

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: P881549

Luminaire Tested: **NAV-SB1A-730-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881549
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-730-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4422 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

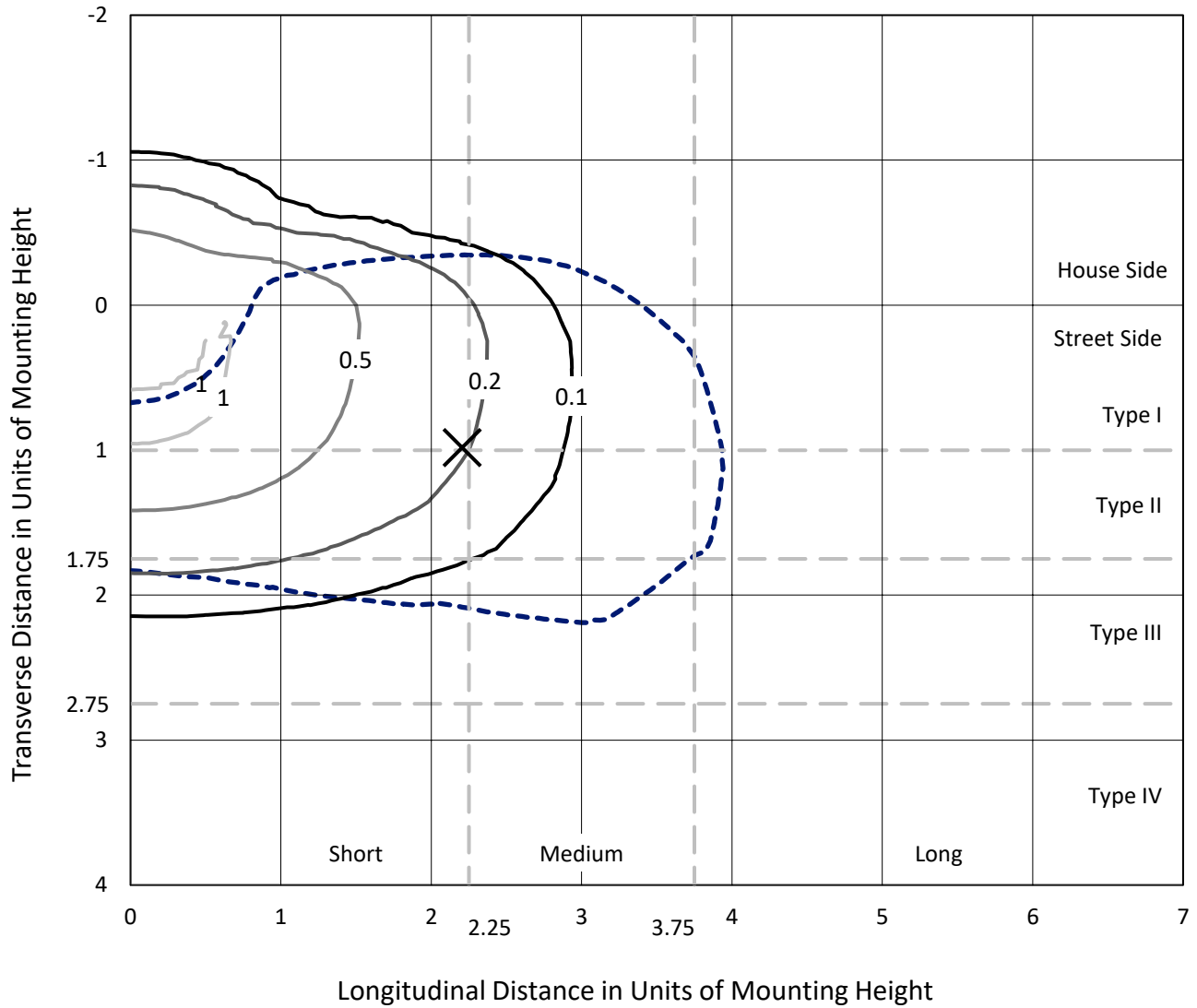
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

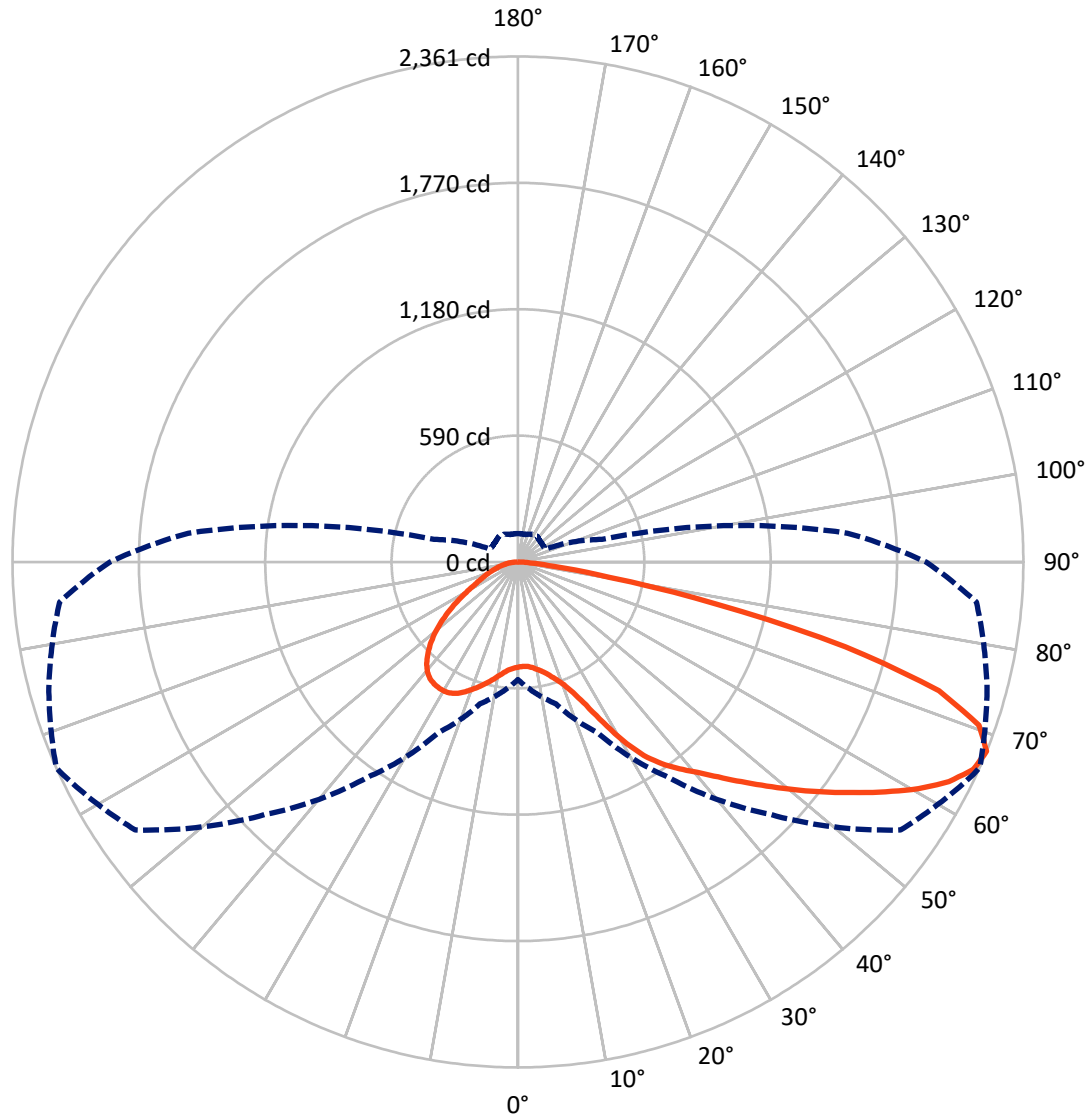
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

REPORT NUMBER: P881549
CATALOG NUMBER: NAV-SB1A-730-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1099.5	0.0	1099.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3322.5	0.0	3322.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	4422.0	0.0	4422.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	1.1
10°-20°	160.7	3.6
20°-30°	309.7	7.0
30°-40°	542.9	12.3
40°-50°	807.2	18.3
50°-60°	1023.2	23.1
60°-70°	1001.2	22.6
70°-80°	477.6	10.8
80°-90°	51.0	1.2
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°	4422.0	100.0
0°-180°	4422.0	100.0

Coefficient of Utilization



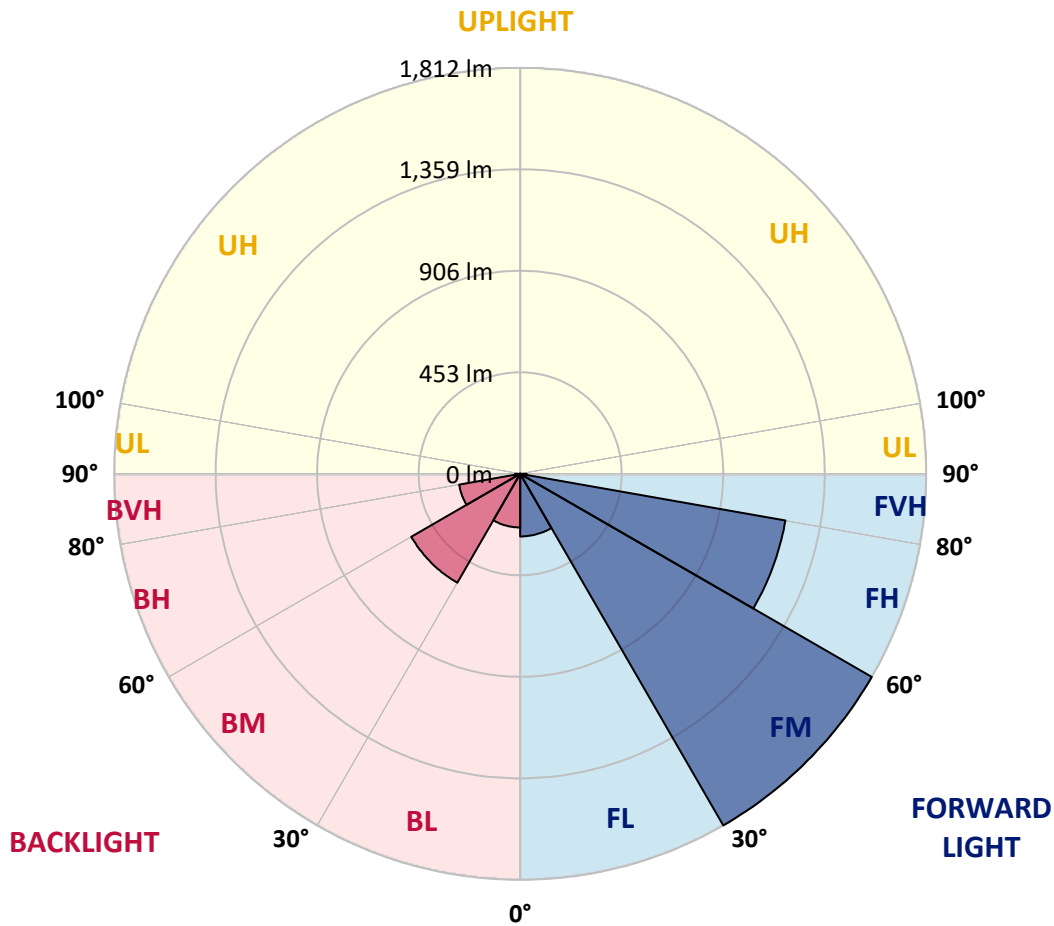
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 CATALOG NUMBER: NAV-SB1A-730-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	279.4	6.3			
FM (30°-60°)	1812.1	41.0			
FH (60°-80°)	1202.0	27.2			G1/1800
FVH (80°-90°)	28.9	0.7			G1/100
