

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: P881551

Luminaire Tested: **NAV-SB1A-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881551
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4368 lumens
Efficiency: N/A
Efficacy: 141.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

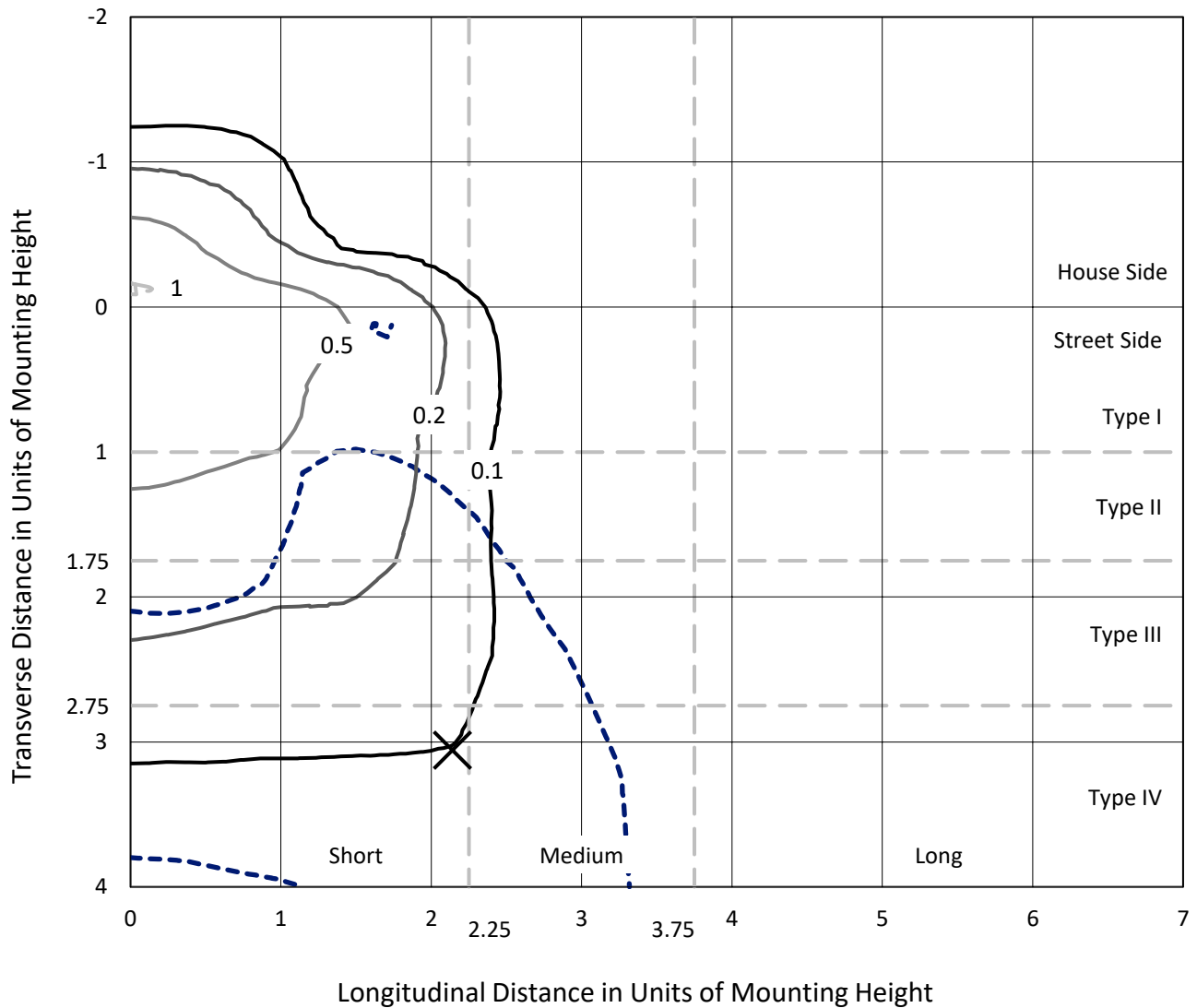
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

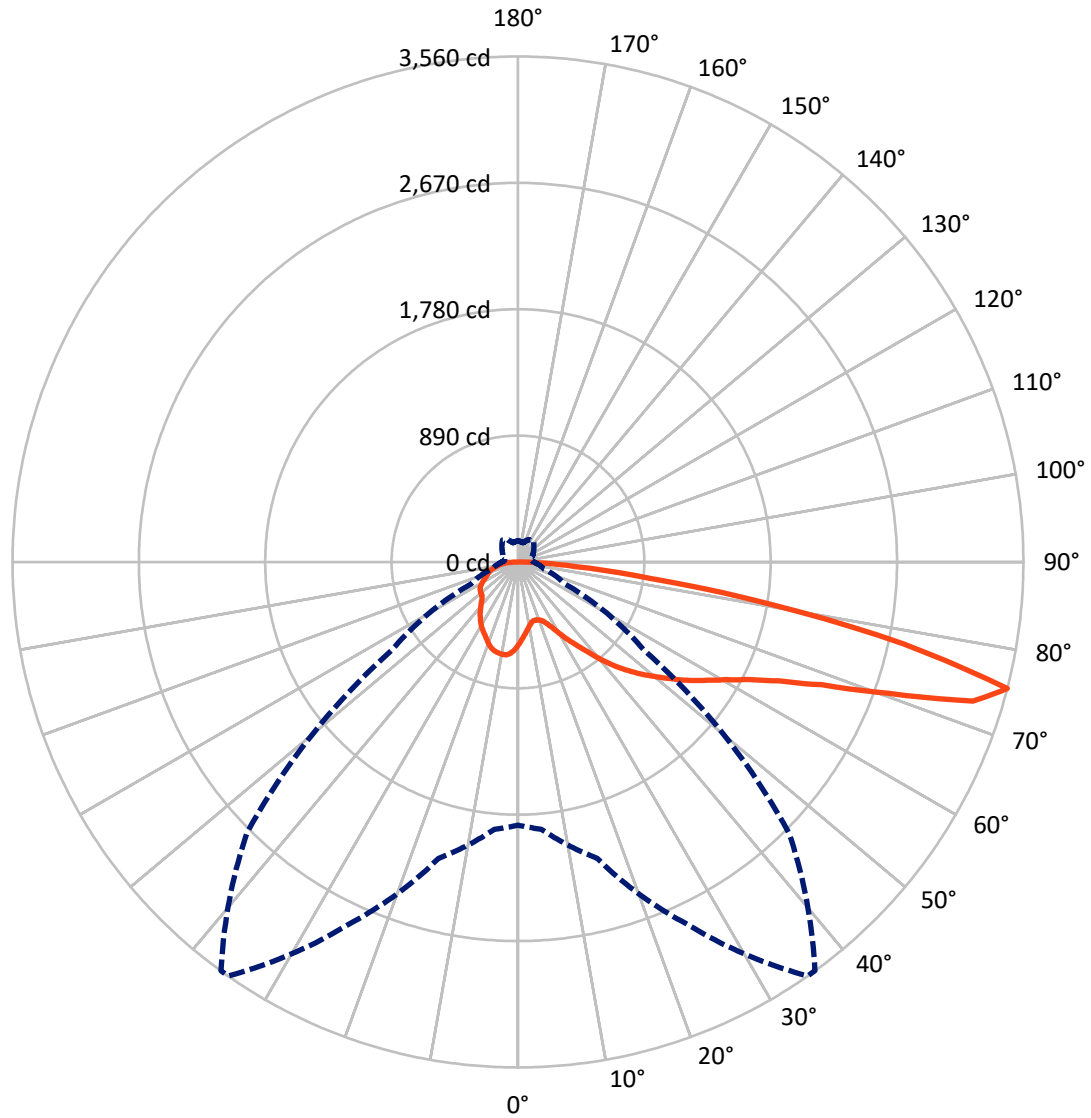
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1039.5	0.0	1039.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3328.5	0.0	3328.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	4368.0	0.0	4368.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	1.3
10°-20°	159.0	3.6
20°-30°	266.9	6.1
30°-40°	414.9	9.5
40°-50°	615.8	14.1
50°-60°	850.1	19.5
60°-70°	1031.4	23.6
70°-80°	852.3	19.5
80°-90°	122.6	2.8
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°	4368.0	100.0
0°-180°	4368.0	100.0

Coefficient of Utilization



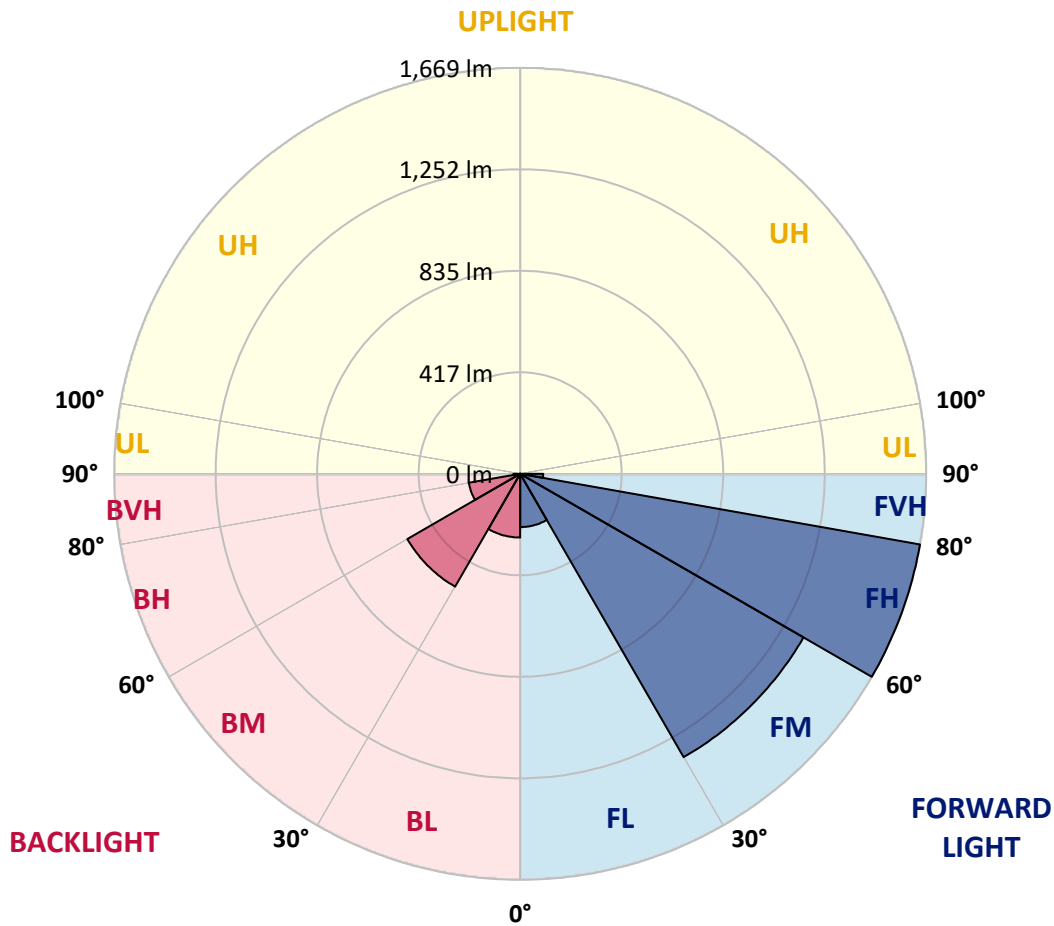
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	219.0	5.0			
FM (30°-60°)	1345.1	30.8			
FH (60°-80°)	1669.4	38.2			G1/1800
FVH (80°-90°)	95.0	2.2			G1/100
BL (0°-30°)	262.0	6.0	B1/500		
BM (30°-60°)	535.6	12.3	B1/1000		
BH (60°-80°)	214.3	4.9	B1/500		G1/500
