

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: P881767

Luminaire Tested: **NAV-SB1B-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881767
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-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4537 lumens
Efficiency: N/A
Efficacy: 114.0 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

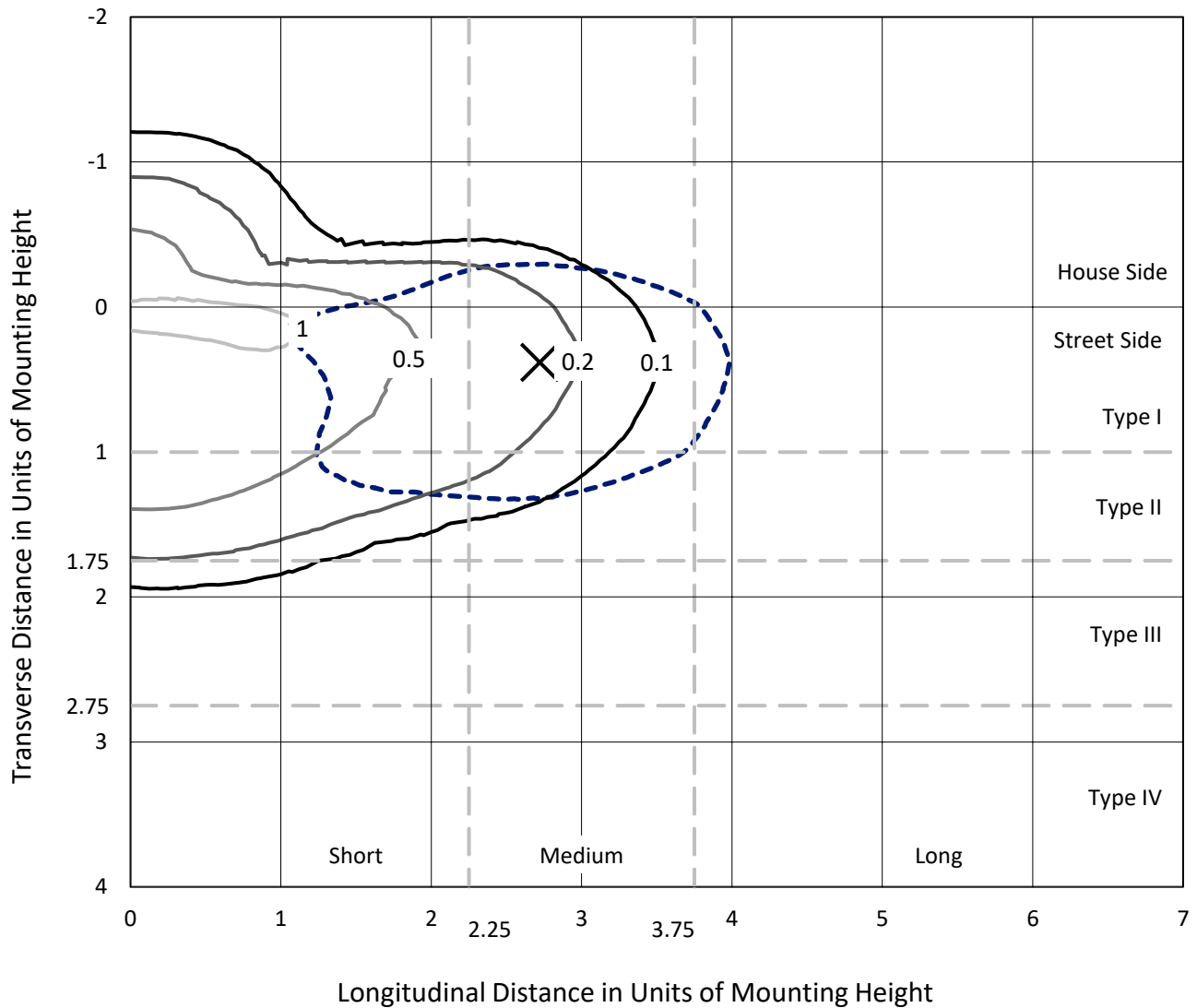
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

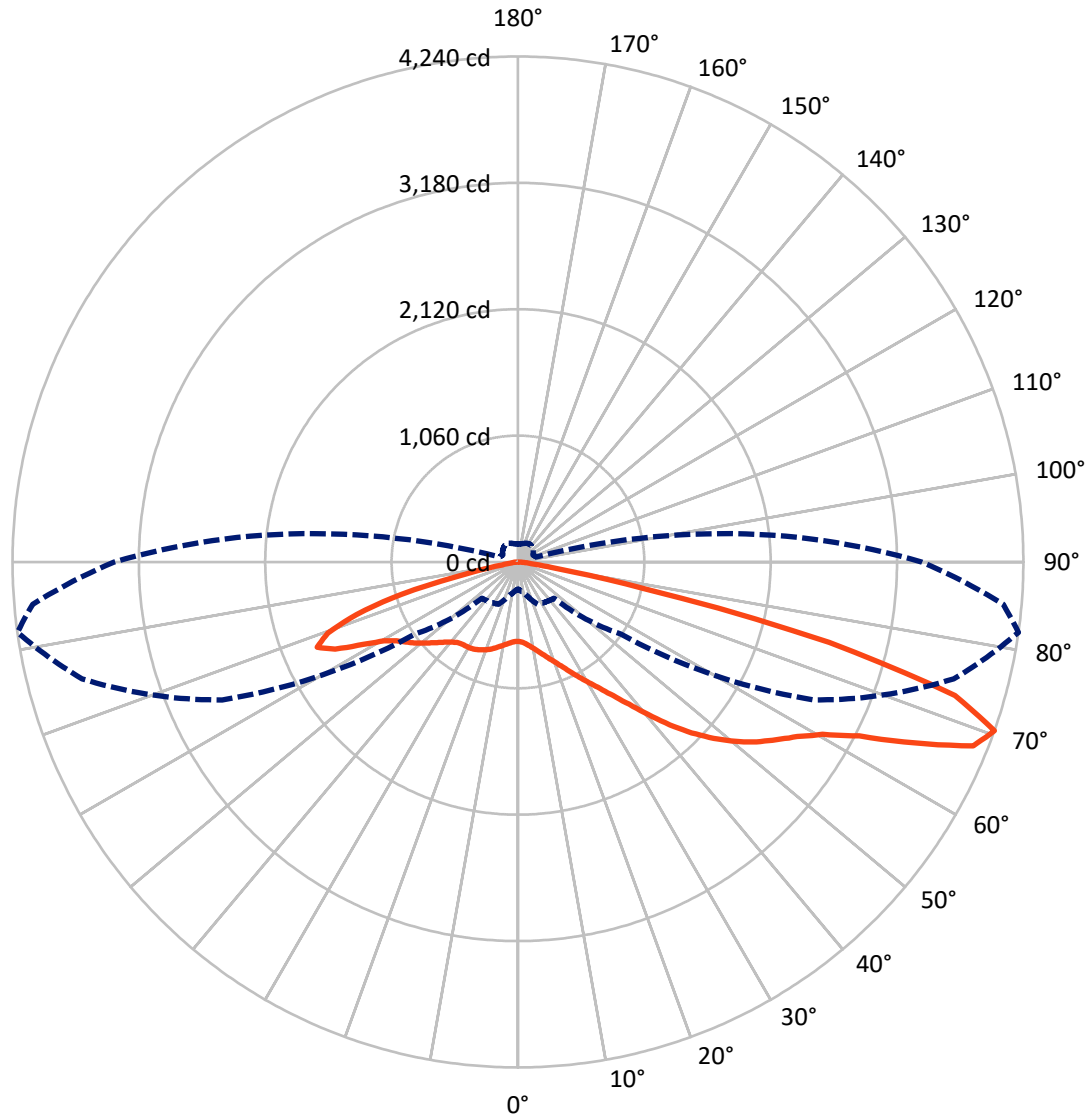
✕ Max cd
 - - - 1/2 Max cd



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	1118.5	0.0	1118.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3418.5	0.0	3418.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	4537.0	0.0	4537.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	1.4
10°-20°	180.4	4.0
20°-30°	301.9	6.7
30°-40°	471.6	10.4
40°-50°	751.1	16.6
50°-60°	1045.2	23.0
60°-70°	1093.3	24.1
70°-80°	571.4	12.6
80°-90°	59.3	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°	4537.0	100.0
0°-180°	4537.0	100.0

Coefficient of Utilization

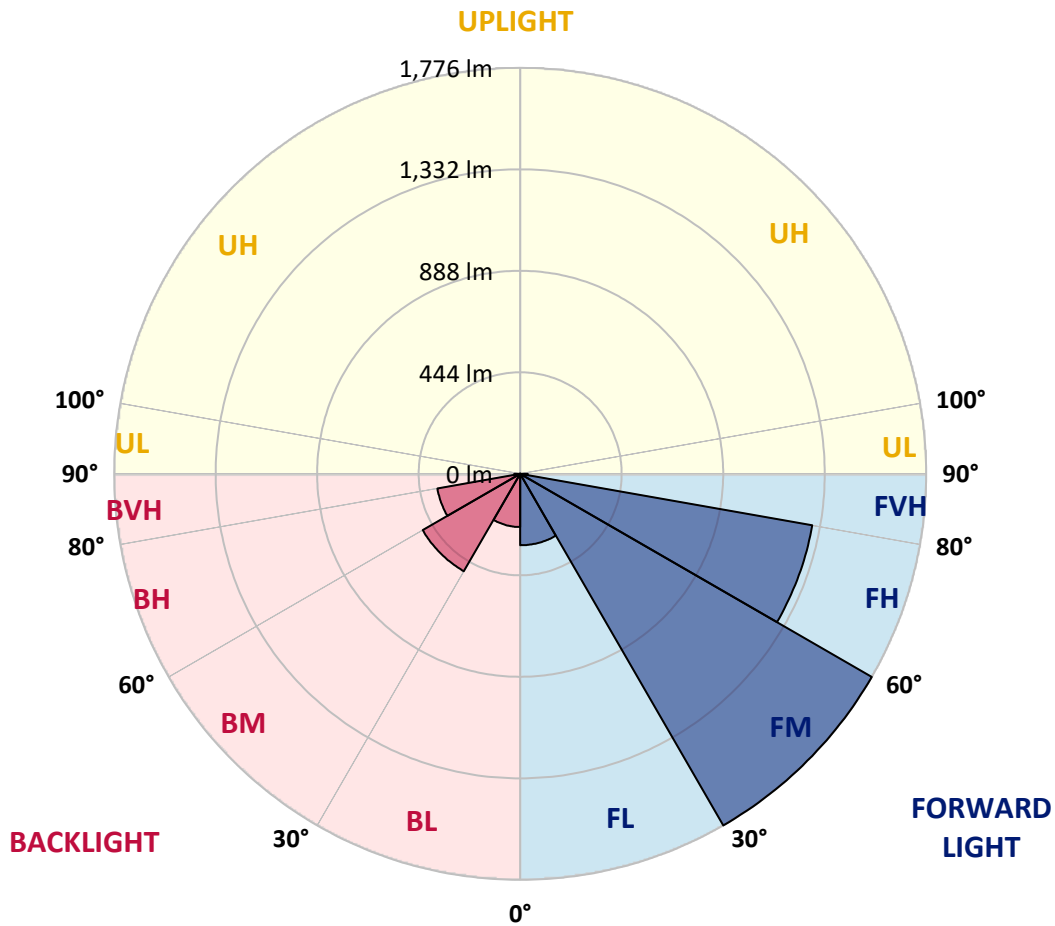


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.4	6.9			
FM (30°-60°)	1775.7	39.1			
FH (60°-80°)	1297.1	28.6			G1/1800
FVH (80°-90°)	33.2	0.7			G1/100
BL (0°-30°)	232.7	5.1	B1/500		
BM (30°-60°)	492.1	10.8	B1/1000		
BH (60°-80°)	367.6	8.1	B1/500		G1/500