BL (0°-30°)	239.5	5.4	B1/500		
BM (30°-60°)	561.2	12.7	B1/1000		
BH (60°-80°)	276.7	6.3	B1/500		G1/500
BVH (80°-90°)	22.1	0.5			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 III Short



REPORT NUMBER: P881549
 CATALOG NUMBER: NAV-SB1A-730-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5
2.5°	485.3	488.1	487.4	486.3	486.0	486.5	487.2	487.9	487.7	488.8	490.7
5°	484.0	486.7	486.5	486.5	487.4	489.3	490.5	491.6	490.5	491.9	494.4
7.5°	484.9	487.0	487.9	488.8	491.2	494.6	497.4	500.0	498.6	500.2	503.5
10°	496.7	498.4	499.3	499.3	500.9	504.9	507.7	512.3	511.1	513.7	517.9
12.5°	518.3	520.0	520.0	519.0	520.2	522.8	523.7	528.8	526.7	530.9	535.1
15°	544.8	548.1	545.5	543.9	544.4	546.9	546.7	550.6	548.5	552.0	555.7
17.5°	574.1	578.3	574.1	573.9	572.9	575.7	576.0	579.4	575.7	578.3	580.8
20°	608.7	614.5	611.0	612.2	610.1	611.3	612.4	617.5	611.7	613.6	612.9
22.5°	657.5	664.5	660.8	665.2	663.8	662.9	662.6	671.7	662.6	663.3	656.6
25°	728.6	737.0	730.5	736.5	736.5	739.5	743.0	754.6	739.5	735.1	717.7
27.5°	833.6	842.0	829.2	832.9	831.8	839.2	835.5	864.3	848.0	840.8	805.7
30°	960.0	974.9	950.7	949.8	948.6	960.5	965.8	984.9	968.4	961.2	918.9
32.5°	1096.6	1112.2	1083.4	1075.0	1070.6	1077.8	1073.4	1088.7	1077.3	1066.2	1013.9
35°	1241.1	1256.5	1229.0	1212.8	1195.1	1180.0	1164.2	1168.2	1157.5	1140.5	1086.4
37.5°	1377.7	1405.9	1376.8	1359.4	1326.9	1297.4	1253.2	1234.9	1224.9	1209.3	1154.7
