

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: P881934

Luminaire Tested: **NAV-SB1C-827-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881934
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-SB1C-827-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA 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: 6037 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

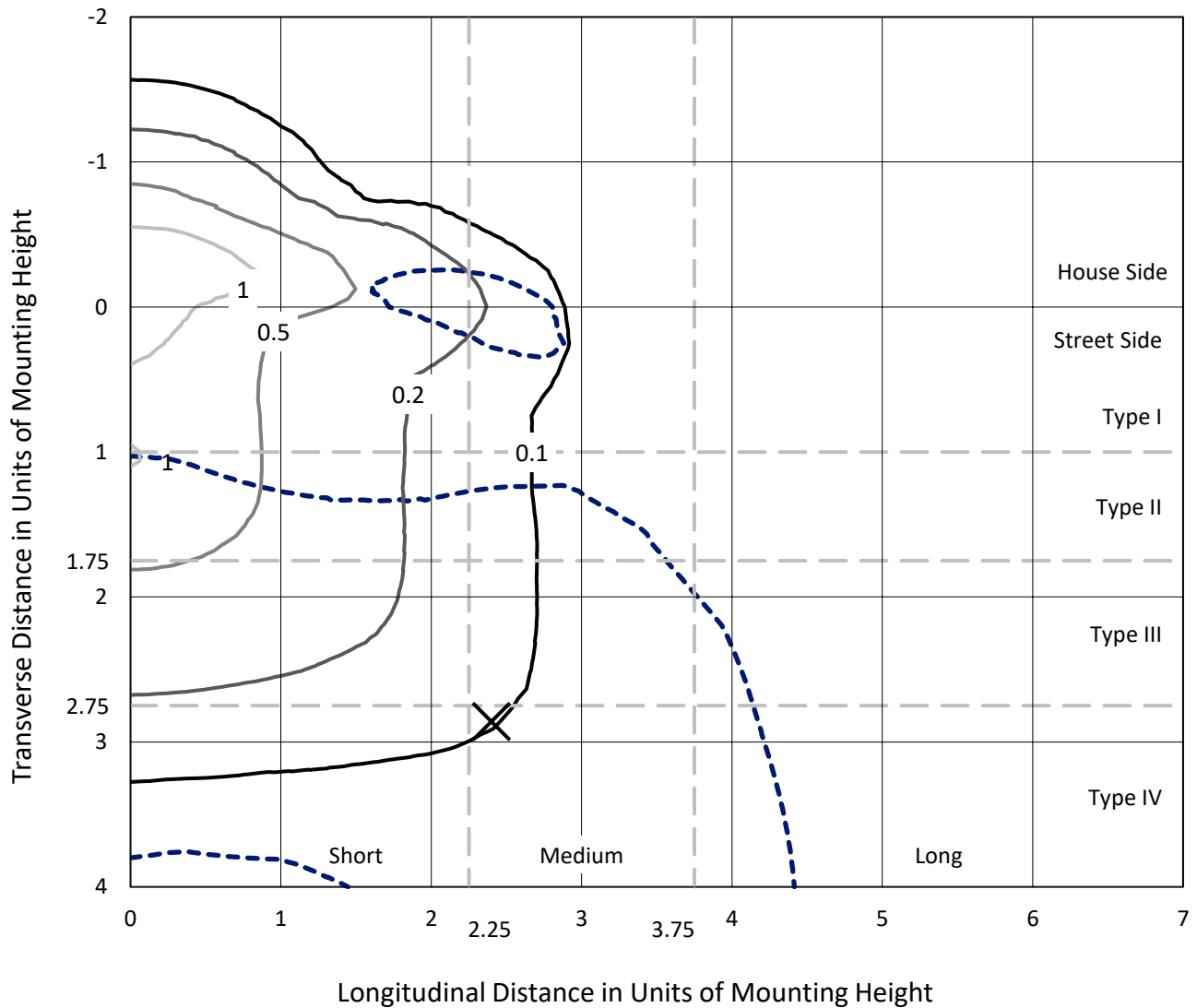
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

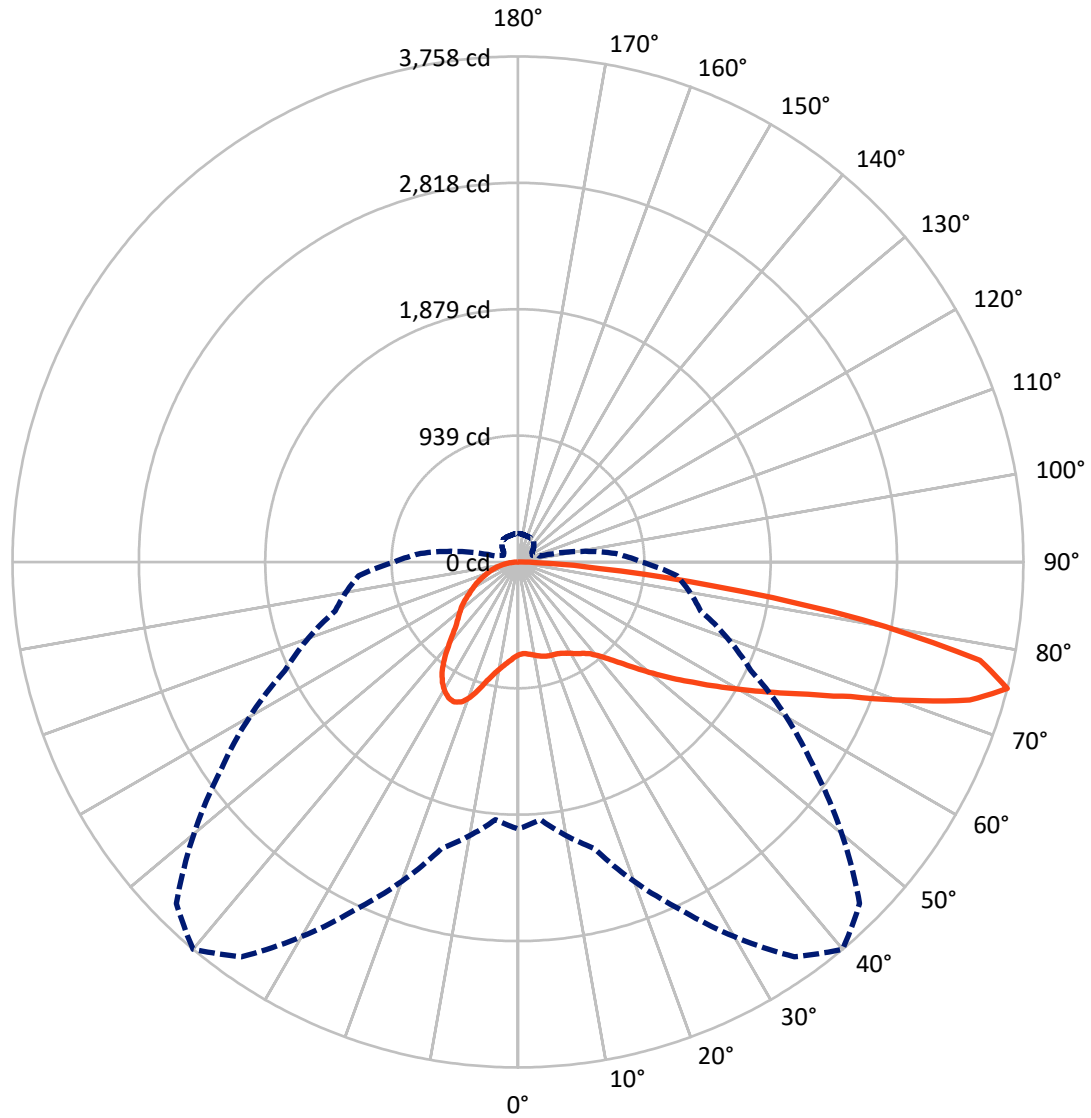
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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	1870.5	0.0	1870.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	4166.5	0.0	4166.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	6037.0	0.0	6037.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	1.1
10°-20°	231.4	3.8
20°-30°	422.4	7.0
30°-40°	599.1	9.9
40°-50°	809.0	13.4
50°-60°	1088.4	18.0
60°-70°	1381.4	22.9
70°-80°	1253.7	20.8
80°-90°	182.7	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°	6037.0	100.0
0°-180°	6037.0	100.0

Coefficient of Utilization



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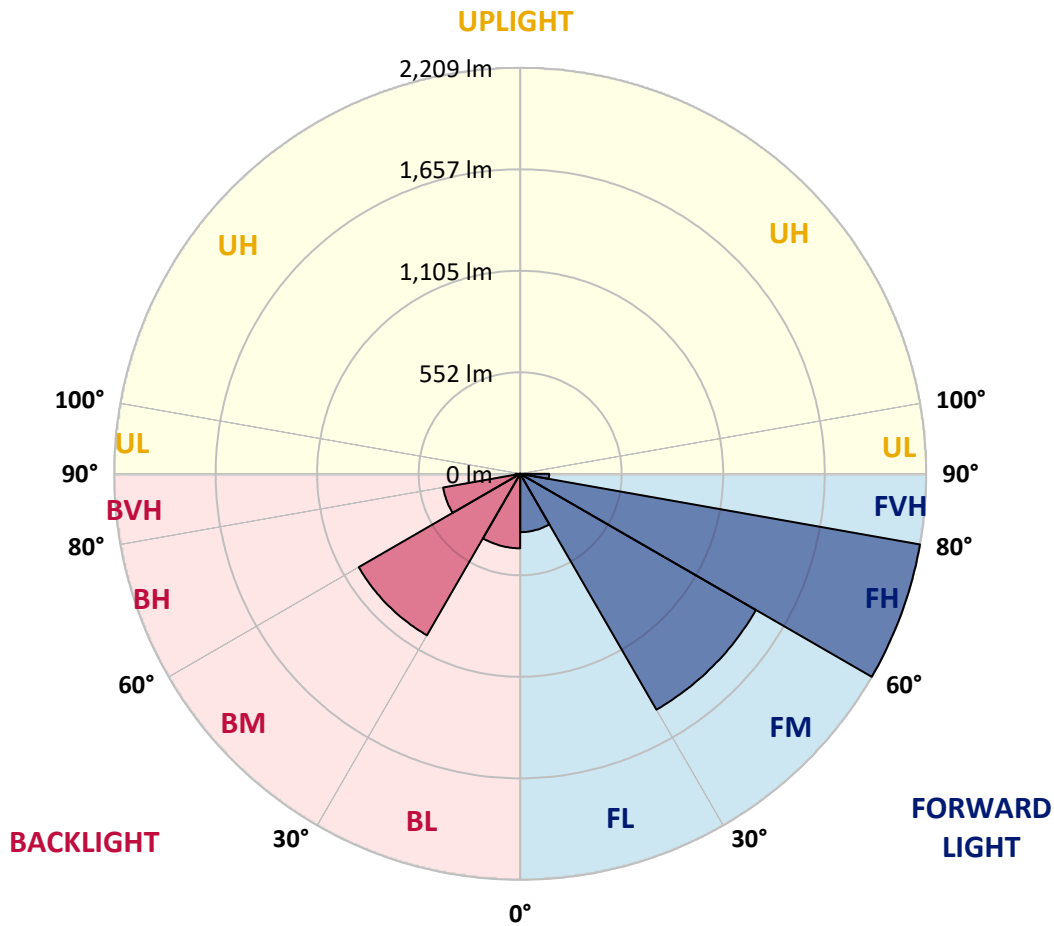
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	317.6	5.3			
FM (30°-60°)	1482.0	24.5			
FH (60°-80°)	2209.4	36.6			G2/5000
FVH (80°-90°)	157.6	2.6			G2/225
