

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: P881778

Luminaire Tested: **NAV-SB1B-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881778
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3868 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

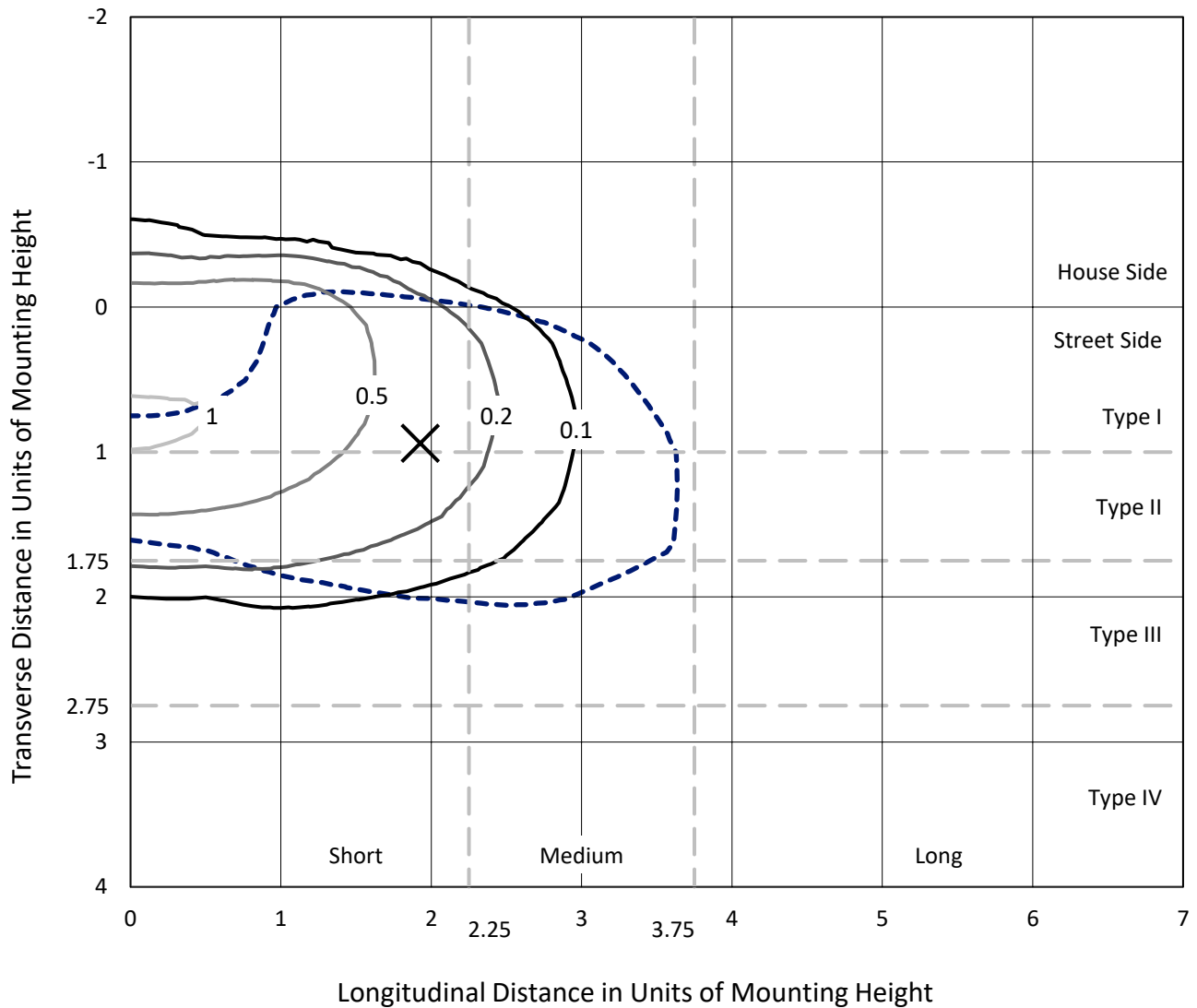
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

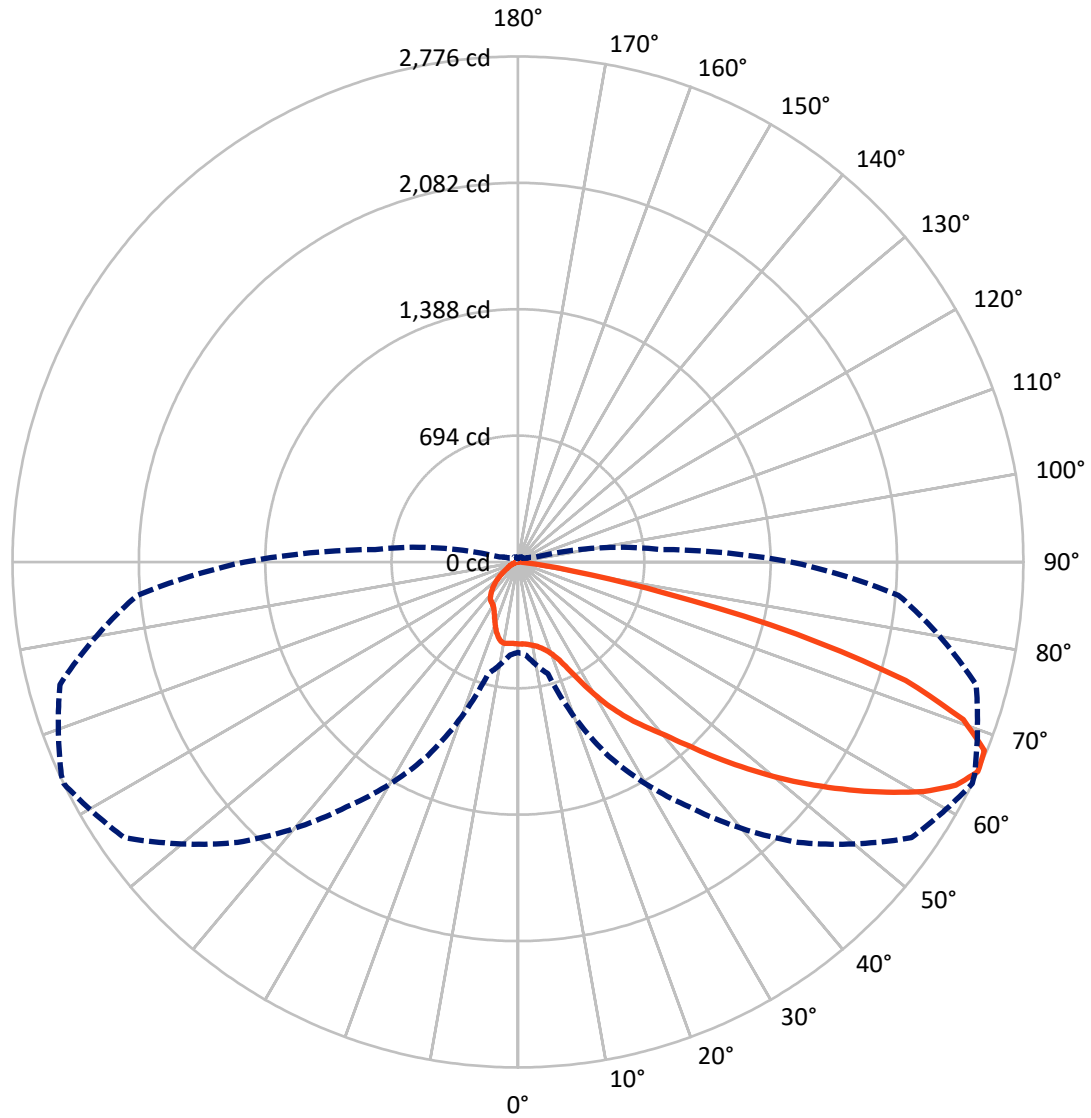
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	517.3	0.0	517.3
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	3350.7	0.0	3350.7
	% Fixture	86.6	0.0	86.6
Total	Lumens	3868.0	0.0	3868.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.5	1.1
10°-20°	112.6	2.9
20°-30°	213.3	5.5
30°-40°	431.7	11.2
40°-50°	735.4	19.0
50°-60°	1000.0	25.9
60°-70°	939.1	24.3
70°-80°	376.2	9.7
80°-90°	18.2	0.5
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°	3868.0	100.0
0°-180°	3868.0	100.0

Coefficient of Utilization



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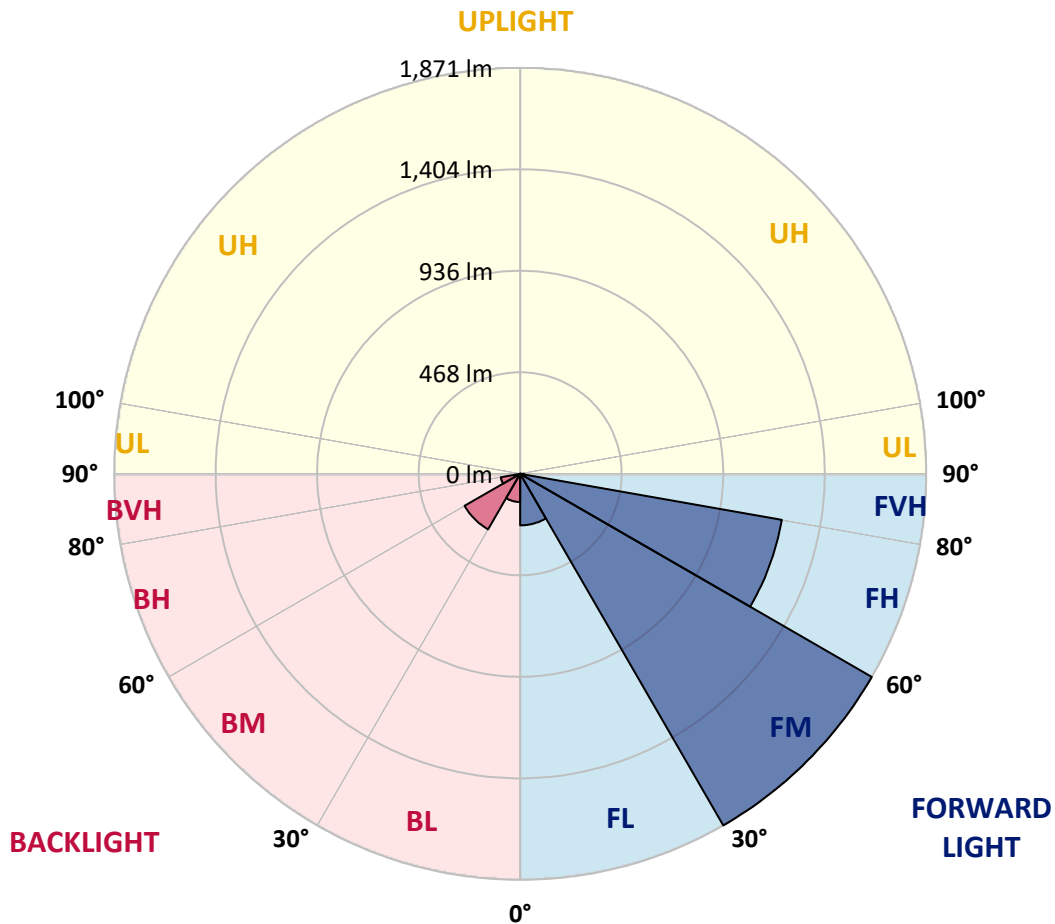
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	237.5	6.1			
FM (30°-60°)	1871.3	48.4			
FH (60°-80°)	1224.5	31.7			G1/1800
FVH (80°-90°)	17.3	0.4			G1/100
BL (0°-30°)	129.9	3.4	B1/500		
BM (30°-60°)	295.7	7.6	B1/1000		
BH (60°-80°)	90.8	2.3	B0/110		G0/110
