

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: P881617

Luminaire Tested: **NAV-SB1A-835-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881617  
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-835-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

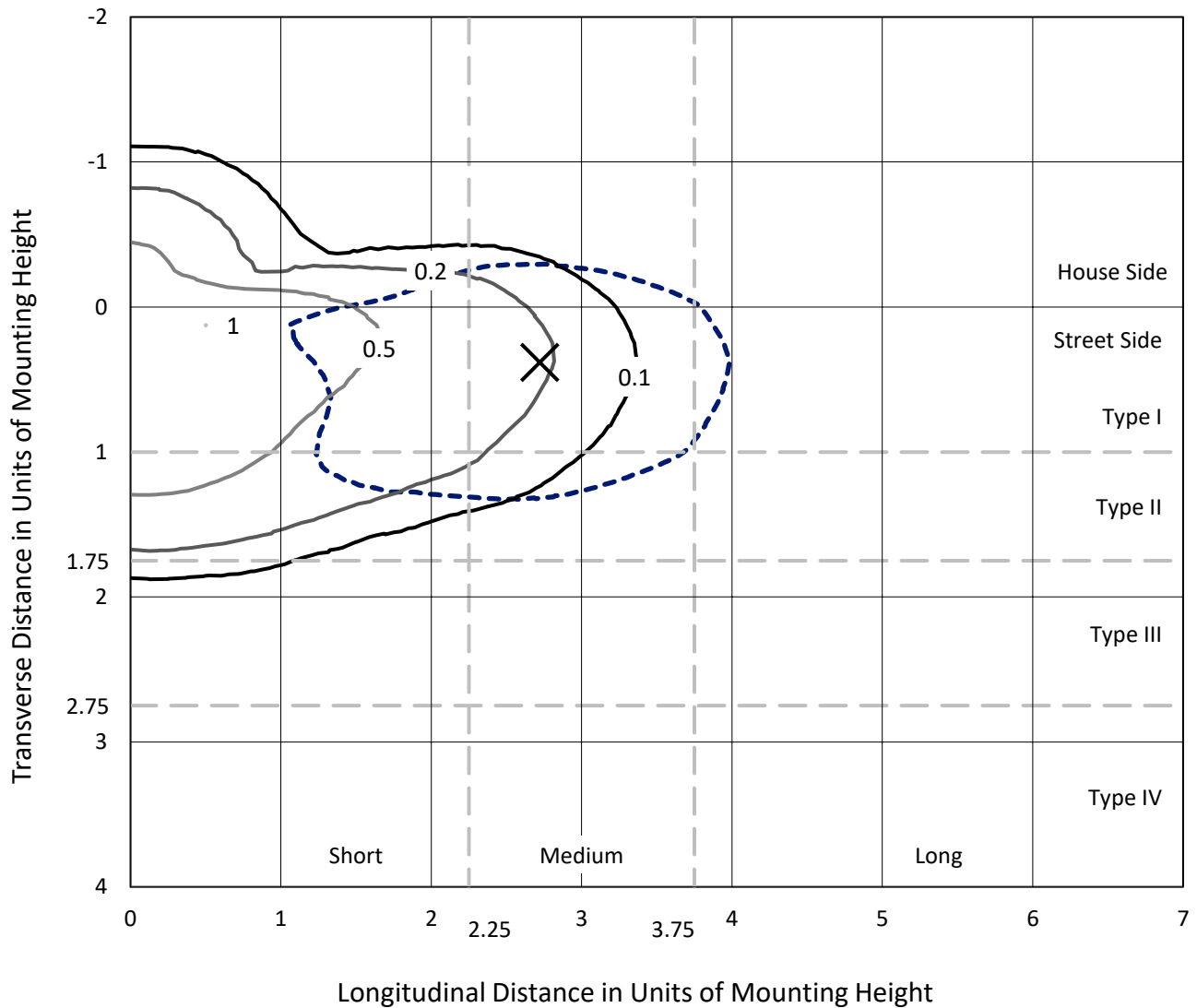
Lumens per Lamp: N/A  
Luminaire Lumens: 3753 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

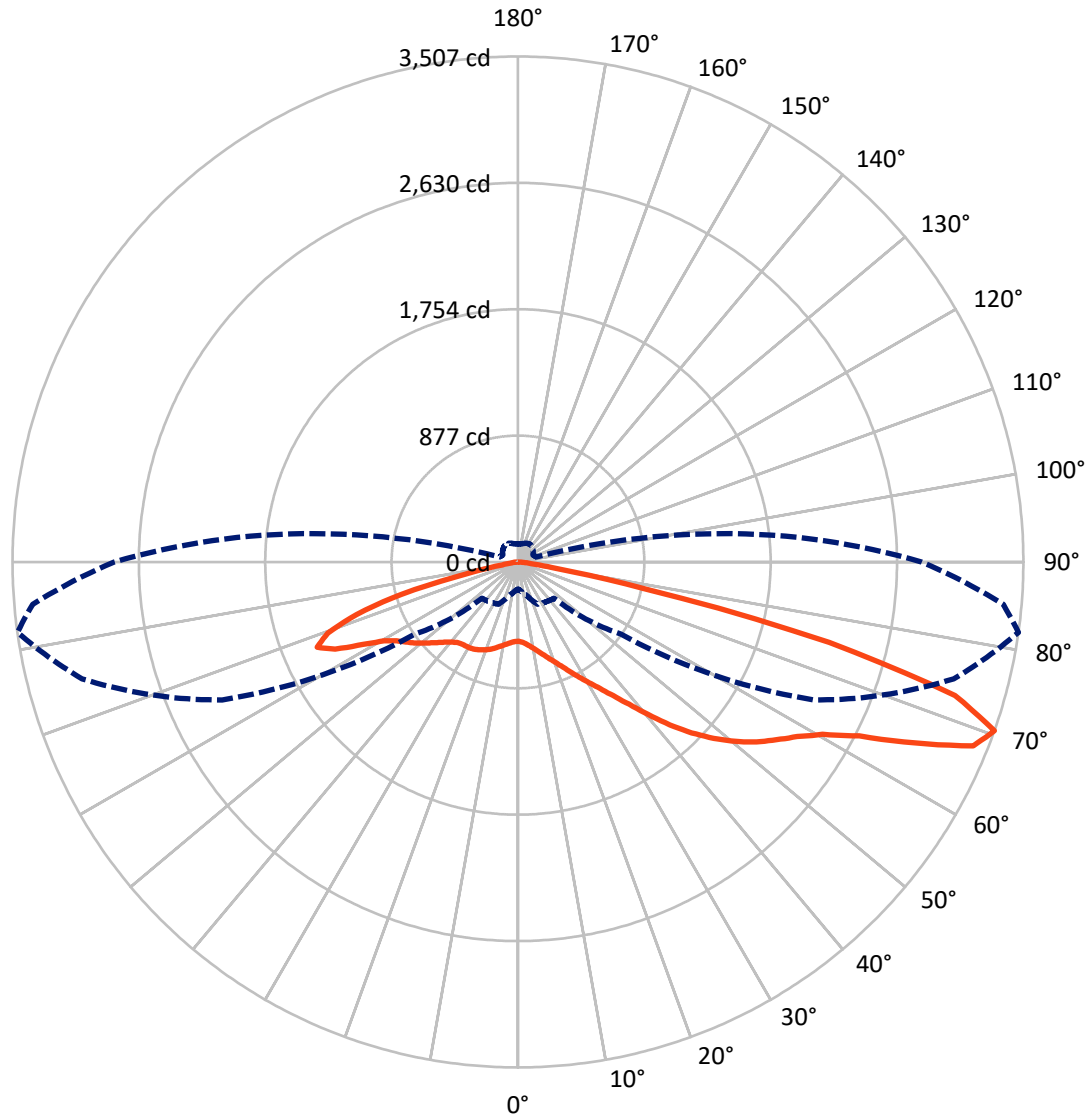
✕ Max cd  
 - - - 1/2 Max cd



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	925.2	0.0	925.2
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	2827.8	0.0	2827.8
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	3753.0	0.0	3753.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.0	1.4
10°-20°	149.3	4.0
20°-30°	249.7	6.7
30°-40°	390.1	10.4
40°-50°	621.3	16.6
50°-60°	864.6	23.0
60°-70°	904.4	24.1
70°-80°	472.7	12.6
80°-90°	49.1	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°	3753.0	100.0
0°-180°	3753.0	100.0

**Coefficient of Utilization**

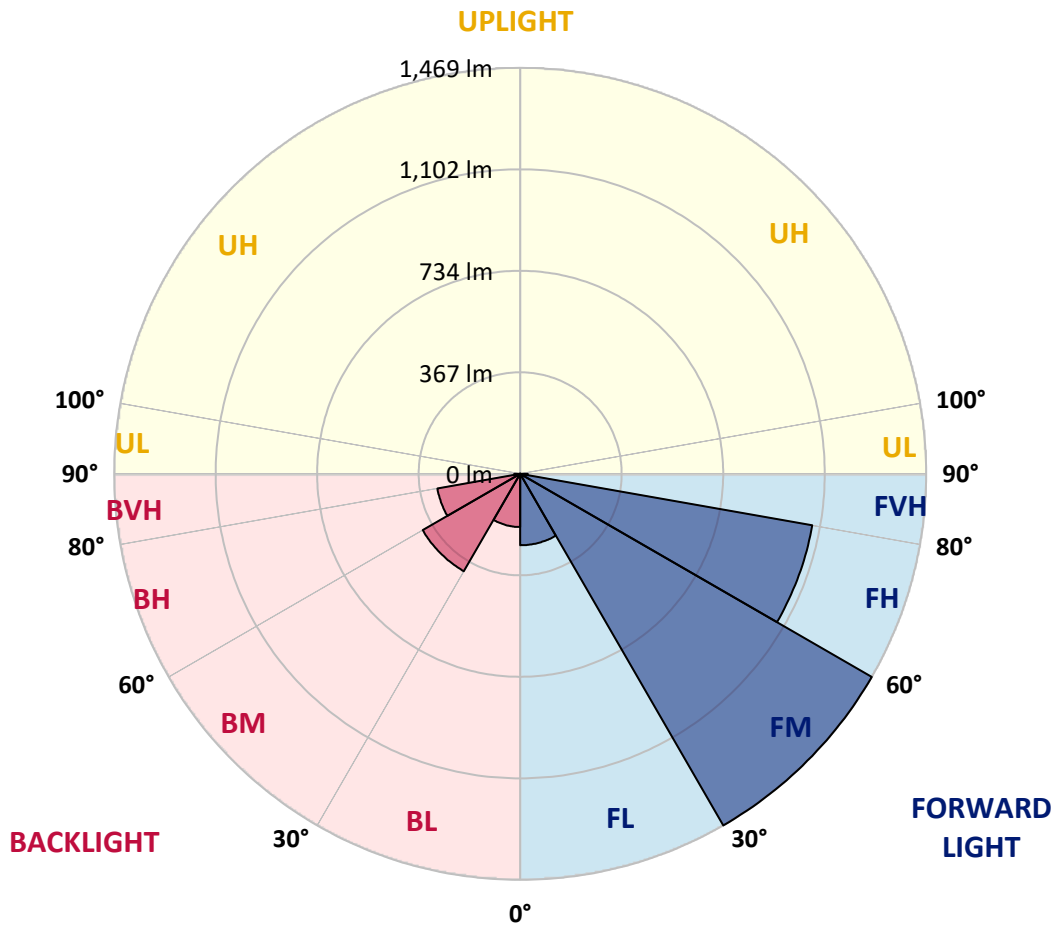


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	258.4	6.9			
FM (30°-60°)	1468.9	39.1			
FH (60°-80°)	1073.0	28.6			G1/1800
FVH (80°-90°)	27.5	0.7			G1/100
BL (0°-30°)	192.5	5.1	B1/500		
BM (30°-60°)	407.1	10.8	B1/1000		
BH (60°-80°)	304.1	8.1	B1/500		G1/500
