

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: P881557

Luminaire Tested: **NAV-SB1A-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881557
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-SB1A-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4448 lumens
Efficiency: N/A
Efficacy: 143.9 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

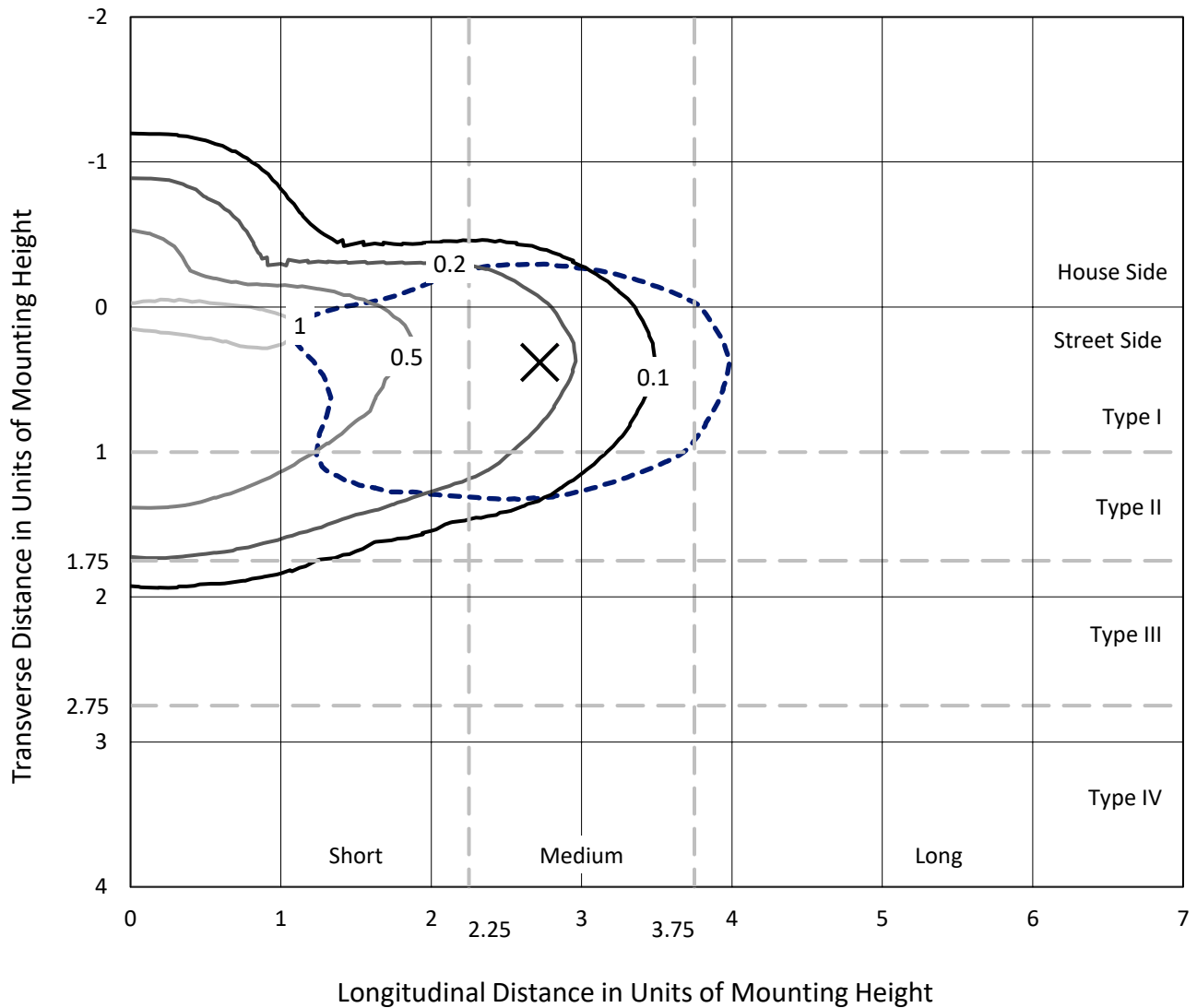
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

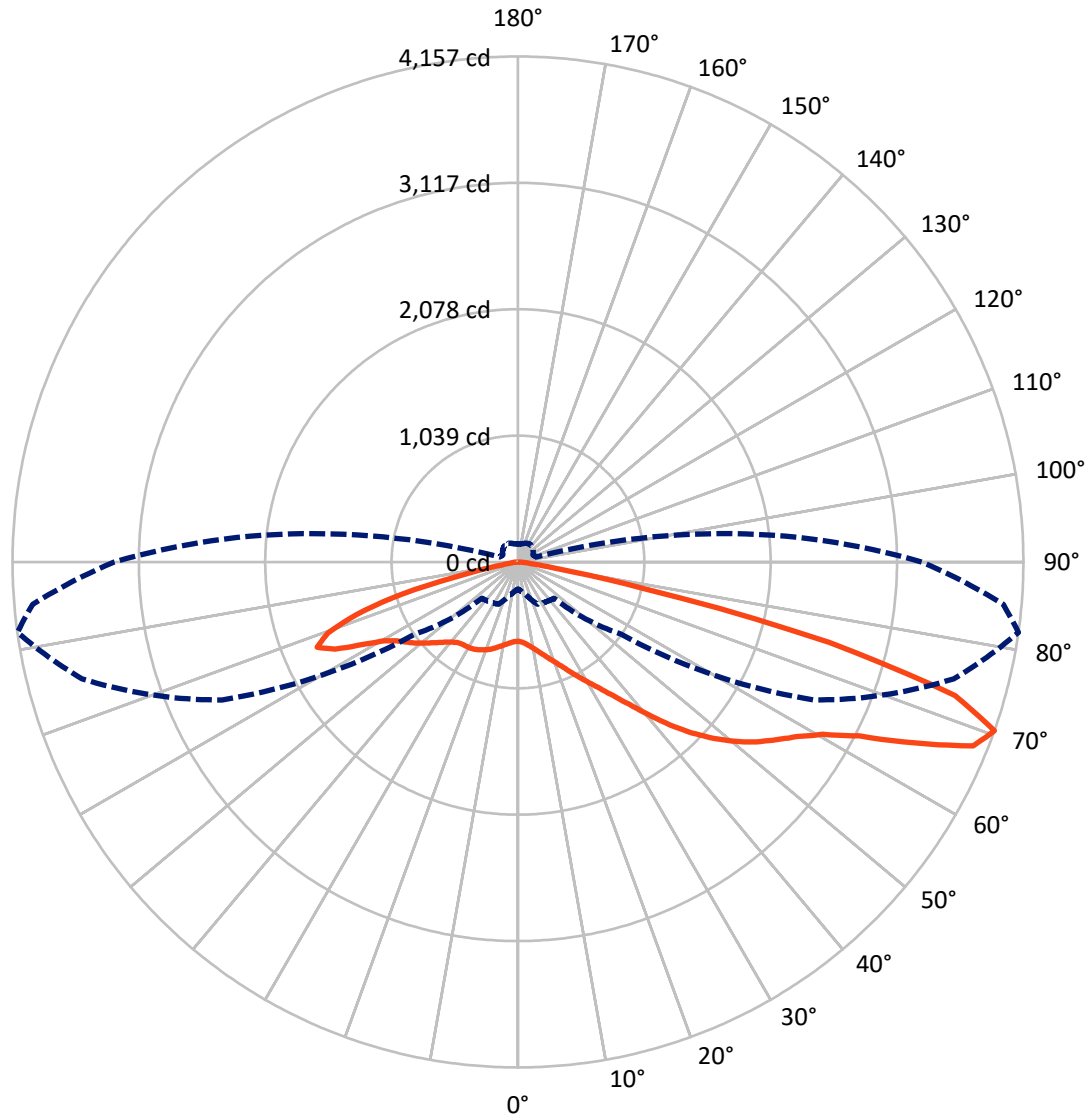
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1096.5	0.0	1096.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3351.5	0.0	3351.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	4448.0	0.0	4448.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.6	1.4
10°-20°	176.9	4.0
20°-30°	295.9	6.7
30°-40°	462.3	10.4
40°-50°	736.3	16.6
50°-60°	1024.7	23.0
60°-70°	1071.9	24.1
70°-80°	560.2	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°	4448.0	100.0
0°-180°	4448.0	100.0

Coefficient of Utilization

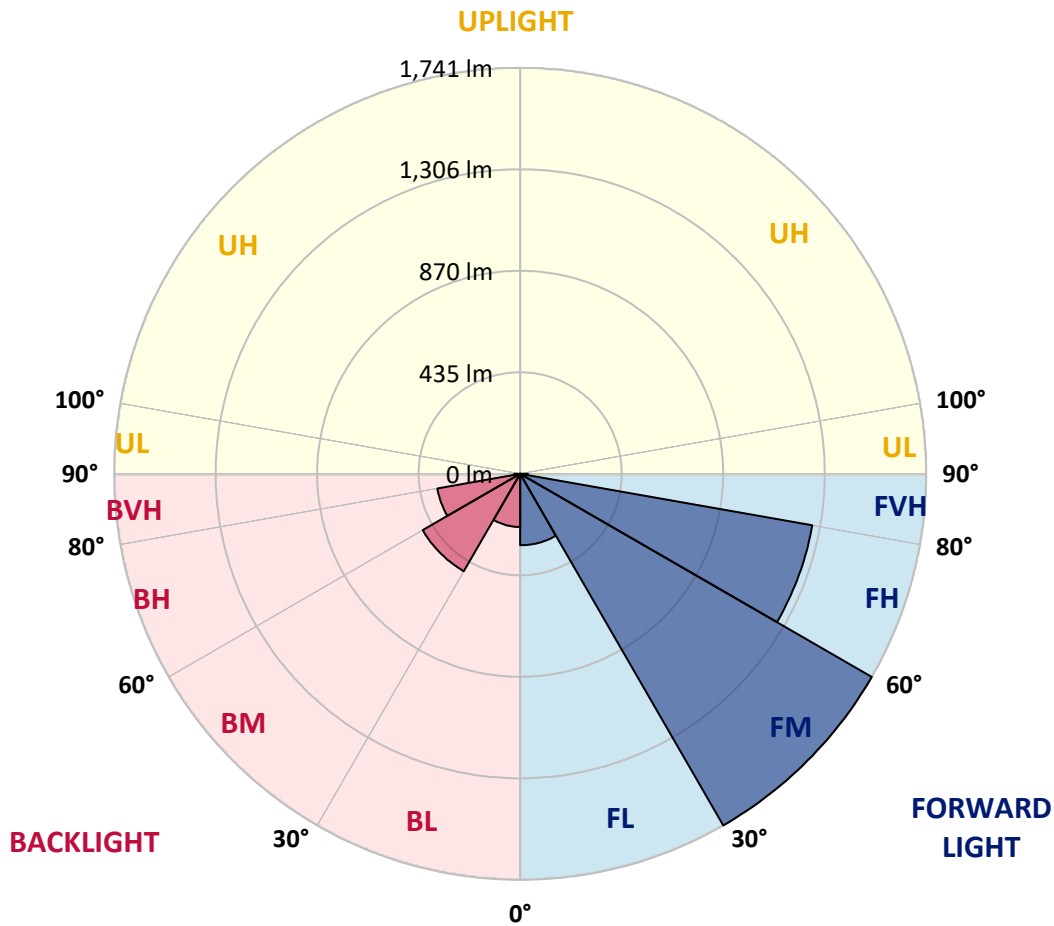


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	306.3	6.9			
FM (30°-60°)	1740.9	39.1			
FH (60°-80°)	1271.7	28.6			G1/1800
FVH (80°-90°)	32.6	0.7			G1/100
BL (0°-30°)	228.1	5.1	B1/500		
BM (30°-60°)	482.4	10.8	B1/1000		
