

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: P881714

Luminaire Tested: **NAV-SB1B-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881714
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-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 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: 5499 lumens
Efficiency: N/A
Efficacy: 138.2 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

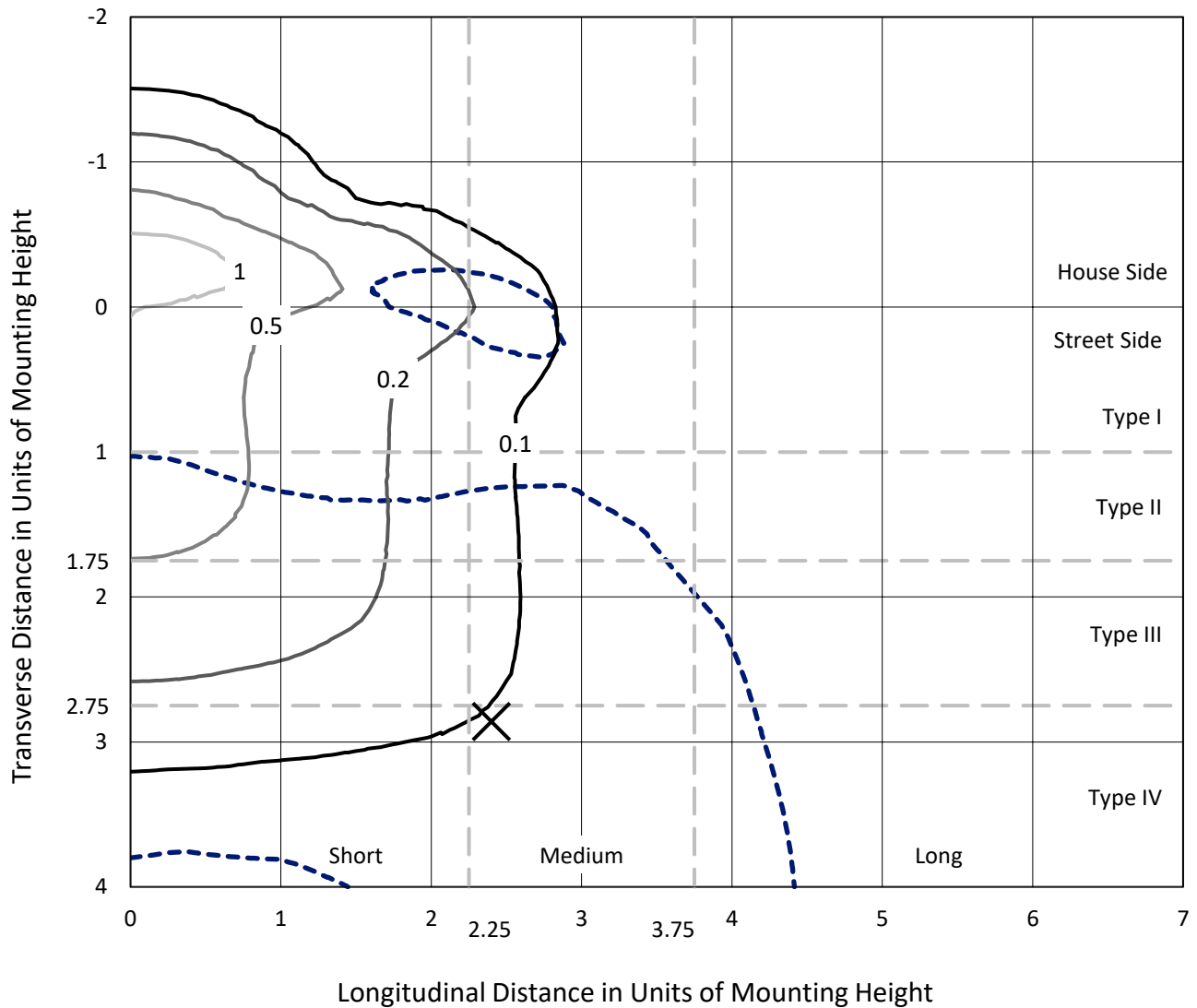
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

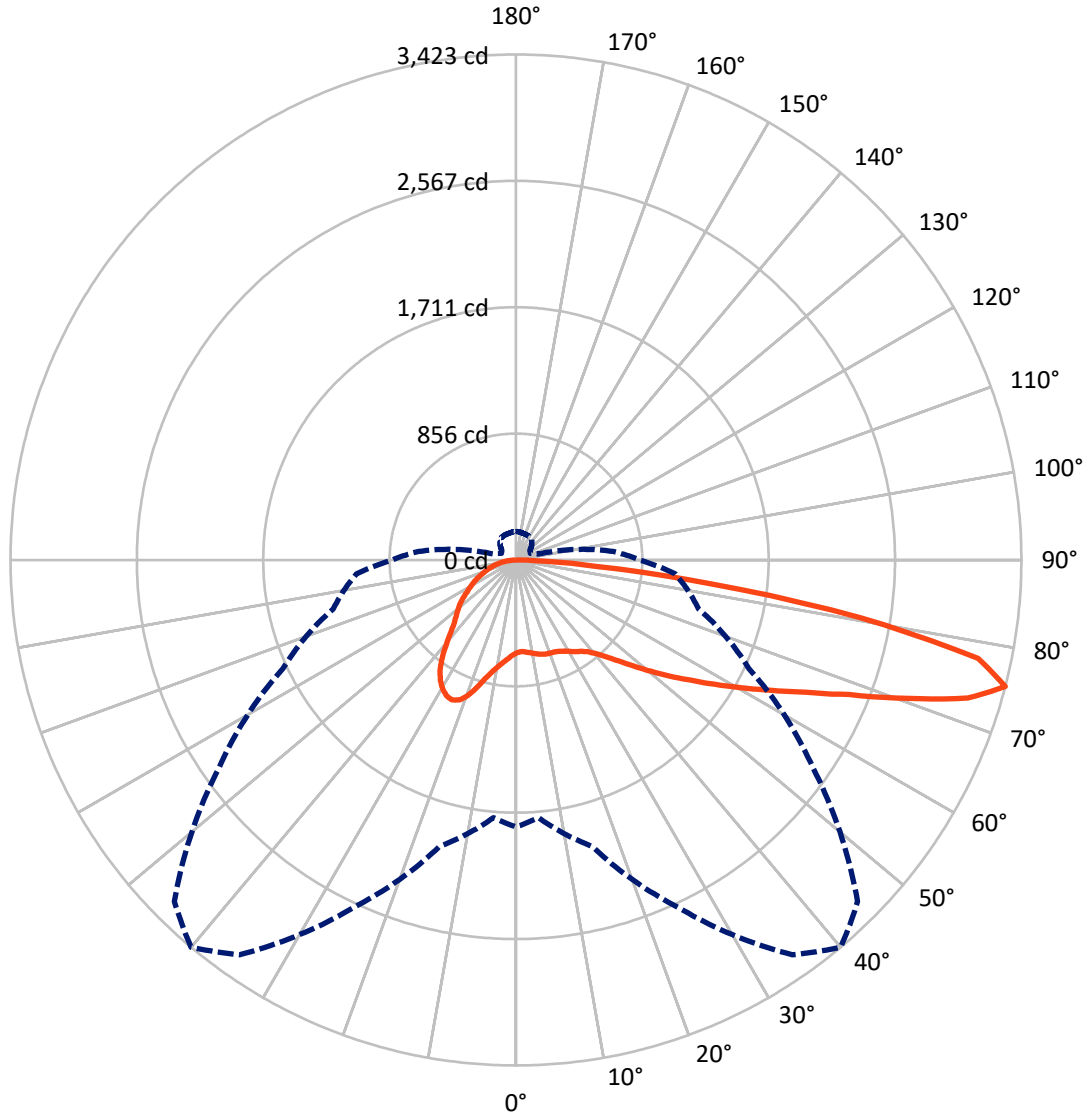
× Max cd
 - - - 1/2 Max cd



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	1703.8	0.0	1703.8
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3795.2	0.0	3795.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	5499.0	0.0	5499.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	1.1
10°-20°	210.7	3.8
20°-30°	384.8	7.0
30°-40°	545.7	9.9
40°-50°	736.9	13.4
50°-60°	991.4	18.0
60°-70°	1258.3	22.9
70°-80°	1141.9	20.8
80°-90°	166.5	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°	5499.0	100.0
0°-180°	5499.0	100.0

Coefficient of Utilization



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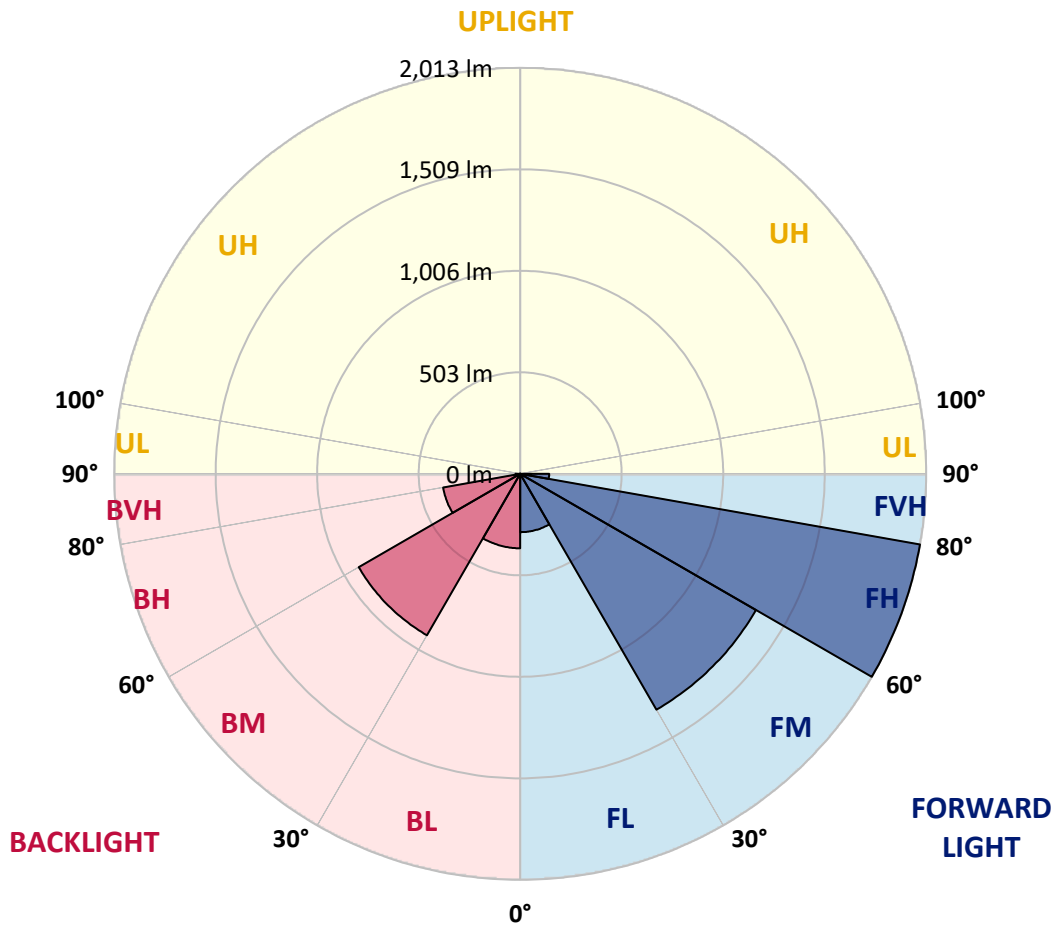
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	289.3	5.3			
FM (30°-60°)	1349.9	24.5			
FH (60°-80°)	2012.6	36.6			G2/5000
FVH (80°-90°)	143.5	2.6			G2/225
