

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: P881538

Luminaire Tested: **NAV-SB1A-727-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881538
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-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 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: 3191 lumens
Efficiency: N/A
Efficacy: 103.3 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

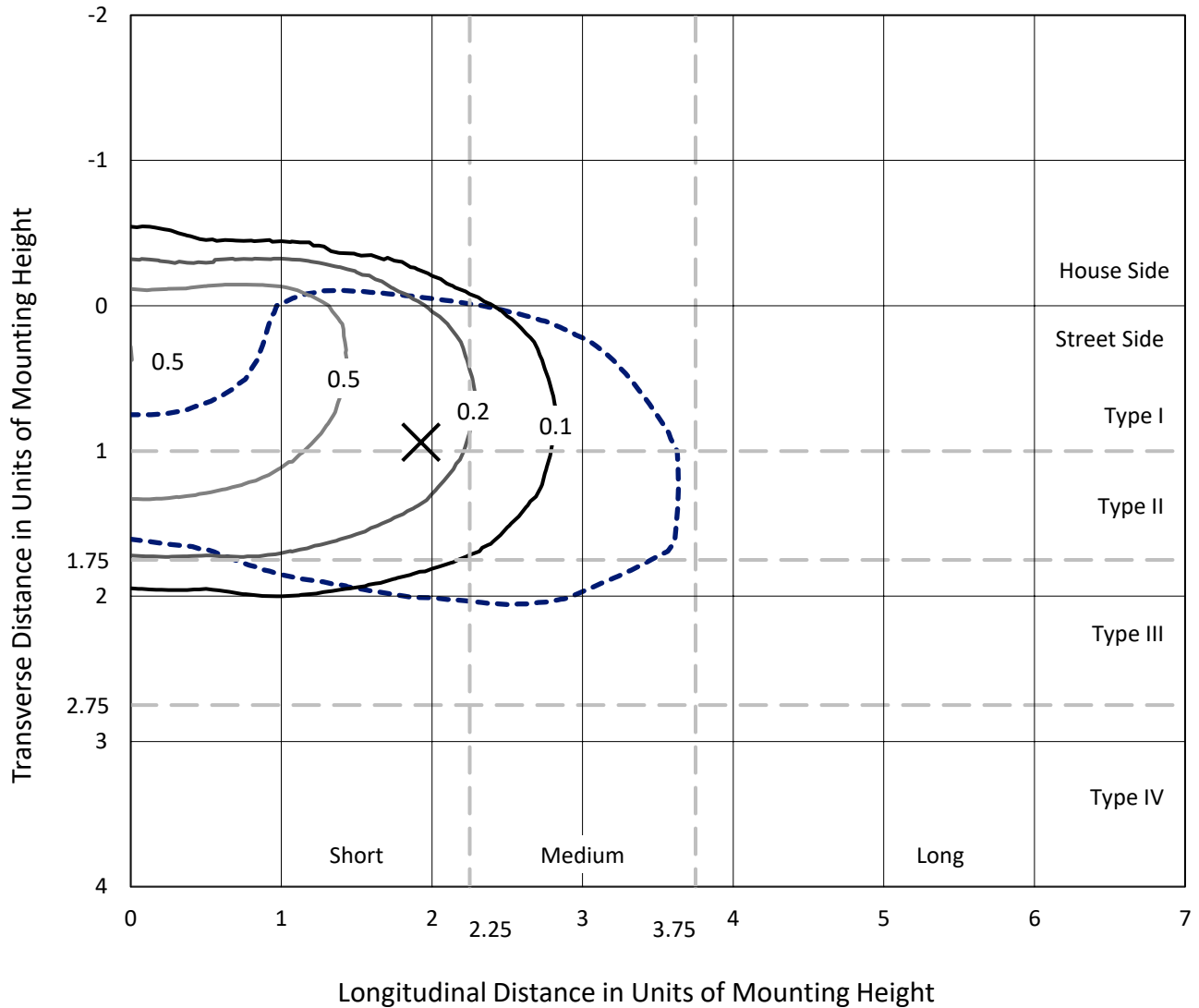
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

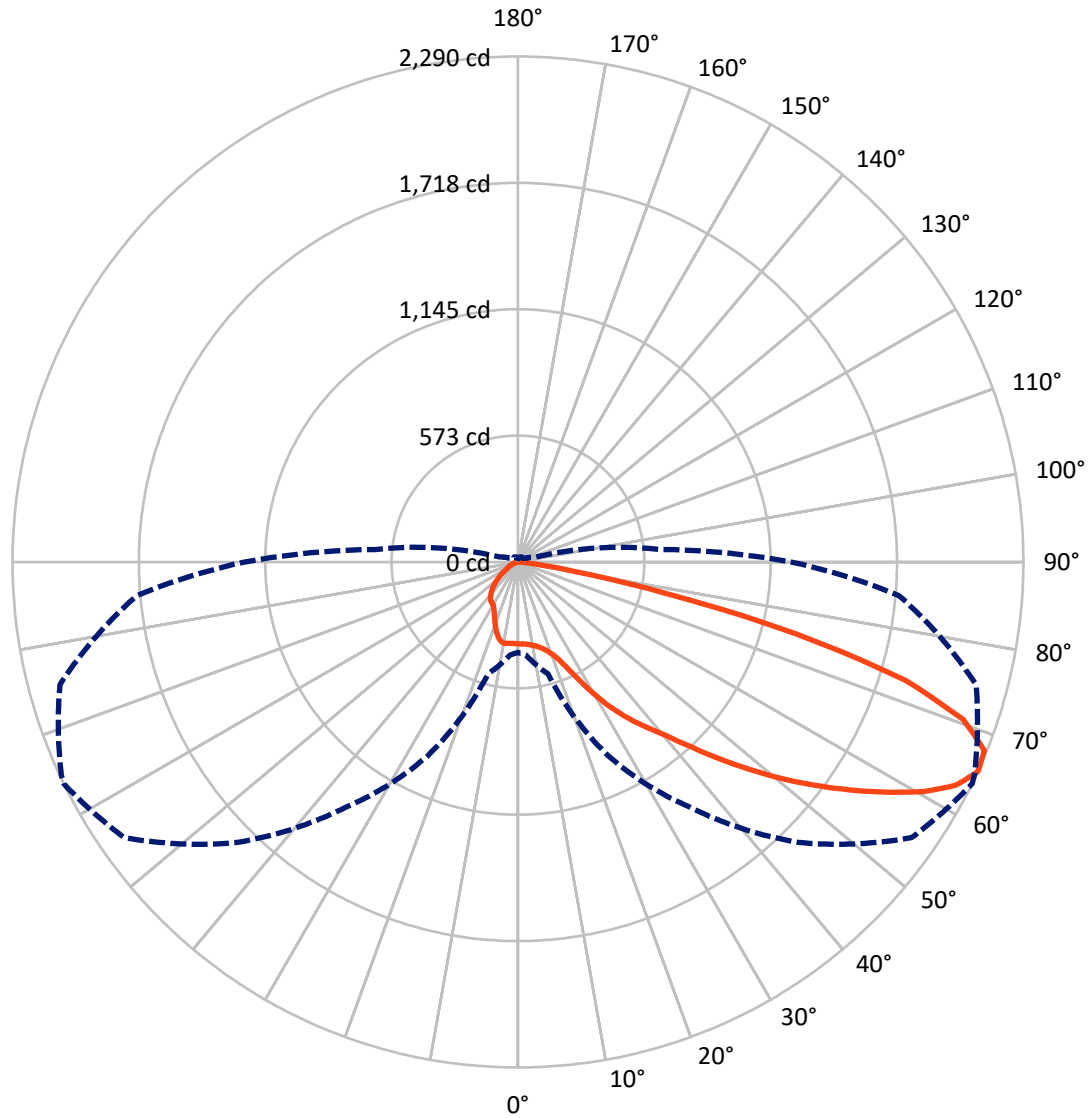
✕ Max cd
 - - - 1/2 Max cd



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	426.7	0.0	426.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	2764.3	0.0	2764.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	3191.0	0.0	3191.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.2	1.1
10°-20°	92.9	2.9
20°-30°	176.0	5.5
30°-40°	356.1	11.2
40°-50°	606.6	19.0
50°-60°	825.0	25.9
60°-70°	774.7	24.3
70°-80°	310.4	9.7
80°-90°	15.0	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°	3191.0	100.0
0°-180°	3191.0	100.0

Coefficient of Utilization



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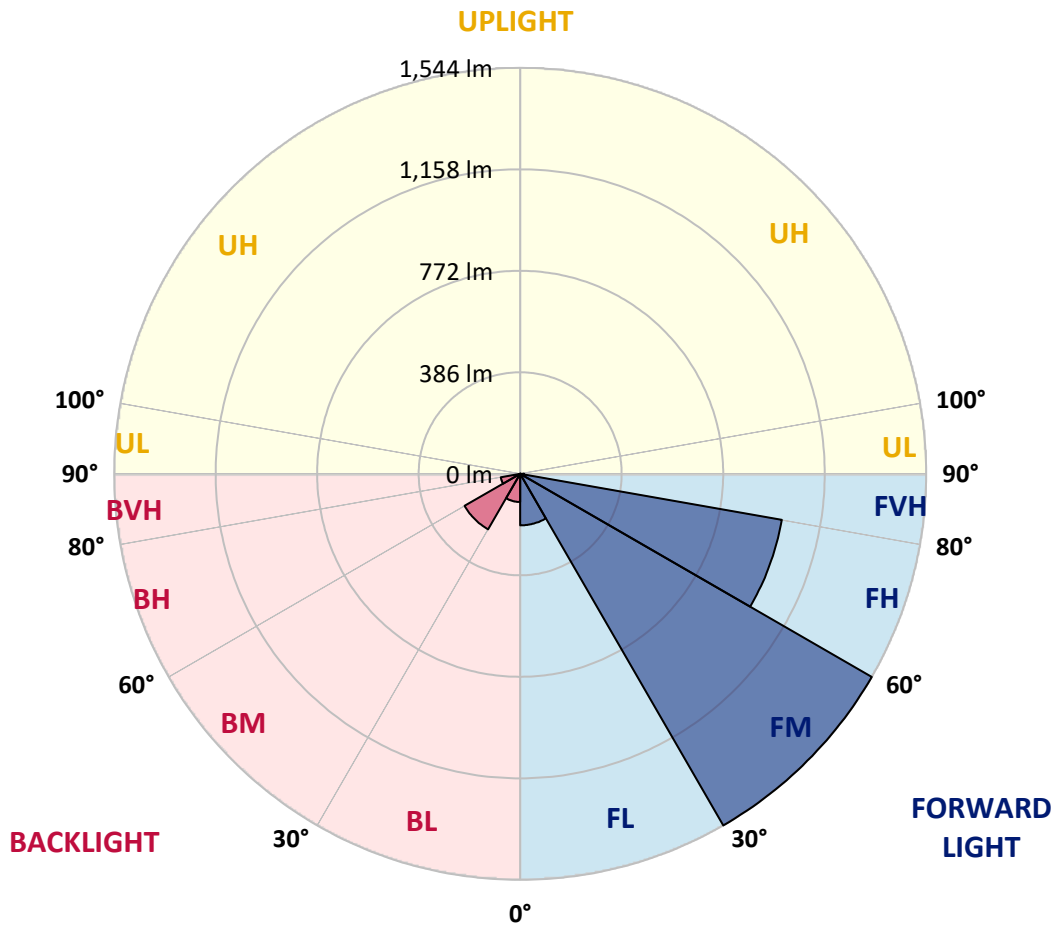
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	196.0	6.1			
FM (30°-60°)	1543.8	48.4			