BVH (80°-90°)	27.6	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1
2.5°	536.7	540.0	541.5	540.7	544.3	543.8	548.8	554.9	563.4	571.7	583.7
5°	495.4	498.9	502.0	504.9	511.7	513.8	521.6	533.4	549.0	564.8	584.7
7.5°	456.9	460.0	464.7	469.9	481.5	483.6	496.6	515.0	536.7	559.9	587.3
10°	425.5	428.6	433.5	439.4	453.8	456.4	473.0	497.5	525.9	555.1	590.1
12.5°	412.1	413.0	415.8	421.7	434.2	435.9	454.1	482.2	515.2	551.6	594.3
15°	411.3	413.2	413.5	416.5	426.9	427.6	444.4	472.3	508.6	550.9	600.7
17.5°	418.4	419.8	417.7	419.6	428.3	429.5	442.7	467.5	506.5	554.0	611.6
20°	437.3	438.5	432.1	429.5	435.9	436.8	449.8	470.6	508.6	560.3	626.5
22.5°	477.5	478.2	462.6	452.0	452.4	452.9	464.2	483.1	516.9	571.9	645.3
25°	540.0	539.6	514.8	494.2	482.4	479.8	487.4	503.4	530.8	587.3	669.7
27.5°	613.2	609.7	584.9	554.2	528.5	524.7	523.0	529.9	550.7	607.6	699.4
30°	695.9	692.6	665.9	625.7	590.1	584.0	568.4	564.8	580.2	635.2	740.7
32.5°	786.6	784.4	752.6	703.9	656.2	649.1	622.9	613.5	625.5	677.0	798.4
35°	862.6	860.7	834.3	784.2	725.9	717.1	690.5	679.8	686.0	730.6	873.7
37.5°	931.3	930.4	907.7	868.3	808.0	797.4	767.4	763.9	762.7	801.2	965.1
40°	995.1	992.7	969.1	948.3	903.7	894.0	867.5	864.5	855.5	888.1	1068.5
42.5°	1065.7	1059.5	1025.3	1015.6	1003.6	995.5	979.7	980.2	960.3	986.1	1178.1
45°	1123.3	1119.7	1084.6	1078.9	1091.9	1088.6	1102.3	1105.8	1067.3	1088.8	1291.9
