

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: P881533

Luminaire Tested: **NAV-SB1A-727-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881533
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-727-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 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: 2840 lumens
Efficiency: N/A
Efficacy: 91.9 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

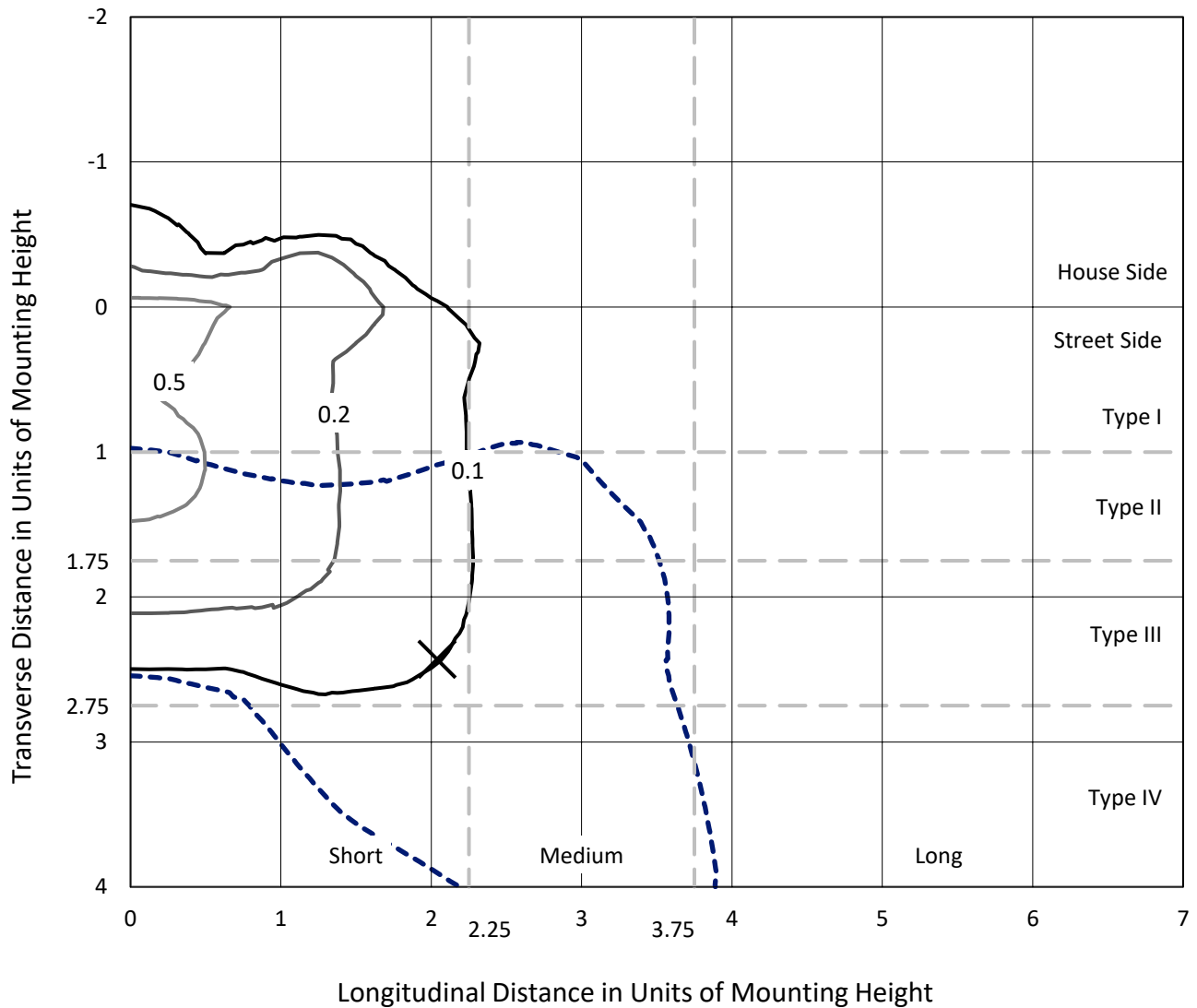
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

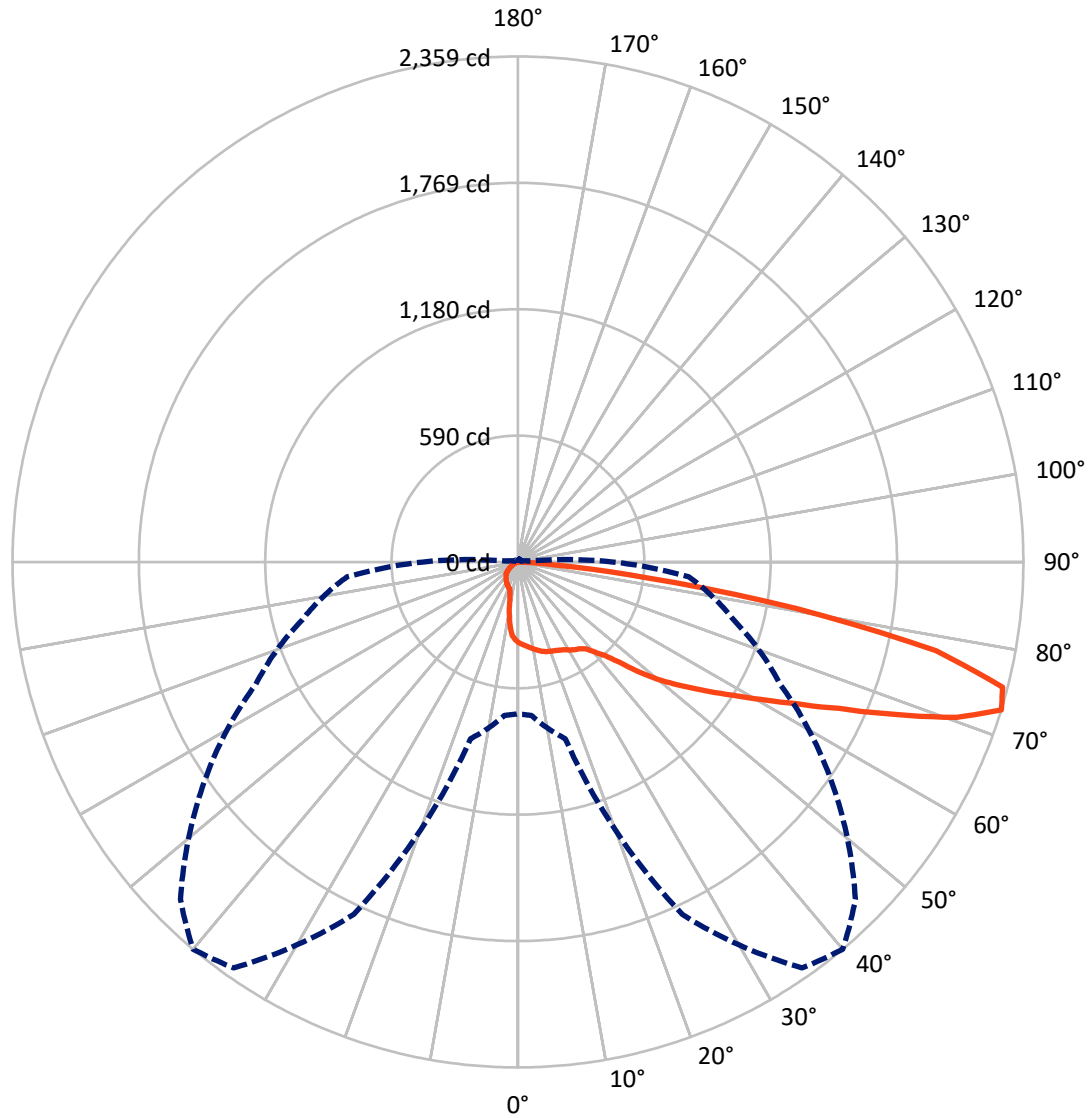
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 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	366.8	0.0	366.8
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2473.2	0.0	2473.2
	% Fixture	87.1	0.0	87.1
Total	Lumens	2840.0	0.0	2840.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	1.2
10°-20°	93.3	3.3
20°-30°	150.9	5.3
30°-40°	222.8	7.8
40°-50°	375.0	13.2
50°-60°	582.2	20.5
60°-70°	728.5	25.7
70°-80°	596.4	21.0
80°-90°	56.6	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°	2840.0	100.0
0°-180°	2840.0	100.0

Coefficient of Utilization



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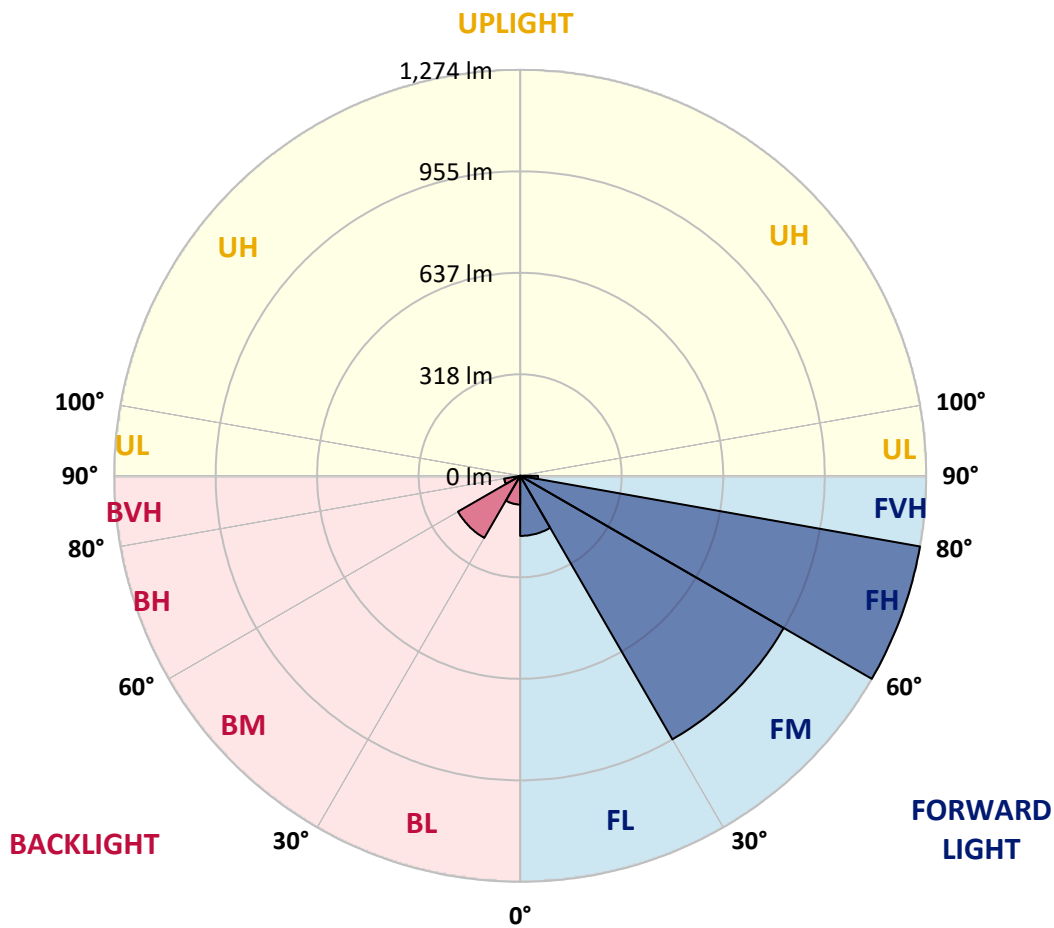
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	188.5	6.6			
FM (30°-60°)	954.8	33.6			
