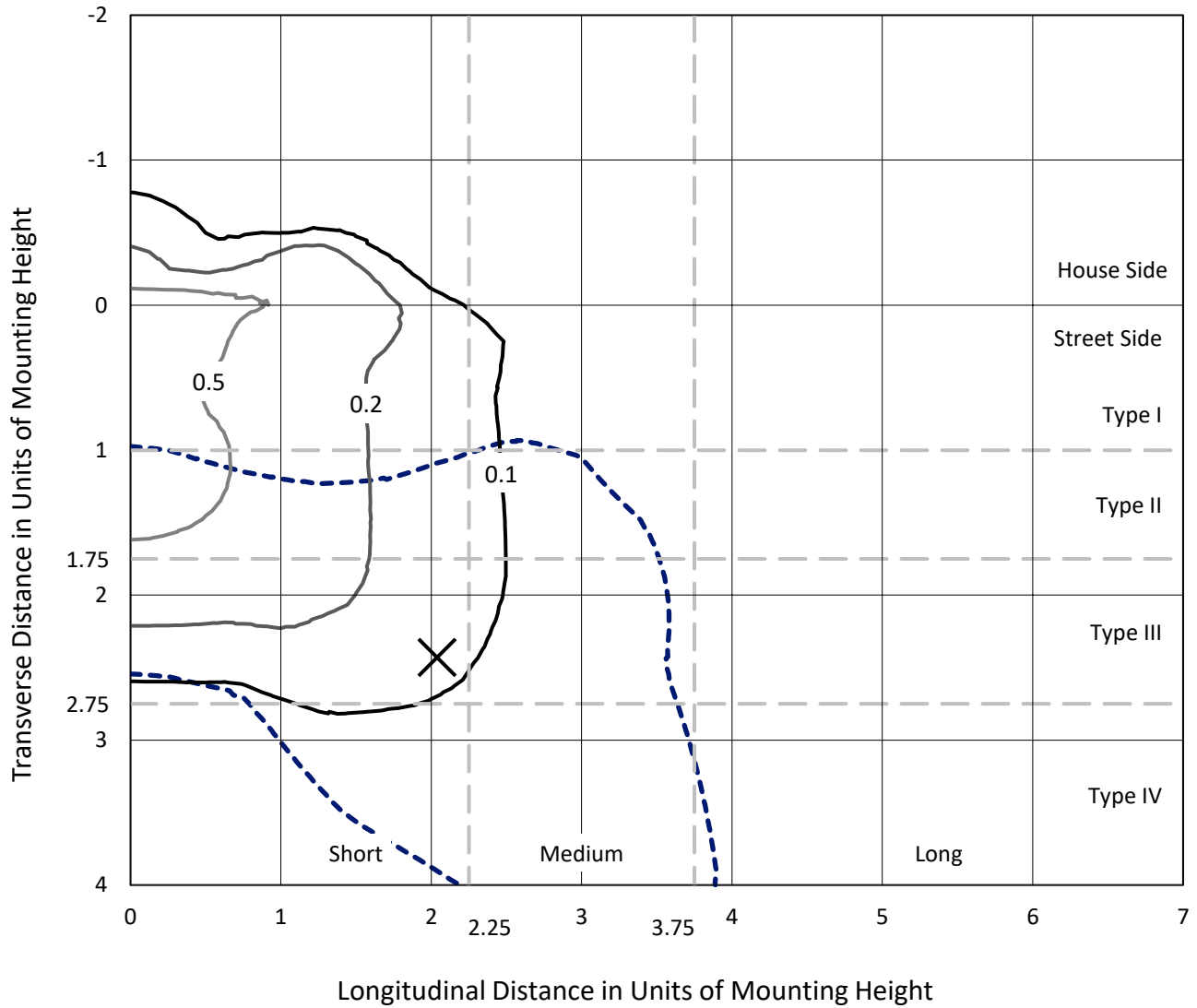
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

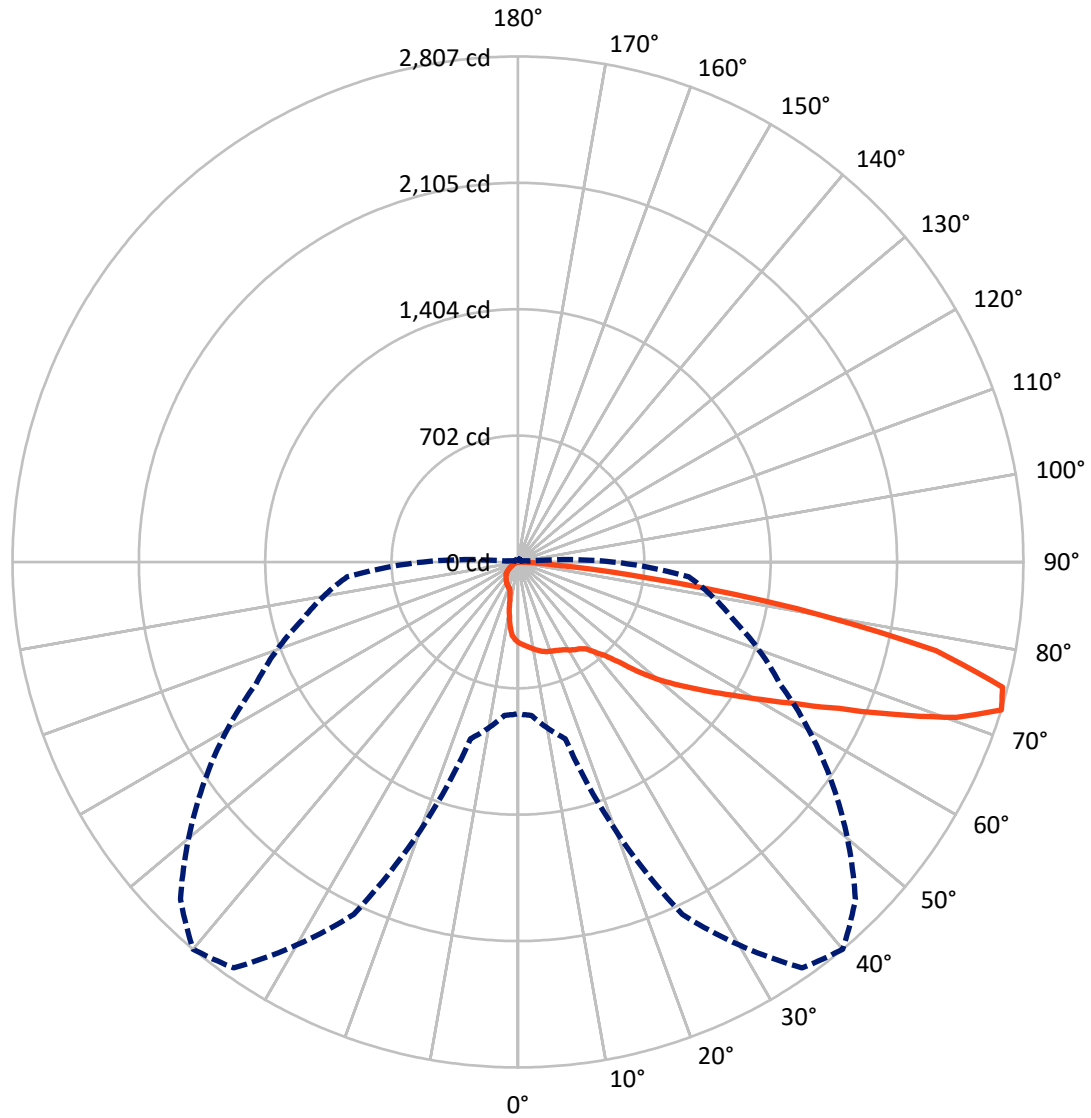
✕ Max cd
 - - - 1/2 Max cd



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	436.4	0.0	436.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2942.6	0.0	2942.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	3379.0	0.0	3379.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	1.2
10°-20°	111.0	3.3
20°-30°	179.5	5.3
30°-40°	265.1	7.8
40°-50°	446.1	13.2
50°-60°	692.7	20.5
60°-70°	866.8	25.7
70°-80°	709.6	21.0
80°-90°	67.3	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°	3379.0	100.0
0°-180°	3379.0	100.0

Coefficient of Utilization



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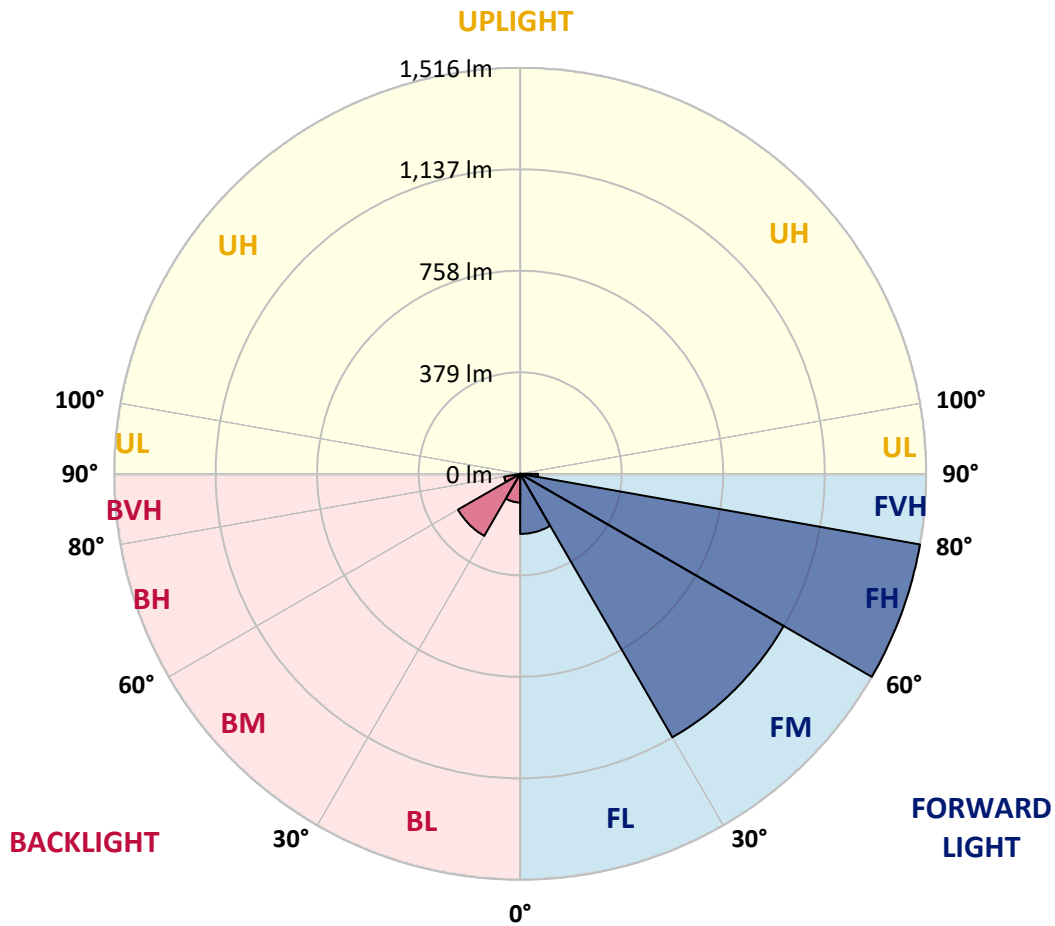
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	224.3	6.6			
FM (30°-60°)	1136.0	33.6			
FH (60°-80°)	1515.6	44.9			G1/1800
FVH (80°-90°)	66.8	2.0			G1/100
BL (0°-30°)	107.1	3.2	B0/110		
BM (30°-60°)	268.0	7.9	B1/1000		
BH (60°-80°)	60.8	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°	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4
2.5°	460.9	462.7	461.7	459.6	459.1	458.1	456.8	456.3	454.5	453.0	451.2