40°	1516.9	1532.9	1510.9	1496.0	1460.7	1414.5	1343.8	1305.0	1291.5	1276.4	1230.2
42.5°	1619.4	1634.7	1622.9	1612.6	1585.0	1531.3	1440.0	1391.5	1371.9	1355.0	1315.7
45°	1700.7	1712.1	1704.6	1708.4	1696.5	1644.5	1539.7	1484.2	1463.9	1443.3	1412.4
47.5°	1733.4	1745.5	1757.4	1779.5	1799.7	1761.3	1646.8	1584.5	1563.1	1542.0	1511.6
50°	1729.7	1742.0	1776.4	1823.4	1886.1	1873.3	1759.7	1691.4	1671.6	1647.5	1619.4
52.5°	1700.0	1713.9	1758.1	1836.1	1936.0	1957.2	1874.7	1801.8	1783.2	1754.4	1726.2
55°	1621.9	1630.3	1696.5	1807.1	1947.9	2015.7	1987.4	1919.3	1900.7	1860.5	1829.9
57.5°	1477.2	1489.3	1585.7	1728.8	1918.2	2055.5	2086.4	2042.9	2025.0	1967.2	1935.1
60°	1288.3	1307.6	1417.9	1597.3	1842.4	2055.2	2176.3	2164.4	2149.6	2072.2	2038.7
62.5°	1074.5	1096.9	1203.0	1411.4	1710.0	1996.9	2232.5	2266.2	2258.5	2169.1	2126.3
65°	825.3	840.6	946.3	1171.0	1503.9	1871.7	2239.0	2335.7	2337.1	2242.7	2172.1
67.5°	549.5	593.6	685.4	878.7	1227.9	1667.0	2181.9	2347.0	2360.5	2268.0	2149.1
70°	268.1	326.2	416.1	571.1	878.7	1353.1	2032.5	2253.6	2283.6	2194.2	2012.0
72.5°	111.3	130.1	179.1	281.8	504.4	913.1	1732.3	2000.4	2055.9	1944.2	1691.6
75°	75.0	81.3	102.5	144.5	229.8	450.3	1249.3	1491.6	1581.0	1468.4	1200.2
77.5°	57.9	61.8	74.6	101.1	136.6	170.3	668.7	898.9	945.1	875.0	624.5
80°	45.5	48.6	55.8	73.7	96.9	91.1	227.9	407.3	434.0	364.1	200.7
82.5°	39.5	40.7	40.0	50.0	64.4	53.2	74.8	150.3	165.9	120.3	65.5