FH (60°-80°)	1273.9	44.9			G1/1800
FVH (80°-90°)	56.1	2.0			G1/100
BL (0°-30°)	90.0	3.2	B0/110		
BM (30°-60°)	225.2	7.9	B1/1000		
BH (60°-80°)	51.1	1.8	B0/110		G0/110
BVH (80°-90°)	0.4	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°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
2.5°	387.4	388.9	388.0	386.3	385.9	385.0	384.0	383.5	382.0	380.7	379.2
5°	398.3	399.8	398.7	396.4	395.3	394.2	392.7	391.4	388.4	385.7	382.2
7.5°	410.3	411.5	410.3	406.8	405.1	403.8	401.7	399.8	396.4	392.3	388.0
10°	423.5	424.6	422.7	418.2	415.4	413.5	411.5	409.4	406.2	401.7	396.6
12.5°	435.9	437.2	434.2	428.9	425.7	423.7	421.6	419.9	416.7	412.4	407.1
15°	447.3	449.2	444.1	438.3	434.6	433.2	431.0	429.9	427.8	424.8	419.9
17.5°	455.8	457.1	451.8	444.9	440.9	439.8	438.3	438.9	438.5	437.0	433.8
20°	463.1	464.0	456.9	448.6	444.1	444.3	443.8	446.0	446.8	446.8	446.6
22.5°	472.1	472.3	463.3	452.8	447.5	449.0	449.6	452.0	453.7	455.4	459.2
25°	483.8	483.4	472.7	458.4	453.7	455.8	457.3	458.2	460.1	462.9	471.7
27.5°	501.4	500.1	486.4	467.4	461.8	463.7	466.5	466.1	465.2	467.4	482.1
30°	523.6	521.9	503.7	480.0	474.9	476.6	477.4	473.6	467.4	469.3	491.3
32.5°	558.9	555.9	530.7	494.1	486.2	488.1	487.1	479.1	469.9	471.9	500.5
35°	620.3	613.0	577.3	523.6	499.0	496.9	494.3	486.6	475.3	473.4	508.2