5°	473.9	475.7	474.4	471.6	470.3	469.0	467.3	465.7	462.2	458.9	454.8
7.5°	488.1	489.7	488.1	484.1	482.0	480.5	477.9	475.7	471.6	466.7	461.7
10°	503.9	505.2	502.9	497.5	494.2	491.9	489.7	487.1	483.3	477.9	471.8
12.5°	518.7	520.2	516.6	510.3	506.5	504.2	501.6	499.6	495.8	490.7	484.3
15°	532.2	534.4	528.3	521.5	517.1	515.4	512.8	511.5	509.0	505.4	499.6
17.5°	542.3	543.9	537.5	529.4	524.5	523.2	521.5	522.2	521.7	519.9	516.1
20°	551.0	552.0	543.6	533.7	528.3	528.6	528.1	530.6	531.6	531.6	531.4
22.5°	561.7	561.9	551.2	538.8	532.4	534.2	535.0	537.8	539.8	541.8	546.4
25°	575.7	575.2	562.4	545.4	539.8	542.3	544.1	545.1	547.4	550.7	561.2
27.5°	596.5	595.0	578.7	556.1	549.5	551.8	555.1	554.6	553.5	556.1	573.6
30°	623.0	621.0	599.3	571.1	565.0	567.0	568.0	563.5	556.1	558.4	584.6
32.5°	665.0	661.4	631.4	587.9	578.5	580.8	579.5	570.1	559.1	561.4	595.5
35°	738.0	729.4	686.9	623.0	593.7	591.2	588.1	579.0	565.5	563.2	604.7
37.5°	893.3	878.0	805.5	691.5	628.4	611.8	602.4	593.2	572.4	563.2	615.1
40°	1068.4	1052.9	969.1	806.0	685.9	657.9	635.5	610.0	579.5	566.5	631.4
42.5°	1251.1	1234.1	1148.0	948.0	768.1	710.6	668.8	623.5	591.2	576.7	653.0
45°	1455.2	1433.8	1321.4	1096.1	887.4	798.1	722.5	651.3	611.6	594.8	682.6
