

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: P881543

Luminaire Tested: **NAV-SB1A-730-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881543
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-730-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 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: 3085 lumens
Efficiency: N/A
Efficacy: 99.8 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

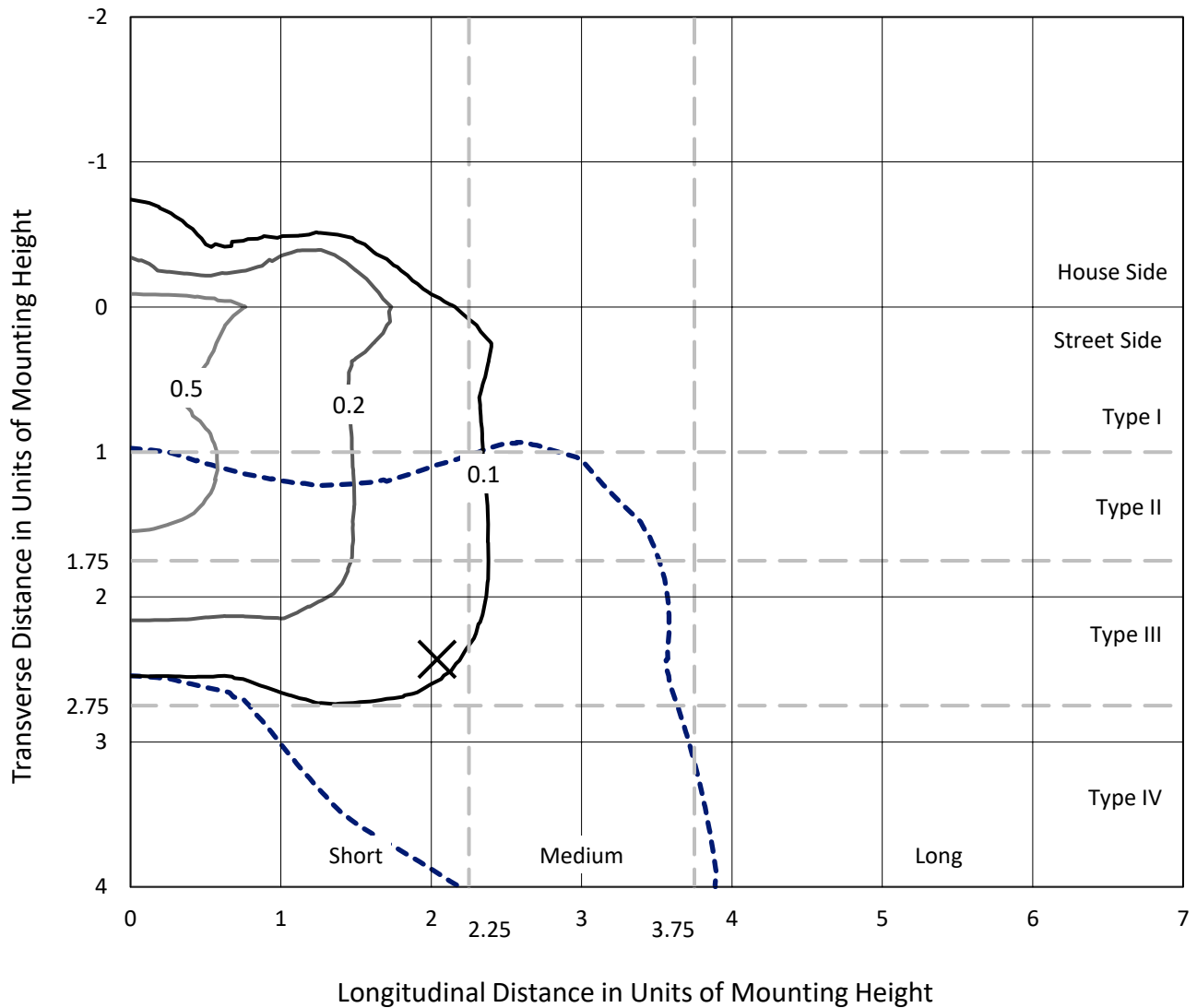
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

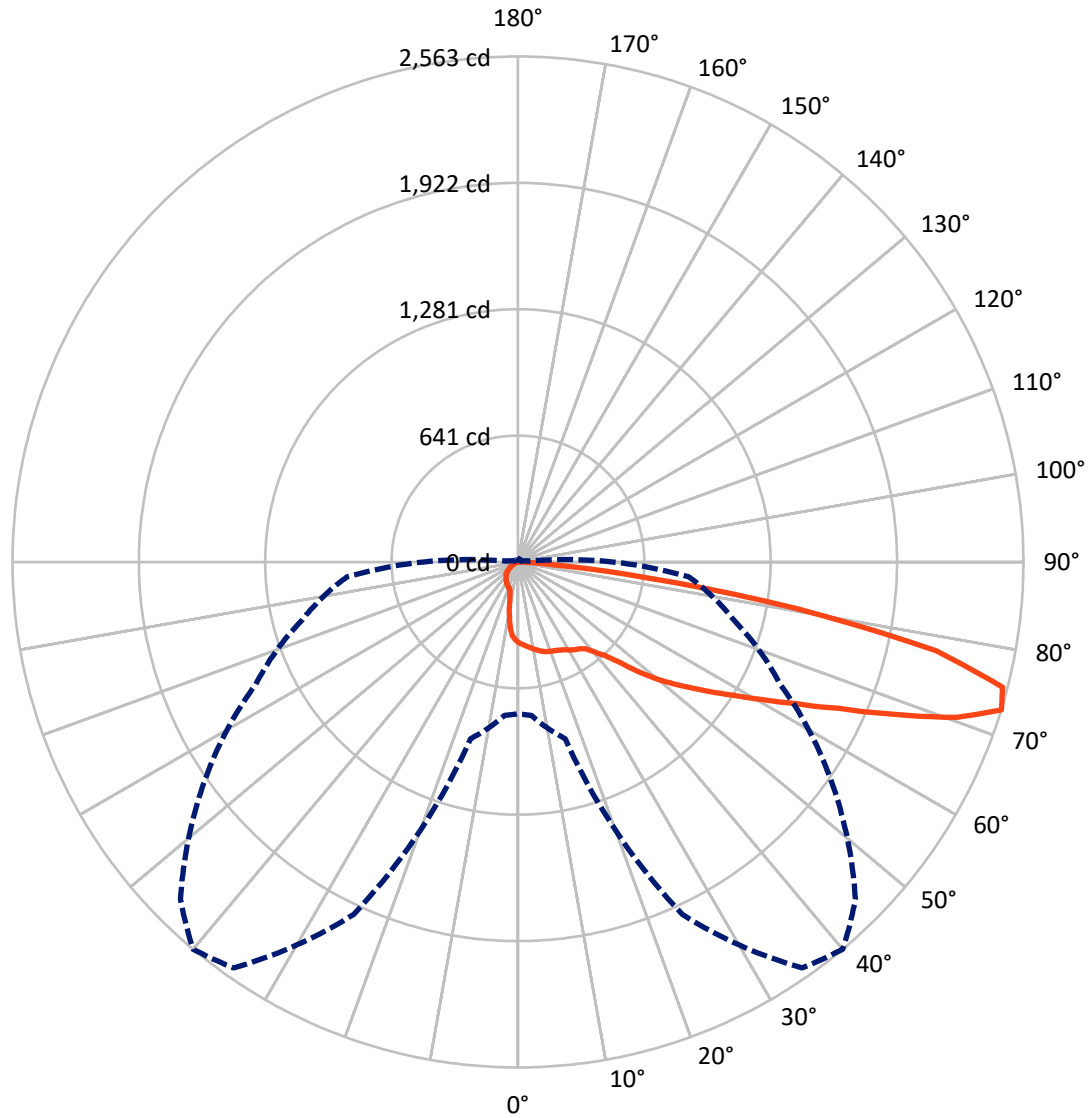
✕ Max cd
 - - - 1/2 Max cd



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	398.4	0.0	398.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	2686.6	0.0	2686.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	3085.0	0.0	3085.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	1.2
10°-20°	101.3	3.3
20°-30°	163.9	5.3
30°-40°	242.0	7.8
40°-50°	407.3	13.2
50°-60°	632.4	20.5
60°-70°	791.4	25.7
70°-80°	647.9	21.0
80°-90°	61.4	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°	3085.0	100.0
0°-180°	3085.0	100.0

Coefficient of Utilization



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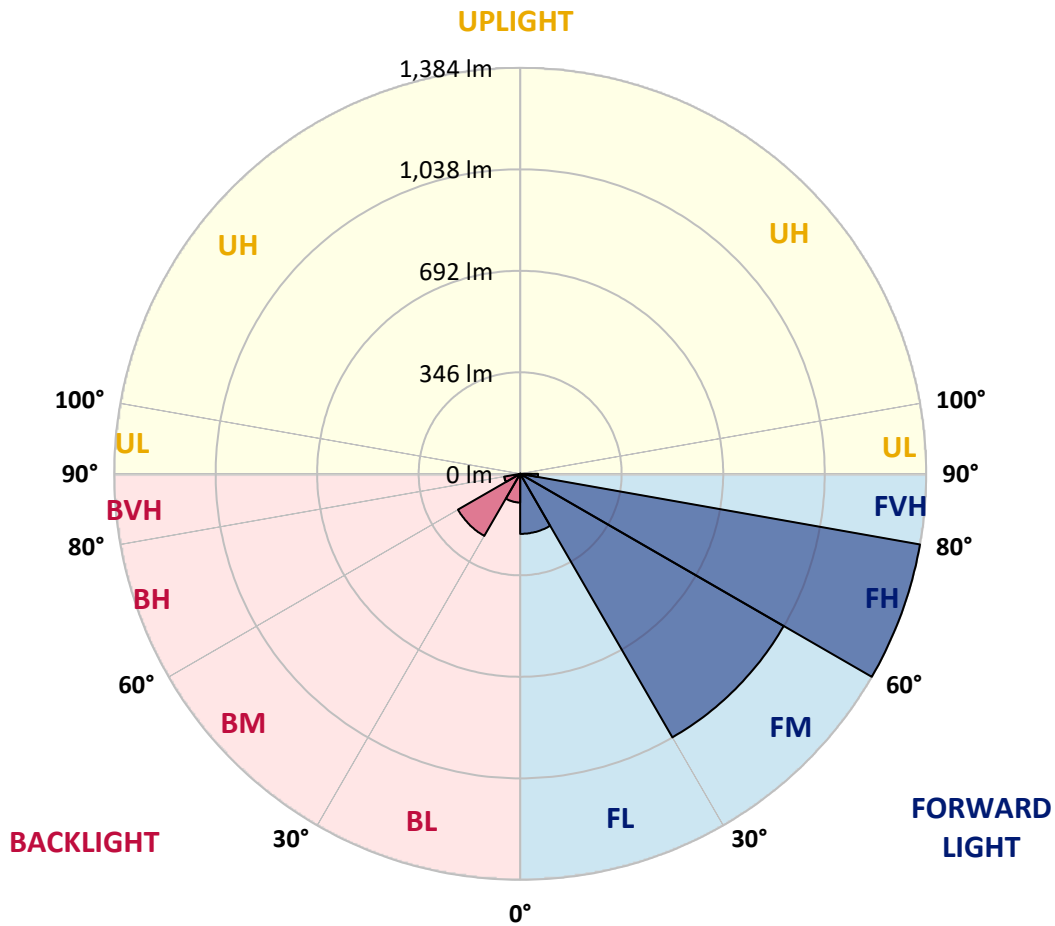
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	204.8	6.6			