BVH (80°-90°)	0.9	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	448.3	451.4	450.7	449.9	449.6	450.1	450.4	450.1	450.1	450.1	450.4
5°	439.8	442.4	442.4	444.2	446.8	449.9	452.2	452.7	453.3	454.0	453.8
7.5°	423.4	425.5	427.1	433.0	439.5	447.8	454.8	458.4	459.0	461.8	462.9
10°	412.3	414.9	417.5	423.7	433.0	445.5	457.4	466.2	467.5	474.3	477.4
12.5°	411.8	414.4	417.7	424.5	435.4	448.6	463.1	475.8	478.2	488.0	494.5
15°	417.2	420.3	423.4	431.7	443.4	459.5	475.0	490.9	493.2	507.2	514.2
17.5°	428.4	432.5	434.8	443.1	455.6	473.5	494.0	512.1	514.2	530.5	539.3
20°	450.4	455.3	456.1	462.9	475.0	494.2	518.6	541.2	543.8	562.4	572.3
22.5°	496.0	503.0	496.8	500.2	511.1	530.3	556.7	585.2	588.9	610.1	619.0
25°	576.4	586.3	570.2	564.5	569.2	589.1	622.3	658.4	662.5	679.6	684.0
27.5°	734.3	721.6	697.3	673.4	659.4	670.8	708.2	752.8	757.9	774.5	769.3
30°	907.8	896.7	863.7	810.8	777.6	775.8	810.3	860.1	866.1	881.9	866.1
32.5°	1081.5	1070.9	1035.1	970.0	912.5	884.0	907.8	963.0	966.2	976.3	952.9
35°	1252.4	1241.5	1205.8	1139.1	1068.3	1003.5	998.8	1061.1	1062.1	1072.7	1038.0
37.5°	1424.3	1415.3	1377.2	1311.8	1242.1	1152.6	1109.3	1153.9	1155.2	1165.6	1129.5
40°	1547.0	1550.9	1524.7	1474.1	1414.2	1316.5	1233.2	1252.7	1244.9	1262.3	1240.8