BL (0°-30°)	405.2	6.7	B1/500		
BM (30°-60°)	1014.6	16.8	B2/2500		
BH (60°-80°)	425.6	7.0	B1/500		G1/500
BVH (80°-90°)	25.2	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3
2.5°	679.8	683.6	682.7	681.4	681.4	681.7	681.4	683.6	685.9	688.1	691.6
5°	686.8	690.7	688.7	687.1	685.9	685.5	684.6	684.3	685.5	688.4	693.2
7.5°	700.6	704.4	701.5	698.7	696.1	694.8	693.5	691.6	690.7	692.3	699.0
10°	716.0	719.8	716.3	711.2	707.0	705.4	704.1	702.2	700.9	701.9	709.2
12.5°	731.3	735.2	730.4	723.3	717.9	716.9	715.3	714.7	714.4	714.0	721.4
15°	745.7	748.9	742.9	734.5	728.8	727.2	725.6	726.5	728.1	730.0	738.4
17.5°	756.9	760.1	751.2	740.3	734.8	734.2	733.2	736.4	740.9	745.7	756.0
20°	767.2	770.4	758.9	744.1	737.7	737.7	738.0	744.8	751.2	758.2	772.3
22.5°	781.6	784.2	770.1	749.9	740.6	741.2	743.8	750.5	758.5	768.1	787.7
25°	803.0	805.0	787.7	760.8	750.2	752.1	754.4	757.6	765.3	776.5	802.7
27.5°	837.6	839.2	816.5	780.0	764.0	767.2	770.4	768.1	771.7	781.3	814.9
30°	886.3	887.3	858.4	810.1	787.4	789.0	789.6	780.3	773.6	781.3	823.5
32.5°	943.9	943.6	909.4	846.6	813.9	812.3	806.9	788.6	772.9	779.7	831.2
35°	1033.3	1029.7	985.6	897.8	844.0	834.1	821.3	797.9	776.2	778.1	837.9
37.5°	1181.2	1170.3	1109.2	981.7	888.9	863.6	844.7	813.0	783.2	777.4	846.0
40°	1348.0	1334.2	1267.0	1096.7	956.1	915.4	885.0	834.4	794.7	780.3	857.8
42.5°	1545.9	1526.4	1454.0	1232.1	1041.3	982.4	936.6	861.6	811.7	789.6	873.8
