

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: P881614

Luminaire Tested: **NAV-SB1A-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881614
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-SB1A-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA 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: 3755 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G1

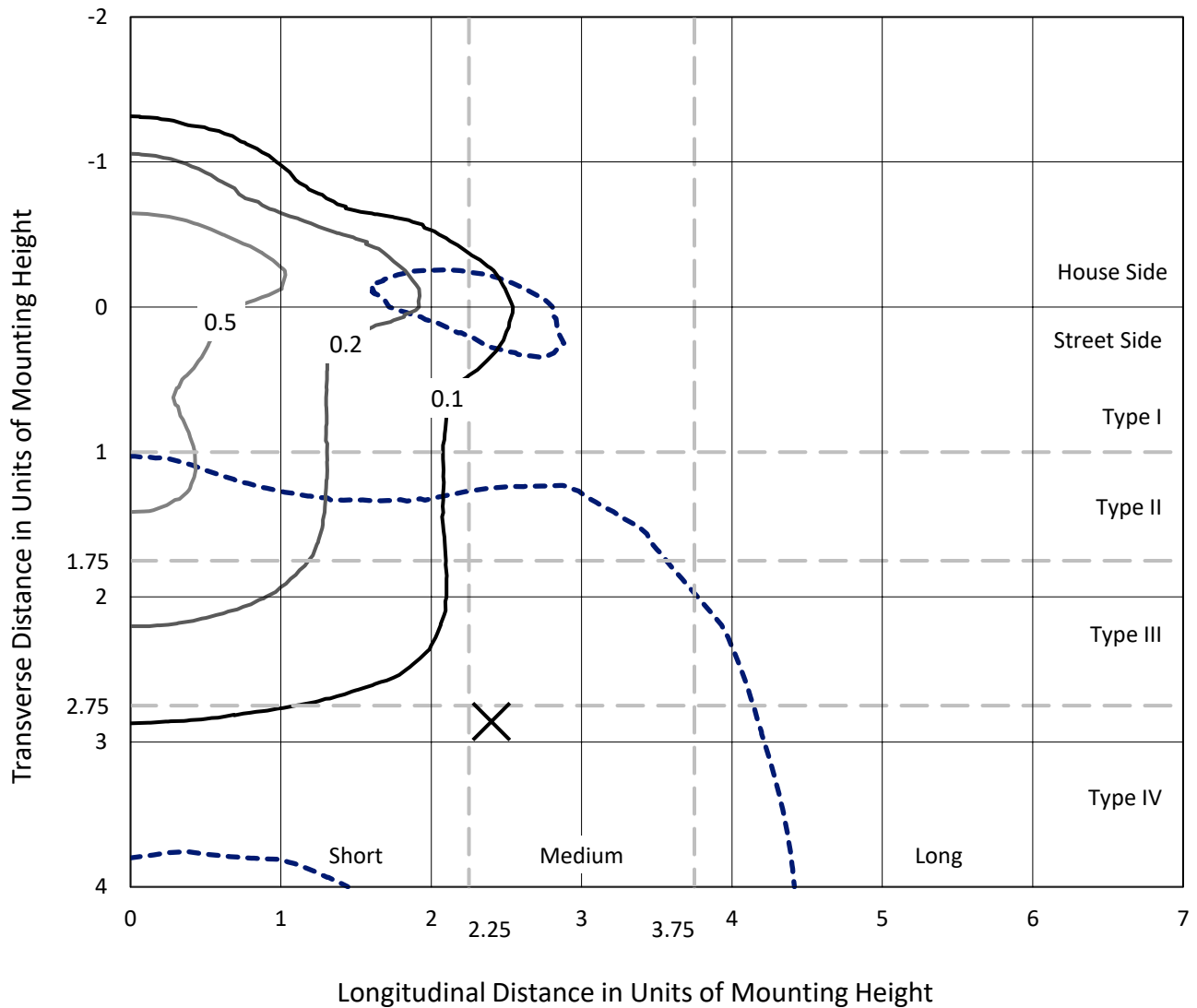
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