BVH (80°-90°)	21.6	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°	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2
2.5°	563.4	566.6	565.6	564.6	564.6	563.2	563.0	561.0	559.4	556.8	556.2
5°	570.5	573.9	573.5	574.3	576.9	577.5	578.1	576.9	573.7	570.5	569.2
7.5°	564.2	568.0	569.2	573.9	581.9	589.1	594.4	596.6	593.7	589.1	586.9
10°	542.7	546.9	551.0	562.4	576.5	593.5	607.8	616.4	615.8	611.4	607.6
12.5°	499.1	503.4	512.4	534.5	560.4	590.3	617.0	634.9	641.0	637.9	631.3
15°	464.2	468.0	474.8	497.5	531.1	576.5	620.3	655.2	670.9	669.1	661.2
17.5°	463.2	464.8	469.0	479.7	505.6	555.0	616.8	675.1	705.2	705.0	695.0
20°	480.7	481.3	483.7	485.9	500.6	538.7	607.6	691.6	743.6	743.6	732.9
22.5°	505.0	504.6	507.0	505.0	512.2	537.3	601.8	706.2	786.4	789.6	776.1
25°	541.5	539.5	538.9	534.3	535.7	550.2	608.2	722.7	837.2	843.8	826.8
27.5°	590.1	586.9	584.7	574.1	570.5	576.9	627.7	742.6	893.8	905.1	883.6
30°	653.4	647.6	644.4	626.1	613.2	614.2	657.2	769.1	952.9	971.2	943.9
32.5°	739.8	730.9	722.3	692.2	668.5	660.8	695.2	805.7	1017.0	1046.3	1011.3
35°	836.6	829.4	820.3	773.9	737.4	719.5	746.6	856.9	1092.1	1138.5	1092.9
37.5°	929.8	923.6	928.0	865.5	818.5	792.4	813.9	925.6	1184.7	1253.2	1195.3
40°	1026.2	1021.4	1022.0	962.3	907.5	878.2	895.6	1011.9	1290.9	1389.6	1318.3
42.5°	1130.9	1127.4	1115.4	1062.4	1000.9	973.6	989.5	1111.4	1404.8	1545.0	1453.4
