

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: P881704

Luminaire Tested: **NAV-SB1B-727-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5063 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

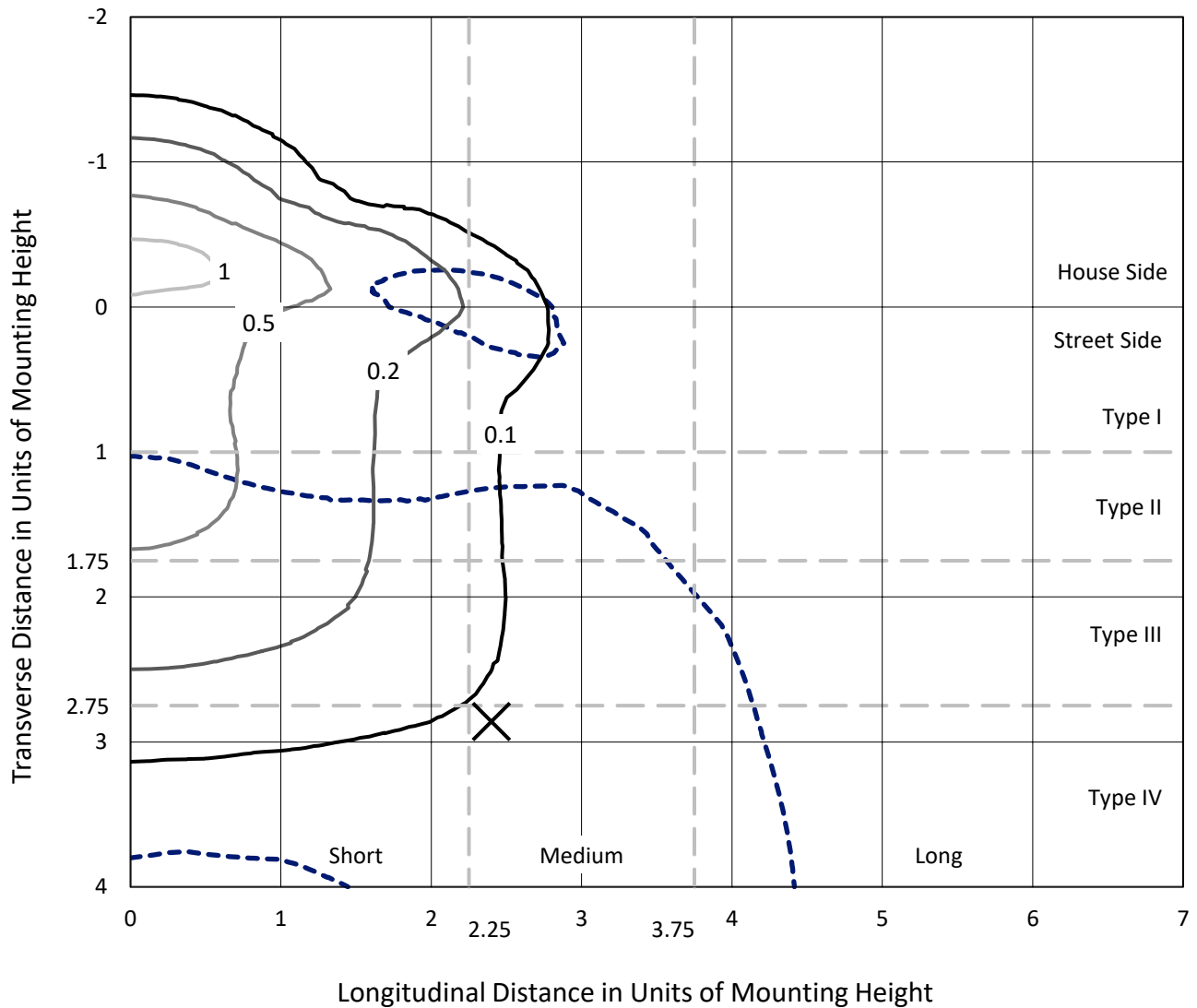
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

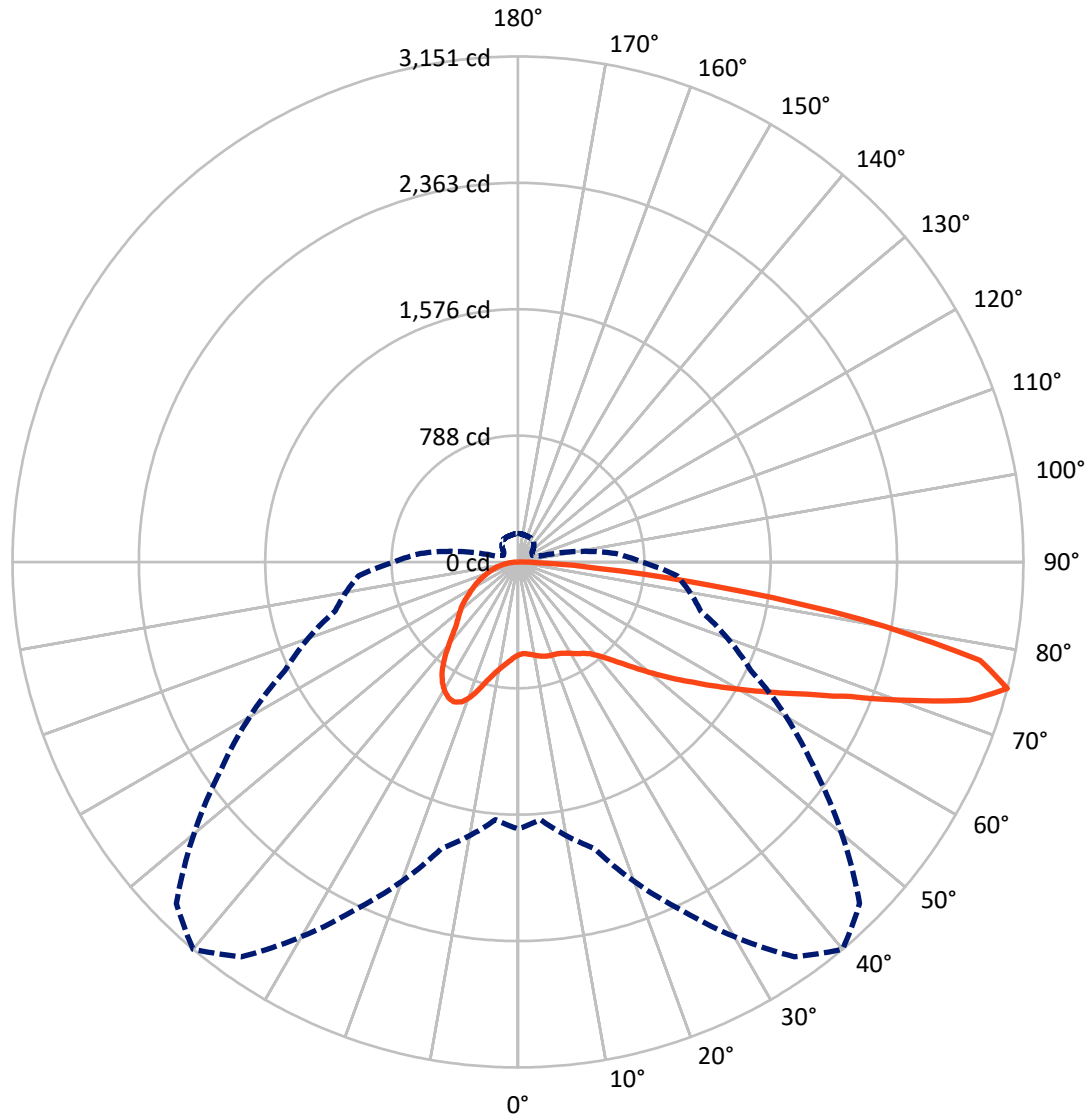
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1568.7	0.0	1568.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3494.3	0.0	3494.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	5063.0	0.0	5063.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	1.1
10°-20°	194.0	3.8
20°-30°	354.3	7.0
30°-40°	502.5	9.9
40°-50°	678.5	13.4
50°-60°	912.8	18.0
60°-70°	1158.5	22.9
70°-80°	1051.4	20.8
80°-90°	153.3	3.0
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°	5063.0	100.0
0°-180°	5063.0	100.0

Coefficient of Utilization



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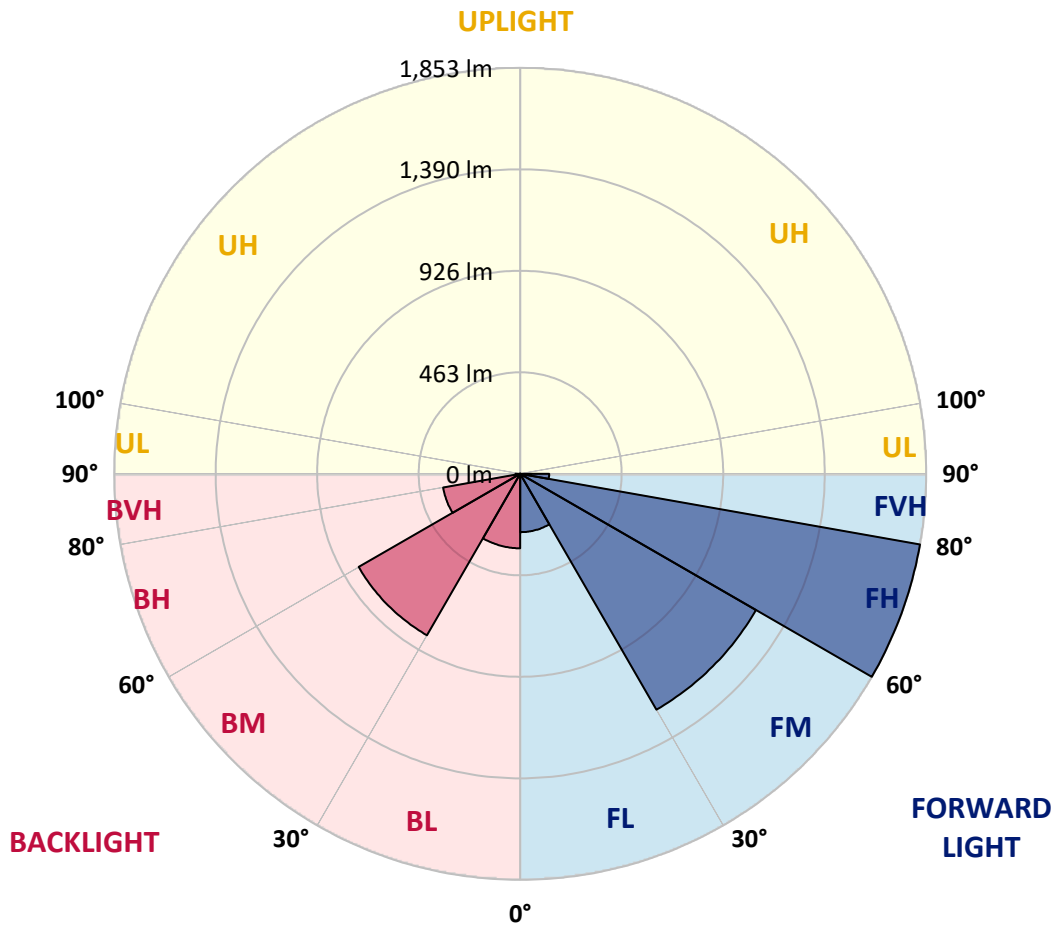
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	266.3	5.3			
FM (30°-60°)	1242.8	24.5			
FH (60°-80°)	1853.0	36.6			G2/5000
FVH (80°-90°)	132.2	2.6			G2/225
BL (0°-30°)	339.8	6.7	B1/500		
BM (30°-60°)	850.9	16.8	B1/1000		
BH (60°-80°)	356.9	7.0	B1/500		G1/500
BVH (80°-90°)	21.1	0.4			G1/100