BH (60°-80°)	360.4	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1
2.5°	667.7	671.5	670.3	669.1	669.1	667.5	667.2	664.9	663.0	659.9	659.2
5°	676.2	680.2	679.7	680.7	683.8	684.5	685.2	683.8	680.0	676.2	674.6
7.5°	668.7	673.1	674.6	680.2	689.7	698.2	704.5	707.1	703.6	698.2	695.6
10°	643.2	648.1	653.1	666.5	683.3	703.3	720.3	730.5	729.8	724.6	720.1
12.5°	591.5	596.7	607.3	633.5	664.2	699.6	731.2	752.4	759.8	756.0	748.2
15°	550.2	554.7	562.7	589.6	629.5	683.3	735.2	776.5	795.2	793.0	783.6
17.5°	549.0	550.9	555.8	568.6	599.3	657.8	731.0	800.1	835.8	835.5	823.7
20°	569.8	570.5	573.3	575.9	593.4	638.4	720.1	819.7	881.3	881.3	868.6
22.5°	598.6	598.1	600.9	598.6	607.1	636.8	713.3	836.9	932.1	935.8	919.8
25°	641.7	639.4	638.7	633.3	634.9	652.1	720.8	856.5	992.2	1000.0	980.0
27.5°	699.3	695.6	693.0	680.5	676.2	683.8	743.9	880.1	1059.3	1072.7	1047.2
30°	774.4	767.5	763.8	742.1	726.7	727.9	778.9	911.5	1129.4	1151.1	1118.8
32.5°	876.8	866.2	856.1	820.4	792.3	783.1	824.0	955.0	1205.4	1240.1	1198.5
35°	991.5	983.0	972.2	917.2	874.0	852.8	884.9	1015.6	1294.4	1349.3	1295.3
37.5°	1102.0	1094.7	1099.9	1025.8	970.1	939.1	964.6	1097.0	1404.1	1485.3	1416.6
40°	1216.2	1210.6	1211.3	1140.5	1075.6	1040.9	1061.4	1199.2	1529.9	1647.0	1562.5
42.5°	1340.4	1336.1	1322.0	1259.2	1186.3	1153.9	1172.8	1317.2	1664.9	1831.1	1722.5