45°	1788.9	1763.0	1660.5	1384.8	1148.5	1070.1	1008.9	902.9	837.6	807.5	897.8
47.5°	2034.5	2040.9	1895.2	1559.7	1277.3	1178.3	1099.5	965.1	875.4	836.3	936.6
50°	2295.5	2300.0	2128.7	1753.4	1423.3	1300.6	1201.4	1034.5	927.9	877.3	994.5
52.5°	2499.1	2499.8	2340.6	1956.1	1575.4	1435.1	1311.2	1114.0	988.8	931.8	1071.7
55°	2626.6	2625.0	2489.2	2147.9	1750.2	1576.3	1432.9	1204.3	1063.0	995.8	1168.7
57.5°	2719.1	2714.3	2591.7	2312.8	1936.5	1743.1	1570.6	1306.7	1150.8	1072.0	1296.5
60°	2754.3	2751.4	2661.1	2455.3	2132.5	1927.6	1729.4	1421.3	1250.4	1162.0	1460.7
62.5°	2767.8	2773.2	2729.3	2593.3	2342.2	2131.9	1903.9	1558.4	1362.4	1263.8	1634.0
65°	2815.1	2825.1	2816.1	2773.8	2579.2	2371.0	2135.4	1721.4	1484.7	1373.0	1814.9
67.5°	2909.0	2918.9	2922.7	2990.0	2868.6	2669.1	2424.2	1924.4	1627.9	1486.3	1950.9
70°	2906.7	2903.8	2971.7	3161.9	3231.1	3081.9	2813.5	2174.1	1798.5	1580.5	1968.2
72.5°	2645.8	2622.7	2783.1	3160.0	3532.7	3512.9	3289.0	2496.2	1945.8	1592.0	1707.9
75°	1984.9	1923.4	2206.8	2847.8	3583.0	3757.5	3591.3	2696.0	1910.9	1406.6	1188.6
77.5°	848.8	787.0	1121.0	2108.2	3206.7	3512.5	3314.0	2352.1	1525.4	930.2	583.7
80°	222.2	221.9	338.8	955.8	2180.8	2593.9	2275.6	1519.0	871.6	332.4	161.1
82.5°	91.9	89.7	124.6	371.7	1065.6	1455.6	1187.9	677.5	314.8	90.0	53.5
85°	34.3	33.9	60.5	128.4	375.9	600.4	434.5	173.2	78.4	43.9	24.0
