

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: P881694

Luminaire Tested: **NAV-SB1B-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881694
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4452 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

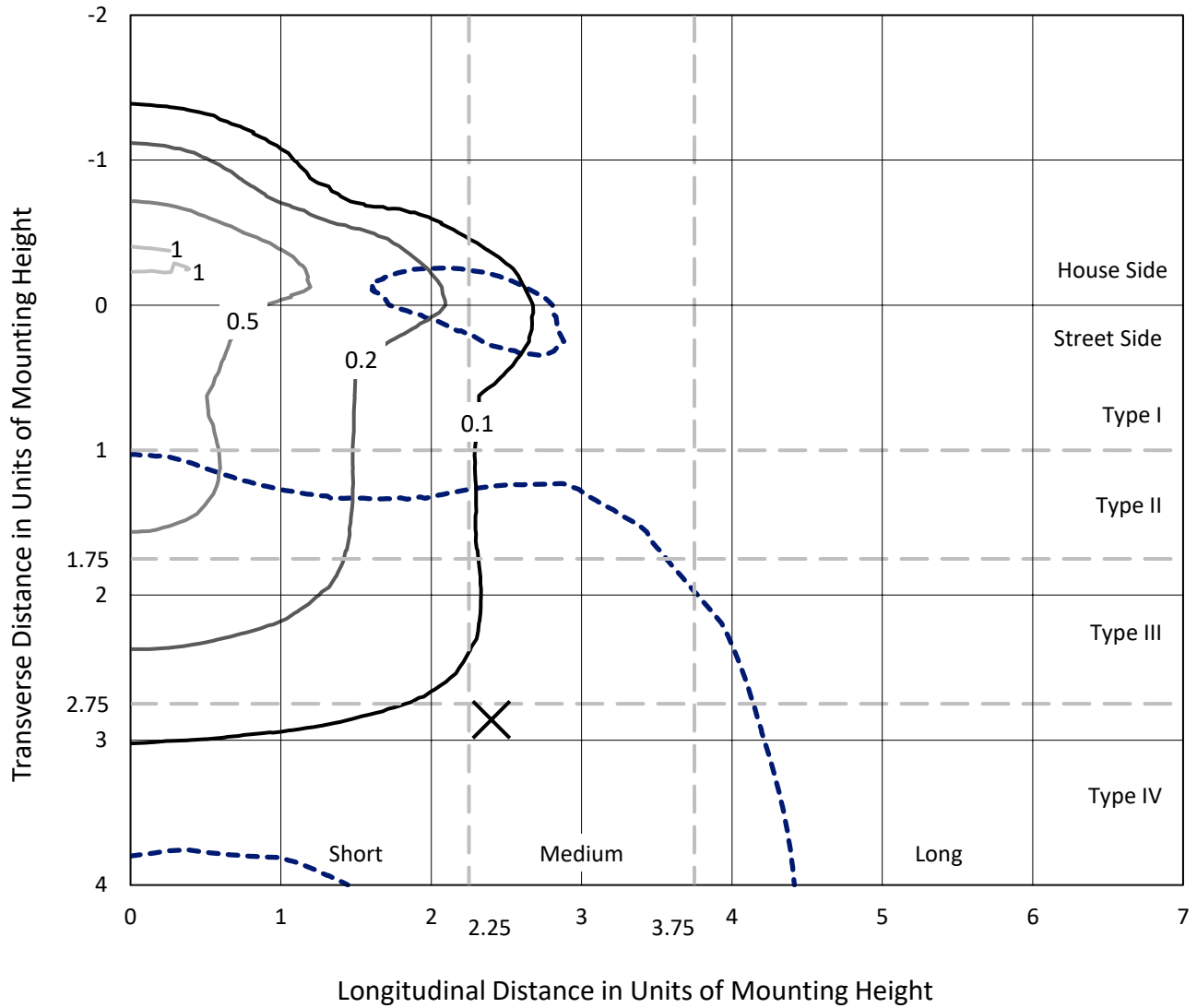
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

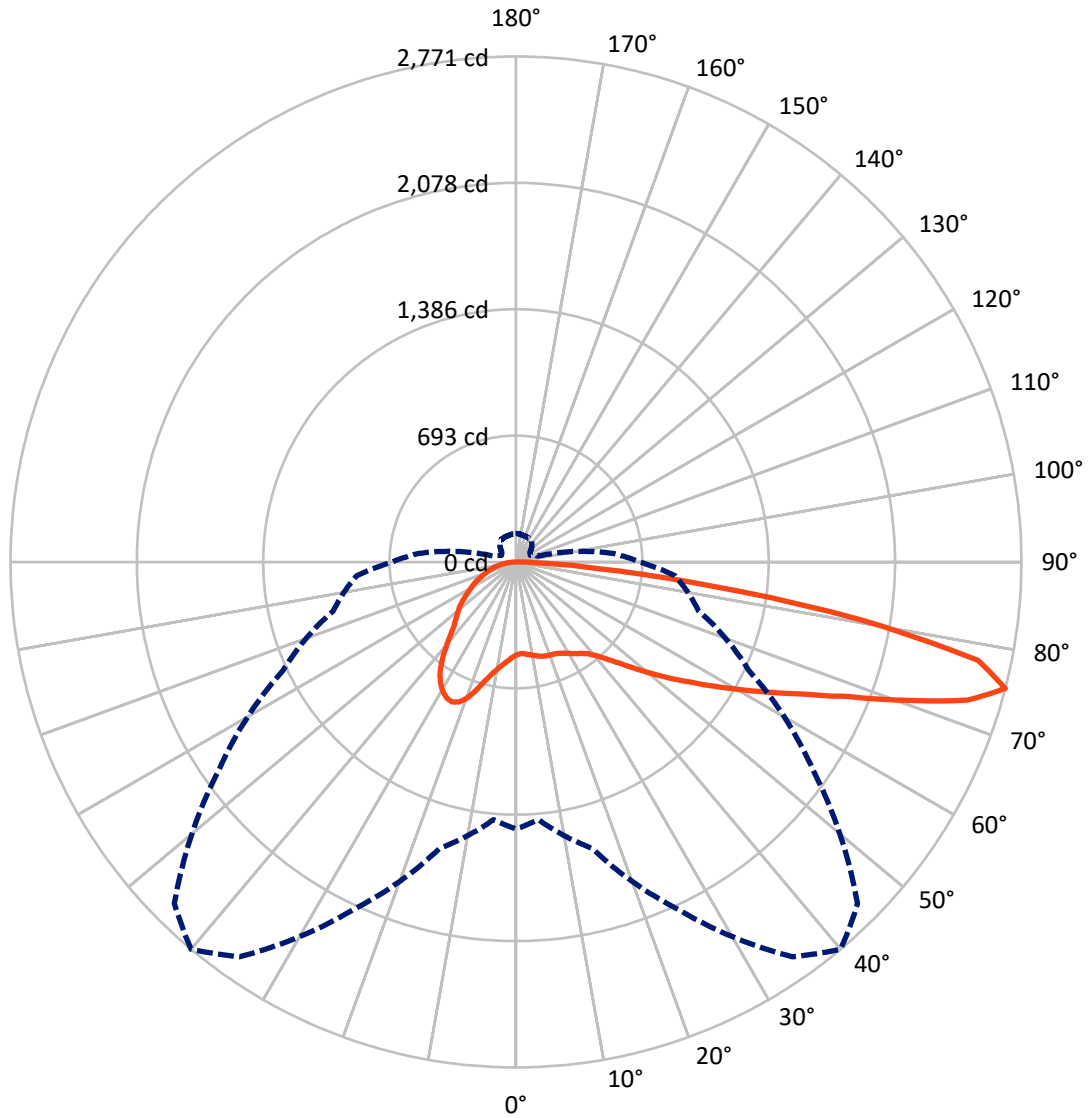
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1379.4	0.0	1379.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3072.6	0.0	3072.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	4452.0	0.0	4452.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	1.1
10°-20°	170.6	3.8
20°-30°	311.5	7.0
30°-40°	441.8	9.9
40°-50°	596.6	13.4
50°-60°	802.6	18.0
60°-70°	1018.7	22.9
70°-80°	924.5	20.8
80°-90°	134.8	3.0
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°	4452.0	100.0
0°-180°	4452.0	100.0

Coefficient of Utilization



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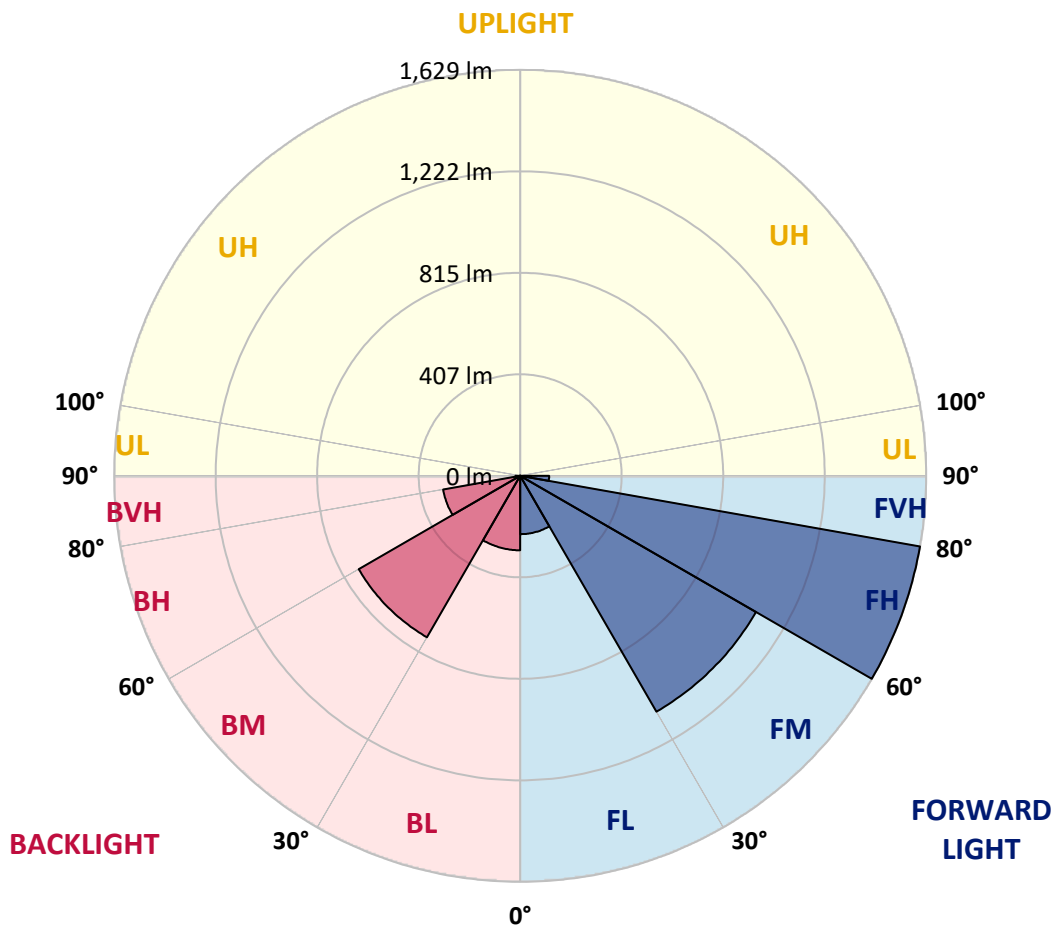
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	234.2	5.3			
FM (30°-60°)	1092.9	24.5			
FH (60°-80°)	1629.4	36.6			G1/1800
FVH (80°-90°)	116.2	2.6			G2/225
BL (0°-30°)	298.8	6.7	B1/500		
BM (30°-60°)	748.2	16.8	B1/1000		
BH (60°-80°)	313.9	7.0	B1/500		G1/500