45°	1248.2	1246.0	1234.9	1174.2	1103.7	1073.0	1094.5	1221.4	1519.3	1691.1	1589.0
47.5°	1349.6	1351.4	1350.0	1298.8	1225.7	1180.7	1206.4	1336.1	1625.8	1828.5	1719.0
50°	1398.4	1407.8	1421.5	1405.6	1360.2	1314.4	1319.3	1446.8	1727.4	1957.4	1843.7
52.5°	1372.9	1390.6	1428.1	1453.6	1471.1	1461.5	1448.2	1556.7	1823.0	2073.7	1961.6
55°	1277.9	1302.8	1364.9	1426.5	1515.9	1585.4	1602.9	1678.6	1916.2	2176.1	2073.1
57.5°	1104.9	1145.3	1201.0	1325.5	1476.1	1645.3	1783.3	1847.7	2014.9	2285.4	2189.8
60°	808.1	862.3	931.6	1116.8	1336.7	1613.3	1936.9	2107.3	2155.3	2427.0	2341.7
62.5°	517.2	550.6	614.4	788.8	1041.5	1449.0	1983.9	2432.0	2393.3	2659.2	2569.6
65°	354.1	375.6	433.9	531.9	673.3	1078.6	1858.0	2675.3	2771.3	3027.2	2959.1
67.5°	257.3	273.6	323.4	409.2	438.7	638.3	1441.8	2664.2	3138.7	3406.4	3300.4
70°	187.6	199.1	241.0	323.4	337.6	355.1	873.4	2264.7	3130.8	3507.1	3380.3
72.5°	139.0	147.0	175.0	250.9	273.2	239.8	432.3	1645.9	2690.2	3172.2	3070.4
75°	100.6	106.5	127.3	192.0	218.7	182.6	215.7	961.9	1876.5	2231.4	2249.3
77.5°	76.9	81.5	95.0	140.6	175.0	137.0	133.8	442.5	889.8	894.2	944.3
80°	61.7	64.7	72.1	99.0	134.2	102.6	87.2	178.6	281.2	238.0	249.7
82.5°	45.4	50.4	60.9	69.5	96.0	70.7	53.2	90.2	106.9	92.0	92.8
85°	25.9	29.3	36.8	49.8	61.3	43.2	30.5	40.0	49.8	40.8	36.4