85°	28.6	31.8	33.2	30.9	34.2	27.0	30.7	53.2	58.5	52.3	36.9
87.5°	11.6	17.2	21.1	20.0	12.5	7.7	9.5	15.6	17.9	19.5	12.1
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: P881549
 CATALOG NUMBER: NAV-SB1A-730-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5	490.5
2.5°	490.9	492.5	493.7	495.1	496.0	497.4	500.2	501.8	502.1	503.2	503.0
5°	495.3	497.7	500.2	503.9	508.1	511.6	516.9	520.7	522.1	523.2	523.0
7.5°	504.9	508.1	512.8	519.3	525.3	530.0	536.5	540.9	545.3	546.9	547.1
10°	519.0	523.7	530.4	539.2	545.8	551.8	558.5	562.2	566.7	568.5	569.5
12.5°	536.7	541.6	550.4	562.7	568.8	572.9	575.3	574.3	575.3	576.9	577.4
15°	556.9	562.2	572.2	585.5	589.7	585.9	580.8	576.2	575.5	576.0	577.6
17.5°	580.8	584.8	596.4	607.6	604.5	589.2	578.0	570.6	566.9	565.7	567.4
20°	614.3	614.3	623.8	630.8	610.6	584.6	567.1	555.0	547.4	544.1	543.4
22.5°	655.0	651.2	657.3	652.4	609.4	571.5	547.4	526.5	514.9	510.2	509.5
25°	706.5	702.1	700.5	670.3	601.0	550.9	511.6	486.3	476.1	473.5	474.0
27.5°	784.4	773.2	752.1	680.0	585.7	518.3	469.8	446.3	440.5	440.7	441.4
30°	888.0	865.7	813.9	681.7	560.6	472.3	427.0	410.3	407.5	408.7	412.6
32.5°	983.9	962.8	877.1	674.2	522.1	427.3	388.7	377.5	373.4	374.8	376.6
35°	1059.2	1053.4	935.6	663.8	474.7	385.0	354.3	344.8	336.7	334.8	336.2
37.5°	1130.3	1128.0	979.5	649.1	427.7	355.0	326.7	314.1	302.3	295.8	296.0
40°	1208.4	1206.0	1008.3	626.6	386.1	329.0	301.8	285.3	270.7	258.8	260.0
