

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: P881724

Luminaire Tested: **NAV-SB1B-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881724
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-SB1B-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 450mA 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: 5587 lumens
Efficiency: N/A
Efficacy: 140.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

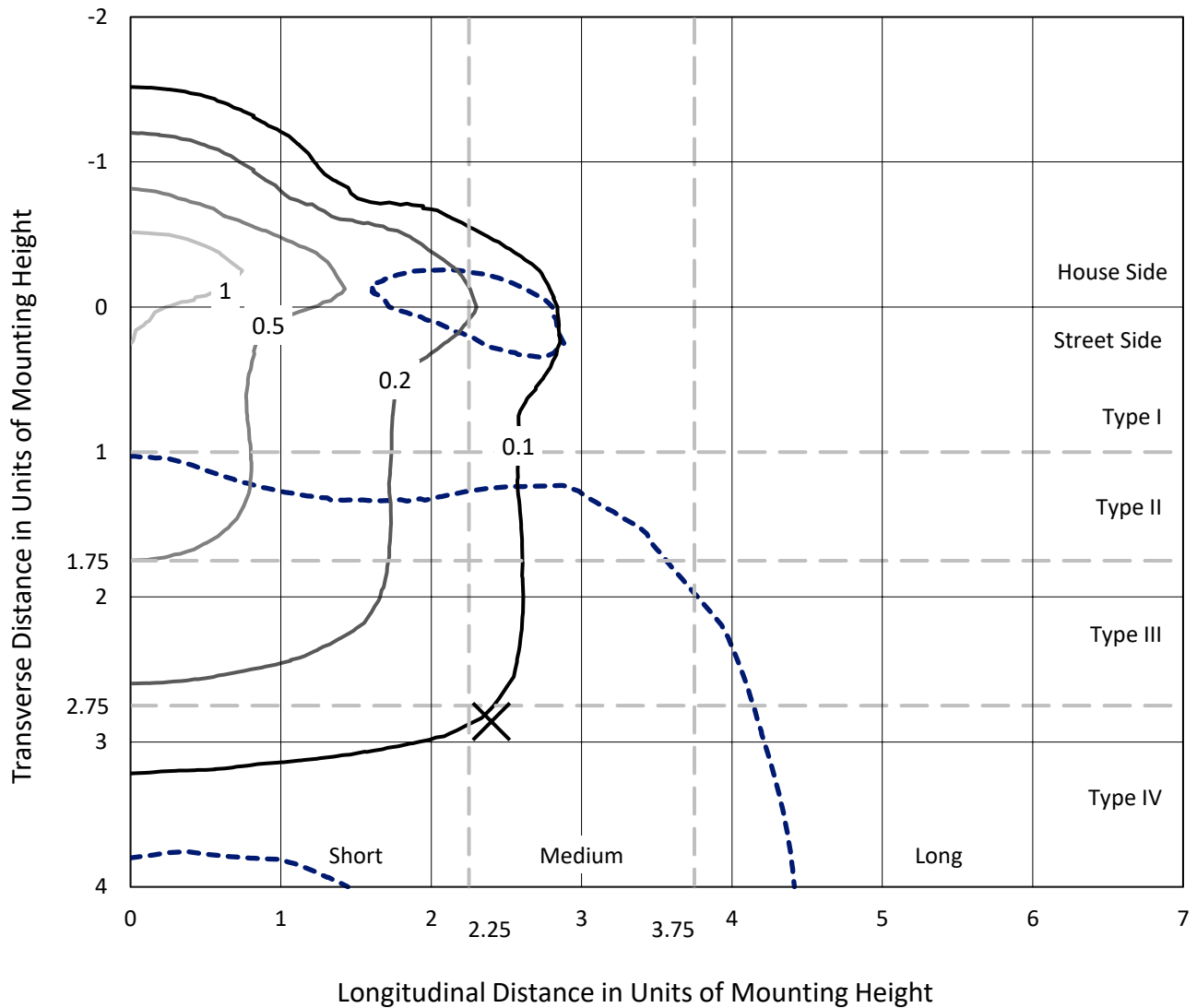
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

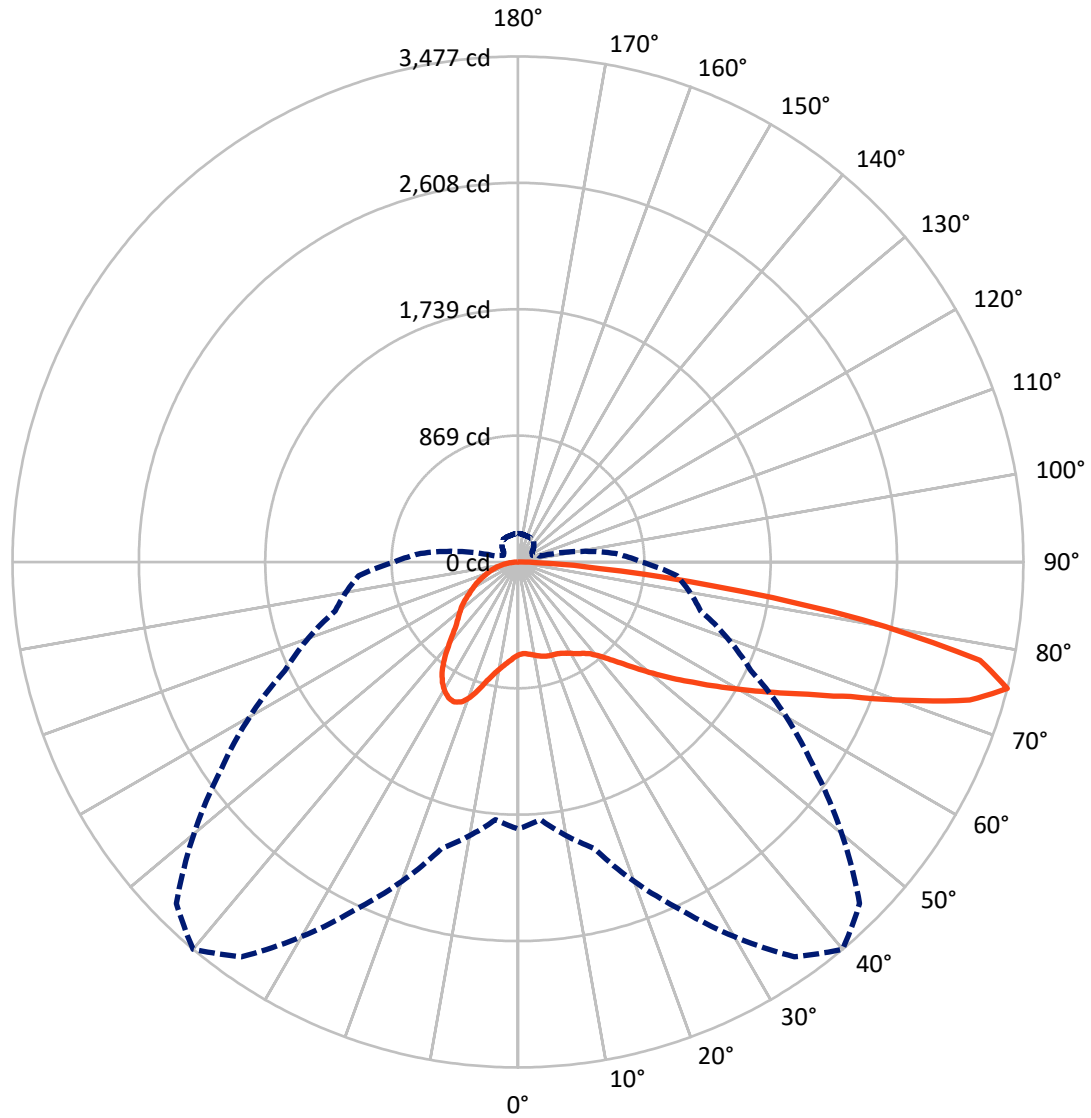
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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	1731.0	0.0	1731.0
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3856.0	0.0	3856.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	5587.0	0.0	5587.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	1.1
10°-20°	214.1	3.8
20°-30°	391.0	7.0
30°-40°	554.5	9.9
40°-50°	748.7	13.4
50°-60°	1007.2	18.0
60°-70°	1278.4	22.9
70°-80°	1160.2	20.8
80°-90°	169.1	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°	5587.0	100.0
0°-180°	5587.0	100.0

Coefficient of Utilization



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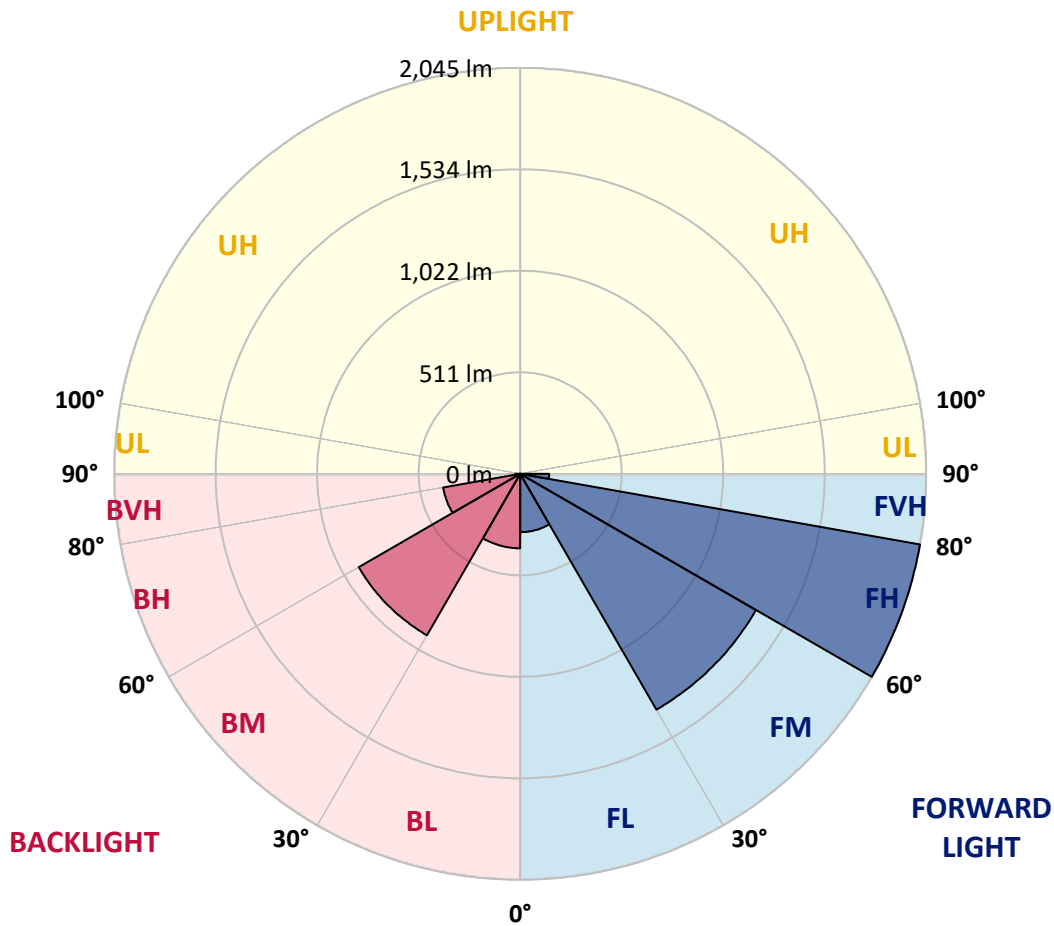
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	293.9	5.3			
FM (30°-60°)	1371.5	24.5			
FH (60°-80°)	2044.8	36.6			G2/5000
