

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: P881537

Luminaire Tested: **NAV-SB1A-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881537
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-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4031 lumens
Efficiency: N/A
Efficacy: 130.5 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

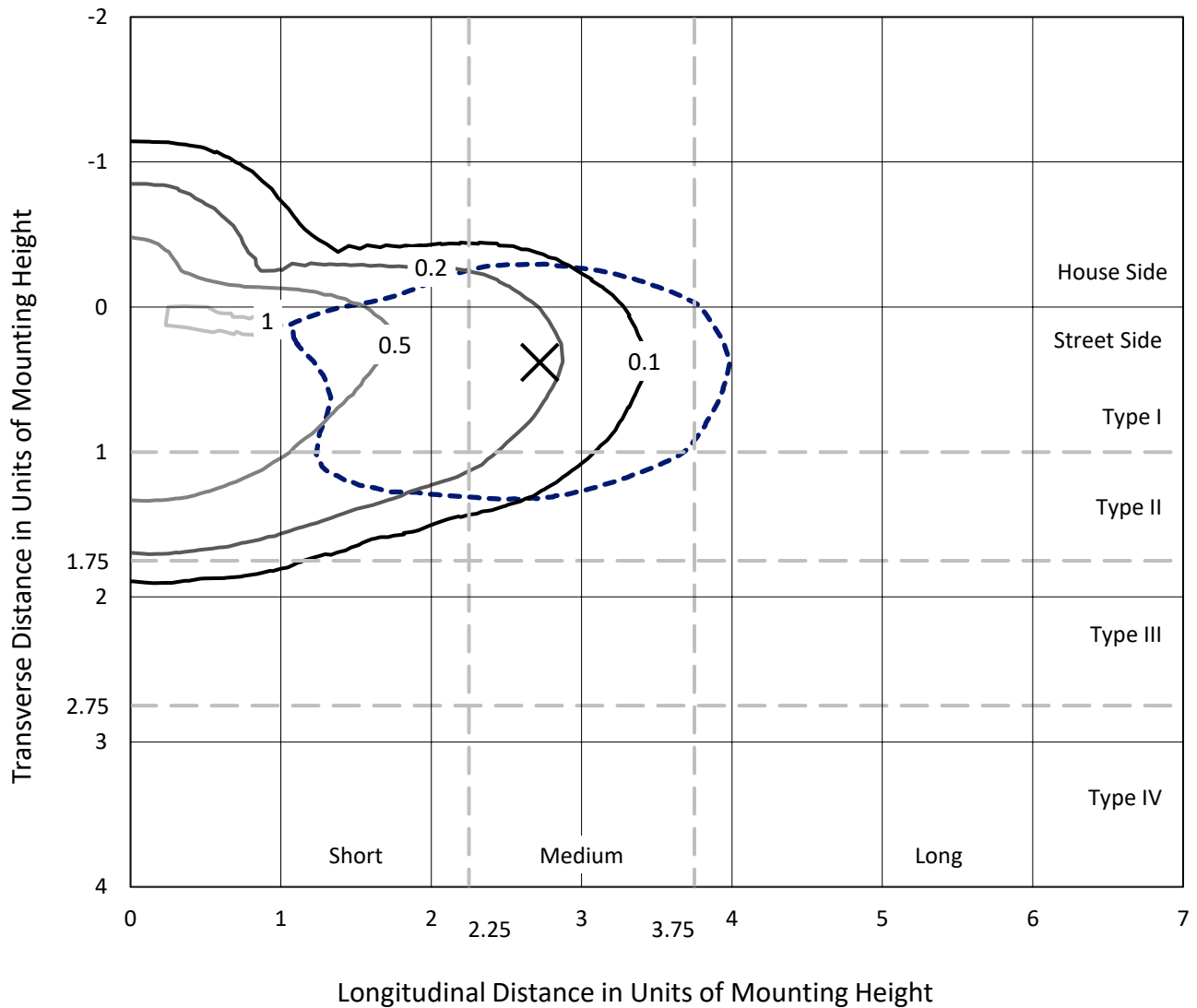
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

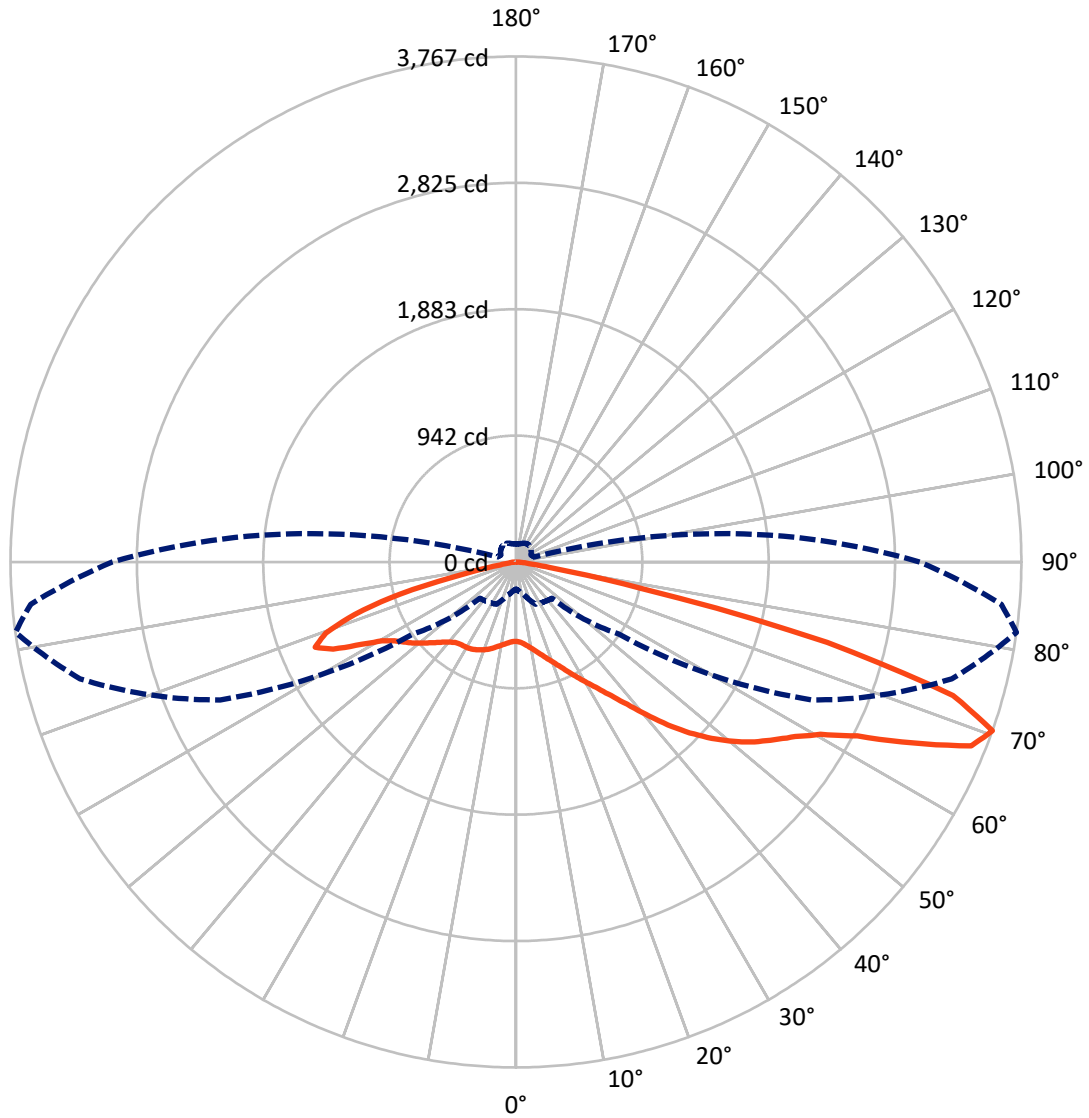
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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
House Side	Lumens	993.7	0.0	993.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3037.3	0.0	3037.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	4031.0	0.0	4031.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	1.4
10°-20°	160.3	4.0
20°-30°	268.2	6.7
30°-40°	419.0	10.4
40°-50°	667.3	16.6
50°-60°	928.6	23.0
60°-70°	971.4	24.1
70°-80°	507.7	12.6
80°-90°	52.7	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°	4031.0	100.0
0°-180°	4031.0	100.0

Coefficient of Utilization

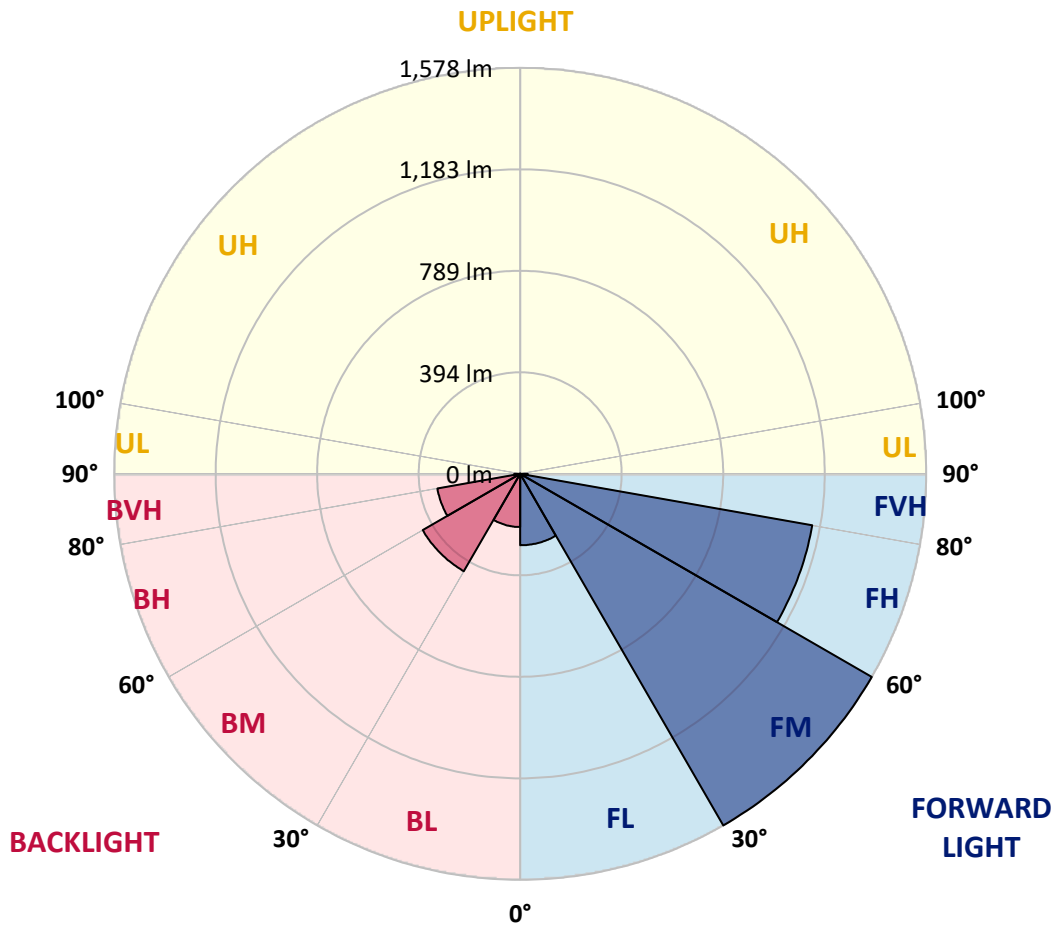


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	277.6	6.9			
FM (30°-60°)	1577.7	39.1			
FH (60°-80°)	1152.5	28.6			G1/1800
FVH (80°-90°)	29.5	0.7			G1/100
BL (0°-30°)	206.7	5.1	B1/500		