BVH (80°-90°)	26.1	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°	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2
2.5°	681.1	684.9	683.7	682.5	682.5	680.8	680.6	678.2	676.3	673.1	672.4
5°	689.7	693.8	693.3	694.3	697.4	698.2	698.9	697.4	693.6	689.7	688.1
7.5°	682.0	686.6	688.1	693.8	703.5	712.1	718.6	721.3	717.7	712.1	709.5
10°	656.0	661.1	666.1	679.9	697.0	717.4	734.8	745.1	744.4	739.1	734.5
12.5°	603.3	608.6	619.4	646.2	677.5	713.6	745.8	767.5	775.0	771.1	763.2
15°	561.2	565.8	573.9	601.4	642.1	697.0	749.9	792.1	811.1	808.9	799.3
17.5°	560.0	561.9	567.0	580.0	611.3	671.0	745.6	816.1	852.5	852.2	840.2
20°	581.2	581.9	584.8	587.4	605.2	651.2	734.5	836.1	898.9	898.9	885.9
22.5°	610.5	610.1	612.9	610.5	619.2	649.5	727.5	853.7	950.7	954.6	938.2
25°	654.6	652.2	651.5	645.9	647.6	665.2	735.2	873.7	1012.1	1020.0	999.6
27.5°	713.3	709.5	706.8	694.1	689.7	697.4	758.8	897.7	1080.5	1094.2	1068.2
30°	789.9	782.9	779.1	756.9	741.3	742.5	794.5	929.8	1152.0	1174.1	1141.1
32.5°	894.4	883.5	873.2	836.8	808.2	798.8	840.4	974.1	1229.5	1264.9	1222.5
35°	1011.4	1002.7	991.6	935.5	891.5	869.8	902.6	1035.9	1320.3	1376.3	1321.2
37.5°	1124.0	1116.6	1121.9	1046.3	989.5	957.9	983.9	1119.0	1432.2	1515.0	1445.0
40°	1240.6	1234.8	1235.5	1163.3	1097.1	1061.7	1082.6	1223.2	1560.5	1679.9	1593.7