FVH (80°-90°)	145.8	2.6			G2/225
BL (0°-30°)	375.0	6.7	B1/500		
BM (30°-60°)	938.9	16.8	B1/1000		
BH (60°-80°)	393.9	7.0	B1/500		G1/500
BVH (80°-90°)	23.3	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9
2.5°	629.1	632.7	631.8	630.6	630.6	630.9	630.6	632.7	634.7	636.8	640.1
5°	635.6	639.2	637.4	635.9	634.7	634.4	633.5	633.3	634.4	637.1	641.5
7.5°	648.4	651.9	649.3	646.6	644.2	643.0	641.8	640.1	639.2	640.7	646.9
10°	662.6	666.1	662.9	658.1	654.3	652.8	651.6	649.8	648.7	649.5	656.4
12.5°	676.8	680.4	675.9	669.4	664.4	663.5	662.0	661.4	661.1	660.8	667.6
15°	690.1	693.1	687.5	679.8	674.4	673.0	671.5	672.4	673.8	675.6	683.3
17.5°	700.5	703.5	695.2	685.1	680.1	679.5	678.6	681.6	685.7	690.1	699.6
20°	710.0	713.0	702.3	688.7	682.7	682.7	683.0	689.3	695.2	701.7	714.7
22.5°	723.3	725.7	712.7	694.0	685.4	686.0	688.4	694.6	702.0	710.9	729.0
25°	743.2	745.0	729.0	704.1	694.3	696.1	698.1	701.1	708.2	718.6	742.9
27.5°	775.2	776.7	755.6	721.9	707.0	710.0	713.0	710.9	714.1	723.0	754.2
30°	820.2	821.1	794.5	749.7	728.7	730.1	730.7	722.1	715.9	723.0	762.2
32.5°	873.6	873.3	841.6	783.5	753.3	751.8	746.7	729.9	715.3	721.6	769.3
35°	956.2	953.0	912.1	830.9	781.1	771.9	760.1	738.4	718.3	720.1	775.5
37.5°	1093.2	1083.1	1026.5	908.5	822.6	799.2	781.7	752.4	724.8	719.5	782.9
40°	1247.5	1234.8	1172.6	1014.9	884.8	847.2	819.0	772.2	735.5	722.1	793.9