BVH (80°-90°)	18.5	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1
2.5°	501.3	504.1	503.4	502.5	502.5	502.7	502.5	504.1	505.8	507.4	510.0
5°	506.5	509.3	507.9	506.7	505.8	505.6	504.8	504.6	505.6	507.7	511.2
7.5°	516.6	519.5	517.4	515.2	513.3	512.4	511.5	510.0	509.3	510.5	515.5
10°	528.0	530.8	528.2	524.4	521.4	520.2	519.2	517.8	516.9	517.6	523.0
12.5°	539.3	542.2	538.6	533.4	529.4	528.7	527.5	527.0	526.8	526.6	532.0
15°	549.9	552.3	547.8	541.7	537.4	536.2	535.1	535.8	537.0	538.4	544.5
17.5°	558.2	560.6	554.0	545.9	541.9	541.4	540.7	543.1	546.4	549.9	557.5
20°	565.8	568.1	559.6	548.8	544.0	544.0	544.3	549.2	554.0	559.2	569.5
22.5°	576.4	578.3	567.9	553.0	546.2	546.6	548.5	553.5	559.4	566.5	580.9
25°	592.2	593.6	580.9	561.0	553.2	554.7	556.3	558.7	564.3	572.6	592.0
27.5°	617.7	618.9	602.1	575.2	563.4	565.8	568.1	566.5	569.1	576.2	600.9
30°	653.6	654.3	633.1	597.4	580.6	581.8	582.3	575.4	570.5	576.2	607.3
32.5°	696.1	695.9	670.6	624.3	600.2	599.1	595.0	581.6	570.0	575.0	613.0
35°	762.0	759.4	726.8	662.1	622.4	615.1	605.7	588.4	572.4	573.8	617.9
37.5°	871.1	863.0	817.9	724.0	655.5	636.8	622.9	599.5	577.6	573.3	623.9
40°	994.1	983.9	934.4	808.7	705.1	675.1	652.7	615.3	586.1	575.4	632.6
42.5°	1140.0	1125.6	1072.3	908.6	767.9	724.4	690.7	635.4	598.6	582.3	644.4
45°	1319.2	1300.1	1224.6	1021.3	847.0	789.1	744.0	665.9	617.7	595.5	662.1