FH (60°-80°)	1010.2	31.7			G1/1800
FVH (80°-90°)	14.3	0.4			G1/100
BL (0°-30°)	107.1	3.4	B0/110		
BM (30°-60°)	244.0	7.6	B1/1000		
BH (60°-80°)	74.9	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°	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1
2.5°	369.9	372.4	371.8	371.1	370.9	371.4	371.6	371.4	371.4	371.4	371.6
5°	362.8	364.9	364.9	366.4	368.6	371.1	373.1	373.5	373.9	374.6	374.4
7.5°	349.3	351.0	352.3	357.2	362.6	369.4	375.2	378.2	378.6	381.0	381.8
10°	340.1	342.3	344.4	349.5	357.2	367.5	377.4	384.6	385.7	391.3	393.8
12.5°	339.7	341.8	344.6	350.2	359.2	370.1	382.1	392.5	394.5	402.6	407.9
15°	344.2	346.8	349.3	356.2	365.8	379.1	391.9	404.9	406.9	418.4	424.2
17.5°	353.4	356.8	358.7	365.6	375.9	390.6	407.5	422.5	424.2	437.7	444.9
20°	371.6	375.6	376.3	381.8	391.9	407.7	427.8	446.4	448.6	464.0	472.1
22.5°	409.2	415.0	409.9	412.6	421.6	437.5	459.3	482.8	485.8	503.3	510.6
25°	475.5	483.7	470.4	465.7	469.5	486.0	513.4	543.1	546.6	560.7	564.3
27.5°	605.8	595.3	575.2	555.5	544.0	553.4	584.2	621.0	625.3	639.0	634.7
30°	748.9	739.7	712.6	668.9	641.5	640.0	668.5	709.6	714.5	727.5	714.5
32.5°	892.2	883.5	854.0	800.3	752.8	729.2	748.9	794.5	797.1	805.4	786.1
35°	1033.2	1024.2	994.7	939.7	881.3	827.9	824.0	875.3	876.2	885.0	856.3
37.5°	1175.0	1167.6	1136.1	1082.2	1024.7	950.9	915.1	951.9	953.0	961.6	931.8