42.5°	1652.3	1660.0	1637.2	1611.8	1577.1	1491.0	1386.7	1383.4	1370.9	1380.3	1358.0
45°	1743.3	1749.8	1729.3	1723.3	1722.5	1662.1	1554.5	1534.3	1516.9	1515.1	1488.4
47.5°	1776.7	1789.2	1798.0	1818.0	1856.9	1831.4	1728.0	1696.6	1677.2	1662.9	1620.6
50°	1789.4	1802.7	1832.7	1890.8	1982.9	1993.8	1900.7	1865.4	1841.6	1815.6	1753.4
52.5°	1772.3	1795.9	1836.4	1934.1	2067.7	2123.9	2066.4	2035.5	2008.3	1966.0	1873.7
55°	1671.5	1695.1	1777.8	1933.6	2109.9	2215.2	2223.0	2209.3	2178.7	2112.0	1971.0
57.5°	1458.8	1493.8	1624.8	1867.8	2109.2	2293.8	2376.5	2386.4	2352.1	2256.7	2047.4
60°	1164.3	1211.7	1371.4	1721.8	2044.1	2336.3	2511.1	2560.3	2524.0	2399.3	2109.4
62.5°	812.4	867.4	1018.5	1493.1	1895.2	2305.7	2609.4	2700.4	2672.9	2526.9	2133.3
65°	495.5	513.2	635.0	1174.9	1642.2	2177.6	2639.7	2776.1	2767.0	2604.9	2098.0
67.5°	330.1	344.9	379.9	805.7	1274.7	1921.7	2567.1	2762.9	2765.5	2592.2	1968.9
70°	198.9	211.6	234.4	468.6	826.1	1521.1	2342.3	2594.3	2609.4	2422.4	1724.1
72.5°	81.9	90.5	111.2	212.4	427.8	965.4	1865.2	2227.4	2262.4	2036.8	1323.2
75°	46.4	50.8	65.3	106.6	185.7	449.9	1129.8	1581.2	1632.8	1403.9	796.1
77.5°	30.9	32.9	42.3	69.0	104.5	153.5	482.8	823.8	922.3	766.8	344.6
80°	20.7	22.6	29.0	46.2	67.9	65.9	153.8	305.2	375.5	263.5	84.0
82.5°	14.0	14.3	20.7	30.3	43.0	31.9	45.4	94.9	119.3	76.2	31.9
