

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: P881933

Luminaire Tested: **NAV-SB1C-827-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881933
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-SB1C-827-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA 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: 4251 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

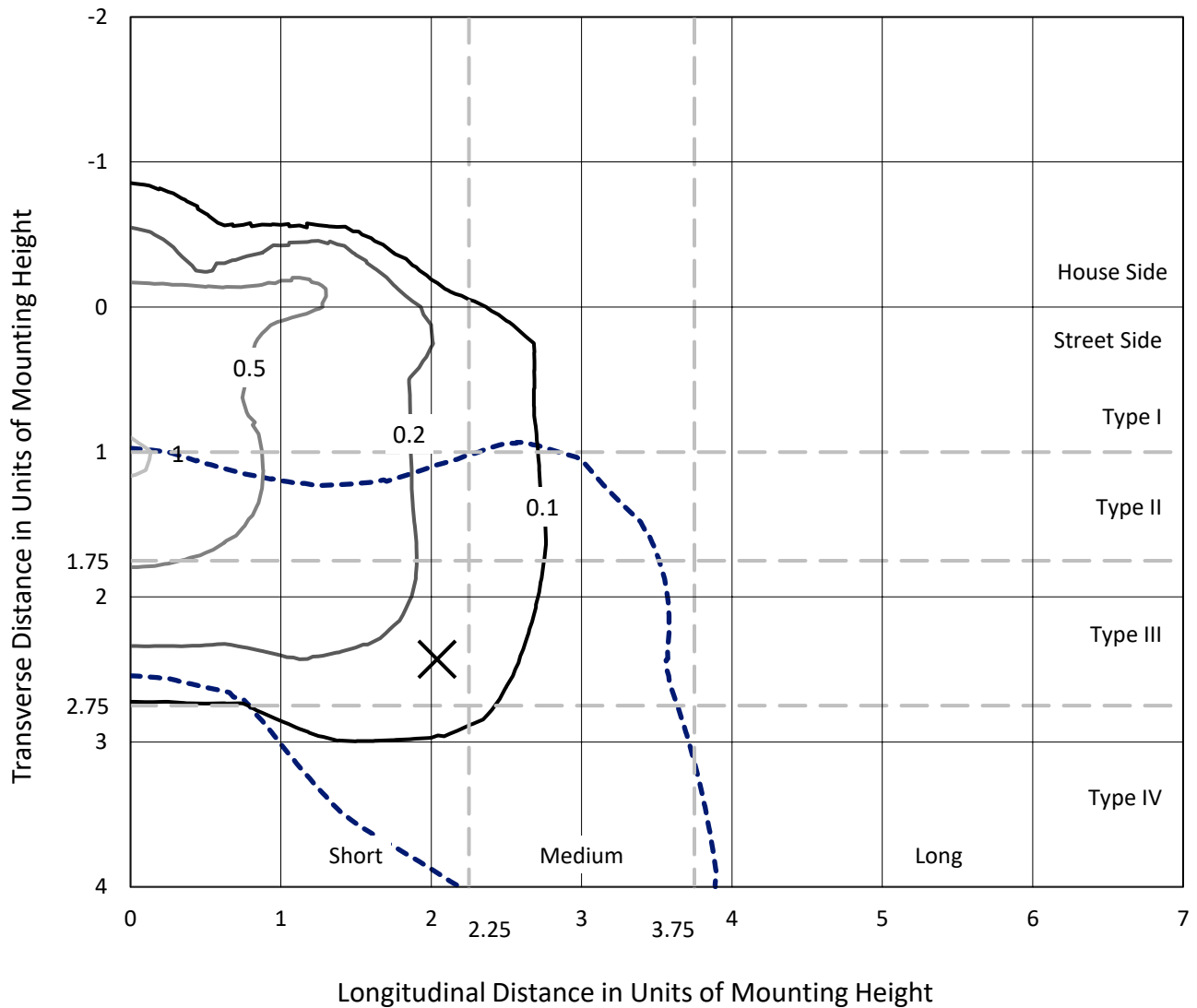
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

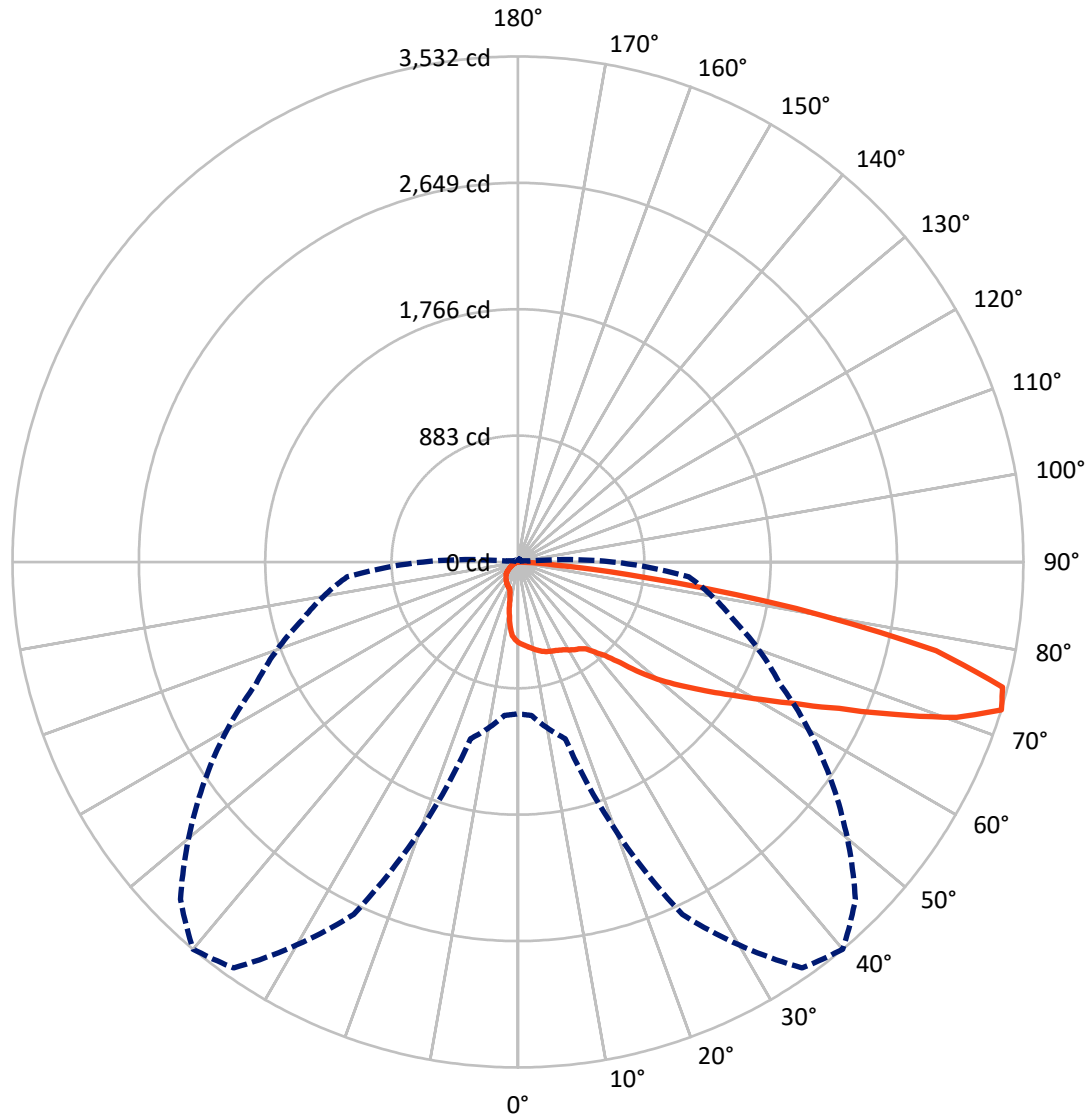
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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	549.0	0.0	549.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3702.0	0.0	3702.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	4251.0	0.0	4251.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	1.2
10°-20°	139.6	3.3
20°-30°	225.9	5.3
30°-40°	333.5	7.8
40°-50°	561.3	13.2
50°-60°	871.5	20.5
60°-70°	1090.5	25.7
70°-80°	892.8	21.0
80°-90°	84.7	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°	4251.0	100.0
0°-180°	4251.0	100.0

Coefficient of Utilization



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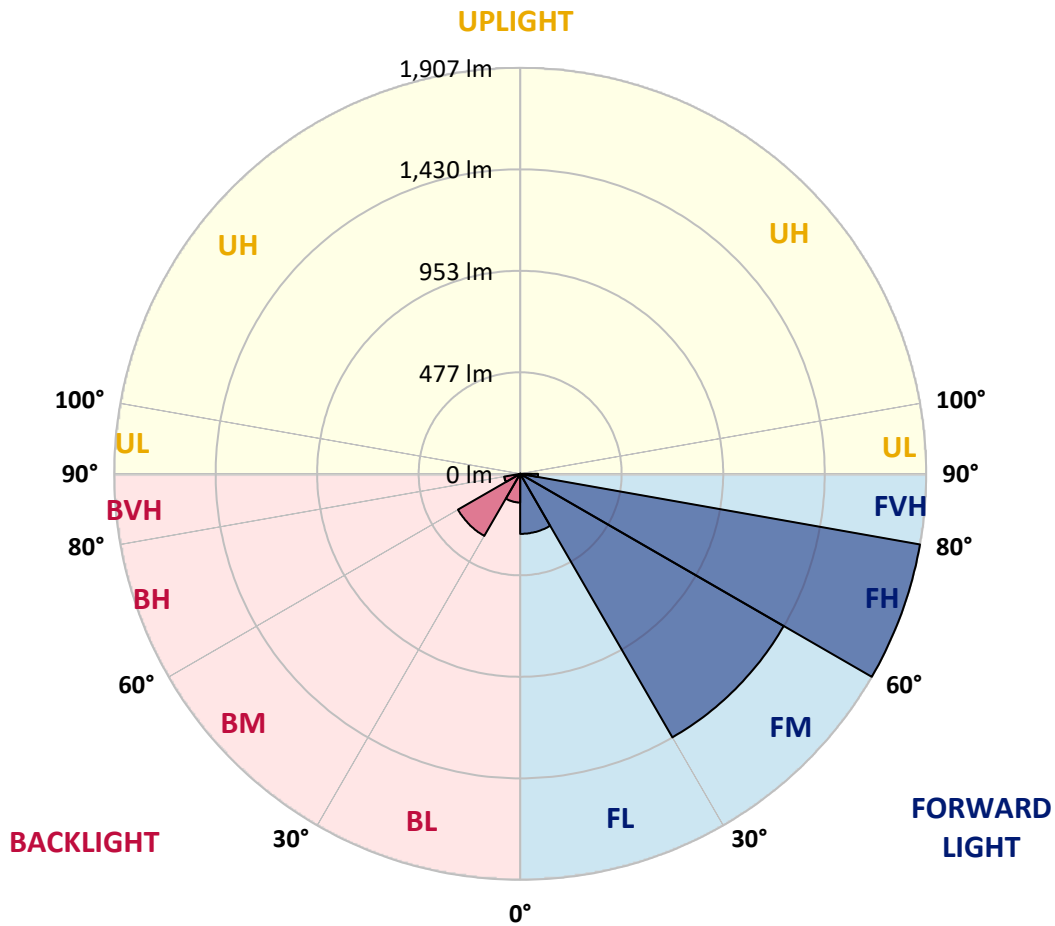
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	282.1	6.6			
FM (30°-60°)	1429.1	33.6			
