

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: P881608

Luminaire Tested: **NAV-SB1A-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881608
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-SB1A-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA 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: 3081 lumens
Efficiency: N/A
Efficacy: 99.7 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

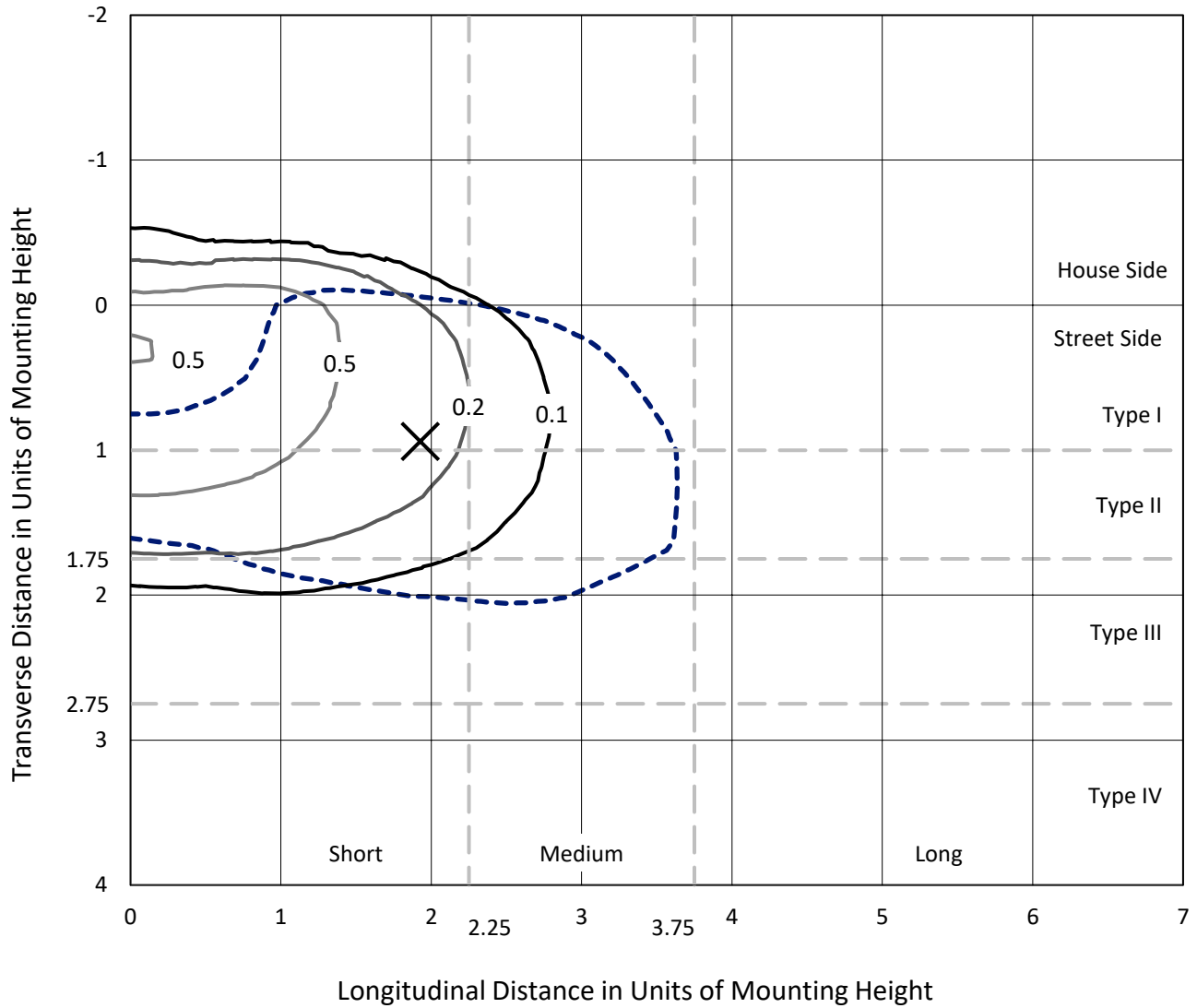
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

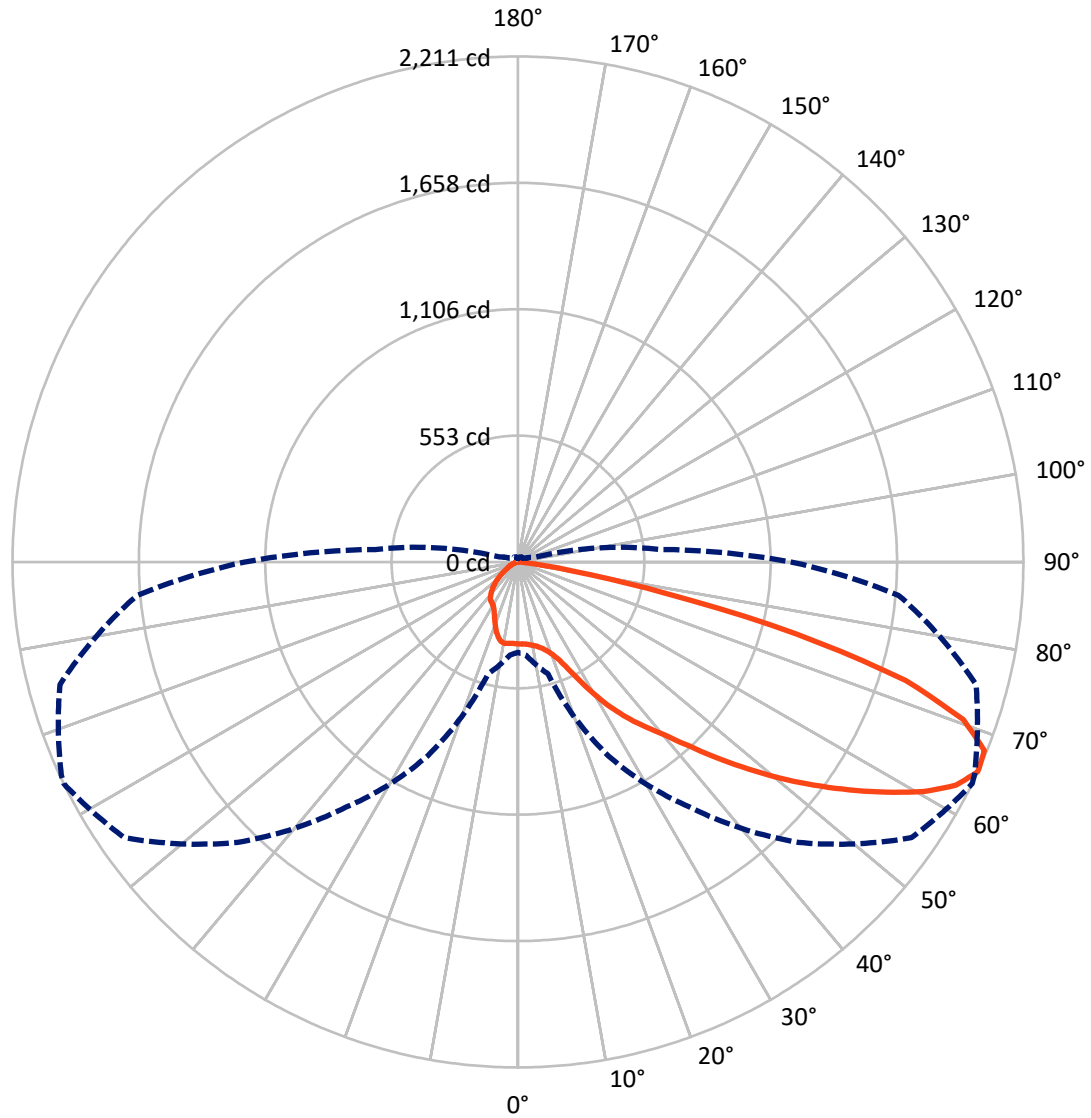
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 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	412.0	0.0	412.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2669.0	0.0	2669.0
	% Fixture	86.6	0.0	86.6
Total	Lumens	3081.0	0.0	3081.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.1	1.1
10°-20°	89.7	2.9
20°-30°	169.9	5.5
30°-40°	343.8	11.2
40°-50°	585.7	19.0
50°-60°	796.6	25.9
60°-70°	748.0	24.3
70°-80°	299.7	9.7
80°-90°	14.5	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°	3081.0	100.0
0°-180°	3081.0	100.0

Coefficient of Utilization



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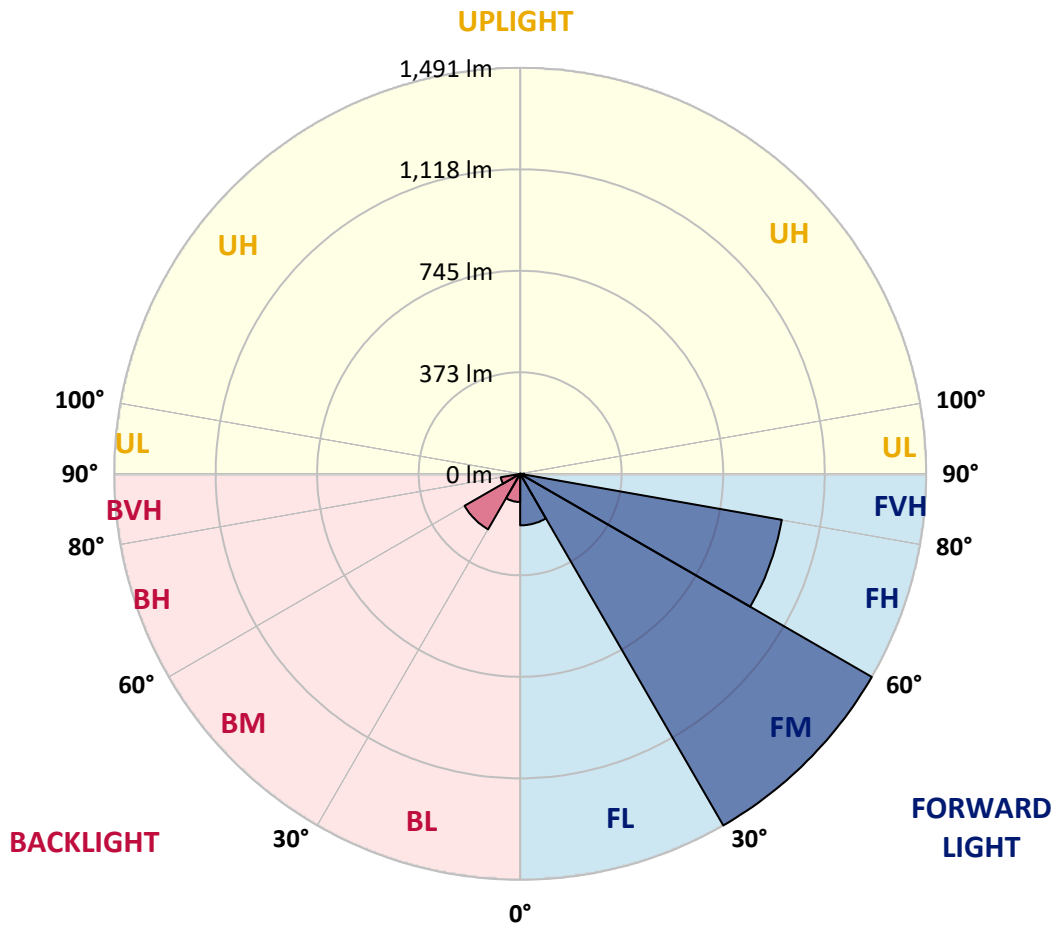
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	189.2	6.1			
FM (30°-60°)	1490.6	48.4			