BL (0°-30°)	369.1	6.7	B1/500		
BM (30°-60°)	924.1	16.8	B1/1000		
BH (60°-80°)	387.7	7.0	B1/500		G1/500
BVH (80°-90°)	22.9	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°	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8
2.5°	619.2	622.7	621.8	620.7	620.7	620.9	620.7	622.7	624.7	626.8	630.0
5°	625.6	629.1	627.4	625.9	624.7	624.4	623.6	623.3	624.4	627.1	631.4
7.5°	638.2	641.7	639.0	636.4	634.1	632.9	631.7	630.0	629.1	630.6	636.7
10°	652.2	655.7	652.4	647.8	644.0	642.5	641.4	639.6	638.4	639.3	646.0
12.5°	666.2	669.7	665.3	658.9	653.9	653.0	651.6	651.0	650.7	650.4	657.1
15°	679.3	682.2	676.7	669.1	663.8	662.4	660.9	661.8	663.2	665.0	672.6
17.5°	689.5	692.4	684.2	674.3	669.4	668.8	667.9	670.8	674.9	679.3	688.6
20°	698.8	701.7	691.2	677.8	672.0	672.0	672.3	678.4	684.2	690.6	703.5
22.5°	711.9	714.3	701.4	683.1	674.6	675.2	677.5	683.6	690.9	699.7	717.5
25°	731.5	733.2	717.5	693.0	683.4	685.1	687.1	690.1	697.1	707.3	731.2
27.5°	763.0	764.4	743.7	710.5	695.9	698.8	701.7	699.7	702.9	711.6	742.3
30°	807.3	808.2	781.9	737.9	717.2	718.6	719.2	710.8	704.6	711.6	750.1
32.5°	859.8	859.5	828.3	771.1	741.4	739.9	735.0	718.4	704.1	710.2	757.1
35°	941.2	938.0	897.7	817.8	768.8	759.8	748.1	726.8	707.0	708.7	763.3
37.5°	1075.9	1066.0	1010.3	894.2	809.6	786.6	769.4	740.5	713.4	708.1	770.6
40°	1227.9	1215.3	1154.1	998.9	870.9	833.9	806.1	760.1	723.9	710.8	781.4