FH (60°-80°)	1906.8	44.9			G2/5000
FVH (80°-90°)	84.0	2.0			G1/100
BL (0°-30°)	134.7	3.2	B1/500		
BM (30°-60°)	337.1	7.9	B1/1000		
BH (60°-80°)	76.5	1.8	B0/110		G0/110
BVH (80°-90°)	0.6	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9
2.5°	579.8	582.1	580.8	578.2	577.6	576.3	574.7	574.1	571.8	569.9	567.7
5°	596.2	598.4	596.8	593.3	591.7	590.1	587.8	585.9	581.4	577.3	572.2
7.5°	614.1	616.0	614.1	609.0	606.4	604.5	601.3	598.4	593.3	587.2	580.8
10°	633.9	635.5	632.7	625.9	621.8	618.9	616.0	612.8	608.0	601.3	593.6
12.5°	652.5	654.4	650.0	641.9	637.1	634.3	631.1	628.5	623.7	617.3	609.3
15°	669.5	672.4	664.7	656.0	650.6	648.4	645.2	643.6	640.3	635.9	628.5
17.5°	682.3	684.2	676.2	666.0	659.9	658.3	656.0	657.0	656.4	654.1	649.3
20°	693.2	694.5	683.9	671.4	664.7	665.0	664.4	667.6	668.8	668.8	668.5
22.5°	706.6	706.9	693.5	677.8	669.8	672.0	673.0	676.5	679.1	681.7	687.4
25°	724.2	723.6	707.6	686.1	679.1	682.3	684.5	685.8	688.7	692.9	706.0
27.5°	750.5	748.6	728.1	699.6	691.3	694.1	698.3	697.7	696.4	699.6	721.7
30°	783.8	781.2	754.0	718.5	710.8	713.3	714.6	708.9	699.6	702.5	735.4
32.5°	836.6	832.1	794.4	739.6	727.8	730.6	729.0	717.2	703.4	706.3	749.2
35°	928.5	917.6	864.2	783.8	747.0	743.8	739.9	728.4	711.4	708.5	760.7
37.5°	1123.8	1104.6	1013.4	869.9	790.5	769.7	757.9	746.3	720.1	708.5	773.9