87.5°	9.2	11.9	12.9	19.5	26.7	17.9	11.7	11.6	16.3	12.1	10.2
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°	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2	550.2
2.5°	554.2	553.2	549.2	543.9	538.3	532.9	531.1	527.3	524.7	523.4	524.9
5°	565.4	562.2	552.8	540.9	528.3	514.8	505.2	496.5	490.1	484.1	486.5
7.5°	581.3	575.7	559.6	538.7	516.4	493.9	477.2	464.4	455.8	450.3	451.5
10°	599.8	591.3	566.6	535.3	500.8	468.6	448.9	437.9	432.5	429.6	430.4
12.5°	621.1	609.0	573.7	527.5	477.2	440.3	426.8	423.6	423.8	424.0	424.4
15°	647.4	630.5	579.5	510.6	446.3	418.6	416.2	421.4	426.8	429.4	429.2
17.5°	677.1	653.2	580.5	482.7	416.0	404.7	412.2	423.4	431.5	435.1	435.9
20°	709.0	676.3	573.3	443.3	391.1	393.3	406.9	421.2	430.2	434.7	435.9
22.5°	745.4	701.0	556.2	401.9	370.8	381.0	396.9	410.8	420.2	424.8	426.0
25°	787.0	728.7	529.3	367.0	353.3	367.0	383.0	394.5	402.1	406.3	407.4
27.5°	833.2	757.5	493.5	339.3	337.9	352.7	365.8	374.8	378.8	382.0	383.2
30°	879.6	783.8	450.1	318.4	324.6	338.5	347.9	351.9	353.1	353.7	355.1
32.5°	929.8	806.5	404.5	301.1	311.9	324.8	330.4	332.2	326.6	322.8	324.0
35°	990.5	830.8	359.9	287.4	299.3	310.5	312.3	310.7	304.1	296.3	296.7
37.5°	1065.6	861.1	324.2	277.6	287.6	294.9	292.7	292.3	292.9	283.8	284.4
40°	1157.6	900.5	298.1	270.0	278.0	279.6	273.4	276.8	279.8	265.9	266.3
42.5°	1259.8	948.1	281.6	264.9	270.0	266.3	256.7	260.5	260.1	241.8	241.6