87.5°	9.6	9.3	13.1	44.5	91.6	139.0	74.3	28.5	22.1	17.3	7.0
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°	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3	690.3
2.5°	692.6	694.2	697.1	699.3	702.2	705.4	709.9	712.8	715.6	717.6	716.3
5°	695.5	699.0	706.3	713.7	722.4	730.4	739.6	746.4	751.8	753.4	754.1
7.5°	701.9	707.6	720.1	732.6	746.4	759.5	772.9	784.5	793.8	797.3	797.6
10°	713.1	720.8	738.4	756.0	774.2	794.4	811.7	828.3	841.5	846.9	847.2
12.5°	727.2	736.8	759.8	784.2	809.5	837.3	859.7	880.2	896.5	903.9	903.9
15°	745.4	757.9	787.4	820.0	857.2	895.9	924.4	947.1	965.4	974.4	973.7
17.5°	765.3	781.9	819.1	868.4	921.5	972.4	1005.7	1022.4	1041.3	1049.9	1049.6
20°	784.5	805.0	858.1	929.8	1000.6	1054.7	1081.6	1086.1	1087.4	1088.3	1090.9
22.5°	804.3	831.9	907.1	1007.3	1083.2	1120.7	1124.5	1105.3	1078.4	1065.9	1069.4
25°	826.1	862.6	971.1	1092.8	1154.3	1158.8	1129.3	1082.6	1031.7	1008.3	1011.8
27.5°	847.2	898.1	1048.0	1174.5	1205.5	1166.1	1102.7	1036.5	975.0	950.3	953.2
30°	868.4	938.8	1132.8	1245.9	1228.9	1147.9	1060.8	986.8	925.0	899.1	902.0
32.5°	889.8	986.2	1230.5	1297.4	1224.7	1109.2	1008.6	931.1	876.7	849.5	853.0
35°	914.2	1044.5	1323.0	1325.6	1196.9	1052.2	939.8	864.5	817.1	795.4	800.2
37.5°	945.9	1118.4	1404.7	1332.6	1148.2	968.6	854.3	785.8	746.7	736.8	743.8
40°	985.2	1207.5	1467.1	1321.4	1076.2	867.1	760.8	706.0	683.9	686.2	693.9
