

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: P881607

Luminaire Tested: **NAV-SB1A-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881607  
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-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

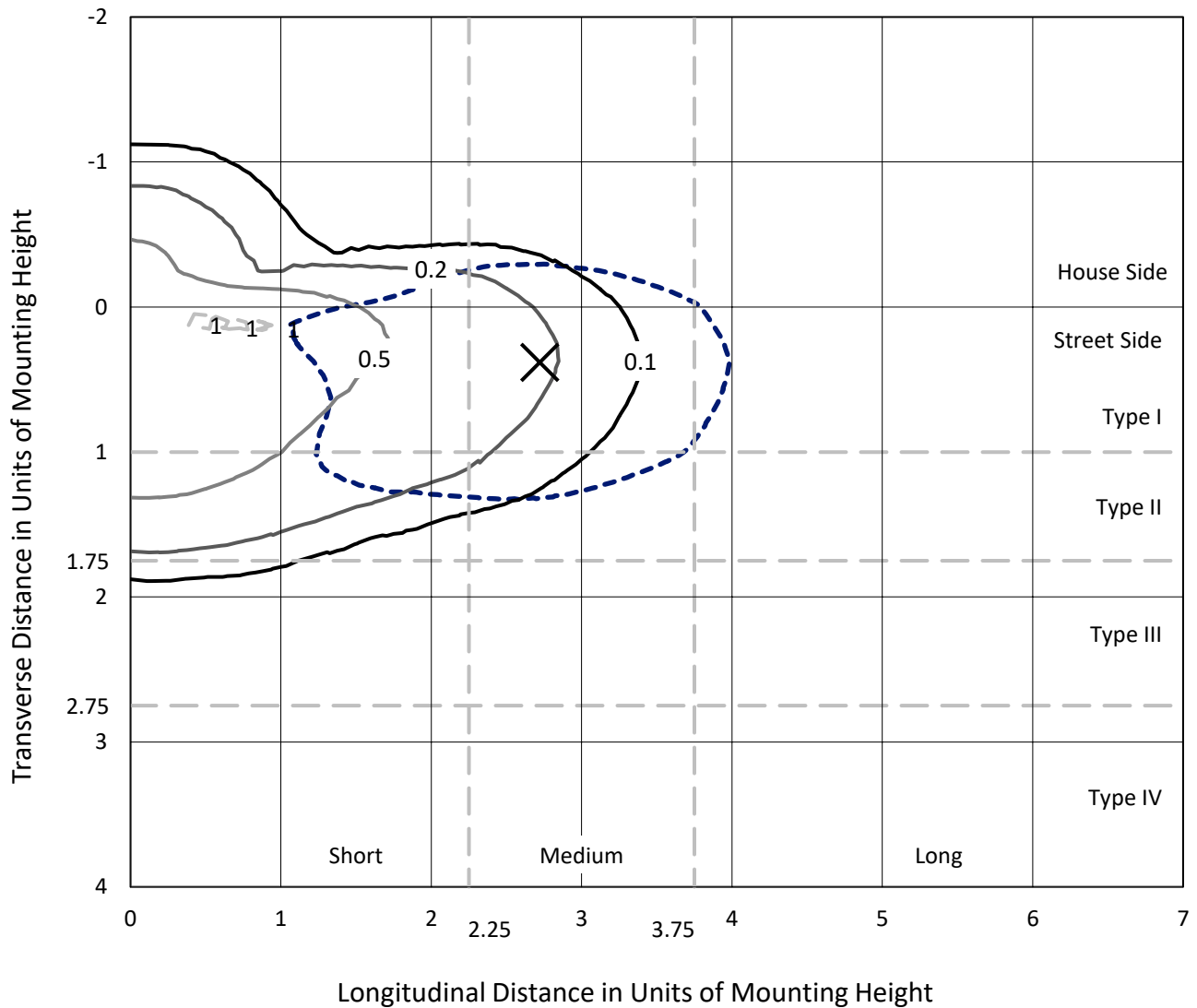
Lumens per Lamp: N/A  
Luminaire Lumens: 3892 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

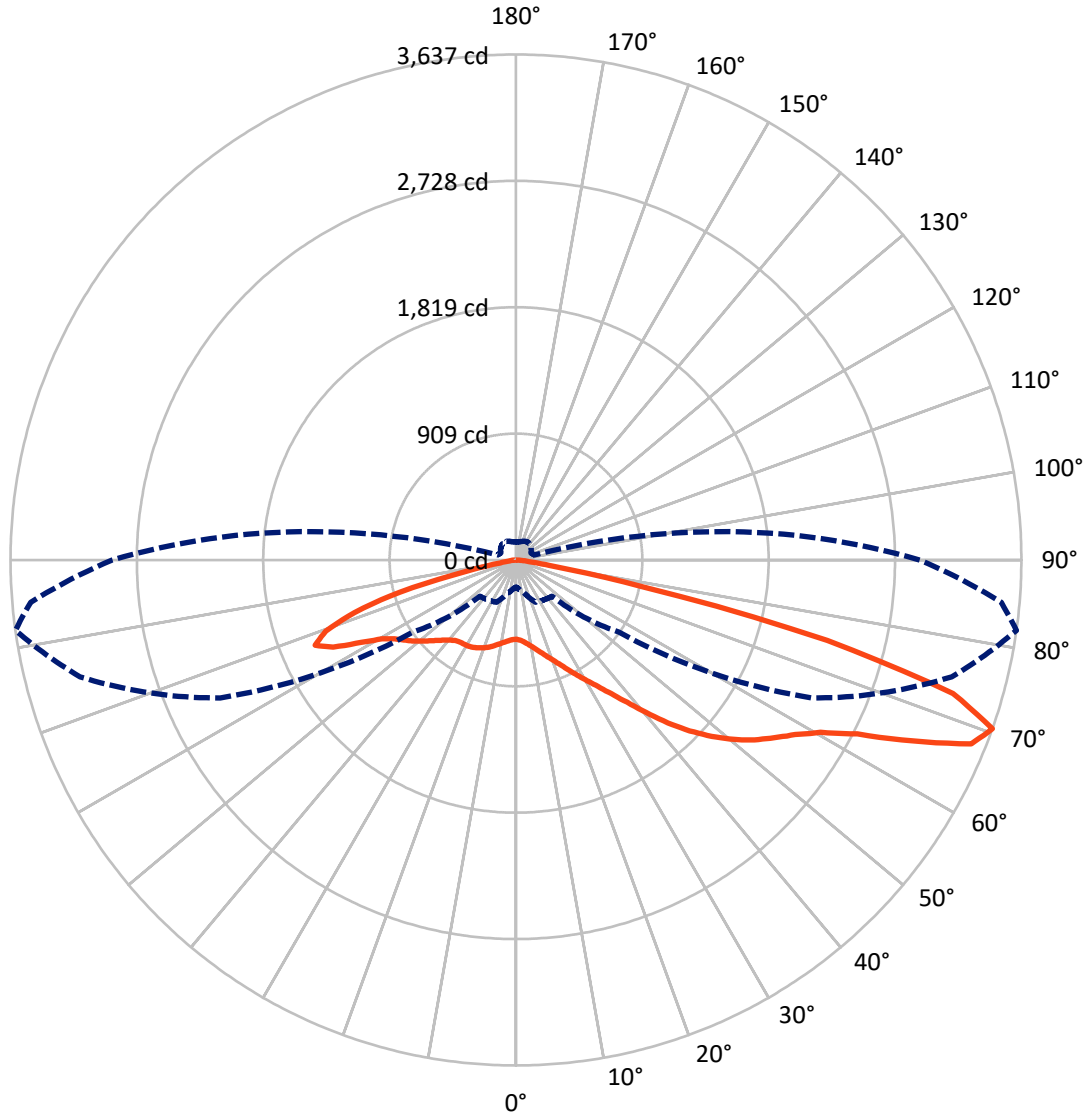
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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
<b>House Side</b>	Lumens	959.5	0.0	959.5
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	2932.5	0.0	2932.5
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	3892.0	0.0	3892.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.9	1.4
10°-20°	154.8	4.0
20°-30°	258.9	6.7
30°-40°	404.5	10.4
40°-50°	644.3	16.6
50°-60°	896.6	23.0
60°-70°	937.9	24.1
70°-80°	490.2	12.6
80°-90°	50.9	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°	3892.0	100.0
0°-180°	3892.0	100.0

**Coefficient of Utilization**

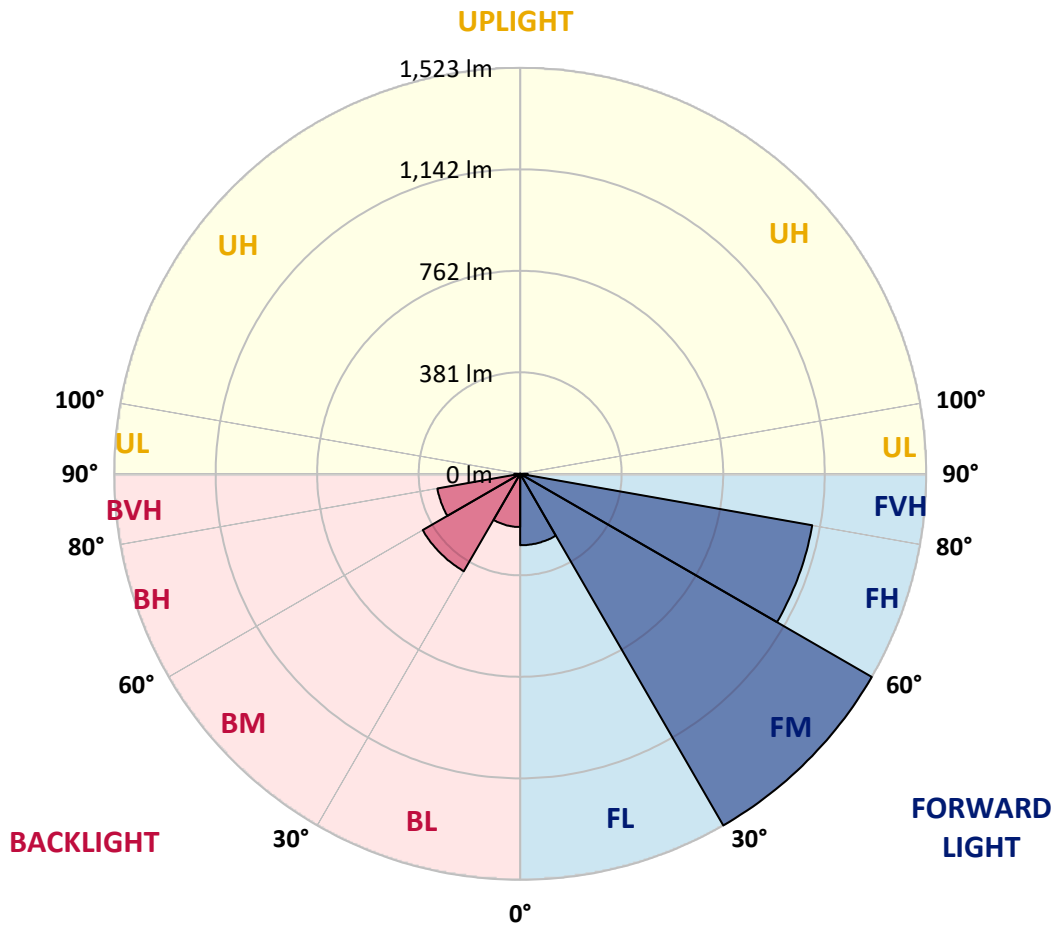


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	268.0	6.9			
FM (30°-60°)	1523.3	39.1			
FH (60°-80°)	1112.7	28.6			G1/1800
FVH (80°-90°)	28.5	0.7			G1/100
BL (0°-30°)	199.6	5.1	B1/500		
BM (30°-60°)	422.1	10.8	B1/1000		
