

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: P881697

Luminaire Tested: **NAV-SB1B-722-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881697
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-SB1B-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4450 lumens
Efficiency: N/A
Efficacy: 111.8 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

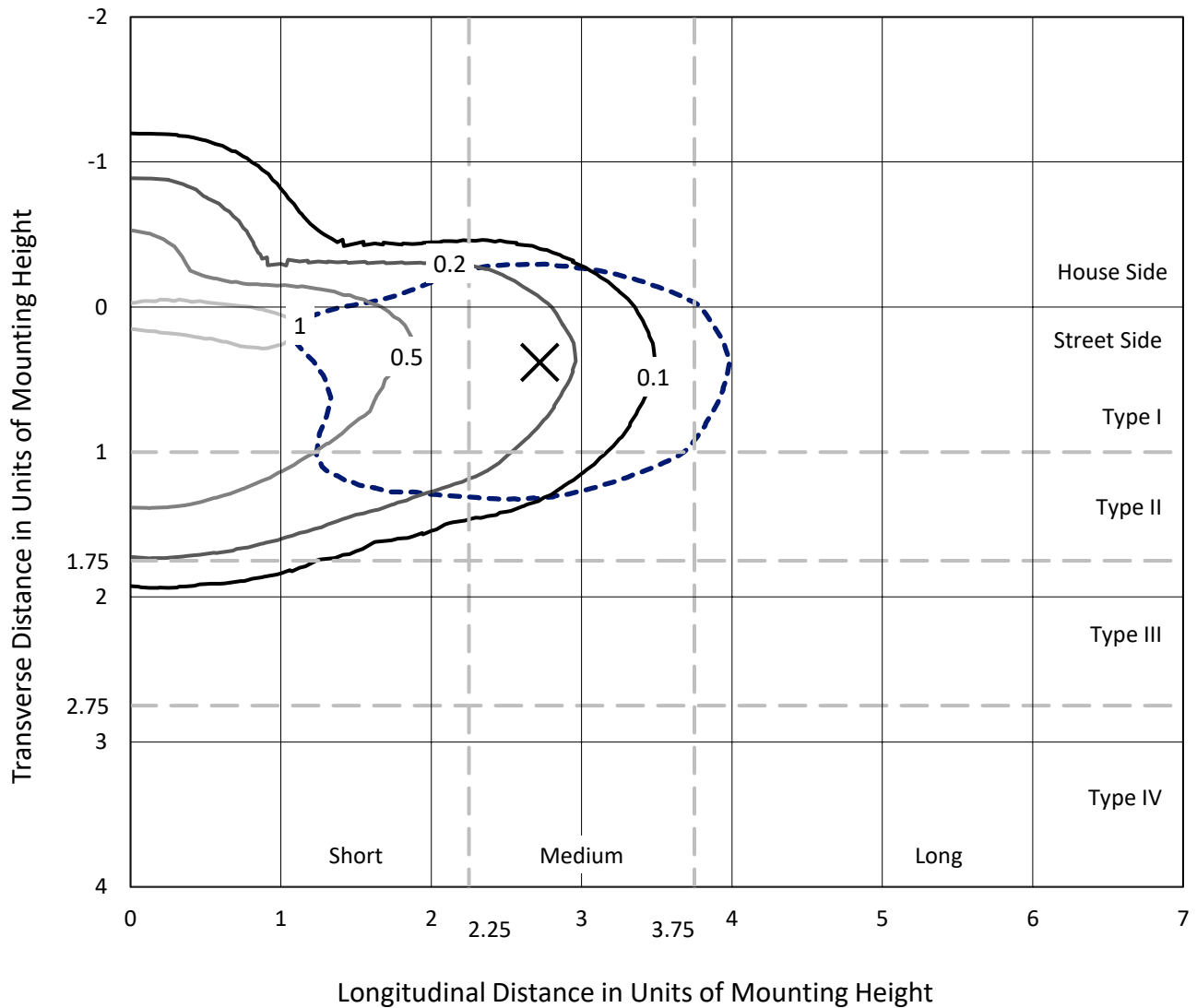
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881697
 CATALOG NUMBER: NAV-SB1B-722-U-T2