42.5°	1408.1	1390.3	1324.4	1122.3	948.5	894.8	853.1	784.9	739.4	719.2	795.9
45°	1629.5	1605.9	1512.5	1261.4	1046.2	974.7	919.0	822.5	763.0	735.6	817.8
47.5°	1853.2	1859.0	1726.3	1420.7	1163.4	1073.3	1001.6	879.1	797.4	761.8	853.1
50°	2090.9	2095.0	1939.0	1597.1	1296.4	1184.7	1094.3	942.4	845.2	799.1	905.9
52.5°	2276.4	2277.0	2132.0	1781.7	1435.0	1307.2	1194.3	1014.7	900.6	848.7	976.2
55°	2392.5	2391.0	2267.4	1956.5	1594.2	1435.8	1305.2	1096.9	968.3	907.1	1064.6
57.5°	2476.8	2472.4	2360.7	2106.7	1764.0	1587.8	1430.6	1190.3	1048.2	976.5	1180.9
60°	2508.9	2506.2	2424.0	2236.4	1942.5	1755.8	1575.3	1294.7	1138.9	1058.4	1330.6
62.5°	2521.1	2526.1	2486.1	2362.2	2133.5	1941.9	1734.2	1419.5	1241.0	1151.2	1488.3
65°	2564.3	2573.3	2565.1	2526.6	2349.3	2159.7	1945.1	1568.0	1352.4	1250.6	1653.1
67.5°	2649.7	2658.8	2662.3	2723.5	2613.0	2431.3	2208.2	1752.9	1482.8	1353.9	1777.1
70°	2647.7	2645.1	2706.9	2880.1	2943.1	2807.2	2562.8	1980.4	1638.3	1439.6	1792.8
72.5°	2410.0	2389.0	2535.1	2878.4	3217.9	3199.8	2995.9	2273.8	1772.4	1450.1	1555.7
75°	1808.0	1752.0	2010.1	2594.0	3263.7	3422.6	3271.3	2455.8	1740.6	1281.3	1082.6
77.5°	773.2	716.9	1021.1	1920.3	2921.0	3199.5	3018.7	2142.5	1389.5	847.3	531.7
80°	202.4	202.1	308.6	870.6	1986.5	2362.7	2072.8	1383.6	793.9	302.7	146.7
82.5°	83.7	81.7	113.5	338.6	970.6	1325.9	1082.1	617.2	286.7	82.0	48.7
85°	31.2	30.9	55.1	117.0	342.4	546.9	395.8	157.8	71.5	40.0	21.9