47.5°	1670.5	1642.8	1494.2	1239.9	1016.0	919.2	820.8	700.9	641.6	621.7	722.5
50°	1861.4	1833.9	1672.6	1390.3	1136.1	1034.5	932.7	769.6	686.6	659.9	776.2
52.5°	1998.6	1977.7	1834.9	1545.6	1261.0	1142.7	1034.3	849.5	743.6	708.8	839.6
55°	2090.4	2071.4	1950.0	1692.7	1406.4	1261.8	1134.3	936.3	812.4	767.3	909.6
57.5°	2146.2	2135.2	2033.2	1824.0	1550.4	1392.1	1248.8	1031.7	893.3	836.3	987.7
60°	2166.0	2157.1	2084.8	1949.2	1724.5	1548.6	1383.4	1139.4	991.5	914.7	1067.9
62.5°	2113.1	2114.9	2122.0	2097.6	1908.0	1731.9	1544.8	1268.7	1100.4	1003.5	1143.2
65°	1863.9	1878.7	2014.1	2262.0	2151.0	1961.4	1750.2	1426.5	1225.2	1104.5	1203.0
67.5°	1543.3	1564.7	1733.1	2358.2	2410.1	2259.4	2036.2	1627.5	1373.8	1207.3	1225.7
70°	1181.4	1204.3	1408.4	2338.1	2652.6	2585.2	2390.0	1883.3	1527.7	1278.6	1167.9
72.5°	843.2	854.9	1015.7	2159.2	2752.1	2807.1	2650.6	2125.6	1606.4	1239.1	952.6
75°	592.5	590.4	697.1	1738.7	2597.1	2780.1	2559.2	1994.5	1453.7	984.4	587.4
77.5°	258.1	258.6	348.2	1055.9	2072.9	2374.5	2127.3	1249.3	1013.4	521.7	247.9
80°	66.9	69.0	127.8	420.4	1248.1	1567.2	1297.4	549.2	468.3	127.2	47.3
82.5°	23.7	25.2	58.8	132.1	460.4	718.7	577.7	175.6	122.2	36.4	12.7
85°	6.9	8.1	31.6	40.5	95.2	203.1	140.2	34.1	30.0	18.8	3.3