47.5°	1500.4	1505.1	1397.6	1150.2	941.9	869.0	810.9	711.7	645.6	616.8	690.7
50°	1692.8	1696.1	1569.8	1293.0	1049.6	959.2	886.0	762.9	684.3	647.0	733.4
52.5°	1843.0	1843.5	1726.1	1442.5	1161.8	1058.3	966.9	821.5	729.2	687.1	790.3
55°	1937.0	1935.8	1835.7	1583.9	1290.7	1162.5	1056.7	888.1	783.9	734.4	861.9
57.5°	2005.2	2001.7	1911.2	1705.6	1428.1	1285.5	1158.2	963.6	848.6	790.6	956.1
60°	2031.2	2029.0	1962.5	1810.6	1572.6	1421.5	1275.3	1048.2	922.1	856.9	1077.2
62.5°	2041.1	2045.1	2012.8	1912.4	1727.3	1572.1	1404.0	1149.2	1004.7	932.0	1205.0
65°	2076.0	2083.4	2076.7	2045.6	1902.0	1748.5	1574.7	1269.4	1094.9	1012.5	1338.4
67.5°	2145.2	2152.5	2155.4	2205.0	2115.5	1968.4	1787.7	1419.1	1200.5	1096.1	1438.7
70°	2143.6	2141.4	2191.5	2331.8	2382.8	2272.7	2074.9	1603.3	1326.3	1165.5	1451.5
72.5°	1951.1	1934.1	2052.4	2330.3	2605.2	2590.6	2425.5	1840.9	1435.0	1174.0	1259.5
75°	1463.8	1418.4	1627.4	2100.1	2642.3	2771.0	2648.4	1988.2	1409.2	1037.3	876.5
77.5°	626.0	580.4	826.7	1554.7	2364.8	2590.3	2443.9	1734.6	1124.9	686.0	430.5
80°	163.9	163.6	249.8	704.8	1608.3	1912.9	1678.2	1120.2	642.7	245.1	118.8
82.5°	67.8	66.1	91.9	274.1	785.8	1073.4	876.0	499.6	232.1	66.4	39.4
85°	25.3	25.0	44.6	94.7	277.2	442.7	320.4	127.7	57.9	32.3	17.7
87.5°	7.1	6.8	9.7	32.8	67.5	102.5	54.8	21.0	16.3	12.8	5.2
