

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: P881547

Luminaire Tested: **NAV-SB1A-730-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-730-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4379 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

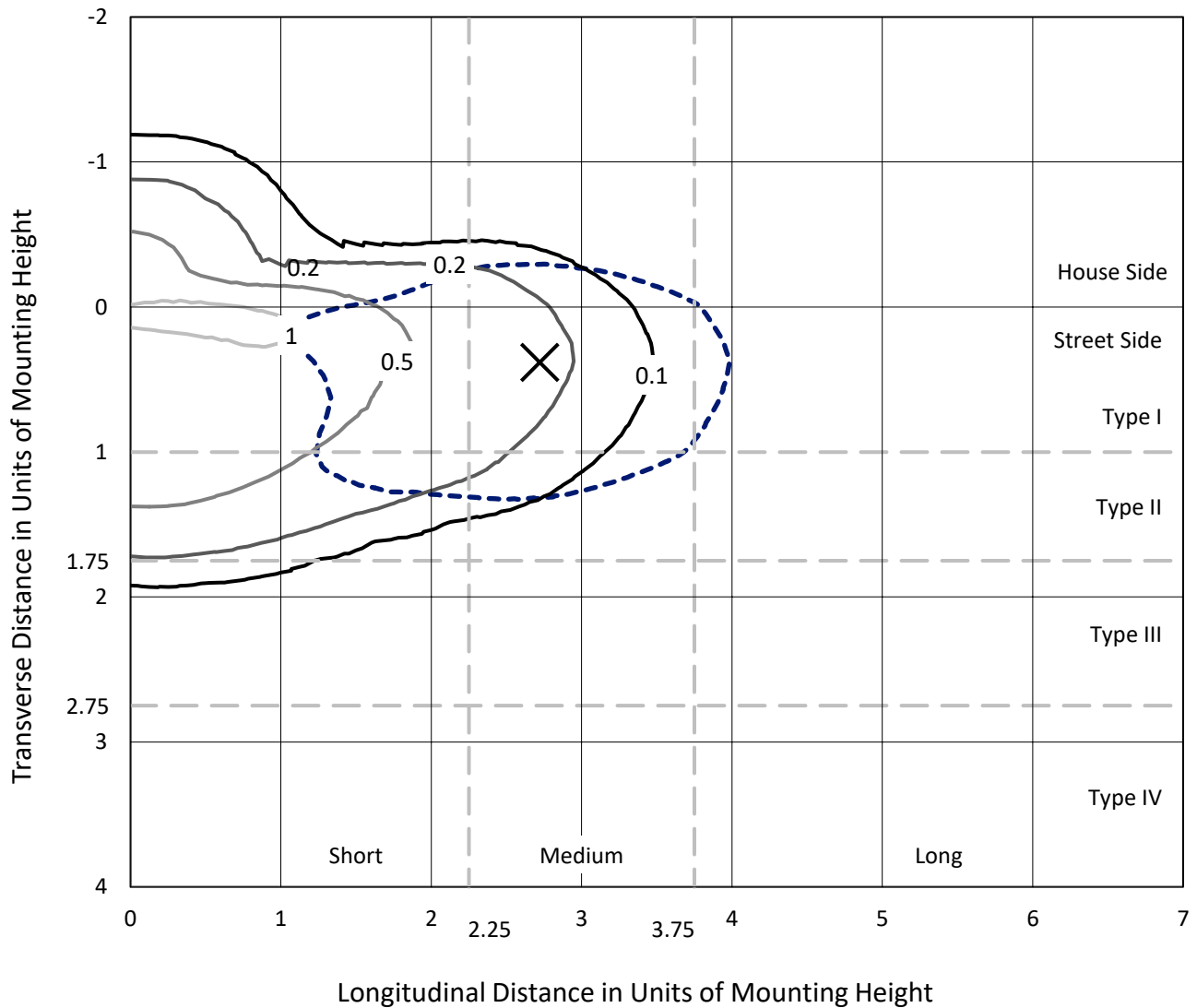
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

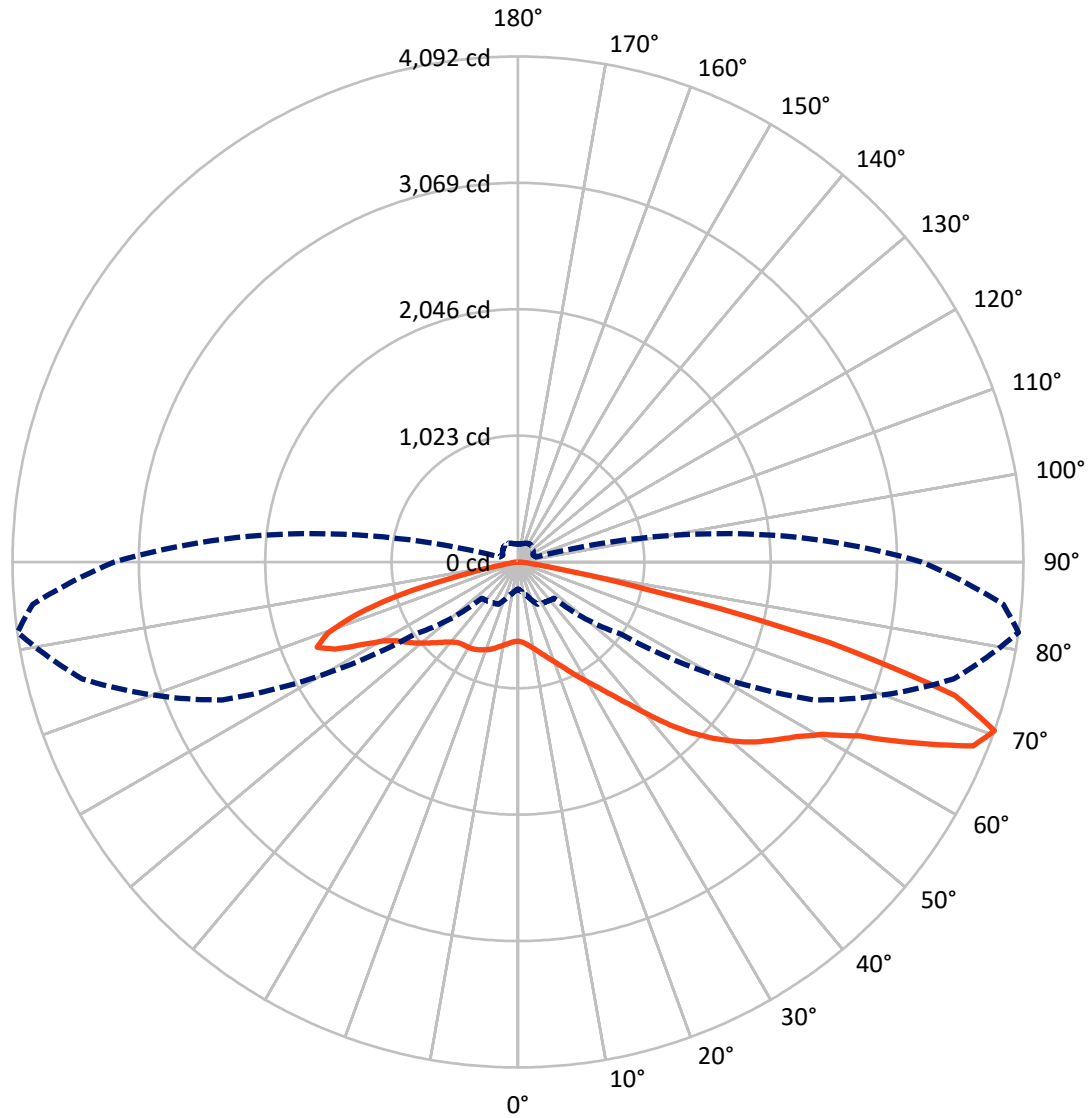
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1079.5	0.0	1079.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3299.5	0.0	3299.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	4379.0	0.0	4379.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	1.4
10°-20°	174.2	4.0
20°-30°	291.3	6.7
30°-40°	455.2	10.4
40°-50°	724.9	16.6
50°-60°	1008.8	23.0
60°-70°	1055.2	24.1
70°-80°	551.5	12.6
80°-90°	57.3	1.3
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°	4379.0	100.0
0°-180°	4379.0	100.0

Coefficient of Utilization

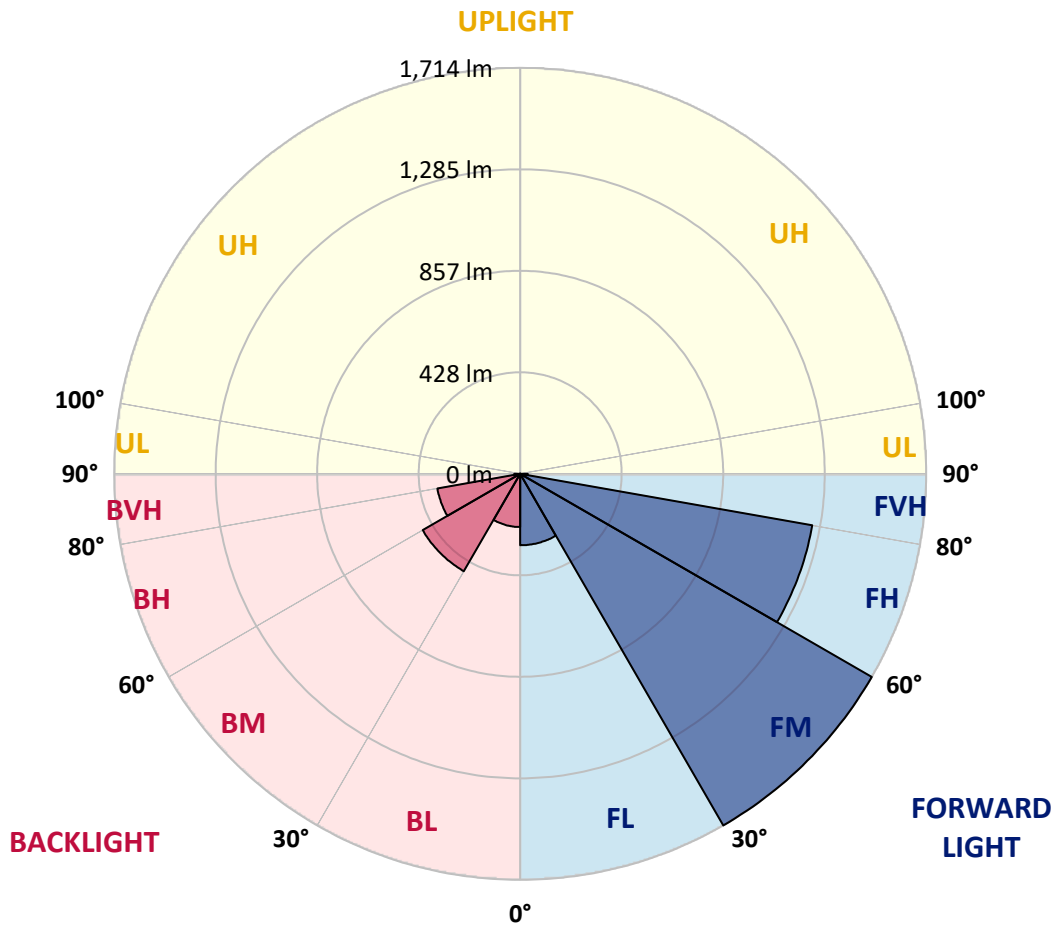


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	301.5	6.9			
FM (30°-60°)	1713.9	39.1			
FH (60°-80°)	1252.0	28.6			G1/1800
FVH (80°-90°)	32.1	0.7			G1/100
BL (0°-30°)	224.6	5.1	B1/500		
BM (30°-60°)	475.0	10.8	B1/1000		
BH (60°-80°)	354.8	8.1	B1/500		G1/500
BVH (80°-90°)	25.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0