40°	1344.1	1324.6	1219.2	1014.0	862.9	827.7	799.5	767.5	729.0	712.7	794.4
42.5°	1574.0	1552.5	1444.3	1192.7	966.3	893.9	841.4	784.4	743.8	725.5	821.6
45°	1830.8	1803.9	1662.3	1379.0	1116.4	1004.1	909.0	819.3	769.4	748.2	858.7
47.5°	2101.6	2066.7	1879.7	1559.9	1278.1	1156.5	1032.6	881.8	807.2	782.2	909.0
50°	2341.8	2307.2	2104.2	1749.1	1429.3	1301.5	1173.4	968.2	863.8	830.2	976.5
52.5°	2514.3	2488.1	2308.5	1944.4	1586.5	1437.6	1301.2	1068.7	935.6	891.7	1056.3
55°	2629.9	2605.9	2453.2	2129.5	1769.3	1587.4	1427.0	1177.9	1022.0	965.3	1144.3
57.5°	2700.0	2686.3	2557.9	2294.7	1950.5	1751.4	1571.1	1298.0	1123.8	1052.1	1242.6
60°	2725.0	2713.8	2622.9	2452.2	2169.5	1948.3	1740.5	1433.4	1247.4	1150.7	1343.5
62.5°	2658.4	2660.7	2669.6	2638.9	2400.3	2178.8	1943.5	1596.1	1384.4	1262.4	1438.2
65°	2345.0	2363.5	2533.9	2845.7	2706.1	2467.6	2201.8	1794.6	1541.3	1389.6	1513.5
67.5°	1941.5	1968.4	2180.4	2966.7	3032.1	2842.5	2561.7	2047.5	1728.3	1518.9	1542.0
70°	1486.3	1515.1	1771.8	2941.4	3337.2	3252.3	3006.8	2369.3	1922.0	1608.6	1469.3
72.5°	1060.7	1075.5	1277.8	2716.4	3462.4	3531.5	3334.6	2674.1	2020.9	1558.9	1198.4
75°	745.4	742.8	877.0	2187.4	3267.4	3497.6	3219.7	2509.2	1828.8	1238.4	739.0
77.5°	324.7	325.3	438.0	1328.4	2607.8	2987.2	2676.3	1571.7	1274.9	656.4	311.9
80°	84.2	86.8	160.7	528.9	1570.1	1971.6	1632.2	690.9	589.1	160.1	59.6