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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0
2.5°	570.1	573.3	572.5	571.4	571.4	571.7	571.4	573.3	575.2	577.1	580.0
5°	576.0	579.2	577.6	576.3	575.2	574.9	574.1	573.9	574.9	577.3	581.4
7.5°	587.6	590.8	588.4	585.9	583.8	582.7	581.6	580.0	579.2	580.6	586.2
10°	600.4	603.7	600.7	596.4	592.9	591.6	590.5	588.9	587.8	588.6	594.8
12.5°	613.3	616.6	612.5	606.6	602.1	601.2	599.9	599.4	599.1	598.8	605.0
15°	625.4	628.1	623.0	616.0	611.2	609.8	608.5	609.3	610.6	612.3	619.2
17.5°	634.8	637.5	630.0	620.9	616.3	615.8	614.9	617.6	621.4	625.4	634.0
20°	643.4	646.1	636.4	624.1	618.7	618.7	619.0	624.6	630.0	635.9	647.7
22.5°	655.5	657.6	645.8	628.9	621.1	621.7	623.8	629.4	636.2	644.2	660.6
25°	673.5	675.1	660.6	638.0	629.2	630.8	632.7	635.4	641.8	651.2	673.2
27.5°	702.5	703.8	684.8	654.2	640.7	643.4	646.1	644.2	647.2	655.2	683.4
30°	743.3	744.1	719.9	679.4	660.3	661.7	662.2	654.4	648.8	655.2	690.7
32.5°	791.6	791.4	762.6	710.0	682.6	681.3	676.7	661.4	648.2	653.9	697.1
35°	866.6	863.6	826.5	753.0	707.9	699.5	688.8	669.2	650.9	652.5	702.8
37.5°	990.6	981.5	930.2	823.3	745.5	724.2	708.4	681.8	656.8	652.0	709.5
40°	1130.5	1119.0	1062.6	919.7	801.8	767.7	742.2	699.8	666.5	654.4	719.4
42.5°	1296.5	1280.1	1219.4	1033.3	873.3	823.9	785.5	722.6	680.7	662.2	732.8
45°	1500.3	1478.6	1392.6	1161.4	963.2	897.4	846.2	757.3	702.5	677.2	753.0