FM (30°-60°)	1037.1	33.6			
FH (60°-80°)	1383.8	44.9			G1/1800
FVH (80°-90°)	61.0	2.0			G1/100
BL (0°-30°)	97.8	3.2	B0/110		
BM (30°-60°)	244.6	7.9	B1/1000		
BH (60°-80°)	55.5	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°	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5
2.5°	420.8	422.4	421.5	419.6	419.2	418.2	417.1	416.6	415.0	413.6	412.0
5°	432.6	434.3	433.1	430.6	429.4	428.2	426.6	425.2	422.0	418.9	415.2
7.5°	445.7	447.0	445.7	441.9	440.1	438.7	436.4	434.3	430.6	426.1	421.5
10°	460.1	461.2	459.1	454.3	451.2	449.1	447.0	444.7	441.2	436.4	430.8
12.5°	473.5	474.9	471.7	465.9	462.4	460.3	458.0	456.1	452.6	448.0	442.2
15°	485.9	487.9	482.4	476.1	472.1	470.5	468.2	467.0	464.7	461.5	456.1
17.5°	495.1	496.5	490.7	483.3	478.9	477.7	476.1	476.8	476.3	474.7	471.2
20°	503.0	504.0	496.3	487.2	482.4	482.6	482.1	484.5	485.4	485.4	485.2
22.5°	512.8	513.0	503.3	491.9	486.1	487.7	488.4	491.0	492.8	494.7	498.9
25°	525.6	525.1	513.5	497.9	492.8	495.1	496.8	497.7	499.8	502.8	512.3
27.5°	544.6	543.2	528.4	507.7	501.7	503.7	506.8	506.3	505.4	507.7	523.7
30°	568.8	566.9	547.2	521.4	515.8	517.7	518.6	514.4	507.7	509.8	533.7
32.5°	607.1	603.9	576.5	536.7	528.1	530.2	529.1	520.5	510.5	512.6	543.7
35°	673.8	665.9	627.1	568.8	542.1	539.8	537.0	528.6	516.3	514.2	552.1