87.5°	0.0	1.0	6.4	5.6	5.6	3.8	7.1	3.8	4.8	2.3	1.0
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°	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4
2.5°	449.7	447.9	444.1	440.0	436.2	432.6	431.6	427.8	426.0	426.3	426.0
5°	452.0	448.7	441.3	432.4	423.2	412.8	404.1	391.9	381.5	380.2	379.5
7.5°	458.1	452.8	440.8	423.5	400.6	371.8	345.1	318.6	303.6	295.5	295.0
10°	467.5	460.4	442.1	409.0	360.4	309.0	268.5	235.2	218.1	210.2	208.7
12.5°	478.7	470.8	444.1	384.3	308.5	241.0	197.2	176.9	173.3	172.8	172.5
15°	494.5	485.8	446.4	351.0	252.2	183.5	163.4	163.6	166.4	168.0	167.7
17.5°	512.0	503.4	443.1	310.2	196.7	156.8	156.3	158.6	162.6	164.2	163.9
20°	529.9	521.7	431.4	262.4	159.1	149.4	151.4	154.0	158.0	160.1	160.1
22.5°	548.2	541.1	412.8	211.5	143.5	144.0	146.6	149.1	153.7	156.0	156.0
25°	567.8	561.7	388.1	169.5	136.9	138.4	141.8	144.8	149.6	152.4	152.4
27.5°	587.6	583.1	360.1	141.5	130.8	132.6	136.4	140.5	145.3	148.6	148.9
30°	609.3	606.7	337.7	131.1	125.0	126.5	130.8	135.4	140.7	144.8	145.3
32.5°	631.4	630.9	326.8	138.7	119.6	120.6	124.4	129.0	135.6	140.7	141.2
35°	653.3	654.3	320.4	160.3	117.8	115.0	117.6	121.6	129.5	135.9	136.9
37.5°	681.3	683.8	320.2	183.7	122.2	109.4	111.2	114.0	120.9	128.3	129.5