47.5°	1185.1	1181.8	1152.1	1148.1	1183.3	1184.2	1232.6	1233.8	1171.7	1195.5	1405.9
50°	1261.4	1256.7	1227.2	1232.1	1271.6	1275.1	1363.7	1355.6	1267.8	1303.9	1519.0
52.5°	1311.7	1314.5	1308.2	1316.2	1370.0	1373.3	1492.6	1472.0	1363.0	1410.9	1630.0
55°	1348.8	1354.5	1374.3	1392.7	1473.9	1477.2	1614.2	1582.8	1441.8	1510.1	1734.4
57.5°	1396.5	1388.5	1425.5	1461.4	1572.6	1581.4	1732.5	1689.5	1511.7	1595.5	1805.9
60°	1465.0	1459.3	1488.1	1541.2	1683.1	1697.1	1857.7	1785.6	1563.0	1663.3	1819.9
62.5°	1603.8	1589.6	1594.1	1641.1	1822.5	1840.9	1998.9	1869.5	1588.5	1689.8	1745.3
65°	1811.4	1787.0	1764.4	1797.0	2018.7	2036.9	2158.2	1935.3	1579.0	1638.5	1547.1
67.5°	2072.8	2048.7	2020.8	2051.5	2307.7	2322.1	2354.9	1972.4	1504.6	1441.1	1197.0
70°	2288.4	2279.4	2312.7	2439.0	2769.4	2769.8	2607.1	1941.7	1300.9	1021.7	692.6
72.5°	2259.8	2254.4	2429.8	2820.4	3351.2	3338.7	2845.9	1709.4	876.3	460.9	259.5
75°	1853.9	1889.1	2160.8	2813.5	3560.2	3558.5	2699.7	1086.7	362.5	191.0	134.1
77.5°	994.1	1049.8	1402.9	2077.3	2779.3	2821.1	1898.0	380.2	155.6	122.3	92.8
80°	324.2	372.9	559.2	1057.6	1805.9	1798.1	813.5	149.2	106.5	86.7	64.2
82.5°	137.7	143.3	249.8	499.4	926.8	912.4	259.0	85.7	74.9	59.3	39.7
85°	53.8	60.2	110.3	230.9	401.4	392.7	93.5	42.5	47.9	38.7	23.6
87.5°	17.7	21.5	39.4	79.1	124.9	120.4	22.9	14.6	20.8	17.7	8.5