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°	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1	509.1
2.5°	510.7	511.9	514.1	515.7	517.8	520.2	523.5	525.6	527.7	529.2	528.2
5°	512.9	515.5	520.9	526.3	532.7	538.6	545.5	550.4	554.4	555.6	556.1
7.5°	517.6	521.8	531.1	540.3	550.4	560.1	570.0	578.5	585.4	588.0	588.2
10°	525.9	531.5	544.5	557.5	571.0	585.8	598.6	610.9	620.5	624.6	624.8
12.5°	536.2	543.3	560.3	578.3	596.9	617.5	634.0	649.1	661.2	666.6	666.6
15°	549.7	558.9	580.6	604.7	632.1	660.7	681.7	698.5	711.9	718.5	718.1
17.5°	564.3	576.6	604.0	640.4	679.6	717.1	741.7	754.0	767.9	774.3	774.0
20°	578.5	593.6	632.8	685.7	737.9	777.8	797.6	800.9	801.9	802.6	804.5
22.5°	593.2	613.5	669.0	742.9	798.8	826.4	829.3	815.1	795.3	786.1	788.7
25°	609.2	636.1	716.2	805.9	851.2	854.5	832.8	798.3	760.8	743.6	746.2
27.5°	624.8	662.3	772.8	866.1	889.0	860.0	813.2	764.3	719.0	700.8	703.0
30°	640.4	692.3	835.4	918.8	906.3	846.5	782.3	727.7	682.2	663.0	665.2
32.5°	656.2	727.3	907.4	956.8	903.2	817.9	743.8	686.7	646.5	626.4	629.0
35°	674.1	770.2	975.7	977.6	882.6	775.9	693.0	637.5	602.6	586.5	590.1
37.5°	697.5	824.8	1035.9	982.8	846.8	714.3	630.0	579.5	550.7	543.3	548.5
40°	726.6	890.4	1081.9	974.5	793.6	639.4	561.0	520.7	504.4	506.0	511.7
42.5°	764.3	963.9	1114.3	953.2	719.7	562.2	500.6	482.6	490.4	497.0	503.2
