

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: P881787

Luminaire Tested: **NAV-SB1B-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881787
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-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4712 lumens
Efficiency: N/A
Efficacy: 118.4 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

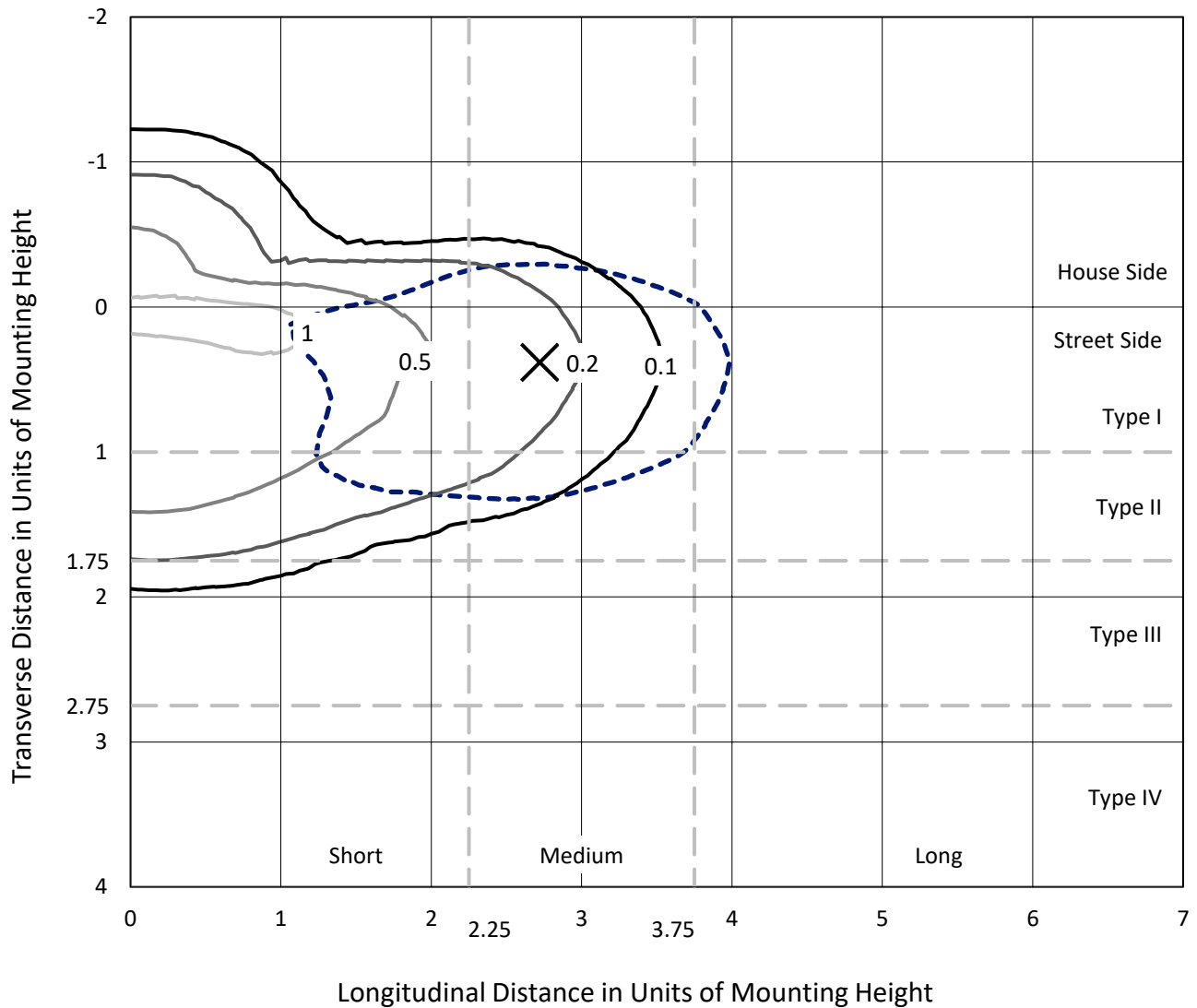
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

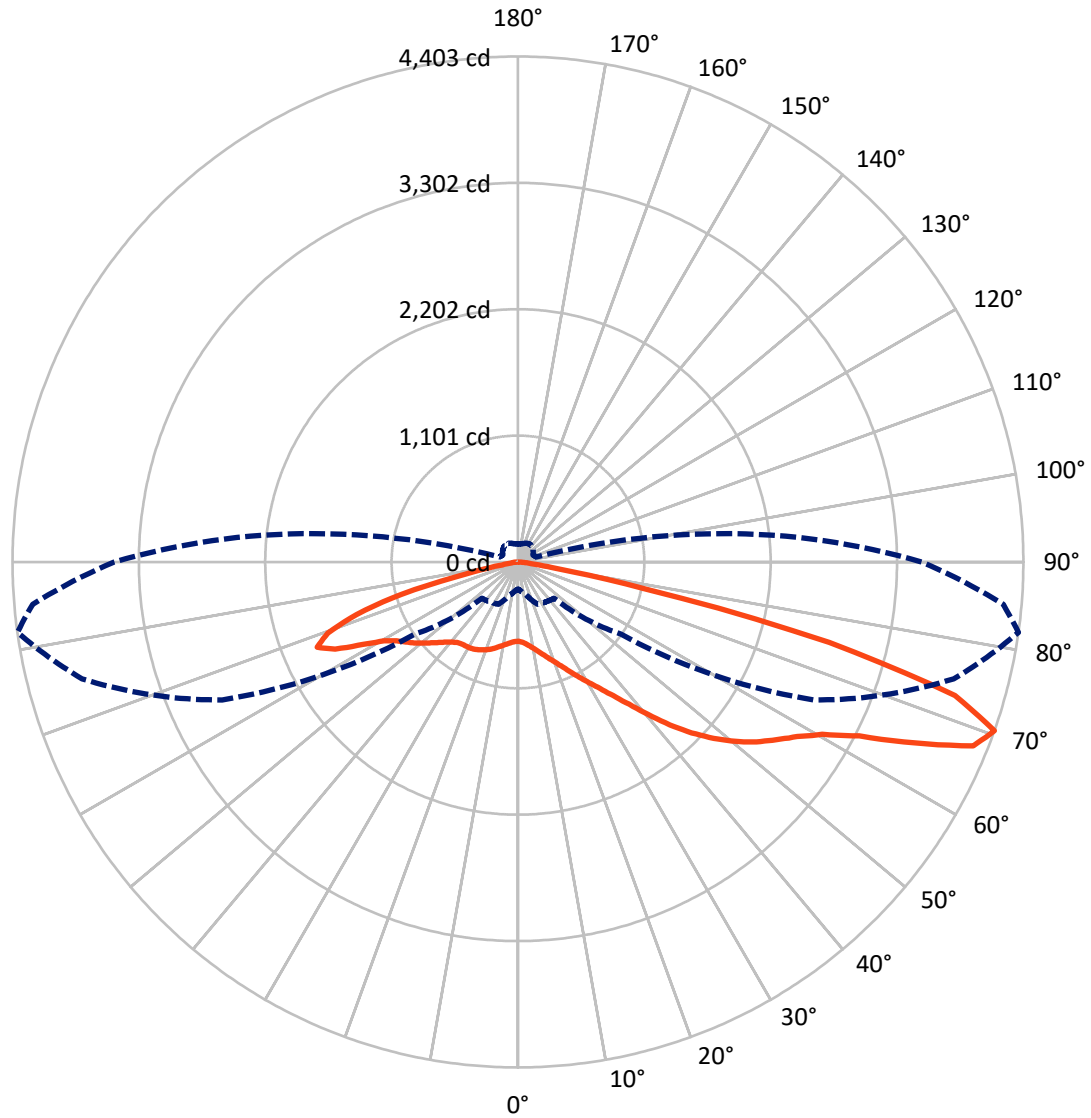
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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	1161.6	0.0	1161.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3550.4	0.0	3550.4
	% Fixture	75.3	0.0	75.3
Total	Lumens	4712.0	0.0	4712.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.4
10°-20°	187.4	4.0
20°-30°	313.5	6.7
30°-40°	489.8	10.4
40°-50°	780.0	16.6
50°-60°	1085.5	23.0
60°-70°	1135.5	24.1
70°-80°	593.5	12.6
80°-90°	61.6	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°	4712.0	100.0
0°-180°	4712.0	100.0

Coefficient of Utilization

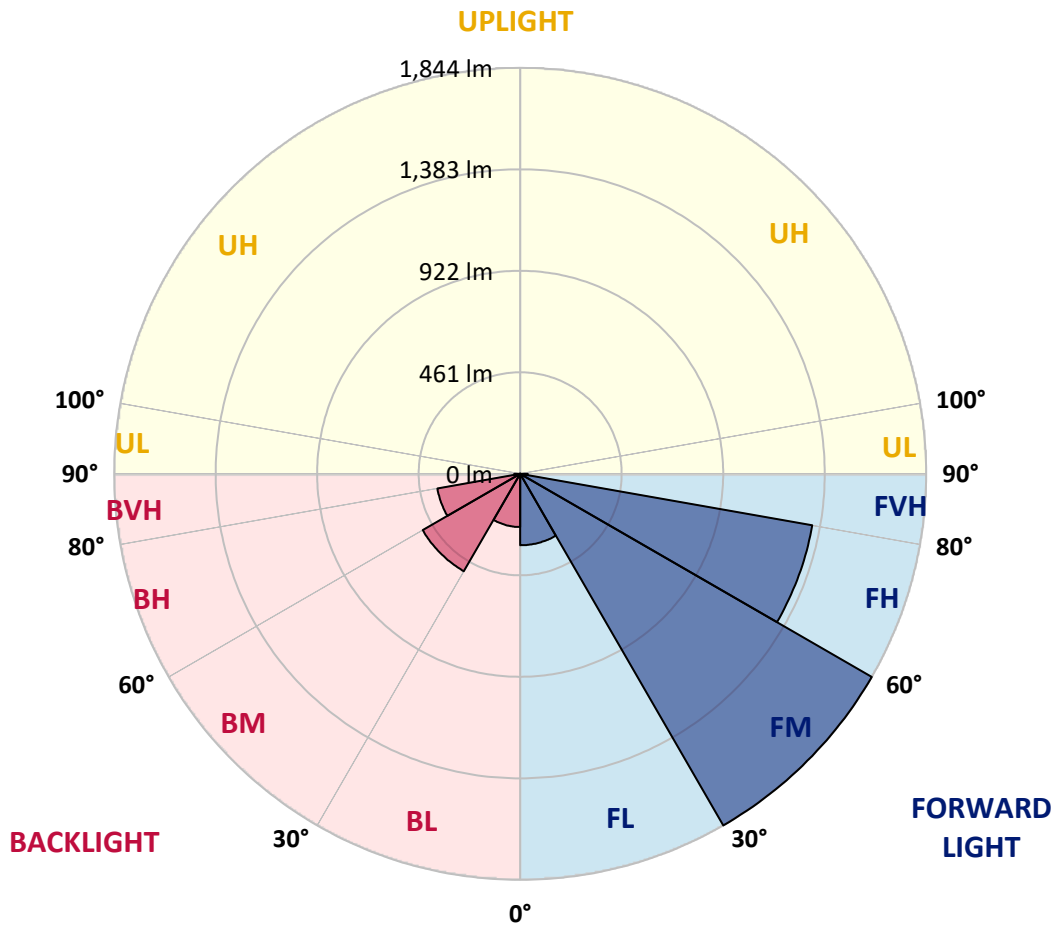


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	324.5	6.9			
FM	(30°-60°)	1844.2	39.1			
FH	(60°-80°)	1347.2	28.6			G1/1800
FVH	(80°-90°)	34.5	0.7			G1/100
BL	(0°-30°)	241.7	5.1	B1/500		
BM	(30°-60°)	511.1	10.8	B1/1000		