FH (60°-80°)	975.4	31.7			G1/1800
FVH (80°-90°)	13.8	0.4			G1/100
BL (0°-30°)	103.4	3.4	B0/110		
BM (30°-60°)	235.6	7.6	B1/1000		
BH (60°-80°)	72.3	2.3	B0/110		G0/110
BVH (80°-90°)	0.7	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°	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4
2.5°	357.1	359.6	359.0	358.4	358.1	358.6	358.8	358.6	358.6	358.6	358.8
5°	350.3	352.4	352.4	353.8	355.9	358.4	360.2	360.6	361.0	361.7	361.5
7.5°	337.3	338.9	340.2	344.9	350.1	356.7	362.3	365.2	365.6	367.9	368.7
10°	328.4	330.5	332.5	337.5	344.9	354.8	364.3	371.4	372.4	377.8	380.2
12.5°	328.0	330.1	332.7	338.1	346.8	357.3	368.9	379.0	380.9	388.7	393.9
15°	332.3	334.8	337.3	343.9	353.2	366.0	378.4	391.0	392.8	404.0	409.6
17.5°	341.2	344.5	346.4	353.0	362.9	377.1	393.5	407.9	409.6	422.6	429.6
20°	358.8	362.7	363.3	368.7	378.4	393.7	413.1	431.1	433.1	448.0	455.8
22.5°	395.1	400.7	395.7	398.4	407.1	422.4	443.4	466.2	469.1	486.0	493.0
25°	459.1	467.0	454.2	449.6	453.4	469.3	495.7	524.4	527.7	541.3	544.9
27.5°	584.9	574.8	555.4	536.4	525.2	534.3	564.1	599.6	603.7	616.9	612.8
30°	723.1	714.2	688.0	645.9	619.4	618.0	645.4	685.1	689.9	702.5	689.9
32.5°	861.5	853.0	824.5	772.7	726.8	704.1	723.1	767.1	769.6	777.6	759.0
35°	997.6	988.9	960.4	907.3	851.0	799.3	795.6	845.2	846.0	854.5	826.8