40°	1276.2	1279.4	1257.8	1216.1	1166.7	1086.1	1017.4	1033.4	1027.0	1041.3	1023.6
42.5°	1363.1	1369.5	1350.7	1329.7	1301.0	1230.0	1144.0	1141.2	1131.0	1138.7	1120.3
45°	1438.2	1443.5	1426.6	1421.7	1421.1	1371.2	1282.4	1265.7	1251.4	1249.9	1227.9
47.5°	1465.8	1476.0	1483.3	1499.8	1531.9	1510.9	1425.5	1399.7	1383.6	1371.9	1337.0
50°	1476.2	1487.2	1512.0	1559.9	1635.8	1644.8	1568.0	1538.9	1519.2	1497.8	1446.5
52.5°	1462.1	1481.6	1515.0	1595.6	1705.8	1752.2	1704.7	1679.3	1656.8	1621.9	1545.8
55°	1378.9	1398.4	1466.6	1595.2	1740.6	1827.5	1833.9	1822.6	1797.3	1742.4	1626.0
57.5°	1203.5	1232.4	1340.4	1540.8	1740.0	1892.3	1960.6	1968.7	1940.4	1861.7	1689.1
60°	960.5	999.6	1131.4	1420.4	1686.3	1927.4	2071.6	2112.2	2082.3	1979.4	1740.2
62.5°	670.2	715.6	840.3	1231.7	1563.5	1902.2	2152.6	2227.7	2205.1	2084.6	1759.9
65°	408.8	423.3	523.9	969.3	1354.7	1796.5	2177.7	2290.2	2282.7	2149.0	1730.8
67.5°	272.3	284.5	313.4	664.6	1051.6	1585.3	2117.8	2279.3	2281.4	2138.5	1624.3
70°	164.1	174.6	193.4	386.5	681.5	1254.8	1932.3	2140.2	2152.6	1998.4	1422.3
72.5°	67.6	74.7	91.8	175.2	353.0	796.4	1538.7	1837.5	1866.4	1680.3	1091.6
75°	38.3	41.9	53.9	87.9	153.2	371.1	932.0	1304.5	1347.0	1158.1	656.7
77.5°	25.5	27.2	34.9	56.9	86.2	126.6	398.3	679.6	760.9	632.6	284.3