42.5°	1430.7	1412.6	1345.6	1140.3	963.7	909.1	866.8	797.4	751.2	730.7	808.7
45°	1655.6	1631.6	1536.8	1281.6	1062.9	990.3	933.7	835.6	775.2	747.3	830.9
47.5°	1882.9	1888.8	1754.0	1443.4	1182.0	1090.5	1017.6	893.1	810.2	774.0	866.8
50°	2124.4	2128.5	1970.0	1622.7	1317.2	1203.7	1111.8	957.4	858.8	811.9	920.4
52.5°	2312.8	2313.4	2166.1	1810.3	1457.9	1328.1	1213.5	1030.9	915.1	862.3	991.8
55°	2430.8	2429.3	2303.6	1987.8	1619.7	1458.8	1326.1	1114.5	983.8	921.6	1081.6
57.5°	2516.4	2512.0	2398.5	2140.4	1792.2	1613.2	1453.5	1209.3	1065.0	992.1	1199.8
60°	2549.0	2546.3	2462.8	2272.2	1973.5	1783.9	1600.5	1315.4	1157.2	1075.4	1351.8
62.5°	2561.5	2566.5	2525.9	2400.0	2167.6	1972.9	1762.0	1442.2	1260.9	1169.6	1512.2
65°	2605.3	2614.5	2606.2	2567.1	2386.9	2194.3	1976.2	1593.1	1374.1	1270.6	1679.6
67.5°	2692.1	2701.3	2704.9	2767.1	2654.8	2470.2	2243.5	1780.9	1506.5	1375.5	1805.5
70°	2690.1	2687.4	2750.2	2926.2	2990.2	2852.1	2603.8	2012.1	1664.5	1462.7	1821.5
72.5°	2448.5	2427.2	2575.7	2924.5	3269.4	3251.0	3043.9	2310.2	1800.8	1473.3	1580.6
75°	1836.9	1780.0	2042.3	2635.5	3315.9	3477.4	3323.6	2495.1	1768.5	1301.8	1100.0
77.5°	785.6	728.4	1037.4	1951.0	2967.7	3250.7	3067.0	2176.8	1411.7	860.8	540.2
80°	205.7	205.4	313.5	884.5	2018.3	2400.5	2106.0	1405.8	806.6	307.6	149.1
82.5°	85.0	83.0	115.3	344.0	986.2	1347.1	1099.4	627.0	291.3	83.3	49.5
85°	31.7	31.4	56.0	118.8	347.9	555.6	402.1	160.3	72.6	40.6	22.2