BH (60°-80°)	315.3	8.1	B1/500		G1/500
BVH (80°-90°)	22.4	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°	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6
2.5°	584.2	587.6	586.5	585.5	585.5	584.0	583.8	581.8	580.1	577.4	576.8
5°	591.7	595.2	594.8	595.6	598.3	598.9	599.5	598.3	595.0	591.7	590.2
7.5°	585.1	589.0	590.2	595.2	603.5	610.9	616.5	618.7	615.6	610.9	608.6
10°	562.8	567.1	571.4	583.2	597.9	615.4	630.3	639.2	638.6	634.0	630.1
12.5°	517.5	522.1	531.4	554.3	581.1	612.1	639.8	658.4	664.8	661.5	654.7
15°	481.4	485.3	492.3	515.9	550.8	597.9	643.3	679.5	695.8	693.9	685.6
17.5°	480.4	482.0	486.4	497.5	524.4	575.6	639.6	700.1	731.3	731.1	720.8
20°	498.5	499.2	501.6	503.9	519.2	558.6	630.1	717.2	771.1	771.1	760.0
22.5°	523.7	523.3	525.8	523.7	531.2	557.2	624.1	732.3	815.5	818.9	804.8
25°	561.5	559.5	558.8	554.1	555.5	570.6	630.7	749.5	868.2	875.0	857.5
27.5°	611.9	608.6	606.3	595.4	591.7	598.3	651.0	770.1	926.9	938.6	916.3
30°	677.6	671.6	668.3	649.3	635.9	636.9	681.5	797.6	988.2	1007.2	978.9
32.5°	767.2	757.9	749.0	717.9	693.3	685.2	721.0	835.6	1054.7	1085.1	1048.7
35°	867.6	860.2	850.7	802.5	764.7	746.2	774.2	888.7	1132.6	1180.7	1133.4
37.5°	964.2	957.8	962.4	897.5	848.8	821.7	844.0	959.9	1228.6	1299.6	1239.5
40°	1064.2	1059.2	1059.9	997.9	941.1	910.8	928.7	1049.3	1338.7	1441.1	1367.2