37.5°	1134.5	1127.3	1097.0	1044.9	989.3	918.1	883.6	919.1	920.1	928.4	899.7
40°	1232.2	1235.3	1214.5	1174.2	1126.5	1048.6	982.3	997.8	991.6	1005.5	988.3
42.5°	1316.1	1322.3	1304.1	1283.9	1256.2	1187.6	1104.6	1101.9	1092.0	1099.4	1081.7
45°	1388.6	1393.8	1377.4	1372.7	1372.1	1323.9	1238.2	1222.1	1208.3	1206.8	1185.6
47.5°	1415.2	1425.1	1432.2	1448.1	1479.1	1458.8	1376.4	1351.4	1335.9	1324.6	1290.9
50°	1425.4	1435.9	1459.8	1506.1	1579.4	1588.1	1514.0	1485.9	1466.9	1446.2	1396.6
52.5°	1411.7	1430.5	1462.7	1540.6	1647.0	1691.8	1645.9	1621.4	1599.7	1566.0	1492.5
55°	1331.4	1350.2	1416.1	1540.2	1680.6	1764.5	1770.7	1759.7	1735.4	1682.3	1569.9
57.5°	1162.0	1189.9	1294.2	1487.7	1680.0	1827.1	1893.0	1900.8	1873.6	1797.5	1630.9
60°	927.4	965.2	1092.4	1371.4	1628.2	1861.0	2000.2	2039.4	2010.5	1911.1	1680.2
62.5°	647.1	690.9	811.3	1189.3	1509.6	1836.6	2078.4	2150.9	2129.0	2012.8	1699.2
65°	394.7	408.7	505.8	935.8	1308.0	1734.5	2102.6	2211.3	2204.0	2074.9	1671.1
67.5°	262.9	274.7	302.6	641.7	1015.4	1530.7	2044.8	2200.7	2202.8	2064.8	1568.3
70°	158.4	168.5	186.7	373.2	658.0	1211.6	1865.7	2066.5	2078.4	1929.5	1373.3
72.5°	65.3	72.1	88.6	169.2	340.8	769.0	1485.7	1774.2	1802.1	1622.4	1054.0
75°	37.0	40.5	52.0	84.9	147.9	358.4	899.9	1259.5	1300.6	1118.2	634.1
77.5°	24.6	26.2	33.7	54.9	83.2	122.3	384.6	656.2	734.7	610.7	274.5