40°	723.0	736.5	336.4	203.9	129.8	104.3	104.9	105.4	108.9	115.0	117.1
42.5°	778.5	818.0	395.2	217.6	132.8	99.8	98.0	95.2	94.7	98.0	99.8
45°	847.5	916.4	498.6	225.2	129.8	94.7	89.8	82.5	79.7	81.9	81.9
47.5°	928.7	1024.4	621.0	227.0	124.7	88.3	79.7	70.0	67.7	68.5	68.2
50°	1007.8	1105.3	728.6	212.3	116.3	80.2	68.5	60.3	58.8	59.0	59.0
52.5°	1077.8	1133.0	759.2	177.4	105.1	70.2	58.8	53.2	52.2	52.2	51.9
55°	1124.1	1103.0	677.0	135.6	91.1	60.1	50.4	47.6	47.1	46.8	46.3
57.5°	1133.8	1005.3	511.3	98.0	71.3	50.6	44.8	43.3	42.2	41.2	40.7
60°	1099.2	842.4	325.5	68.5	53.4	43.3	39.7	38.7	36.6	34.6	33.8
62.5°	1024.4	636.2	180.2	47.6	43.0	36.9	35.1	33.8	30.0	26.7	25.7
65°	923.8	423.0	79.7	37.2	35.1	31.0	30.0	28.2	23.7	19.9	19.1
67.5°	822.8	243.6	35.9	29.8	28.2	25.4	24.7	23.4	20.1	16.5	16.0
70°	707.5	123.4	24.7	23.7	21.9	19.3	20.1	19.9	16.5	13.5	13.0
72.5°	526.8	61.3	18.6	17.8	15.8	13.7	16.5	16.3	13.0	10.2	9.7
75°	298.3	30.3	13.5	12.5	9.4	10.2	13.2	12.5	8.9	6.6	6.1
77.5°	118.3	15.5	8.9	7.6	5.6	6.9	9.7	8.4	4.6	2.8	2.5
80°	27.2	7.6	4.6	3.3	2.5	4.1	5.1	3.1	1.3	0.3	0.0
82.5°	7.6	3.3	1.5	1.3	1.3	1.5	1.3	0.5	0.0	0.0	0.0
85°	2.5	1.5	0.5	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.0	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)