Iso-Footcandle Lines of Horizontal Illumination

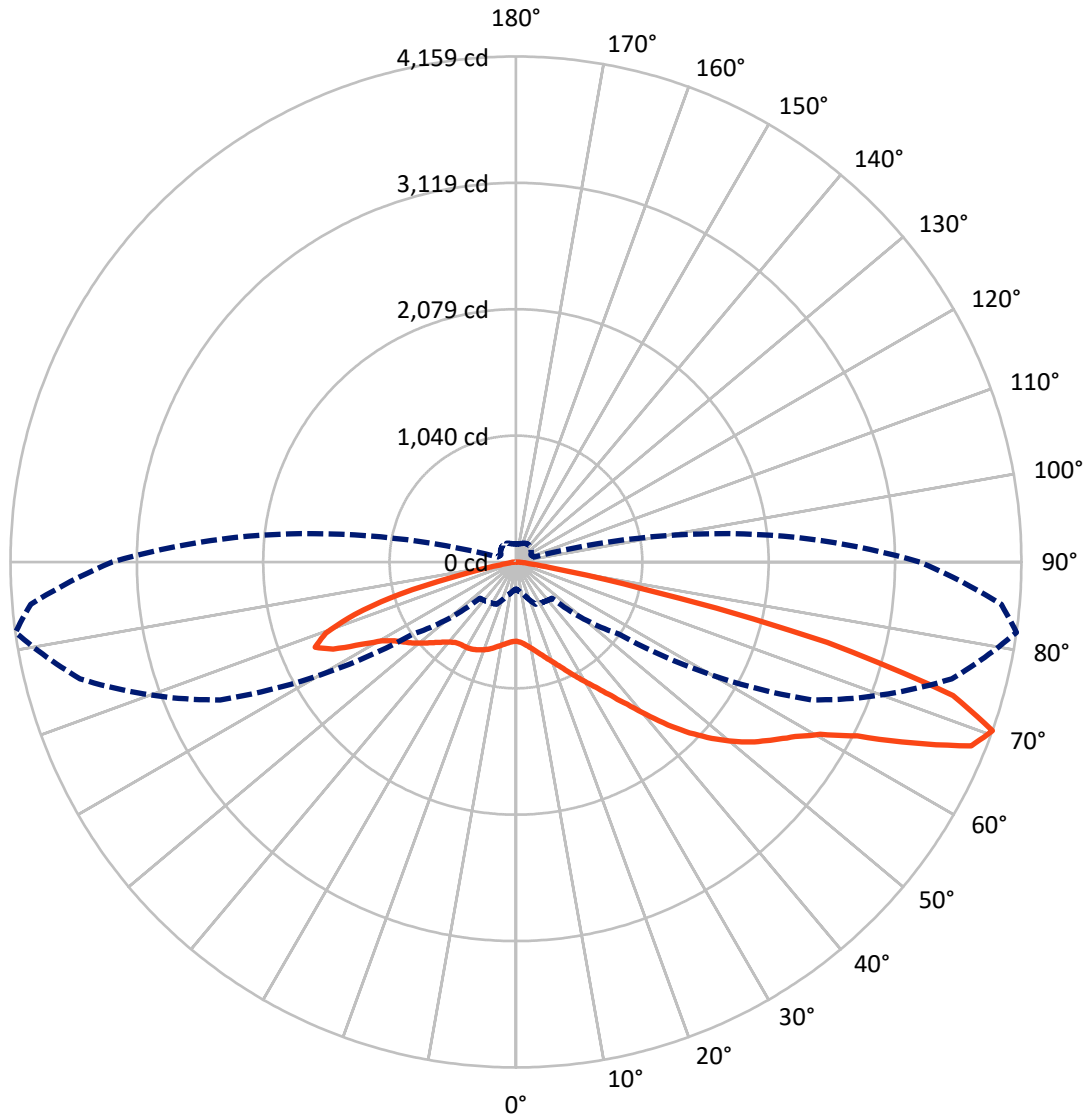
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P881697
CATALOG NUMBER: NAV-SB1B-722-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P881697
 CATALOG NUMBER: NAV-SB1B-722-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1097.0	0.0	1097.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3353.0	0.0	3353.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	4450.0	0.0	4450.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.6	1.4
10°-20°	177.0	4.0
20°-30°	296.1	6.7
30°-40°	462.5	10.4
40°-50°	736.7	16.6
50°-60°	1025.1	23.0
60°-70°	1072.3	24.1
70°-80°	560.5	12.6
80°-90°	58.2	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°	4450.0	100.0
0°-180°	4450.0	100.0