47.5°	1706.3	1711.6	1589.5	1308.0	1071.2	988.2	922.1	809.4	734.2	701.4	785.5
50°	1925.1	1928.9	1785.2	1470.5	1193.6	1090.8	1007.5	867.6	778.2	735.8	834.1
52.5°	2095.9	2096.5	1963.0	1640.5	1321.2	1203.6	1099.6	934.2	829.2	781.4	898.8
55°	2202.8	2201.4	2087.6	1801.3	1467.8	1322.0	1201.7	1010.0	891.5	835.1	980.2
57.5°	2280.4	2276.4	2173.5	1939.6	1624.1	1461.9	1317.2	1095.9	965.1	899.1	1087.3
60°	2309.9	2307.5	2231.8	2059.1	1788.4	1616.6	1450.4	1192.0	1048.6	974.5	1225.1
62.5°	2321.2	2325.8	2289.0	2174.9	1964.3	1787.9	1596.7	1307.0	1142.6	1059.9	1370.3
65°	2361.0	2369.3	2361.8	2326.3	2163.0	1988.5	1790.9	1443.6	1245.2	1151.5	1522.1
67.5°	2439.6	2448.0	2451.2	2507.6	2405.8	2238.5	2033.1	1613.9	1365.2	1246.5	1636.2
70°	2437.8	2435.3	2492.3	2651.8	2709.8	2584.6	2359.6	1823.4	1508.4	1325.5	1650.7
72.5°	2218.9	2199.6	2334.1	2650.2	2962.7	2946.1	2758.4	2093.5	1631.9	1335.2	1432.4
75°	1664.6	1613.1	1850.7	2388.3	3004.9	3151.3	3011.9	2261.1	1602.6	1179.7	996.8
77.5°	711.9	660.1	940.1	1768.0	2689.4	2945.8	2779.3	1972.7	1279.3	780.1	489.5
80°	186.4	186.1	284.1	801.6	1829.0	2175.4	1908.5	1273.9	731.0	278.7	135.1
82.5°	77.1	75.2	104.5	311.8	893.7	1220.8	996.3	568.2	264.0	75.5	44.8
85°	28.7	28.5	50.8	107.7	315.3	503.5	364.4	145.3	65.8	36.8	20.1
87.5°	8.1	7.8	11.0	37.3	76.8	116.5	62.3	23.9	18.5	14.5	5.9