BH	(60°-80°)	381.8	8.1	B1/500		G1/500
BVH	(80°-90°)	27.1	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°	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8
2.5°	707.3	711.3	710.1	708.8	708.8	707.1	706.8	704.3	702.3	699.1	698.3
5°	716.3	720.6	720.1	721.1	724.3	725.1	725.8	724.3	720.3	716.3	714.6
7.5°	708.3	713.1	714.6	720.6	730.6	739.6	746.3	749.1	745.3	739.6	736.8
10°	681.3	686.6	691.8	706.1	723.8	745.1	763.1	773.8	773.1	767.6	762.8
12.5°	626.6	632.1	643.3	671.1	703.6	741.1	774.6	797.1	804.9	800.9	792.6
15°	582.8	587.6	596.1	624.6	666.8	723.8	778.8	822.6	842.4	840.1	830.1
17.5°	581.6	583.6	588.8	602.3	634.8	696.8	774.3	847.6	885.4	885.1	872.6
20°	603.6	604.3	607.3	610.1	628.6	676.3	762.8	868.4	933.6	933.6	920.1
22.5°	634.1	633.6	636.6	634.1	643.1	674.6	755.6	886.6	987.4	991.4	974.4
25°	679.8	677.3	676.6	670.8	672.6	690.8	763.6	907.4	1051.1	1059.4	1038.1
27.5°	740.8	736.8	734.1	720.8	716.3	724.3	788.1	932.4	1122.1	1136.4	1109.4
30°	820.4	813.1	809.1	786.1	769.8	771.1	825.1	965.6	1196.4	1219.4	1185.2
32.5°	928.9	917.6	906.9	869.1	839.4	829.6	872.9	1011.6	1276.9	1313.7	1269.7
35°	1050.4	1041.4	1029.9	971.6	925.9	903.4	937.4	1075.9	1371.2	1429.4	1372.2
37.5°	1167.4	1159.6	1165.1	1086.6	1027.6	994.9	1021.9	1162.1	1487.4	1573.5	1500.7
40°	1288.4	1282.4	1283.2	1208.2	1139.4	1102.6	1124.4	1270.4	1620.7	1744.7	1655.2