85°	8.0	7.8	15.3	17.6	19.2	13.2	13.7	28.5	37.3	32.2	18.2
87.5°	1.0	1.6	6.0	4.7	2.6	2.9	2.9	4.9	7.3	7.8	3.9
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°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	450.4	450.1	449.4	448.6	446.8	445.7	446.3	445.7	445.5	445.7	446.8
5°	453.8	453.0	450.9	448.3	444.7	440.3	437.4	433.3	429.4	427.1	427.6
7.5°	462.9	462.1	459.2	452.0	440.3	421.9	405.0	390.2	379.1	372.6	372.9
10°	477.4	476.1	471.7	455.6	425.0	384.8	351.4	323.6	305.5	296.9	296.1
12.5°	494.5	492.9	485.2	452.2	396.0	333.2	287.0	256.2	239.3	231.8	231.0
15°	514.7	512.6	497.3	436.1	353.7	276.2	233.9	210.8	199.9	193.2	193.4
17.5°	539.9	536.2	506.4	412.0	307.8	232.6	201.2	183.8	174.3	167.8	167.2
20°	572.5	566.6	513.7	383.2	265.5	205.1	179.2	164.7	157.4	151.7	150.7
22.5°	618.2	609.6	522.5	352.1	235.7	186.2	162.8	152.2	146.2	139.8	138.7
25°	674.7	664.6	533.4	323.3	215.2	169.8	150.9	142.1	135.1	127.6	126.8
27.5°	753.8	735.6	546.3	299.8	197.6	155.8	140.0	130.2	122.1	115.9	114.6
30°	842.0	812.1	557.8	285.5	181.5	142.9	125.8	115.9	108.4	104.0	103.2
32.5°	925.4	885.0	565.3	279.3	167.0	128.1	110.2	99.6	93.9	92.6	93.3
35°	1004.3	950.9	564.5	273.3	154.0	113.3	94.9	84.0	79.6	80.4	80.4
37.5°	1095.0	1021.1	559.1	264.0	143.4	99.8	81.7	72.1	68.2	68.5	69.5