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°	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0	579.0
2.5°	580.8	582.2	584.6	586.5	588.9	591.6	595.3	597.8	600.2	601.8	600.7
5°	583.3	586.2	592.4	598.6	605.8	612.5	620.3	626.0	630.5	631.9	632.4
7.5°	588.6	593.5	603.9	614.4	626.0	637.0	648.2	657.9	665.7	668.7	668.9
10°	598.0	604.5	619.2	634.0	649.3	666.2	680.7	694.7	705.7	710.3	710.5
12.5°	609.8	617.9	637.2	657.6	678.9	702.2	721.0	738.2	751.9	758.1	758.1
15°	625.1	635.6	660.3	687.7	718.9	751.4	775.3	794.3	809.6	817.2	816.6
17.5°	641.8	655.8	686.9	728.3	772.8	815.5	843.5	857.4	873.3	880.5	880.3
20°	657.9	675.1	719.7	779.8	839.2	884.6	907.1	910.9	911.9	912.7	914.9
22.5°	674.6	697.7	760.8	844.8	908.5	939.9	943.1	927.0	904.4	894.0	896.9
25°	692.8	723.4	814.5	916.5	968.1	971.8	947.1	907.9	865.2	845.6	848.6
27.5°	710.5	753.2	878.9	985.0	1011.0	978.0	924.8	869.2	817.7	797.0	799.4
30°	728.3	787.3	950.1	1044.9	1030.6	962.7	889.7	827.6	775.8	754.0	756.5
32.5°	746.3	827.1	1032.0	1088.1	1027.1	930.2	845.9	780.9	735.2	712.4	715.4
35°	766.7	876.0	1109.6	1111.7	1003.8	882.4	788.1	725.0	685.3	667.0	671.1
37.5°	793.3	938.0	1178.1	1117.6	963.0	812.3	716.5	659.0	626.2	617.9	623.8
40°	826.3	1012.6	1230.4	1108.2	902.5	727.2	638.0	592.1	573.6	575.5	581.9
42.5°	869.2	1096.2	1267.2	1084.1	818.5	639.4	569.3	548.9	557.7	565.3	572.2