42.5°	1419.9	1415.4	1400.4	1333.9	1256.7	1222.4	1242.4	1395.4	1763.7	1939.7	1824.7
45°	1567.2	1564.4	1550.4	1474.2	1385.7	1347.2	1374.2	1533.4	1907.5	2123.3	1995.0
47.5°	1694.5	1696.7	1695.0	1630.7	1538.9	1482.4	1514.7	1677.5	2041.3	2295.8	2158.3
50°	1755.7	1767.5	1784.7	1764.7	1707.7	1650.2	1656.5	1816.5	2168.8	2457.6	2314.8
52.5°	1723.7	1746.0	1793.0	1825.0	1847.0	1835.0	1818.2	1954.5	2288.8	2603.6	2462.8
55°	1604.5	1635.7	1713.7	1791.0	1903.2	1990.5	2012.5	2107.5	2405.8	2732.1	2602.8
57.5°	1387.2	1437.9	1507.9	1664.2	1853.2	2065.8	2239.0	2319.8	2529.8	2869.4	2749.4
60°	1014.6	1082.6	1169.6	1402.2	1678.2	2025.5	2431.8	2645.8	2706.1	3047.1	2940.1
62.5°	649.3	691.3	771.3	990.4	1307.7	1819.2	2490.8	3053.4	3004.9	3338.7	3226.2
65°	444.6	471.6	544.8	667.8	845.4	1354.2	2332.8	3358.9	3479.4	3800.7	3715.2
67.5°	323.0	343.5	406.1	513.8	550.8	801.4	1810.2	3344.9	3940.8	4276.8	4143.8
70°	235.5	250.0	302.5	406.1	423.8	445.8	1096.6	2843.4	3930.8	4403.3	4244.0
72.5°	174.5	184.5	219.8	315.0	343.0	301.0	542.8	2066.5	3377.7	3982.8	3855.0
75°	126.3	133.8	159.8	241.0	274.5	229.3	270.8	1207.7	2356.1	2801.6	2824.1
77.5°	96.5	102.3	119.3	176.5	219.8	172.0	168.0	555.6	1117.1	1122.6	1185.7
80°	77.5	81.3	90.5	124.3	168.5	128.8	109.5	224.3	353.0	298.8	313.5
82.5°	57.0	63.3	76.5	87.3	120.5	88.8	66.8	113.3	134.3	115.5	116.5
85°	32.5	36.8	46.3	62.5	77.0	54.3	38.3	50.3	62.5	51.3	45.8