87.5°	8.7	8.5	12.0	40.5	83.4	126.6	67.7	26.0	20.1	15.7	6.4
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°	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8	628.8
2.5°	630.9	632.3	634.9	637.0	639.6	642.5	646.6	649.2	651.9	653.6	652.4
5°	633.5	636.7	643.4	650.1	658.0	665.3	673.7	679.9	684.8	686.3	686.9
7.5°	639.3	644.6	655.9	667.3	679.9	691.8	704.1	714.6	723.0	726.2	726.5
10°	649.5	656.5	672.6	688.6	705.2	723.6	739.4	754.5	766.5	771.4	771.7
12.5°	662.4	671.1	692.1	714.3	737.3	762.7	783.1	801.8	816.6	823.4	823.4
15°	679.0	690.4	717.2	746.9	780.8	816.1	842.0	862.7	879.4	887.5	886.9
17.5°	697.1	712.2	746.1	791.0	839.4	885.8	916.1	931.3	948.5	956.4	956.1
20°	714.6	733.2	781.6	847.0	911.4	960.7	985.2	989.3	990.5	991.4	993.7
22.5°	732.6	757.7	826.3	917.6	986.7	1020.8	1024.3	1006.8	982.3	970.9	974.1
25°	752.5	785.7	884.6	995.4	1051.4	1055.5	1028.7	986.1	939.7	918.4	921.6
27.5°	771.7	818.1	954.6	1069.8	1098.1	1062.2	1004.5	944.1	888.1	865.6	868.3
30°	791.0	855.1	1031.9	1134.8	1119.4	1045.6	966.3	898.9	842.6	819.0	821.6
32.5°	810.5	898.3	1120.8	1181.8	1115.6	1010.3	918.7	848.1	798.6	773.8	777.0
35°	832.7	951.4	1205.1	1207.5	1090.2	958.4	856.0	787.5	744.3	724.5	728.9
37.5°	861.6	1018.8	1279.5	1213.9	1045.9	882.3	778.1	715.7	680.2	671.1	677.5
40°	897.4	1099.8	1336.4	1203.7	980.3	789.8	693.0	643.1	623.0	625.0	632.0