45°	925.1	1182.9	1290.0	1043.0	723.4	565.0	528.7	533.6	540.3	541.1	546.5
47.5°	996.5	1270.7	1305.1	981.0	626.5	512.6	503.0	504.0	502.7	497.1	501.4
50°	1085.7	1356.1	1318.5	898.8	544.1	479.9	467.0	463.2	444.7	426.4	428.8
52.5°	1187.2	1434.5	1324.1	796.7	479.9	452.5	431.5	407.9	373.3	367.6	369.5
55°	1300.0	1507.0	1309.6	671.3	425.9	417.3	385.6	357.2	353.4	348.6	349.4
57.5°	1434.8	1585.2	1280.1	531.4	370.6	376.2	345.3	348.6	341.8	334.3	333.0
60°	1582.2	1666.0	1228.3	403.9	313.4	324.9	334.9	334.6	332.7	326.5	324.4
62.5°	1714.9	1719.2	1126.2	309.4	263.2	285.2	312.3	312.0	310.4	306.9	305.6
65°	1793.8	1711.1	956.0	243.6	221.8	252.4	281.7	283.8	284.1	283.8	283.8
67.5°	1779.8	1616.8	722.4	193.9	187.7	219.1	251.3	254.3	256.5	257.0	257.5
70°	1621.9	1409.8	471.0	154.7	157.4	189.9	222.6	225.6	227.4	229.6	230.7
72.5°	1264.3	1036.5	269.6	125.1	130.8	164.6	194.2	197.6	198.7	202.7	204.4
75°	770.4	609.6	145.5	98.6	107.4	140.7	166.0	170.0	171.9	176.7	177.2
77.5°	366.3	264.0	83.0	76.8	86.5	114.9	140.2	144.7	139.6	142.3	140.2
80°	123.8	98.0	52.4	58.5	66.1	89.7	112.2	116.8	106.1	105.5	104.5
82.5°	43.2	39.7	33.3	38.9	42.7	64.2	84.9	90.8	78.9	78.7	74.9
85°	16.9	16.1	18.5	21.2	25.5	39.5	55.9	58.8	48.6	39.2	38.7
87.5°	3.5	3.8	4.6	4.8	7.8	13.7	20.1	24.7	19.6	16.6	15.3
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)