87.5°	8.9	8.6	12.1	41.2	84.7	128.6	68.7	26.4	20.4	16.0	6.5
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°	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9	638.9
2.5°	641.0	642.4	645.1	647.2	649.8	652.8	657.0	659.6	662.3	664.1	662.9
5°	643.6	646.9	653.7	660.5	668.5	675.9	684.5	690.7	695.8	697.3	697.8
7.5°	649.5	654.9	666.4	678.0	690.7	702.9	715.3	726.0	734.6	737.9	738.2
10°	659.9	667.0	683.3	699.6	716.5	735.2	751.2	766.6	778.7	783.8	784.1
12.5°	673.0	681.8	703.2	725.7	749.1	774.9	795.6	814.6	829.7	836.5	836.5
15°	689.8	701.4	728.7	758.9	793.3	829.1	855.5	876.5	893.4	901.7	901.1
17.5°	708.2	723.6	758.0	803.6	852.8	899.9	930.8	946.2	963.7	971.7	971.4
20°	726.0	745.0	794.2	860.5	926.0	976.1	1001.0	1005.1	1006.3	1007.2	1009.6
22.5°	744.4	769.9	839.5	932.2	1002.5	1037.1	1040.7	1022.9	998.0	986.5	989.7
25°	764.5	798.3	898.8	1011.4	1068.3	1072.4	1045.1	1001.9	954.8	933.1	936.4
27.5°	784.1	831.2	969.9	1086.9	1115.7	1079.2	1020.6	959.2	902.3	879.5	882.2
30°	803.6	868.8	1048.4	1153.0	1137.3	1062.3	981.7	913.3	856.1	832.1	834.8
32.5°	823.5	912.7	1138.8	1200.7	1133.5	1026.5	933.4	861.7	811.3	786.2	789.4
35°	846.0	966.6	1224.4	1226.8	1107.7	973.7	869.7	800.1	756.2	736.1	740.5
37.5°	875.3	1035.1	1300.0	1233.3	1062.6	896.4	790.6	727.2	691.0	681.8	688.4
40°	911.8	1117.4	1357.8	1222.9	996.0	802.5	704.1	653.4	633.0	635.0	642.1