2.5°	657.4	661.1	659.9	658.7	658.7	657.1	656.9	654.6	652.7	649.7	649.0
5°	665.7	669.7	669.2	670.1	673.2	673.8	674.5	673.2	669.4	665.7	664.1
7.5°	658.3	662.7	664.1	669.7	679.0	687.3	693.6	696.2	692.7	687.3	684.8
10°	633.2	638.1	642.9	656.2	672.7	692.4	709.2	719.2	718.5	713.4	708.9
12.5°	582.3	587.4	597.9	623.7	653.9	688.7	719.9	740.8	748.0	744.3	736.6
15°	541.6	546.1	554.0	580.4	619.7	672.7	723.8	764.5	782.8	780.7	771.4
17.5°	540.5	542.3	547.2	559.8	590.0	647.6	719.6	787.7	822.8	822.6	810.9
20°	560.9	561.6	564.4	567.0	584.2	628.5	708.9	807.0	867.6	867.6	855.1
22.5°	589.3	588.8	591.6	589.3	597.6	626.9	702.2	824.0	917.6	921.3	905.5
25°	631.8	629.5	628.8	623.4	625.1	642.0	709.6	843.2	976.8	984.5	964.8
27.5°	688.5	684.8	682.2	669.9	665.7	673.2	732.4	866.5	1042.8	1056.1	1031.0
30°	762.4	755.6	751.9	730.5	715.4	716.6	766.8	897.4	1111.9	1133.2	1101.4
32.5°	863.2	852.8	842.8	807.7	780.0	771.0	811.2	940.1	1186.7	1220.8	1179.9
35°	976.2	967.8	957.1	903.0	860.4	839.5	871.1	999.9	1274.3	1328.4	1275.2
37.5°	1084.9	1077.7	1082.8	1009.8	955.0	924.6	949.7	1080.0	1382.3	1462.3	1394.6
40°	1197.4	1191.8	1192.5	1122.8	1058.9	1024.7	1044.9	1180.6	1506.2	1621.4	1538.2
42.5°	1319.6	1315.4	1301.5	1239.7	1167.9	1136.0	1154.6	1296.8	1639.1	1802.7	1695.8
45°	1456.4	1453.9	1440.9	1370.0	1287.8	1252.0	1277.1	1425.1	1772.7	1973.2	1854.0