37.5°	750.8	738.0	677.0	581.2	528.1	514.2	506.3	498.6	481.1	473.4	517.0
40°	898.0	884.9	814.5	677.4	576.5	552.9	534.1	512.7	487.1	476.1	530.7
42.5°	1051.5	1037.2	964.9	796.8	645.6	597.2	562.1	524.1	496.9	484.7	548.9
45°	1223.1	1205.1	1110.6	921.3	745.9	670.8	607.3	547.4	514.0	499.9	573.7
47.5°	1404.1	1380.7	1255.8	1042.1	853.9	772.6	689.8	589.1	539.2	522.6	607.3
50°	1564.5	1541.4	1405.8	1168.5	954.9	869.5	783.9	646.8	577.1	554.6	652.4
52.5°	1679.8	1662.2	1542.2	1299.0	1059.9	960.4	869.3	714.0	625.0	595.7	705.7
55°	1757.0	1740.9	1638.9	1422.7	1182.0	1060.5	953.4	786.9	682.8	644.9	764.5
57.5°	1803.8	1794.6	1708.9	1533.0	1303.1	1170.0	1049.6	867.2	750.8	702.9	830.2
60°	1820.5	1813.0	1752.3	1638.3	1449.4	1301.6	1162.8	957.6	833.4	768.8	897.5
62.5°	1776.0	1777.5	1783.5	1763.0	1603.6	1455.6	1298.4	1066.3	924.9	843.4	960.8
65°	1566.6	1579.0	1692.8	1901.2	1807.9	1648.5	1471.0	1198.9	1029.7	928.3	1011.1
67.5°	1297.1	1315.1	1456.7	1982.0	2025.6	1899.0	1711.4	1367.9	1154.6	1014.7	1030.2
70°	992.9	1012.2	1183.7	1965.1	2229.5	2172.8	2008.8	1582.9	1284.1	1074.6	981.6
72.5°	708.7	718.5	853.7	1814.7	2313.1	2359.3	2227.8	1786.5	1350.1	1041.5	800.6
75°	498.0	496.3	585.9	1461.4	2182.9	2336.7	2151.0	1676.3	1221.8	827.4	493.7
77.5°	216.9	217.3	292.6	887.5	1742.2	1995.7	1788.0	1050.0	851.8	438.5	208.3