Coefficient of Utilization

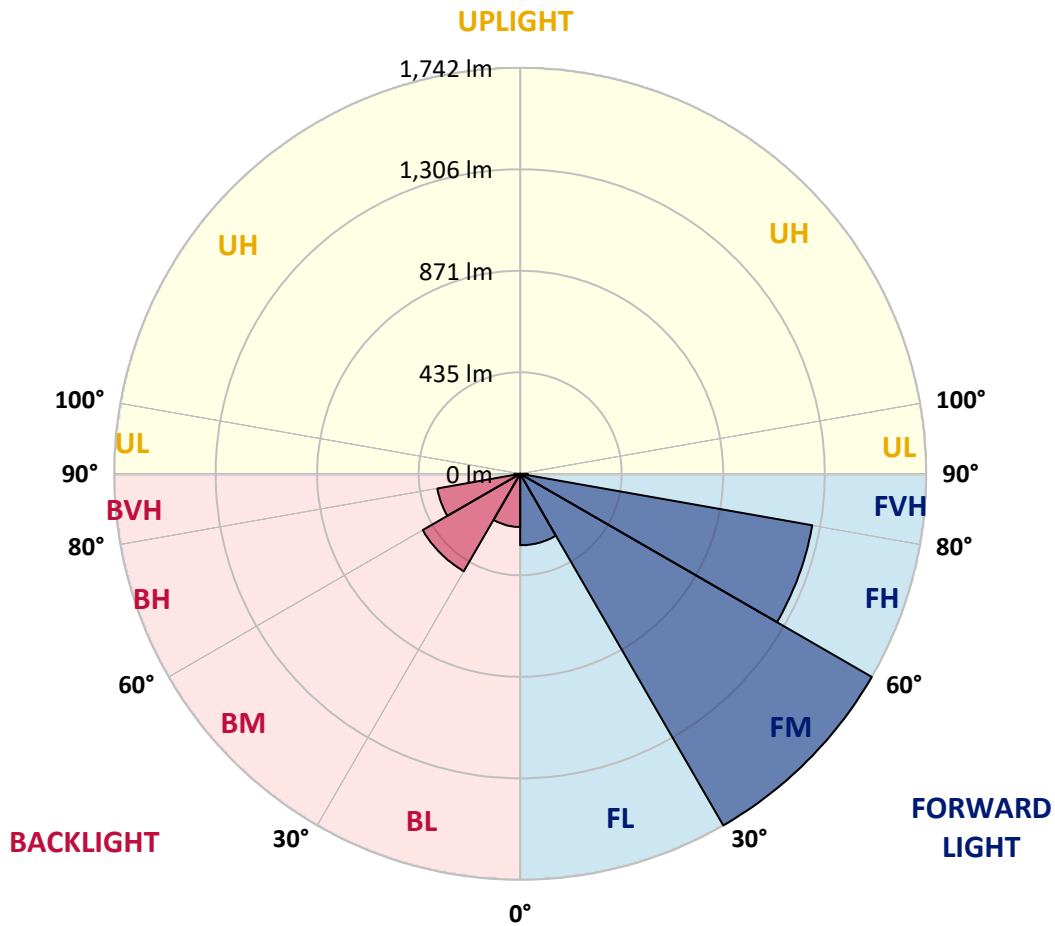


REPORT NUMBER: P881697
 CATALOG NUMBER: NAV-SB1B-722-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	306.4	6.9			
FM (30°-60°)	1741.7	39.1			
FH (60°-80°)	1272.3	28.6			G1/1800
FVH (80°-90°)	32.6	0.7			G1/100
BL (0°-30°)	228.2	5.1	B1/500		
BM (30°-60°)	482.7	10.8	B1/1000		
BH (60°-80°)	360.5	8.1	B1/500		G1/500
BVH (80°-90°)	25.6	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 II Medium