42.5°	1172.8	1169.1	1156.7	1101.8	1038.0	1009.7	1026.2	1152.6	1456.8	1602.2	1507.2
45°	1294.5	1292.2	1280.6	1217.6	1144.5	1112.7	1135.0	1266.6	1575.5	1753.8	1647.8
47.5°	1399.6	1401.4	1400.0	1346.9	1271.1	1224.5	1251.1	1385.5	1686.0	1896.3	1782.7
50°	1450.2	1459.9	1474.1	1457.6	1410.5	1363.0	1368.2	1500.4	1791.4	2029.9	1912.0
52.5°	1423.8	1442.1	1481.0	1507.4	1525.6	1515.7	1501.8	1614.4	1890.5	2150.5	2034.2
55°	1325.2	1351.1	1415.5	1479.3	1572.0	1644.1	1662.3	1740.8	1987.1	2256.6	2149.9
57.5°	1145.8	1187.7	1245.5	1374.6	1530.7	1706.3	1849.4	1916.1	2089.6	2370.0	2270.9
60°	838.1	894.2	966.1	1158.2	1386.2	1673.0	2008.6	2185.4	2235.2	2516.9	2428.5
62.5°	536.3	571.0	637.1	818.0	1080.1	1502.6	2057.4	2522.0	2482.0	2757.7	2664.7
65°	367.2	389.5	450.0	551.6	698.2	1118.5	1926.8	2774.4	2873.9	3139.3	3068.7
67.5°	266.8	283.8	335.4	424.4	455.0	661.9	1495.2	2762.8	3255.0	3532.5	3422.7
70°	194.5	206.5	249.9	335.4	350.1	368.2	905.8	2348.5	3246.7	3637.0	3505.5
72.5°	144.2	152.4	181.5	260.2	283.3	248.7	448.4	1706.9	2789.9	3289.7	3184.1
75°	104.3	110.5	132.0	199.1	226.8	189.4	223.7	997.5	1946.0	2314.1	2332.6
77.5°	79.7	84.5	98.5	145.8	181.5	142.1	138.8	458.9	922.7	927.3	979.3
80°	64.0	67.1	74.8	102.6	139.2	106.4	90.5	185.2	291.6	246.8	259.0
82.5°	47.1	52.2	63.2	72.1	99.5	73.3	55.1	93.6	110.9	95.4	96.2
85°	26.8	30.4	38.2	51.6	63.6	44.8	31.6	41.5	51.6	42.3	37.8