40°	1200.6	1102.3	555.7	246.3	131.7	87.4	70.8	63.0	60.2	59.1	58.9
42.5°	1313.1	1180.9	556.2	226.4	117.2	76.2	63.3	56.8	54.2	53.4	53.2
45°	1426.2	1255.8	557.0	205.6	101.9	67.7	57.8	52.4	50.8	49.8	49.8
47.5°	1532.5	1319.6	542.5	183.3	86.9	61.2	53.4	49.8	48.5	47.2	47.2
50°	1631.5	1362.1	507.5	157.4	74.9	56.0	50.0	47.5	46.2	44.9	44.9
52.5°	1708.5	1368.9	449.6	130.7	66.6	52.1	48.0	45.6	44.1	42.8	42.5
55°	1742.8	1326.6	367.4	105.8	60.2	48.7	45.9	43.6	41.7	40.5	40.2
57.5°	1734.0	1237.6	286.5	85.1	53.9	45.4	43.3	41.7	39.7	37.6	37.3
60°	1690.6	1118.6	216.0	70.8	48.2	41.7	40.5	39.2	36.3	33.2	32.7
62.5°	1615.7	969.0	154.0	58.6	42.0	37.6	37.1	36.0	31.9	26.2	25.7
65°	1501.1	787.2	103.7	48.7	36.0	32.9	33.2	31.4	25.9	19.4	18.9
67.5°	1333.6	575.6	66.4	39.9	30.1	27.5	27.7	26.7	22.0	16.6	15.8
70°	1120.2	381.2	43.3	30.3	24.1	21.3	22.8	23.1	18.7	13.5	13.0
72.5°	821.2	225.1	30.3	22.6	17.6	14.8	18.7	19.2	15.0	10.1	9.6
75°	468.0	106.8	22.8	16.3	10.9	10.4	14.5	14.5	10.4	6.7	6.2
77.5°	196.6	44.6	16.1	10.6	6.2	6.0	9.9	9.1	5.2	3.1	3.1
80°	56.8	20.0	8.6	5.2	2.6	2.3	3.9	2.9	1.3	0.5	0.5
82.5°	22.3	8.8	3.4	2.1	1.0	1.0	0.5	0.0	0.0	0.0	0.0
85°	13.2	3.6	1.6	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	0.8	0.5	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)