37.5°	815.6	801.6	735.4	631.3	573.7	558.6	550.0	541.6	522.6	514.2	561.6
40°	975.4	961.3	884.8	735.9	626.2	600.6	580.2	557.0	529.1	517.2	576.5
42.5°	1142.3	1126.7	1048.2	865.5	701.2	648.7	610.6	569.3	539.8	526.5	596.2
45°	1328.6	1309.1	1206.4	1000.8	810.2	728.7	659.7	594.6	558.3	543.0	623.2
47.5°	1525.2	1499.8	1364.2	1132.0	927.6	839.3	749.3	639.9	585.8	567.6	659.7
50°	1699.4	1674.3	1527.0	1269.4	1037.2	944.5	851.6	702.6	626.9	602.5	708.7
52.5°	1824.7	1805.6	1675.3	1411.1	1151.3	1043.3	944.3	775.6	678.9	647.1	766.5
55°	1908.6	1891.1	1780.3	1545.4	1284.0	1152.0	1035.6	854.8	741.7	700.5	830.4
57.5°	1959.4	1949.5	1856.3	1665.3	1415.5	1271.0	1140.2	942.0	815.6	763.5	901.8
60°	1977.6	1969.4	1903.4	1779.6	1574.4	1413.9	1263.1	1040.3	905.3	835.1	975.0
62.5°	1929.2	1930.9	1937.4	1915.1	1742.0	1581.2	1410.4	1158.3	1004.7	916.2	1043.7
65°	1701.8	1715.2	1838.9	2065.2	1963.9	1790.8	1597.9	1302.3	1118.6	1008.4	1098.3
67.5°	1409.0	1428.5	1582.3	2153.0	2200.4	2062.8	1859.1	1485.9	1254.2	1102.3	1119.0
70°	1078.6	1099.5	1285.8	2134.6	2421.8	2360.3	2182.0	1719.4	1394.8	1167.3	1066.3
72.5°	769.8	780.5	927.3	1971.3	2512.7	2562.9	2420.0	1940.6	1466.6	1131.3	869.7
75°	540.9	539.1	636.4	1587.4	2371.2	2538.2	2336.6	1821.0	1327.2	898.7	536.3
77.5°	235.6	236.1	317.9	964.0	1892.5	2167.9	1942.3	1140.6	925.2	476.3	226.3