45°	1363.9	999.9	275.8	261.1	262.7	255.1	244.5	245.5	237.2	220.7	221.2
47.5°	1467.5	1055.5	279.4	257.9	253.5	244.9	236.8	232.4	220.1	207.7	207.7
50°	1569.1	1113.8	292.5	251.5	241.0	236.0	230.0	222.2	209.1	198.5	197.8
52.5°	1663.3	1172.6	307.3	241.0	225.2	228.2	224.4	215.5	202.5	191.8	192.0
55°	1752.5	1231.3	313.1	226.4	210.5	221.4	219.3	202.7	187.2	178.4	177.6
57.5°	1849.7	1302.0	306.7	207.9	198.5	213.7	205.3	187.0	178.0	171.5	170.9
60°	1984.3	1412.9	292.9	185.0	187.2	202.1	187.8	180.2	170.5	163.1	162.7
62.5°	2207.9	1619.8	270.8	162.3	173.9	185.0	179.4	171.9	161.9	154.7	154.7
65°	2538.5	1907.4	229.2	144.6	158.9	168.3	170.5	162.9	152.5	145.0	145.4
67.5°	2817.3	2087.8	173.5	129.8	143.6	154.7	160.9	153.5	142.6	135.2	135.4
70°	2802.0	1956.8	132.4	115.3	130.0	141.4	149.4	143.6	131.8	124.9	125.5
72.5°	2488.7	1637.0	107.1	100.6	116.3	127.5	137.0	132.6	120.7	113.9	113.9
75°	1828.3	1162.0	85.6	85.6	99.2	112.9	123.5	120.7	109.7	104.9	103.6
77.5°	770.7	487.5	67.1	71.1	82.4	97.0	110.1	111.1	101.6	107.5	97.6
80°	204.9	134.4	51.2	56.0	64.7	80.1	95.8	95.4	85.0	79.5	73.9
82.5°	78.1	53.0	36.4	39.4	46.8	61.3	75.9	78.3	67.9	58.7	58.7
85°	30.1	22.7	22.5	23.7	27.3	40.6	57.4	59.3	51.2	43.4	44.8
87.5°	7.8	6.8	8.4	8.0	12.5	21.7	32.9	34.1	31.3	18.1	25.9
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)