45°	1479.4	1476.8	1463.6	1391.6	1308.0	1271.7	1297.2	1447.5	1800.6	2004.3	1883.2
47.5°	1599.5	1601.7	1600.0	1539.3	1452.7	1399.4	1429.8	1583.5	1926.9	2167.2	2037.4
50°	1657.4	1668.4	1684.7	1665.9	1612.0	1557.8	1563.7	1714.7	2047.3	2319.9	2185.1
52.5°	1627.1	1648.2	1692.5	1722.7	1743.5	1732.2	1716.4	1845.0	2160.6	2457.7	2324.8
55°	1514.6	1544.1	1617.7	1690.6	1796.6	1879.0	1899.8	1989.4	2271.0	2579.0	2457.0
57.5°	1309.5	1357.4	1423.5	1571.0	1749.4	1950.0	2113.6	2189.8	2388.1	2708.6	2595.3
60°	957.8	1022.0	1104.1	1323.6	1584.2	1912.0	2295.6	2497.6	2554.5	2876.4	2775.4
62.5°	613.0	652.6	728.1	934.9	1234.4	1717.3	2351.3	2882.3	2836.5	3151.6	3045.4
65°	419.6	445.1	514.3	630.4	798.0	1278.3	2202.1	3170.7	3284.5	3587.8	3507.1
67.5°	304.9	324.3	383.3	485.0	520.0	756.5	1708.8	3157.5	3720.0	4037.2	3911.6
70°	222.3	236.0	285.6	383.3	400.1	420.8	1035.2	2684.1	3710.5	4156.6	4006.3
72.5°	164.7	174.2	207.5	297.4	323.8	284.2	512.4	1950.7	3188.4	3759.6	3639.0
75°	119.2	126.3	150.8	227.5	259.2	216.4	255.6	1140.0	2224.0	2644.6	2665.9
77.5°	91.1	96.5	112.6	166.6	207.5	162.4	158.6	524.4	1054.6	1059.7	1119.2
80°	73.2	76.7	85.4	117.3	159.1	121.6	103.4	211.7	333.3	282.0	296.0
82.5°	53.8	59.7	72.2	82.4	113.8	83.8	63.0	106.9	126.7	109.0	110.0
85°	30.7	34.7	43.7	59.0	72.7	51.2	36.1	47.4	59.0	48.4	43.2