BM (30°-60°)	437.2	10.8	B1/1000		
BH (60°-80°)	326.6	8.1	B1/500		G1/500
BVH (80°-90°)	23.2	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°	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0
2.5°	605.1	608.5	607.5	606.4	606.4	604.9	604.7	602.5	600.8	598.1	597.4
5°	612.8	616.4	616.0	616.9	619.7	620.3	620.9	619.7	616.2	612.8	611.3
7.5°	606.0	610.0	611.3	616.4	625.0	632.7	638.5	640.8	637.6	632.7	630.4
10°	582.9	587.4	591.9	604.0	619.2	637.4	652.8	662.0	661.4	656.7	652.6
12.5°	536.0	540.7	550.4	574.1	601.9	634.0	662.7	681.9	688.5	685.1	678.1
15°	498.6	502.7	509.9	534.3	570.5	619.2	666.3	703.7	720.6	718.7	710.1
17.5°	497.5	499.2	503.7	515.3	543.1	596.1	662.4	725.1	757.4	757.2	746.5
20°	516.3	517.0	519.6	521.9	537.7	578.6	652.6	742.9	798.7	798.7	787.1
22.5°	542.4	542.0	544.6	542.4	550.1	577.1	646.4	758.5	844.7	848.1	833.6
25°	581.6	579.4	578.8	573.9	575.4	591.0	653.2	776.2	899.2	906.3	888.1
27.5°	633.8	630.4	628.0	616.7	612.8	619.7	674.2	797.6	960.0	972.2	949.1
30°	701.8	695.6	692.2	672.5	658.6	659.7	705.9	826.1	1023.5	1043.2	1013.9
32.5°	794.6	785.0	775.8	743.5	718.0	709.7	746.7	865.4	1092.4	1123.8	1086.2
35°	898.6	890.9	881.0	831.2	792.1	772.8	801.9	920.4	1173.0	1222.8	1173.9
37.5°	998.7	992.1	996.8	929.6	879.1	851.1	874.2	994.2	1272.5	1346.0	1283.8
40°	1102.2	1097.1	1097.7	1033.5	974.7	943.3	961.9	1086.8	1386.5	1492.6	1416.0