42.5°	1367.2	1362.9	1348.4	1284.4	1210.0	1177.0	1196.3	1343.6	1698.2	1867.7	1757.0
45°	1509.0	1506.3	1492.9	1419.4	1334.2	1297.1	1323.1	1476.5	1836.7	2044.4	1920.9
47.5°	1631.5	1633.7	1632.0	1570.1	1481.8	1427.4	1458.4	1615.2	1965.4	2210.5	2078.1
50°	1690.5	1701.8	1718.4	1699.2	1644.3	1588.9	1594.9	1749.0	2088.2	2366.3	2228.8
52.5°	1659.7	1681.1	1726.4	1757.2	1778.4	1766.8	1750.7	1881.9	2203.8	2506.9	2371.3
55°	1544.9	1575.0	1650.1	1724.5	1832.6	1916.6	1937.8	2029.2	2316.5	2630.6	2506.2
57.5°	1335.7	1384.5	1451.9	1602.4	1784.4	1989.0	2155.9	2233.6	2435.9	2762.8	2647.2
60°	976.9	1042.4	1126.2	1350.1	1615.9	1950.3	2341.5	2547.6	2605.6	2934.0	2830.9
62.5°	625.2	665.7	742.7	953.6	1259.1	1751.7	2398.3	2940.0	2893.3	3214.7	3106.3
65°	428.0	454.0	524.6	643.0	814.0	1303.9	2246.2	3234.2	3350.2	3659.6	3577.2
67.5°	311.0	330.8	391.0	494.7	530.4	771.6	1743.0	3220.7	3794.4	4118.0	3989.9
70°	226.8	240.7	291.3	391.0	408.1	429.2	1055.9	2737.8	3784.8	4239.8	4086.4
72.5°	168.0	177.7	211.6	303.3	330.3	289.9	522.7	1989.8	3252.2	3834.8	3711.8
75°	121.6	128.8	153.8	232.1	264.3	220.8	260.7	1162.8	2268.5	2697.6	2719.2
77.5°	92.9	98.5	114.8	170.0	211.6	165.6	161.8	534.9	1075.7	1080.9	1141.6
80°	74.6	78.2	87.2	119.7	162.3	124.0	105.4	215.9	339.9	287.7	301.9
82.5°	54.9	60.9	73.7	84.0	116.0	85.5	64.3	109.1	129.3	111.2	112.2
85°	31.3	35.4	44.5	60.2	74.1	52.2	36.8	48.4	60.2	49.4	44.1