87.5°	9.5	12.4	13.4	20.2	27.7	18.6	12.2	12.0	16.9	12.6	10.5
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°	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6	570.6
2.5°	574.7	573.7	569.6	564.0	558.2	552.6	550.8	546.9	544.2	542.7	544.4
5°	586.3	583.0	573.3	560.9	547.9	533.9	523.9	514.9	508.2	502.1	504.5
7.5°	602.8	597.1	580.3	558.6	535.5	512.2	494.8	481.6	472.7	466.9	468.2
10°	622.0	613.2	587.6	555.1	519.4	485.9	465.5	454.1	448.6	445.5	446.3
12.5°	644.1	631.5	595.0	547.1	494.8	456.6	442.6	439.3	439.5	439.7	440.1
15°	671.4	653.8	601.0	529.5	462.8	434.1	431.6	437.0	442.6	445.3	445.1
17.5°	702.2	677.4	602.0	500.6	431.4	419.6	427.5	439.1	447.5	451.2	452.1
20°	735.2	701.3	594.6	459.7	405.6	407.9	421.9	436.8	446.1	450.8	452.1
22.5°	773.0	727.0	576.8	416.8	384.5	395.1	411.6	426.1	435.8	440.5	441.7
25°	816.2	755.7	548.9	380.6	366.4	380.6	397.1	409.1	417.0	421.3	422.5
27.5°	864.1	785.6	511.8	351.9	350.5	365.7	379.4	388.7	392.8	396.1	397.3
30°	912.2	812.9	466.7	330.2	336.6	351.1	360.8	364.9	366.2	366.8	368.2
32.5°	964.2	836.4	419.4	312.3	323.4	336.8	342.6	344.5	338.7	334.8	336.0
35°	1027.2	861.6	373.2	298.0	310.4	322.0	323.8	322.2	315.4	307.3	307.7
37.5°	1105.1	893.0	336.2	287.9	298.2	305.9	303.6	303.2	303.8	294.3	294.9
40°	1200.5	933.9	309.2	280.0	288.3	290.0	283.6	287.1	290.2	275.7	276.1
42.5°	1306.4	983.2	292.0	274.7	280.0	276.1	266.2	270.1	269.7	250.7	250.5