87.5°	10.9	14.2	15.3	23.1	31.6	21.2	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

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1	652.1
2.5°	656.9	655.7	651.0	644.6	638.0	631.6	629.5	625.0	621.9	620.3	622.2
5°	670.1	666.3	655.2	641.0	626.2	610.1	598.8	588.4	580.9	573.8	576.6
7.5°	689.0	682.3	663.2	638.4	612.0	585.3	565.5	550.4	540.3	533.6	535.1
10°	710.9	700.8	671.5	634.4	593.6	555.4	532.0	519.0	512.6	509.1	510.0
12.5°	736.2	721.8	680.0	625.2	565.5	521.8	505.8	502.0	502.3	502.5	503.0
15°	767.3	747.2	686.8	605.2	528.9	496.1	493.3	499.4	505.8	508.9	508.6
17.5°	802.5	774.2	688.0	572.1	493.1	479.6	488.6	501.8	511.5	515.7	516.7
20°	840.2	801.5	679.5	525.4	463.5	466.1	482.2	499.2	509.8	515.2	516.7
22.5°	883.4	830.8	659.2	476.3	439.5	451.5	470.4	486.9	498.0	503.4	504.9
25°	932.8	863.6	627.3	435.0	418.7	435.0	453.9	467.6	476.5	481.5	482.9
27.5°	987.5	897.8	584.9	402.2	400.5	418.0	433.6	444.2	448.9	452.7	454.1
30°	1042.5	929.0	533.4	377.4	384.7	401.2	412.3	417.1	418.5	419.2	420.8
32.5°	1102.0	955.9	479.4	356.9	369.6	385.0	391.6	393.7	387.1	382.6	384.0
35°	1174.0	984.7	426.5	340.6	354.7	368.0	370.1	368.2	360.4	351.2	351.7
37.5°	1263.0	1020.6	384.2	329.0	340.8	349.6	347.0	346.5	347.2	336.3	337.0
40°	1372.0	1067.3	353.3	320.0	329.5	331.4	324.1	328.1	331.6	315.1	315.6
42.5°	1493.1	1123.7	333.7	313.9	320.0	315.6	304.2	308.7	308.2	286.5	286.3