87.5°	11.1	14.4	15.6	23.6	32.3	21.7	14.2	14.0	19.7	14.7	12.3
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°	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2	665.2
2.5°	670.0	668.8	664.0	657.5	650.7	644.2	642.1	637.5	634.4	632.7	634.6
5°	683.5	679.6	668.3	653.9	638.7	622.3	610.8	600.2	592.5	585.3	588.1
7.5°	702.7	696.0	676.5	651.2	624.3	597.0	576.8	561.4	551.1	544.3	545.8
10°	725.1	714.8	684.9	647.1	605.5	566.5	542.6	529.4	522.9	519.3	520.3
12.5°	750.9	736.2	693.6	637.7	576.8	532.3	515.9	512.1	512.3	512.5	513.0
15°	782.7	762.2	700.6	617.3	539.5	506.0	503.2	509.4	515.9	519.0	518.8
17.5°	818.5	789.6	701.8	583.6	502.9	489.2	498.3	511.8	521.7	526.0	527.0
20°	857.1	817.6	693.1	535.9	472.8	475.5	491.8	509.2	520.0	525.5	527.0
22.5°	901.1	847.4	672.4	485.8	448.3	460.5	479.8	496.7	508.0	513.5	515.0
25°	951.4	880.9	639.9	443.7	427.1	443.7	463.0	476.9	486.1	491.1	492.6
27.5°	1007.3	915.8	596.6	410.2	408.5	426.4	442.3	453.1	457.9	461.8	463.2
30°	1063.4	947.6	544.1	385.0	392.4	409.3	420.6	425.4	426.8	427.6	429.2
32.5°	1124.0	975.0	489.0	364.0	377.0	392.7	399.4	401.6	394.8	390.2	391.7
35°	1197.5	1004.4	435.0	347.4	361.8	375.3	377.5	375.6	367.6	358.2	358.7
37.5°	1288.2	1041.0	391.9	335.6	347.6	356.5	353.9	353.4	354.1	343.1	343.8
40°	1399.5	1088.7	360.4	326.5	336.1	338.0	330.5	334.6	338.2	321.4	321.9
42.5°	1523.0	1146.2	340.4	320.2	326.5	321.9	310.3	314.9	314.4	292.3	292.0