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°	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1	582.1
2.5°	587.0	590.8	595.3	601.9	607.6	612.3	617.2	620.3	621.5	625.0	624.8
5°	591.3	599.5	610.6	621.5	632.1	638.5	644.2	647.0	649.6	651.5	652.0
7.5°	598.4	609.0	626.5	640.6	649.6	654.8	658.6	657.6	658.6	659.0	659.8
10°	604.5	619.4	640.2	653.6	660.5	660.7	659.8	656.4	654.8	655.0	655.5
12.5°	611.8	628.3	650.8	662.1	664.0	658.8	654.8	649.1	647.0	646.1	645.6
15°	621.7	640.6	662.4	666.6	661.9	655.3	648.4	639.2	634.5	630.7	631.9
17.5°	633.8	654.6	671.3	668.3	658.1	647.2	636.1	622.2	612.5	608.5	608.7
20°	650.5	669.2	678.2	664.7	649.4	632.8	613.9	596.9	588.0	584.0	583.5
22.5°	670.9	688.8	684.8	658.6	636.8	610.4	586.8	574.3	569.8	567.0	567.4
25°	695.2	710.5	689.5	649.6	616.3	580.6	562.5	558.5	556.3	554.2	554.2
27.5°	726.8	735.1	693.0	636.4	584.2	549.0	542.4	543.1	542.4	538.9	539.6
30°	768.6	767.0	696.4	614.9	547.4	520.4	520.9	524.0	524.4	522.1	523.3
32.5°	823.6	806.9	698.0	587.0	512.2	495.4	495.9	499.2	501.5	497.5	499.4
35°	890.2	853.4	695.4	552.1	485.0	471.6	468.0	469.0	469.7	465.9	468.5
37.5°	967.9	905.6	683.8	513.4	462.6	448.2	440.6	434.2	430.5	426.9	429.3
40°	1053.1	962.5	662.6	475.6	437.6	423.4	412.1	400.0	387.3	382.5	384.7
42.5°	1142.4	1021.0	636.8	439.4	408.7	397.2	385.1	367.7	348.5	338.8	340.0