REPORT NUMBER: P881697

CATALOG NUMBER: NAV-SB1B-722-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	668.0	671.8	670.6	669.4	669.4	667.8	667.5	665.2	663.3	660.2	659.5
5°	676.5	680.5	680.1	681.0	684.1	684.8	685.5	684.1	680.3	676.5	674.9
7.5°	669.0	673.4	674.9	680.5	690.0	698.5	704.8	707.4	703.9	698.5	695.9
10°	643.5	648.4	653.4	666.8	683.6	703.7	720.7	730.8	730.1	724.9	720.4
12.5°	591.7	596.9	607.6	633.8	664.5	699.9	731.5	752.8	760.1	756.3	748.5
15°	550.4	554.9	562.9	589.9	629.8	683.6	735.5	776.9	795.5	793.4	783.9
17.5°	549.2	551.1	556.1	568.8	599.5	658.1	731.3	800.5	836.1	835.9	824.1
20°	570.0	570.7	573.6	576.2	593.6	638.7	720.4	820.1	881.7	881.7	869.0
22.5°	598.8	598.4	601.2	598.8	607.3	637.1	713.6	837.3	932.5	936.3	920.2
25°	642.0	639.7	639.0	633.5	635.2	652.4	721.1	856.9	992.7	1000.5	980.4
27.5°	699.7	695.9	693.3	680.8	676.5	684.1	744.3	880.5	1059.7	1073.2	1047.7
30°	774.7	767.9	764.1	742.4	727.0	728.2	779.2	911.9	1129.9	1151.6	1119.3
32.5°	877.2	866.6	856.4	820.8	792.7	783.5	824.3	955.4	1205.9	1240.6	1199.1
35°	992.0	983.5	972.6	917.6	874.4	853.1	885.2	1016.1	1294.9	1350.0	1295.9
37.5°	1102.5	1095.2	1100.4	1026.2	970.5	939.6	965.1	1097.5	1404.7	1486.0	1417.2
40°	1216.8	1211.1	1211.8	1141.0	1076.0	1041.3	1061.9	1199.8	1530.6	1647.7	1563.2
42.5°	1341.0	1336.7	1322.6	1259.8	1186.8	1154.4	1173.3	1317.8	1665.7	1831.9	1723.3
45°	1480.1	1477.5	1464.2	1392.2	1308.6	1272.3	1297.8	1448.2	1801.4	2005.2	1884.1
47.5°	1600.2	1602.4	1600.7	1540.0	1453.4	1400.0	1430.5	1584.2	1927.8	2168.1	2038.3
50°	1658.1	1669.2	1685.5	1666.6	1612.8	1558.5	1564.4	1715.5	2048.2	2320.9	2186.1
52.5°	1627.9	1648.9	1693.3	1723.5	1744.3	1733.0	1717.1	1845.8	2161.5	2458.8	2325.9
55°	1515.2	1544.8	1618.4	1691.4	1797.4	1879.8	1900.6	1990.3	2272.0	2580.2	2458.1
57.5°	1310.0	1358.0	1424.1	1571.7	1750.2	1950.9	2114.5	2190.8	2389.2	2709.8	2596.5
60°	958.2	1022.4	1104.6	1324.2	1584.9	1912.9	2296.6	2498.7	2555.6	2877.7	2776.6
62.5°	613.2	652.9	728.5	935.3	1235.0	1718.1	2352.3	2883.6	2837.8	3153.0	3046.8
65°	419.8	445.3	514.5	630.7	798.4	1278.9	2203.1	3172.2	3286.0	3589.4	3508.6
67.5°	305.1	324.4	383.5	485.2	520.2	756.8	1709.6	3158.9	3721.6	4039.0	3913.4
70°	222.4	236.1	285.7	383.5	400.2	421.0	1035.7	2685.3	3712.2	4158.5	4008.1
72.5°	164.8	174.3	207.6	297.5	324.0	284.3	512.6	1951.6	3189.9	3761.3	3640.6
75°	119.2	126.3	150.9	227.6	259.3	216.5	255.7	1140.5	2225.0	2645.8	2667.1
77.5°	91.1	96.6	112.6	166.7	207.6	162.5	158.7	524.7	1055.0	1060.2	1119.7
80°	73.2	76.7	85.5	117.4	159.2	121.6	103.4	211.8	333.4	282.2	296.1
82.5°	53.8	59.7	72.3	82.4	113.8	83.8	63.0	107.0	126.8	109.1	110.0
85°	30.7	34.7	43.7	59.0	72.7	51.2	36.1	47.5	59.0	48.4	43.2