80°	17.1	18.6	24.0	38.1	56.0	54.3	126.9	251.8	309.8	217.3	69.3
82.5°	11.6	11.8	17.1	25.0	35.5	26.3	37.4	78.3	98.4	62.9	26.3
85°	6.6	6.4	12.6	14.5	15.8	10.9	11.3	23.5	30.8	26.5	15.0
87.5°	0.9	1.3	4.9	3.9	2.1	2.4	2.4	4.1	6.0	6.4	3.2
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°	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1	371.1
2.5°	371.6	371.4	370.7	370.1	368.6	367.7	368.2	367.7	367.5	367.7	368.6
5°	374.4	373.7	372.0	369.9	366.9	363.2	360.9	357.5	354.2	352.3	352.7
7.5°	381.8	381.2	378.8	372.9	363.2	348.0	334.1	321.9	312.7	307.4	307.6
10°	393.8	392.8	389.1	375.9	350.6	317.5	289.9	267.0	252.0	244.9	244.3
12.5°	407.9	406.7	400.2	373.1	326.7	274.9	236.8	211.4	197.4	191.2	190.6
15°	424.6	422.9	410.3	359.8	291.8	227.8	193.0	173.9	164.9	159.4	159.6
17.5°	445.4	442.4	417.8	339.9	253.9	191.9	166.0	151.7	143.8	138.4	138.0
20°	472.3	467.4	423.8	316.2	219.1	169.2	147.8	135.8	129.8	125.1	124.3
22.5°	510.0	502.9	431.0	290.5	194.5	153.6	134.3	125.6	120.6	115.3	114.4
25°	556.6	548.3	440.0	266.8	177.6	140.1	124.5	117.2	111.5	105.2	104.6
27.5°	621.9	606.9	450.7	247.3	163.0	128.6	115.5	107.4	100.8	95.6	94.6
30°	694.6	670.0	460.1	235.5	149.7	117.9	103.7	95.6	89.4	85.8	85.1
32.5°	763.5	730.1	466.3	230.4	137.8	105.7	90.9	82.1	77.4	76.4	77.0
35°	828.5	784.4	465.7	225.5	127.1	93.5	78.3	69.3	65.7	66.3	66.3