45°	813.5	1040.1	1134.4	917.1	636.1	496.8	464.9	469.2	475.1	475.8	480.5
47.5°	876.3	1117.4	1147.6	862.6	550.9	450.8	442.3	443.2	442.0	437.1	440.9
50°	954.7	1192.4	1159.4	790.3	478.4	422.0	410.6	407.3	391.0	375.0	377.1
52.5°	1043.9	1261.4	1164.3	700.6	422.0	397.9	379.5	358.7	328.2	323.3	324.9
55°	1143.1	1325.2	1151.6	590.3	374.5	366.9	339.1	314.1	310.7	306.5	307.2
57.5°	1261.6	1393.9	1125.6	467.3	325.9	330.8	303.7	306.5	300.6	294.0	292.8
60°	1391.3	1464.9	1080.0	355.1	275.6	285.7	294.5	294.2	292.6	287.1	285.2
62.5°	1507.9	1511.7	990.3	272.0	231.4	250.8	274.6	274.4	273.0	269.9	268.7
65°	1577.3	1504.6	840.6	214.2	195.0	222.0	247.7	249.6	249.8	249.6	249.6
67.5°	1565.1	1421.7	635.2	170.5	165.1	192.7	221.0	223.6	225.5	226.0	226.4
70°	1426.2	1239.7	414.2	136.0	138.4	166.9	195.8	198.3	200.0	201.9	202.8
72.5°	1111.7	911.5	237.1	110.0	115.0	144.7	170.7	173.8	174.7	178.3	179.7
75°	677.5	536.0	128.0	86.7	94.5	123.7	145.9	149.5	151.1	155.4	155.8
77.5°	322.1	232.1	73.0	67.5	76.0	101.1	123.3	127.3	122.8	125.1	123.3
80°	108.9	86.2	46.0	51.5	58.1	78.9	98.7	102.7	93.3	92.8	91.9
82.5°	38.0	34.9	29.3	34.2	37.5	56.4	74.6	79.8	69.4	69.2	65.9
85°	14.9	14.2	16.3	18.7	22.4	34.7	49.1	51.7	42.7	34.5	34.0
87.5°	3.1	3.3	4.0	4.3	6.8	12.0	17.7	21.7	17.2	14.6	13.5
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)