87.5°	11.5	15.0	16.3	24.5	33.5	22.5	14.8	14.5	20.5	15.3	12.8
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°	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8	690.8
2.5°	695.8	694.6	689.6	682.8	675.8	669.1	666.8	662.1	658.8	657.1	659.1
5°	709.8	705.8	694.1	679.1	663.3	646.3	634.3	623.3	615.3	607.8	610.8
7.5°	729.8	722.8	702.6	676.3	648.3	620.1	599.1	583.1	572.3	565.3	566.8
10°	753.1	742.3	711.3	672.1	628.8	588.3	563.6	549.8	543.1	539.3	540.3
12.5°	779.8	764.6	720.3	662.3	599.1	552.8	535.8	531.8	532.1	532.3	532.8
15°	812.9	791.6	727.6	641.1	560.3	525.6	522.6	529.1	535.8	539.1	538.8
17.5°	850.1	820.1	728.8	606.1	522.3	508.1	517.6	531.6	541.8	546.3	547.3
20°	890.1	849.1	719.8	556.6	491.1	493.8	510.8	528.8	540.1	545.8	547.3
22.5°	935.9	880.1	698.3	504.6	465.6	478.3	498.3	515.8	527.6	533.3	534.8
25°	988.1	914.9	664.6	460.8	443.6	460.8	480.8	495.3	504.8	510.1	511.6
27.5°	1046.1	951.1	619.6	426.1	424.3	442.8	459.3	470.6	475.6	479.6	481.1
30°	1104.4	984.1	565.1	399.8	407.6	425.1	436.8	441.8	443.3	444.1	445.8
32.5°	1167.4	1012.6	507.8	378.0	391.5	407.8	414.8	417.1	410.1	405.3	406.8
35°	1243.7	1043.1	451.8	360.8	375.8	389.8	392.1	390.0	381.8	372.0	372.5
37.5°	1337.9	1081.1	407.1	348.5	361.0	370.3	367.5	367.0	367.8	356.3	357.0
40°	1453.4	1130.6	374.3	339.0	349.0	351.0	343.3	347.5	351.3	333.8	334.3