80°	16.5	18.0	23.1	36.8	54.1	52.5	122.5	243.1	299.1	209.8	66.9
82.5°	11.2	11.4	16.5	24.2	34.3	25.4	36.1	75.6	95.0	60.7	25.4
85°	6.4	6.2	12.2	14.0	15.3	10.5	10.9	22.7	29.7	25.6	14.5
87.5°	0.8	1.2	4.8	3.7	2.1	2.3	2.3	3.9	5.8	6.2	3.1
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°	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4
2.5°	358.8	358.6	357.9	357.3	355.9	355.0	355.5	355.0	354.8	355.0	355.9
5°	361.5	360.8	359.2	357.1	354.2	350.7	348.4	345.1	342.0	340.2	340.6
7.5°	368.7	368.1	365.8	360.0	350.7	336.0	322.6	310.8	302.0	296.8	297.0
10°	380.2	379.2	375.7	362.9	338.5	306.5	279.9	257.8	243.3	236.5	235.9
12.5°	393.9	392.6	386.4	360.2	315.4	265.4	228.6	204.1	190.6	184.6	184.0
15°	410.0	408.3	396.1	347.4	281.7	220.0	186.3	167.9	159.2	153.9	154.1
17.5°	430.0	427.1	403.4	328.2	245.2	185.3	160.3	146.4	138.8	133.6	133.2
20°	456.0	451.3	409.2	305.3	211.5	163.4	142.7	131.2	125.4	120.8	120.0
22.5°	492.4	485.6	416.2	280.5	187.7	148.3	129.7	121.2	116.5	111.3	110.5
25°	537.4	529.4	424.9	257.6	171.4	135.3	120.2	113.2	107.6	101.6	101.0
27.5°	600.4	586.0	435.2	238.8	157.4	124.1	111.5	103.7	97.3	92.3	91.3
30°	670.6	646.9	444.3	227.4	144.6	113.8	100.2	92.3	86.3	82.8	82.2
32.5°	737.2	704.9	450.3	222.4	133.0	102.0	87.8	79.3	74.8	73.7	74.4
35°	799.9	757.4	449.6	217.7	122.7	90.3	75.6	66.9	63.4	64.0	64.0