47.5°	1574.7	1576.8	1575.2	1515.5	1430.2	1377.7	1407.6	1558.9	1897.0	2133.5	2005.7
50°	1631.6	1642.6	1658.6	1640.0	1587.0	1533.6	1539.4	1688.1	2015.5	2283.9	2151.2
52.5°	1601.9	1622.6	1666.3	1696.0	1716.5	1705.3	1689.7	1816.4	2127.0	2419.6	2288.8
55°	1491.1	1520.1	1592.6	1664.4	1768.7	1849.8	1870.3	1958.6	2235.8	2539.0	2418.9
57.5°	1289.1	1336.3	1401.4	1546.6	1722.3	1919.8	2080.8	2155.9	2351.0	2666.6	2555.1
60°	942.9	1006.1	1087.0	1303.1	1559.6	1882.4	2260.0	2458.9	2514.9	2831.8	2732.3
62.5°	603.4	642.5	716.8	920.4	1215.3	1690.7	2314.8	2837.6	2792.5	3102.7	2998.2
65°	413.1	438.2	506.3	620.6	785.6	1258.5	2167.9	3121.6	3233.5	3532.1	3452.7
67.5°	300.2	319.3	377.4	477.5	511.9	744.7	1682.3	3108.5	3662.3	3974.6	3850.9
70°	218.9	232.4	281.2	377.4	393.9	414.3	1019.1	2642.4	3653.0	4092.1	3944.1
72.5°	162.2	171.5	204.2	292.8	318.8	279.8	504.5	1920.5	3139.0	3701.3	3582.6
75°	117.3	124.3	148.5	224.0	255.1	213.1	251.6	1122.3	2189.5	2603.6	2624.5
77.5°	89.7	95.0	110.8	164.0	204.2	159.9	156.1	516.3	1038.2	1043.3	1101.9
80°	72.0	75.5	84.1	115.5	156.6	119.7	101.8	208.4	328.1	277.7	291.4
82.5°	53.0	58.8	71.1	81.1	112.0	82.5	62.0	105.3	124.8	107.4	108.3
85°	30.2	34.2	43.0	58.1	71.6	50.4	35.6	46.7	58.1	47.6	42.5
87.5°	10.7	13.9	15.1	22.8	31.1	20.9	13.7	13.5	19.1	14.2	11.9