45°	1235.0	1081.0	611.6	403.8	379.2	374.3	360.3	339.3	318.5	306.3	305.3
47.5°	1325.6	1137.7	574.5	367.9	351.6	357.0	346.2	326.8	303.7	284.3	282.2
50°	1412.3	1190.8	513.8	331.5	329.2	351.8	341.4	313.6	287.1	262.3	260.2
52.5°	1498.3	1233.8	436.1	298.5	317.1	350.4	335.3	304.6	272.3	246.3	243.5
55°	1571.2	1256.0	361.3	270.1	299.7	338.4	328.0	294.0	251.2	223.6	221.3
57.5°	1612.8	1238.0	298.9	242.3	275.6	318.5	315.5	271.3	226.2	205.0	202.1
60°	1594.8	1165.3	247.9	217.9	252.7	297.1	293.7	248.9	207.1	187.0	184.2
62.5°	1495.9	1026.7	207.6	196.7	231.9	275.1	272.0	231.6	192.4	173.1	170.0
65°	1296.6	835.2	176.2	179.0	210.9	248.6	253.1	217.2	180.9	162.0	158.9
67.5°	988.9	605.0	151.6	163.6	190.3	222.7	235.7	206.9	171.2	153.2	150.4
70°	563.6	343.6	130.8	148.8	172.1	198.6	222.2	198.6	160.8	145.9	144.0
72.5°	213.7	157.7	113.1	133.9	154.7	178.3	207.3	185.6	148.8	137.7	135.8
75°	114.1	96.1	95.2	116.4	134.6	158.4	188.7	172.8	139.8	145.5	150.2
77.5°	77.7	68.0	79.6	99.6	112.6	136.5	168.8	153.5	121.1	120.7	111.2
80°	53.8	48.2	64.7	80.3	87.1	114.8	147.3	131.8	98.7	92.1	88.1
82.5°	32.4	31.4	48.4	60.0	61.6	88.5	122.1	110.5	80.8	70.4	70.8
85°	17.7	18.7	30.9	35.2	35.9	61.9	95.6	85.5	62.1	52.2	52.7
87.5°	5.0	6.4	11.3	13.9	17.2	32.1	56.9	50.8	31.2	21.7	21.7
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)