80°	56.3	58.0	107.4	353.4	1049.0	1317.2	1090.5	461.6	393.6	107.0	39.8
82.5°	19.9	21.2	49.4	111.0	386.9	604.1	485.6	147.6	102.7	30.6	10.7
85°	5.8	6.8	26.5	34.0	80.0	170.7	117.9	28.7	25.2	15.8	2.8
87.5°	0.0	0.9	5.3	4.7	4.7	3.2	6.0	3.2	4.1	1.9	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°	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0	376.0
2.5°	378.0	376.5	373.3	369.8	366.6	363.6	362.8	359.6	358.1	358.3	358.1
5°	379.9	377.1	370.9	363.4	355.7	346.9	339.7	329.4	320.6	319.6	318.9
7.5°	385.0	380.5	370.5	355.9	336.7	312.5	290.1	267.8	255.2	248.3	247.9
10°	392.9	386.9	371.5	343.7	302.9	259.7	225.7	197.6	183.3	176.7	175.4
12.5°	402.3	395.7	373.3	323.0	259.2	202.6	165.8	148.7	145.7	145.2	145.0
15°	415.6	408.3	375.2	295.0	212.0	154.2	137.3	137.5	139.9	141.2	141.0
17.5°	430.4	423.1	372.4	260.7	165.3	131.8	131.3	133.3	136.7	138.0	137.8
20°	445.3	438.5	362.6	220.5	133.7	125.6	127.3	129.4	132.8	134.5	134.5
22.5°	460.7	454.8	346.9	177.8	120.6	121.1	123.2	125.3	129.2	131.1	131.1
25°	477.2	472.1	326.2	142.5	115.1	116.4	119.1	121.7	125.8	128.1	128.1
27.5°	493.9	490.0	302.7	118.9	109.9	111.4	114.7	118.1	122.1	124.9	125.1
30°	512.1	509.9	283.8	110.2	105.0	106.3	109.9	113.8	118.3	121.7	122.1
32.5°	530.7	530.3	274.6	116.6	100.5	101.4	104.6	108.4	114.0	118.3	118.7
35°	549.1	549.9	269.3	134.8	99.0	96.7	98.8	102.2	108.9	114.2	115.1