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°	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0	642.0
2.5°	646.7	645.5	640.9	634.6	628.1	621.8	619.7	615.3	612.3	610.6	612.5
5°	659.7	656.0	645.0	631.1	616.5	600.7	589.5	579.3	571.8	564.9	567.7
7.5°	678.3	671.8	652.9	628.5	602.5	576.3	556.7	541.9	531.9	525.4	526.8
10°	699.9	689.9	661.1	624.6	584.4	546.7	523.7	511.0	504.7	501.2	502.1
12.5°	724.7	710.6	669.4	615.5	556.7	513.8	498.0	494.2	494.5	494.7	495.2
15°	755.4	735.7	676.2	595.8	520.7	488.4	485.6	491.7	498.0	501.0	500.7
17.5°	790.0	762.1	677.3	563.2	485.4	472.2	481.0	494.0	503.5	507.7	508.6
20°	827.2	789.1	669.0	517.2	456.4	458.9	474.7	491.4	501.9	507.2	508.6
22.5°	869.7	817.9	649.0	468.9	432.7	444.5	463.1	479.4	490.3	495.6	497.0
25°	918.3	850.2	617.6	428.2	412.2	428.2	446.8	460.3	469.1	474.0	475.4
27.5°	972.2	883.9	575.8	395.9	394.3	411.5	426.8	437.3	442.0	445.7	447.1
30°	1026.3	914.6	525.1	371.5	378.8	395.0	405.9	410.6	412.0	412.7	414.3
32.5°	1084.9	941.1	471.9	351.3	363.9	379.0	385.5	387.6	381.1	376.7	378.1
35°	1155.8	969.4	419.9	335.3	349.2	362.3	364.3	362.5	354.8	345.8	346.2
37.5°	1243.4	1004.7	378.3	323.9	335.5	344.1	341.6	341.1	341.8	331.1	331.8
40°	1350.7	1050.7	347.8	315.1	324.4	326.2	319.0	323.0	326.5	310.2	310.7
42.5°	1469.9	1106.3	328.6	309.0	315.1	310.7	299.5	303.9	303.5	282.1	281.9