42.5°	944.1	1190.6	1376.3	1177.4	889.0	694.4	618.3	596.2	605.8	613.9	621.5
45°	1004.8	1284.8	1401.1	1132.8	785.7	613.7	574.3	579.5	586.8	587.7	593.5
47.5°	1082.3	1380.1	1417.5	1065.4	680.4	556.8	546.3	547.4	546.0	539.9	544.5
50°	1179.2	1472.9	1432.0	976.2	590.9	521.2	507.2	503.1	483.0	463.2	465.8
52.5°	1289.4	1558.0	1438.2	865.4	521.2	491.4	468.7	443.0	405.4	399.3	401.3
55°	1411.9	1636.8	1422.4	729.1	462.6	453.2	418.8	387.9	383.8	378.6	379.4
57.5°	1558.3	1721.7	1390.3	577.2	402.5	408.6	375.1	378.6	371.3	363.1	361.7
60°	1718.5	1809.5	1334.1	438.7	340.4	352.9	363.7	363.4	361.4	354.7	352.3
62.5°	1862.5	1867.2	1223.2	336.0	285.8	309.7	339.2	338.9	337.2	333.4	331.9
65°	1948.3	1858.5	1038.3	264.5	240.9	274.2	306.0	308.3	308.6	308.3	308.3
67.5°	1933.1	1756.1	784.6	210.6	203.9	238.0	273.0	276.2	278.5	279.1	279.7
70°	1761.6	1531.2	511.6	168.0	170.9	206.2	241.8	245.0	247.0	249.4	250.5
72.5°	1373.1	1125.8	292.8	135.9	142.0	178.8	210.9	214.7	215.8	220.2	222.0
75°	836.8	662.1	158.1	107.0	116.7	152.8	180.2	184.6	186.7	191.9	192.5
77.5°	397.8	286.7	90.1	83.4	93.9	124.8	152.2	157.2	151.7	154.6	152.2
80°	134.5	106.5	56.9	63.6	71.7	97.4	121.9	126.9	115.2	114.6	113.5
82.5°	47.0	43.2	36.2	42.3	46.4	69.7	92.2	98.6	85.7	85.5	81.4
85°	18.4	17.5	20.1	23.0	27.7	42.9	60.7	63.9	52.8	42.6	42.0
87.5°	3.8	4.1	5.0	5.2	8.5	14.9	21.9	26.8	21.3	18.1	16.6
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)