37.5°	572.6	574.8	269.1	154.4	102.7	92.0	93.5	95.8	101.6	107.8	108.9
40°	607.7	619.0	282.8	171.3	109.1	87.7	88.1	88.6	91.5	96.7	98.4
42.5°	654.3	687.5	332.2	182.9	111.7	83.8	82.4	80.0	79.6	82.4	83.8
45°	712.3	770.3	419.0	189.3	109.1	79.6	75.5	69.3	67.0	68.9	68.9
47.5°	780.5	861.0	521.9	190.8	104.8	74.2	67.0	58.8	56.9	57.5	57.3
50°	847.1	929.0	612.4	178.4	97.8	67.4	57.5	50.7	49.4	49.6	49.6
52.5°	905.9	952.3	638.1	149.1	88.3	59.0	49.4	44.7	43.8	43.8	43.6
55°	944.8	927.0	569.0	114.0	76.6	50.5	42.4	40.0	39.6	39.4	38.9
57.5°	952.9	844.9	429.7	82.4	59.9	42.6	37.6	36.4	35.5	34.7	34.2
60°	923.8	708.0	273.6	57.5	44.9	36.4	33.4	32.5	30.8	29.1	28.4
62.5°	861.0	534.8	151.4	40.0	36.1	31.0	29.5	28.4	25.2	22.5	21.6
65°	776.5	355.5	67.0	31.2	29.5	26.1	25.2	23.7	19.9	16.7	16.0
67.5°	691.5	204.7	30.2	25.0	23.7	21.4	20.7	19.7	16.9	13.9	13.5
70°	594.6	103.7	20.7	19.9	18.4	16.3	16.9	16.7	13.9	11.3	10.9
72.5°	442.8	51.6	15.6	15.0	13.3	11.6	13.9	13.7	10.9	8.6	8.1
75°	250.7	25.5	11.3	10.5	7.9	8.6	11.1	10.5	7.5	5.6	5.1
77.5°	99.5	13.0	7.5	6.4	4.7	5.8	8.1	7.1	3.9	2.4	2.1
80°	22.9	6.4	3.9	2.8	2.1	3.4	4.3	2.6	1.1	0.2	0.0
82.5°	6.4	2.8	1.3	1.1	1.1	1.3	1.1	0.4	0.0	0.0	0.0
85°	2.1	1.3	0.4	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
87.5°	0.9	0.4	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)