42.5°	1214.7	1210.9	1198.0	1141.1	1075.0	1045.7	1062.8	1193.8	1508.8	1659.4	1561.0
45°	1340.7	1338.3	1326.4	1261.1	1185.4	1152.5	1175.6	1311.8	1631.8	1816.4	1706.7
47.5°	1449.6	1451.5	1450.0	1395.0	1316.5	1268.2	1295.8	1435.0	1746.2	1964.0	1846.4
50°	1502.0	1512.0	1526.8	1509.7	1460.9	1411.7	1417.1	1554.0	1855.3	2102.4	1980.3
52.5°	1474.6	1493.6	1533.8	1561.2	1580.1	1569.8	1555.5	1672.0	1958.0	2227.3	2106.9
55°	1372.6	1399.3	1466.0	1532.1	1628.2	1702.8	1721.6	1802.9	2058.1	2337.2	2226.7
57.5°	1186.7	1230.1	1290.0	1423.7	1585.4	1767.2	1915.4	1984.5	2164.2	2454.7	2352.0
60°	868.0	926.2	1000.6	1199.5	1435.7	1732.8	2080.4	2263.4	2315.0	2606.8	2515.2
62.5°	555.5	591.4	659.9	847.2	1118.7	1556.3	2130.8	2612.1	2570.6	2856.2	2759.9
65°	380.3	403.4	466.1	571.3	723.2	1158.5	1995.7	2873.5	2976.6	3251.4	3178.3
67.5°	276.4	293.9	347.4	439.6	471.2	685.5	1548.6	2861.5	3371.2	3658.7	3544.9
70°	201.5	213.9	258.8	347.4	362.6	381.4	938.1	2432.4	3362.7	3766.9	3630.7
72.5°	149.3	157.9	188.0	269.5	293.5	257.5	464.4	1767.9	2889.5	3407.2	3297.9
75°	108.0	114.4	136.7	206.2	234.9	196.1	231.6	1033.1	2015.5	2396.7	2416.0
77.5°	82.6	87.5	102.0	151.0	188.0	147.2	143.7	475.3	955.7	960.4	1014.3
80°	66.3	69.5	77.4	106.3	144.2	110.2	93.7	191.9	302.0	255.6	268.2
82.5°	48.8	54.1	65.5	74.6	103.1	75.9	57.1	96.9	114.9	98.8	99.7
85°	27.8	31.4	39.6	53.5	65.9	46.4	32.7	43.0	53.5	43.8	39.1