37.5°	903.4	842.4	461.2	217.8	118.3	82.4	67.4	59.5	56.3	56.5	57.3
40°	990.4	909.4	458.4	203.2	108.7	72.1	58.4	52.0	49.6	48.8	48.6
42.5°	1083.3	974.2	458.9	186.7	96.7	62.9	52.2	46.8	44.7	44.1	43.9
45°	1176.5	1036.0	459.5	169.6	84.1	55.8	47.7	43.2	41.9	41.1	41.1
47.5°	1264.3	1088.6	447.5	151.2	71.7	50.5	44.1	41.1	40.0	38.9	38.9
50°	1346.0	1123.7	418.6	129.8	61.8	46.2	41.3	39.1	38.1	37.0	37.0
52.5°	1409.5	1129.3	370.9	107.8	55.0	43.0	39.6	37.6	36.4	35.3	35.1
55°	1437.7	1094.4	303.1	87.3	49.6	40.2	37.9	35.9	34.4	33.4	33.2
57.5°	1430.5	1021.0	236.4	70.2	44.5	37.4	35.7	34.4	32.7	31.0	30.8
60°	1394.7	922.8	178.2	58.4	39.8	34.4	33.4	32.3	29.9	27.4	27.0
62.5°	1332.9	799.4	127.1	48.3	34.7	31.0	30.6	29.7	26.3	21.6	21.2
65°	1238.4	649.5	85.6	40.2	29.7	27.2	27.4	25.9	21.4	16.0	15.6
67.5°	1100.2	474.9	54.8	32.9	24.8	22.7	22.9	22.0	18.2	13.7	13.0
70°	924.1	314.5	35.7	25.0	19.9	17.5	18.8	19.0	15.4	11.1	10.7
72.5°	677.5	185.7	25.0	18.6	14.5	12.2	15.4	15.8	12.4	8.3	7.9
75°	386.1	88.1	18.8	13.5	9.0	8.6	12.0	12.0	8.6	5.6	5.1
77.5°	162.1	36.8	13.3	8.8	5.1	4.9	8.1	7.5	4.3	2.6	2.6
80°	46.8	16.5	7.1	4.3	2.1	1.9	3.2	2.4	1.1	0.4	0.4
82.5°	18.4	7.3	2.8	1.7	0.9	0.9	0.4	0.0	0.0	0.0	0.0
85°	10.9	3.0	1.3	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	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)