82.5°	29.8	31.7	74.0	166.2	579.2	904.2	726.8	220.9	153.7	45.8	16.0
85°	8.6	10.2	39.7	50.9	119.7	255.5	176.4	42.9	37.8	23.7	4.2
87.5°	0.0	1.3	8.0	7.0	7.0	4.8	9.0	4.8	6.1	2.9	1.3
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°	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9	562.9
2.5°	565.7	563.5	558.7	553.6	548.8	544.3	543.0	538.2	536.0	536.3	536.0
5°	568.6	564.5	555.2	544.0	532.5	519.3	508.4	493.1	479.9	478.3	477.4
7.5°	576.3	569.6	554.5	532.8	504.0	467.8	434.2	400.9	382.0	371.7	371.1
10°	588.2	579.2	556.1	514.5	453.4	388.7	337.8	295.8	274.4	264.5	262.5
12.5°	602.2	592.3	558.7	483.5	388.1	303.2	248.1	222.5	218.0	217.4	217.1
15°	622.1	611.2	561.6	441.5	317.3	230.8	205.6	205.9	209.4	211.3	211.0
17.5°	644.2	633.3	557.4	390.3	247.5	197.2	196.6	199.5	204.6	206.5	206.2
20°	666.6	656.4	542.7	330.1	200.1	187.9	190.5	193.7	198.8	201.4	201.4
22.5°	689.7	680.7	519.3	266.1	180.6	181.2	184.4	187.6	193.4	196.3	196.3
25°	714.3	706.6	488.3	213.2	172.3	174.2	178.3	182.2	188.3	191.8	191.8
27.5°	739.3	733.5	453.0	178.0	164.6	166.8	171.6	176.7	182.8	187.0	187.3
30°	766.5	763.3	424.9	164.9	157.2	159.1	164.6	170.3	177.1	182.2	182.8
32.5°	794.4	793.7	411.1	174.5	150.5	151.8	156.6	162.3	170.7	177.1	177.7
35°	821.9	823.2	403.1	201.7	148.2	144.7	147.9	153.0	163.0	171.0	172.3