42.5°	1296.2	1282.5	1022.0	594.3	350.8	306.9	281.6	259.3	240.0	229.1	229.8
45°	1392.1	1361.2	1021.8	553.2	321.1	286.7	260.0	228.4	210.5	200.3	199.8
47.5°	1493.9	1436.5	1009.3	507.7	292.3	264.4	226.5	202.4	190.5	184.2	182.8
50°	1598.9	1506.9	987.9	455.4	262.8	239.1	205.6	189.1	180.1	174.3	172.2
52.5°	1697.7	1570.8	962.1	396.1	232.8	214.4	196.3	183.5	174.0	167.5	164.7
55°	1789.4	1625.9	925.6	335.5	208.4	197.9	191.9	181.2	170.3	162.6	159.6
57.5°	1871.0	1661.7	862.7	278.6	191.0	186.6	187.3	177.3	164.7	158.2	154.0
60°	1938.8	1687.9	769.5	225.8	176.8	175.4	180.1	169.8	155.2	147.8	144.5
62.5°	1979.5	1687.4	655.2	184.9	164.7	165.2	170.5	160.5	145.7	138.7	136.6
65°	1976.0	1646.1	529.7	158.2	153.1	153.6	160.5	150.3	137.8	133.6	133.4
67.5°	1906.1	1545.3	406.4	140.8	140.3	142.4	150.6	143.4	132.9	132.4	133.1
70°	1716.7	1335.9	292.7	126.9	127.1	130.1	140.8	138.9	130.3	131.3	131.0
72.5°	1376.6	1018.6	196.6	112.2	112.4	117.3	131.5	135.5	127.8	140.1	142.0
75°	916.8	635.2	126.4	96.7	96.9	103.2	123.4	128.7	120.8	139.6	140.8
77.5°	440.5	285.5	91.5	81.3	81.3	87.1	106.6	115.2	102.9	108.5	99.4
80°	152.2	107.3	72.0	65.5	64.1	68.1	89.9	99.9	88.8	81.8	76.7
82.5°	59.9	55.8	57.9	50.9	46.2	48.8	69.9	82.5	65.3	59.0	58.8
85°	34.4	36.2	40.9	33.7	26.7	30.0	51.3	59.2	49.3	43.4	44.4
87.5°	9.3	12.8	18.8	17.4	12.1	12.8	24.4	32.8	28.3	21.8	22.5
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)