80°	61.1	63.0	116.6	383.8	1139.5	1430.8	1184.5	501.4	427.5	116.2	43.2
82.5°	21.6	23.0	53.7	120.6	420.3	656.2	527.4	160.3	111.5	33.2	11.6
85°	6.3	7.4	28.8	36.9	86.9	185.4	128.0	31.1	27.4	17.2	3.0
87.5°	0.0	0.9	5.8	5.1	5.1	3.5	6.5	3.5	4.4	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°	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5	408.5
2.5°	410.6	408.9	405.5	401.7	398.3	395.0	394.1	390.6	389.0	389.2	389.0
5°	412.7	409.6	402.9	394.8	386.4	376.9	369.0	357.8	348.3	347.1	346.4
7.5°	418.2	413.4	402.4	386.6	365.7	339.5	315.1	290.9	277.2	269.8	269.3
10°	426.8	420.3	403.6	373.4	329.0	282.1	245.1	214.7	199.1	191.9	190.5
12.5°	437.1	429.9	405.5	350.9	281.6	220.0	180.1	161.5	158.2	157.8	157.5
15°	451.5	443.6	407.5	320.4	230.3	167.5	149.2	149.4	152.0	153.4	153.1
17.5°	467.5	459.6	404.5	283.2	179.6	143.1	142.7	144.8	148.5	149.9	149.6
20°	483.8	476.3	393.8	239.6	145.2	136.4	138.3	140.6	144.3	146.2	146.2
22.5°	500.5	494.0	376.9	193.1	131.0	131.5	133.8	136.2	140.3	142.4	142.4
25°	518.4	512.8	354.3	154.7	125.0	126.4	129.4	132.2	136.6	139.2	139.2
27.5°	536.5	532.3	328.8	129.2	119.4	121.1	124.5	128.3	132.7	135.7	135.9
30°	556.3	553.9	308.3	119.7	114.1	115.5	119.4	123.6	128.5	132.2	132.7
32.5°	576.5	576.0	298.3	126.6	109.2	110.1	113.6	117.8	123.8	128.5	129.0