37.5°	872.2	813.4	445.3	210.3	114.2	79.5	65.1	57.4	54.3	54.5	55.4
40°	956.3	878.0	442.6	196.2	104.9	69.6	56.4	50.2	47.9	47.1	46.9
42.5°	1045.9	940.6	443.0	180.3	93.4	60.7	50.4	45.2	43.2	42.5	42.3
45°	1136.0	1000.3	443.7	163.8	81.2	53.9	46.1	41.7	40.5	39.7	39.7
47.5°	1220.7	1051.1	432.1	146.0	69.2	48.7	42.5	39.7	38.6	37.6	37.6
50°	1299.6	1085.0	404.2	125.4	59.7	44.6	39.9	37.8	36.8	35.7	35.7
52.5°	1360.9	1090.3	358.1	104.1	53.1	41.5	38.2	36.4	35.1	34.1	33.9
55°	1388.2	1056.7	292.7	84.3	47.9	38.8	36.6	34.7	33.3	32.2	32.0
57.5°	1381.2	985.8	228.2	67.7	43.0	36.1	34.5	33.3	31.6	29.9	29.7
60°	1346.7	891.0	172.1	56.4	38.4	33.3	32.2	31.2	28.9	26.4	26.0
62.5°	1287.0	771.9	122.7	46.7	33.5	29.9	29.5	28.7	25.4	20.9	20.4
65°	1195.7	627.1	82.6	38.8	28.7	26.2	26.4	25.0	20.7	15.5	15.1
67.5°	1062.3	458.5	52.9	31.8	24.0	21.9	22.1	21.3	17.6	13.2	12.6
70°	892.3	303.6	34.5	24.2	19.2	16.9	18.2	18.4	14.9	10.7	10.3
72.5°	654.1	179.3	24.2	18.0	14.0	11.8	14.9	15.3	12.0	8.1	7.6
75°	372.8	85.1	18.2	13.0	8.7	8.3	11.6	11.6	8.3	5.4	5.0
77.5°	156.6	35.5	12.8	8.5	5.0	4.8	7.8	7.2	4.1	2.5	2.5
80°	45.2	15.9	6.8	4.1	2.1	1.9	3.1	2.3	1.0	0.4	0.4
82.5°	17.8	7.0	2.7	1.7	0.8	0.8	0.4	0.0	0.0	0.0	0.0
85°	10.5	2.9	1.2	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.6	0.4	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)