87.5°	10.9	14.2	15.3	23.1	31.6	21.3	13.9	13.7	19.4	14.4	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P881697
 CATALOG NUMBER: NAV-SB1B-722-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	657.1	656.0	651.2	644.9	638.3	631.9	629.8	625.3	622.2	620.5	622.4
5°	670.4	666.6	655.5	641.3	626.5	610.4	599.1	588.7	581.1	574.0	576.9
7.5°	689.3	682.7	663.5	638.7	612.3	585.6	565.8	550.7	540.5	533.9	535.3
10°	711.2	701.1	671.8	634.7	593.9	555.6	532.2	519.2	512.9	509.3	510.3
12.5°	736.5	722.1	680.3	625.5	565.8	522.1	506.0	502.2	502.5	502.7	503.2
15°	767.7	747.6	687.1	605.4	529.2	496.3	493.5	499.6	506.0	509.1	508.9
17.5°	802.8	774.5	688.3	572.4	493.3	479.8	488.8	502.0	511.7	515.9	516.9
20°	840.6	801.9	679.8	525.6	463.8	466.4	482.4	499.4	510.0	515.5	516.9
22.5°	883.8	831.2	659.5	476.5	439.7	451.7	470.6	487.1	498.2	503.7	505.1
25°	933.2	864.0	627.6	435.2	418.9	435.2	454.1	467.8	476.7	481.7	483.1
27.5°	988.0	898.2	585.1	402.4	400.7	418.2	433.8	444.4	449.1	452.9	454.3
30°	1043.0	929.4	533.7	377.6	384.9	401.4	412.5	417.2	418.7	419.4	421.0
32.5°	1102.5	956.3	479.6	357.0	369.8	385.1	391.7	393.9	387.3	382.8	384.2
35°	1174.5	985.1	426.7	340.7	354.9	368.1	370.3	368.4	360.6	351.4	351.8
37.5°	1263.5	1021.0	384.4	329.2	341.0	349.7	347.1	346.6	347.3	336.5	337.2
40°	1372.6	1067.8	353.5	320.2	329.6	331.5	324.2	328.2	331.8	315.2	315.7
42.5°	1493.8	1124.2	333.9	314.1	320.2	315.7	304.4	308.9	308.4	286.7	286.4
45°	1617.3	1185.6	327.0	309.6	311.5	302.5	290.0	291.1	281.2	261.6	262.3
47.5°	1740.0	1251.5	331.3	305.8	300.6	290.4	280.8	275.6	260.9	246.3	246.3
50°	1860.5	1320.7	346.9	298.2	285.7	279.8	272.7	263.5	247.9	235.4	234.5
52.5°	1972.2	1390.3	364.3	285.7	267.1	270.6	266.1	255.5	240.1	227.4	227.6
55°	2077.9	1460.0	371.2	268.5	249.6	262.6	260.0	240.4	222.0	211.6	210.6
57.5°	2193.2	1543.8	363.6	246.5	235.4	253.4	243.4	221.7	211.1	203.3	202.6
60°	2352.8	1675.3	347.3	219.4	222.0	239.7	222.7	213.7	202.1	193.4	192.9
62.5°	2618.0	1920.7	321.1	192.4	206.1	219.4	212.8	203.8	192.0	183.5	183.5
65°	3009.9	2261.6	271.8	171.4	188.4	199.5	202.1	193.2	180.9	171.9	172.4
67.5°	3340.5	2475.6	205.7	154.0	170.2	183.5	190.8	182.1	169.1	160.3	160.6
70°	3322.3	2320.2	157.0	136.7	154.2	167.7	177.1	170.2	156.3	148.1	148.8
72.5°	2950.9	1941.0	127.0	119.2	137.9	151.1	162.5	157.3	143.1	135.1	135.1
75°	2167.9	1377.8	101.5	101.5	117.6	133.9	146.4	143.1	130.1	124.4	122.8
77.5°	913.8	578.0	79.6	84.3	97.8	115.0	130.6	131.8	120.4	127.5	115.7
80°	243.0	159.4	60.7	66.4	76.7	94.9	113.6	113.1	100.8	94.2	87.6
82.5°	92.6	62.8	43.2	46.8	55.5	72.7	90.0	92.8	80.5	69.7	69.7
85°	35.7	26.9	26.7	28.1	32.3	48.2	68.0	70.4	60.7	51.5	53.1
87.5°	9.2	8.0	9.9	9.4	14.9	25.7	39.0	40.4	37.1	21.5	30.7
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)