42.5°	1581.7	1190.4	353.5	332.5	339.0	334.3	322.3	327.0	326.5	303.5	303.3
45°	1712.5	1255.4	346.3	327.8	329.8	320.3	307.0	308.3	297.8	277.0	277.8
47.5°	1842.5	1325.2	350.8	323.8	318.3	307.5	297.3	291.8	276.3	260.8	260.8
50°	1970.0	1398.4	367.3	315.8	302.5	296.3	288.8	279.0	262.5	249.3	248.3
52.5°	2088.3	1472.2	385.8	302.5	282.8	286.5	281.8	270.5	254.3	240.8	241.0
55°	2200.3	1545.9	393.1	284.3	264.3	278.0	275.3	254.5	235.0	224.0	223.0
57.5°	2322.3	1634.7	385.0	261.0	249.3	268.3	257.8	234.8	223.5	215.3	214.5
60°	2491.3	1774.0	367.8	232.3	235.0	253.8	235.8	226.3	214.0	204.8	204.3
62.5°	2772.1	2033.8	340.0	203.8	218.3	232.3	225.3	215.8	203.3	194.3	194.3
65°	3187.2	2394.8	287.8	181.5	199.5	211.3	214.0	204.5	191.5	182.0	182.5
67.5°	3537.2	2621.3	217.8	163.0	180.3	194.3	202.0	192.8	179.0	169.8	170.0
70°	3517.9	2456.8	166.3	144.8	163.3	177.5	187.5	180.3	165.5	156.8	157.5
72.5°	3124.6	2055.3	134.5	126.3	146.0	160.0	172.0	166.5	151.5	143.0	143.0
75°	2295.5	1458.9	107.5	107.5	124.5	141.8	155.0	151.5	137.8	131.8	130.0
77.5°	967.6	612.1	84.3	89.3	103.5	121.8	138.3	139.5	127.5	135.0	122.5
80°	257.3	168.8	64.3	70.3	81.3	100.5	120.3	119.8	106.8	99.8	92.8
82.5°	98.0	66.5	45.8	49.5	58.8	77.0	95.3	98.3	85.3	73.8	73.8
85°	37.8	28.5	28.3	29.8	34.3	51.0	72.0	74.5	64.3	54.5	56.3
87.5°	9.8	8.5	10.5	10.0	15.8	27.3	41.3	42.8	39.3	22.8	32.5
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)