35°	596.5	597.4	292.5	146.4	107.6	105.0	107.3	111.1	118.3	124.1	125.0
37.5°	622.0	624.3	292.3	167.8	111.5	99.9	101.5	104.1	110.4	117.1	118.3
40°	660.1	672.4	307.2	186.1	118.5	95.3	95.7	96.2	99.4	105.0	106.9
42.5°	710.8	746.8	360.8	198.7	121.3	91.1	89.5	86.9	86.4	89.5	91.1
45°	773.7	836.7	455.2	205.6	118.5	86.4	82.0	75.3	72.7	74.8	74.8
47.5°	847.9	935.2	566.9	207.3	113.9	80.6	72.7	63.9	61.8	62.5	62.3
50°	920.1	1009.1	665.2	193.8	106.2	73.2	62.5	55.1	53.7	53.9	53.9
52.5°	984.0	1034.4	693.1	162.0	96.0	64.1	53.7	48.6	47.6	47.6	47.4
55°	1026.3	1007.0	618.1	123.8	83.2	54.8	46.0	43.5	43.0	42.8	42.3
57.5°	1035.1	917.8	466.8	89.5	65.1	46.2	40.9	39.5	38.6	37.6	37.2
60°	1003.5	769.1	297.2	62.5	48.8	39.5	36.2	35.3	33.5	31.6	30.9
62.5°	935.2	580.9	164.5	43.5	39.3	33.7	32.1	30.9	27.4	24.4	23.5
65°	843.4	386.2	72.7	33.9	32.1	28.3	27.4	25.8	21.6	18.1	17.4
67.5°	751.2	222.4	32.8	27.2	25.8	23.2	22.5	21.4	18.4	15.1	14.6
70°	645.9	112.7	22.5	21.6	20.0	17.7	18.4	18.1	15.1	12.3	11.9
72.5°	481.0	56.0	17.0	16.3	14.4	12.5	15.1	14.9	11.9	9.3	8.8
75°	272.3	27.7	12.3	11.4	8.6	9.3	12.1	11.4	8.1	6.0	5.6
77.5°	108.0	14.2	8.1	7.0	5.1	6.3	8.8	7.7	4.2	2.6	2.3
80°	24.9	7.0	4.2	3.0	2.3	3.7	4.6	2.8	1.2	0.2	0.0
82.5°	7.0	3.0	1.4	1.2	1.2	1.4	1.2	0.5	0.0	0.0	0.0
85°	2.3	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)