45°	1648.9	1208.8	333.4	315.6	317.5	308.4	295.6	296.8	286.7	266.7	267.5
47.5°	1774.1	1276.0	337.8	311.8	306.5	296.1	286.2	281.0	266.0	251.1	251.1
50°	1896.8	1346.5	353.7	304.1	291.3	285.3	278.1	268.7	252.8	240.0	239.1
52.5°	2010.7	1417.5	371.5	291.3	272.3	275.9	271.3	260.5	244.8	231.8	232.1
55°	2118.6	1488.5	378.5	273.7	254.5	267.7	265.1	245.1	226.3	215.7	214.7
57.5°	2236.0	1574.0	370.7	251.3	240.0	258.3	248.2	226.1	215.2	207.3	206.6
60°	2398.8	1708.1	354.1	223.7	226.3	244.4	227.0	217.9	206.1	197.2	196.7
62.5°	2669.1	1958.2	327.4	196.2	210.2	223.7	216.9	207.8	195.7	187.1	187.1
65°	3068.8	2305.9	277.1	174.8	192.1	203.4	206.1	196.9	184.4	175.3	175.7
67.5°	3405.8	2524.0	209.7	157.0	173.6	187.1	194.5	185.6	172.4	163.5	163.7
70°	3387.3	2365.6	160.1	139.4	157.2	170.9	180.6	173.6	159.4	150.9	151.7
72.5°	3008.6	1978.9	129.5	121.6	140.6	154.1	165.6	160.3	145.9	137.7	137.7
75°	2210.3	1404.8	103.5	103.5	119.9	136.5	149.3	145.9	132.7	126.9	125.2
77.5°	931.7	589.3	81.1	85.9	99.7	117.2	133.1	134.3	122.8	130.0	118.0
80°	247.7	162.5	61.9	67.6	78.2	96.8	115.8	115.3	102.8	96.1	89.3
82.5°	94.4	64.0	44.1	47.7	56.6	74.1	91.7	94.6	82.1	71.0	71.0
85°	36.4	27.4	27.2	28.6	33.0	49.1	69.3	71.7	61.9	52.5	54.2
87.5°	9.4	8.2	10.1	9.6	15.2	26.2	39.7	41.2	37.8	21.9	31.3
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)