45°	1591.4	1166.7	321.8	304.6	306.5	297.7	285.3	286.5	276.7	257.5	258.2
47.5°	1712.3	1231.5	326.0	300.9	295.8	285.8	276.3	271.2	256.8	242.4	242.4
50°	1830.8	1299.6	341.3	293.5	281.2	275.3	268.4	259.3	244.0	231.7	230.7
52.5°	1940.7	1368.1	358.5	281.2	262.8	266.3	261.9	251.4	236.3	223.8	224.0
55°	2044.8	1436.7	365.3	264.2	245.6	258.4	255.8	236.5	218.4	208.2	207.3
57.5°	2158.2	1519.2	357.8	242.6	231.7	249.3	239.6	218.2	207.7	200.1	199.4
60°	2315.3	1648.6	341.8	215.9	218.4	235.8	219.1	210.3	198.9	190.3	189.8
62.5°	2576.2	1890.0	316.0	189.4	202.9	215.9	209.4	200.5	188.9	180.5	180.5
65°	2961.9	2225.6	267.4	168.7	185.4	196.3	198.9	190.1	178.0	169.2	169.6
67.5°	3287.2	2436.1	202.4	151.5	167.5	180.5	187.7	179.2	166.4	157.8	158.0
70°	3269.3	2283.2	154.5	134.5	151.7	165.0	174.3	167.5	153.8	145.7	146.4
72.5°	2903.8	1910.0	125.0	117.3	135.7	148.7	159.9	154.8	140.8	132.9	132.9
75°	2133.3	1355.8	99.9	99.9	115.7	131.7	144.1	140.8	128.0	122.5	120.8
77.5°	899.2	568.8	78.3	83.0	96.2	113.2	128.5	129.7	118.5	125.5	113.9
80°	239.1	156.8	59.7	65.3	75.5	93.4	111.8	111.3	99.2	92.7	86.2
82.5°	91.1	61.8	42.5	46.0	54.6	71.6	88.5	91.3	79.2	68.5	68.5
85°	35.1	26.5	26.3	27.7	31.8	47.4	66.9	69.2	59.7	50.7	52.3
87.5°	9.1	7.9	9.8	9.3	14.6	25.3	38.3	39.7	36.5	21.1	30.2
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)