42.5°	959.2	1209.6	1398.4	1196.3	903.2	705.6	628.2	605.7	615.5	623.8	631.5
45°	1020.8	1305.3	1423.6	1150.9	798.3	623.5	583.5	588.8	596.2	597.1	603.0
47.5°	1099.7	1402.2	1440.1	1082.5	691.3	565.7	555.0	556.2	554.7	548.5	553.2
50°	1198.0	1496.5	1455.0	991.8	600.4	529.5	515.3	511.2	490.7	470.6	473.2
52.5°	1310.1	1583.0	1461.2	879.2	529.5	499.3	476.2	450.1	411.9	405.7	407.7
55°	1434.5	1663.0	1445.2	740.8	470.0	460.5	425.5	394.1	390.0	384.6	385.5
57.5°	1583.3	1749.2	1412.6	586.4	408.9	415.2	381.1	384.6	377.2	368.9	367.4
60°	1746.0	1838.4	1355.4	445.7	345.8	358.6	369.5	369.2	367.1	360.3	358.0
62.5°	1892.3	1897.1	1242.8	341.4	290.4	314.7	344.6	344.3	342.6	338.7	337.2
65°	1979.5	1888.2	1054.9	268.8	244.8	278.5	310.8	313.2	313.5	313.2	313.2
67.5°	1964.1	1784.2	797.1	213.9	207.1	241.8	277.4	280.6	283.0	283.6	284.2
70°	1789.8	1555.7	519.8	170.7	173.6	209.5	245.7	248.9	251.0	253.4	254.5
72.5°	1395.1	1143.8	297.5	138.1	144.3	181.6	214.2	218.1	219.3	223.7	225.5
75°	850.2	672.7	160.6	108.8	118.5	155.3	183.1	187.6	189.6	195.0	195.6
77.5°	404.2	291.3	91.6	84.7	95.4	126.8	154.7	159.7	154.1	157.1	154.7
80°	136.6	108.2	57.8	64.6	72.9	99.0	123.9	128.9	117.0	116.5	115.3
82.5°	47.7	43.9	36.7	43.0	47.1	70.8	93.6	100.2	87.1	86.8	82.7
85°	18.7	17.8	20.4	23.4	28.2	43.6	61.6	64.9	53.6	43.3	42.7
87.5°	3.9	4.1	5.0	5.3	8.6	15.1	22.2	27.3	21.6	18.4	16.9
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)