42.5°	1036.5	1307.0	1511.0	1292.6	976.0	762.4	678.8	654.5	665.0	674.0	682.3
45°	1103.1	1410.5	1538.2	1243.6	862.6	673.7	630.5	636.2	644.2	645.2	651.6
47.5°	1188.2	1515.2	1556.1	1169.7	747.0	611.3	599.7	601.0	599.4	592.7	597.8
50°	1294.5	1617.0	1572.2	1071.7	648.7	572.2	556.8	552.3	530.2	508.5	511.4
52.5°	1415.6	1710.5	1578.9	950.0	572.2	539.5	514.6	486.4	445.1	438.3	440.6
55°	1550.1	1796.9	1561.6	800.5	507.8	497.6	459.8	425.9	421.4	415.6	416.6
57.5°	1710.8	1890.1	1526.4	633.7	441.9	448.6	411.8	415.6	407.6	398.6	397.0
60°	1886.6	1986.5	1464.6	481.6	373.7	387.4	399.3	399.0	396.7	389.4	386.8
62.5°	2044.8	2049.9	1342.9	368.9	313.8	340.0	372.4	372.1	370.1	366.0	364.4
65°	2138.9	2040.3	1139.9	290.4	264.5	301.0	335.9	338.4	338.8	338.4	338.4
67.5°	2122.2	1927.9	861.3	231.2	223.8	261.3	299.7	303.2	305.8	306.4	307.1
70°	1934.0	1681.0	561.6	184.4	187.6	226.4	265.4	269.0	271.2	273.8	275.0
72.5°	1507.5	1236.0	321.5	149.2	155.9	196.3	231.5	235.7	236.9	241.7	243.7
75°	918.6	726.8	173.5	117.5	128.1	167.8	197.9	202.7	204.9	210.7	211.3
77.5°	436.7	314.8	98.9	91.6	103.1	137.0	167.1	172.6	166.5	169.7	167.1
80°	147.6	116.9	62.4	69.8	78.8	106.9	133.8	139.3	126.5	125.8	124.6
82.5°	51.6	47.4	39.7	46.4	50.9	76.5	101.2	108.2	94.1	93.8	89.3
85°	20.2	19.2	22.1	25.3	30.4	47.1	66.6	70.1	58.0	46.7	46.1
87.5°	4.2	4.5	5.4	5.8	9.3	16.3	24.0	29.5	23.4	19.9	18.3
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)