87.5°	9.8	12.8	13.9	21.0	28.7	19.3	12.6	12.4	17.5	13.0	10.9
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°	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0
2.5°	595.3	594.2	589.9	584.2	578.2	572.4	570.5	566.4	563.6	562.1	563.8
5°	607.3	603.8	593.8	580.9	567.5	552.9	542.7	533.2	526.4	520.0	522.5
7.5°	624.4	618.4	601.0	578.6	554.6	530.5	512.5	498.8	489.6	483.6	484.9
10°	644.3	635.1	608.5	575.0	537.9	503.3	482.1	470.4	464.6	461.4	462.2
12.5°	667.1	654.1	616.2	566.6	512.5	472.9	458.4	455.0	455.2	455.4	455.8
15°	695.4	677.2	622.4	548.4	479.3	449.6	447.0	452.6	458.4	461.2	460.9
17.5°	727.2	701.6	623.5	518.5	446.8	434.6	442.8	454.7	463.5	467.4	468.2
20°	761.5	726.4	615.8	476.1	420.1	422.4	437.0	452.4	462.0	466.9	468.2
22.5°	800.6	752.9	597.4	431.6	398.3	409.2	426.3	441.3	451.3	456.2	457.5
25°	845.3	782.6	568.5	394.2	379.5	394.2	411.3	423.7	431.9	436.3	437.6
27.5°	894.9	813.7	530.0	364.5	363.0	378.8	392.9	402.6	406.8	410.3	411.5
30°	944.8	841.9	483.4	342.0	348.7	363.6	373.7	378.0	379.2	379.9	381.4
32.5°	998.7	866.3	434.4	323.4	335.0	348.9	354.9	356.8	350.8	346.7	348.0
35°	1063.9	892.4	386.5	308.7	321.5	333.5	335.4	333.7	326.6	318.3	318.7
37.5°	1144.6	924.9	348.2	298.2	308.9	316.8	314.4	314.0	314.6	304.8	305.4
40°	1243.4	967.2	320.2	290.0	298.6	300.3	293.7	297.3	300.5	285.6	286.0