37.5°	857.1	860.3	402.8	231.2	153.7	137.7	139.9	143.4	152.1	161.4	163.0
40°	909.6	926.6	423.3	256.5	163.3	131.3	131.9	132.6	137.0	144.7	147.3
42.5°	979.4	1029.0	497.2	273.7	167.1	125.5	123.3	119.7	119.1	123.3	125.5
45°	1066.2	1152.9	627.2	283.4	163.3	119.1	113.0	103.7	100.2	103.1	103.1
47.5°	1168.3	1288.7	781.2	285.6	156.9	111.1	100.2	88.0	85.2	86.1	85.8
50°	1267.9	1390.5	916.7	267.0	146.3	100.9	86.1	75.9	74.0	74.3	74.3
52.5°	1355.9	1425.4	955.1	223.2	132.2	88.4	74.0	66.9	65.6	65.6	65.3
55°	1414.2	1387.6	851.7	170.7	114.6	75.6	63.4	59.9	59.2	58.9	58.3
57.5°	1426.4	1264.7	643.2	123.3	89.6	63.7	56.4	54.4	53.1	51.9	51.2
60°	1382.8	1059.8	409.5	86.1	67.2	54.4	49.9	48.7	46.1	43.5	42.6
62.5°	1288.7	800.4	226.7	59.9	54.1	46.4	44.2	42.6	37.8	33.6	32.3
65°	1162.2	532.1	100.2	46.7	44.2	39.1	37.8	35.5	29.8	25.0	24.0
67.5°	1035.1	306.4	45.1	37.5	35.5	32.0	31.1	29.5	25.3	20.8	20.2
70°	890.1	155.3	31.1	29.8	27.5	24.3	25.3	25.0	20.8	17.0	16.3
72.5°	662.8	77.2	23.4	22.4	19.9	17.3	20.8	20.5	16.3	12.8	12.2
75°	375.2	38.1	17.0	15.7	11.8	12.8	16.6	15.7	11.2	8.3	7.7
77.5°	148.9	19.5	11.2	9.6	7.0	8.6	12.2	10.6	5.8	3.5	3.2
80°	34.3	9.6	5.8	4.2	3.2	5.1	6.4	3.8	1.6	0.3	0.0
82.5°	9.6	4.2	1.9	1.6	1.6	1.9	1.6	0.6	0.0	0.0	0.0
85°	3.2	1.9	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.3	0.6	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)