45°	1616.5	1185.1	326.9	309.4	311.3	302.3	289.8	291.0	281.1	261.5	262.2
47.5°	1739.3	1250.9	331.1	305.7	300.5	290.3	280.6	275.4	260.8	246.2	246.2
50°	1859.6	1320.1	346.7	298.1	285.6	279.7	272.6	263.4	247.8	235.3	234.4
52.5°	1971.3	1389.7	364.2	285.6	266.9	270.5	266.0	255.4	240.0	227.3	227.5
55°	2077.0	1459.3	371.0	268.4	249.5	262.5	259.9	240.3	221.9	211.5	210.5
57.5°	2192.2	1543.1	363.5	246.4	235.3	253.3	243.3	221.6	211.0	203.2	202.5
60°	2351.7	1674.6	347.2	219.3	221.9	239.6	222.6	213.6	202.0	193.3	192.8
62.5°	2616.8	1919.8	321.0	192.4	206.0	219.3	212.7	203.7	191.9	183.4	183.4
65°	3008.6	2260.6	271.7	171.4	188.3	199.4	202.0	193.1	180.8	171.8	172.3
67.5°	3339.0	2474.5	205.6	153.9	170.2	183.4	190.7	182.0	169.0	160.3	160.5
70°	3320.8	2319.2	157.0	136.7	154.1	167.6	177.0	170.2	156.2	148.0	148.7
72.5°	2949.6	1940.1	127.0	119.2	137.8	151.1	162.4	157.2	143.0	135.0	135.0
75°	2166.9	1377.2	101.5	101.5	117.5	133.8	146.3	143.0	130.0	124.4	122.7
77.5°	913.4	577.8	79.5	84.3	97.7	114.9	130.5	131.7	120.4	127.5	115.7
80°	242.9	159.3	60.7	66.3	76.7	94.9	113.5	113.1	100.8	94.2	87.6
82.5°	92.5	62.8	43.2	46.7	55.5	72.7	89.9	92.8	80.5	69.6	69.6
85°	35.6	26.9	26.7	28.1	32.3	48.1	68.0	70.3	60.7	51.5	53.1
87.5°	9.2	8.0	9.9	9.4	14.9	25.7	38.9	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)