42.5°	1353.1	1018.4	302.4	284.5	290.0	286.0	275.7	279.8	279.3	259.7	259.5
45°	1465.0	1074.0	296.2	280.4	282.1	274.0	262.7	263.7	254.8	237.0	237.6
47.5°	1576.2	1133.6	300.1	277.0	272.3	263.1	254.3	249.6	236.4	223.1	223.1
50°	1685.3	1196.3	314.2	270.2	258.8	253.5	247.1	238.7	224.6	213.3	212.4
52.5°	1786.5	1259.4	330.0	258.8	241.9	245.1	241.1	231.4	217.5	206.0	206.2
55°	1882.3	1322.5	336.2	243.2	226.1	237.9	235.5	217.7	201.1	191.7	190.8
57.5°	1986.7	1398.5	329.4	223.3	213.3	229.5	220.5	200.8	191.2	184.2	183.5
60°	2131.3	1517.6	314.6	198.7	201.1	217.1	201.7	193.6	183.1	175.2	174.8
62.5°	2371.5	1739.8	290.9	174.3	186.7	198.7	192.7	184.6	173.9	166.2	166.2
65°	2726.5	2048.7	246.2	155.3	170.7	180.7	183.1	175.0	163.8	155.7	156.1
67.5°	3026.0	2242.5	186.3	139.5	154.2	166.2	172.8	164.9	153.1	145.2	145.4
70°	3009.5	2101.7	142.2	123.8	139.7	151.9	160.4	154.2	141.6	134.1	134.8
72.5°	2673.1	1758.2	115.1	108.0	124.9	136.9	147.2	142.5	129.6	122.3	122.3
75°	1963.8	1248.1	92.0	92.0	106.5	121.3	132.6	129.6	117.9	112.7	111.2
77.5°	827.8	523.6	72.1	76.4	88.6	104.2	118.3	119.4	109.1	115.5	104.8
80°	220.1	144.4	55.0	60.1	69.5	86.0	102.9	102.5	91.3	85.3	79.4
82.5°	83.8	56.9	39.1	42.4	50.3	65.9	81.5	84.1	72.9	63.1	63.1
85°	32.3	24.4	24.2	25.5	29.3	43.6	61.6	63.7	55.0	46.6	48.1
87.5°	8.3	7.3	9.0	8.6	13.5	23.3	35.3	36.6	33.6	19.5	27.8
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)