45°	1414.5	1036.9	286.0	270.7	272.4	264.6	253.6	254.6	246.0	228.8	229.4
47.5°	1521.8	1094.6	289.7	267.4	262.9	254.0	245.6	241.0	228.2	215.4	215.4
50°	1627.2	1155.1	303.4	260.8	249.9	244.7	238.5	230.5	216.8	205.9	205.1
52.5°	1724.9	1216.0	318.7	249.9	233.6	236.7	232.7	223.5	210.0	198.9	199.1
55°	1817.4	1276.9	324.7	234.8	218.3	229.7	227.4	210.2	194.1	185.0	184.2
57.5°	1918.2	1350.2	318.0	215.6	205.9	221.6	212.9	193.9	184.6	177.8	177.2
60°	2057.8	1465.3	303.8	191.9	194.1	209.6	194.7	186.9	176.8	169.1	168.7
62.5°	2289.7	1679.8	280.9	168.3	180.3	191.9	186.1	178.2	167.9	160.5	160.5
65°	2632.5	1978.1	237.7	149.9	164.8	174.5	176.8	168.9	158.2	150.3	150.8
67.5°	2921.6	2165.2	179.9	134.7	148.9	160.5	166.9	159.2	147.9	140.2	140.4
70°	2905.7	2029.3	137.3	119.6	134.9	146.6	154.9	148.9	136.7	129.5	130.1
72.5°	2580.9	1697.6	111.1	104.3	120.6	132.2	142.1	137.5	125.2	118.1	118.1
75°	1896.1	1205.0	88.8	88.8	102.8	117.1	128.0	125.2	113.8	108.8	107.4
77.5°	799.2	505.6	69.6	73.7	85.5	100.6	114.2	115.2	105.3	111.5	101.2
80°	212.5	139.4	53.1	58.0	67.1	83.0	99.3	98.9	88.2	82.4	76.6
82.5°	81.0	54.9	37.8	40.9	48.5	63.6	78.7	81.2	70.4	60.9	60.9
85°	31.2	23.5	23.3	24.6	28.3	42.1	59.5	61.5	53.1	45.0	46.5
87.5°	8.1	7.0	8.7	8.3	13.0	22.5	34.1	35.3	32.4	18.8	26.8
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)