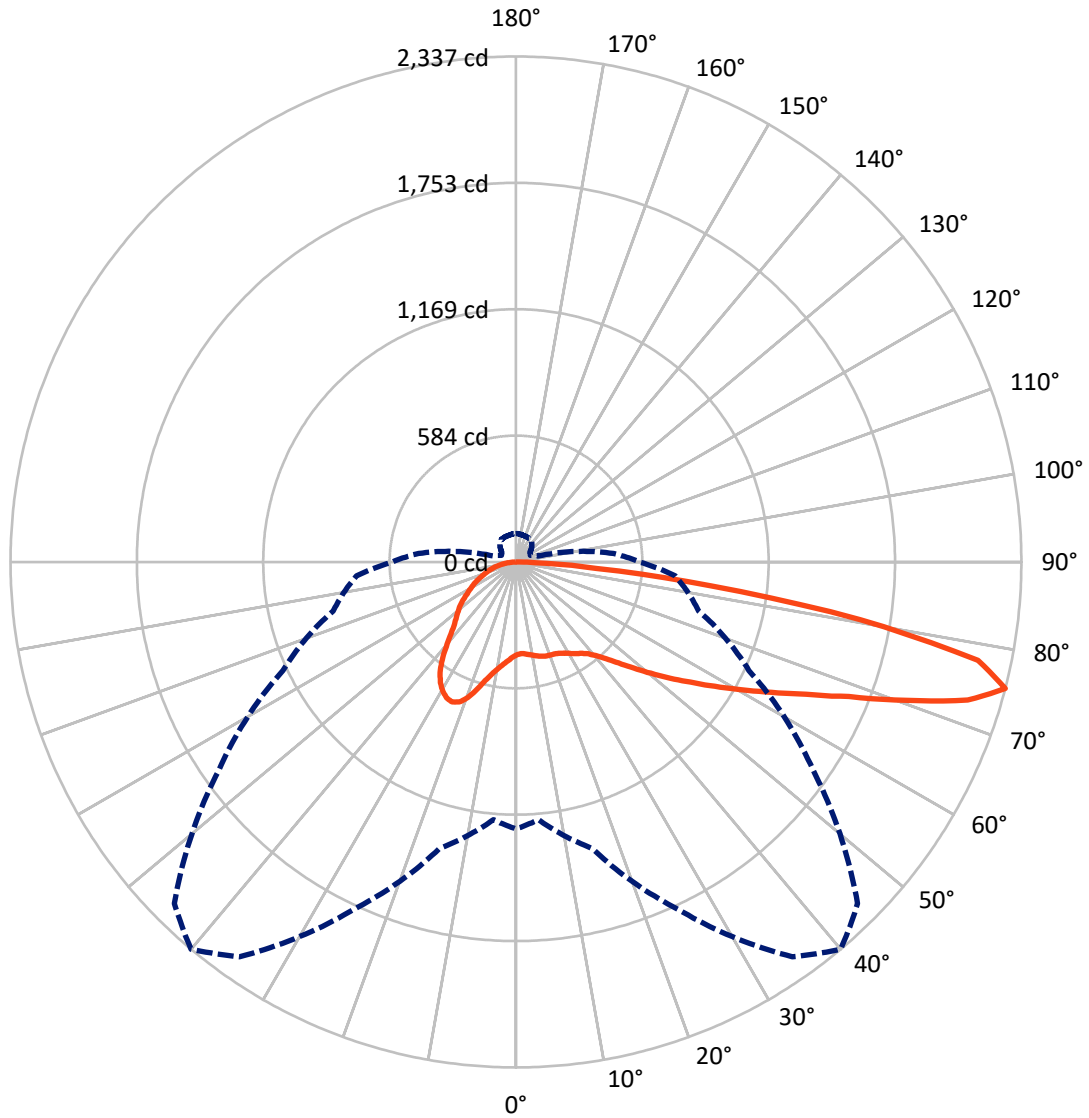
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 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	1163.4	0.0	1163.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	2591.6	0.0	2591.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	3755.0	0.0	3755.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	1.1
10°-20°	143.9	3.8
20°-30°	262.8	7.0
30°-40°	372.7	9.9
40°-50°	503.2	13.4
50°-60°	677.0	18.0
60°-70°	859.2	22.9
70°-80°	779.8	20.8
80°-90°	113.7	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°	3755.0	100.0
0°-180°	3755.0	100.0

Coefficient of Utilization



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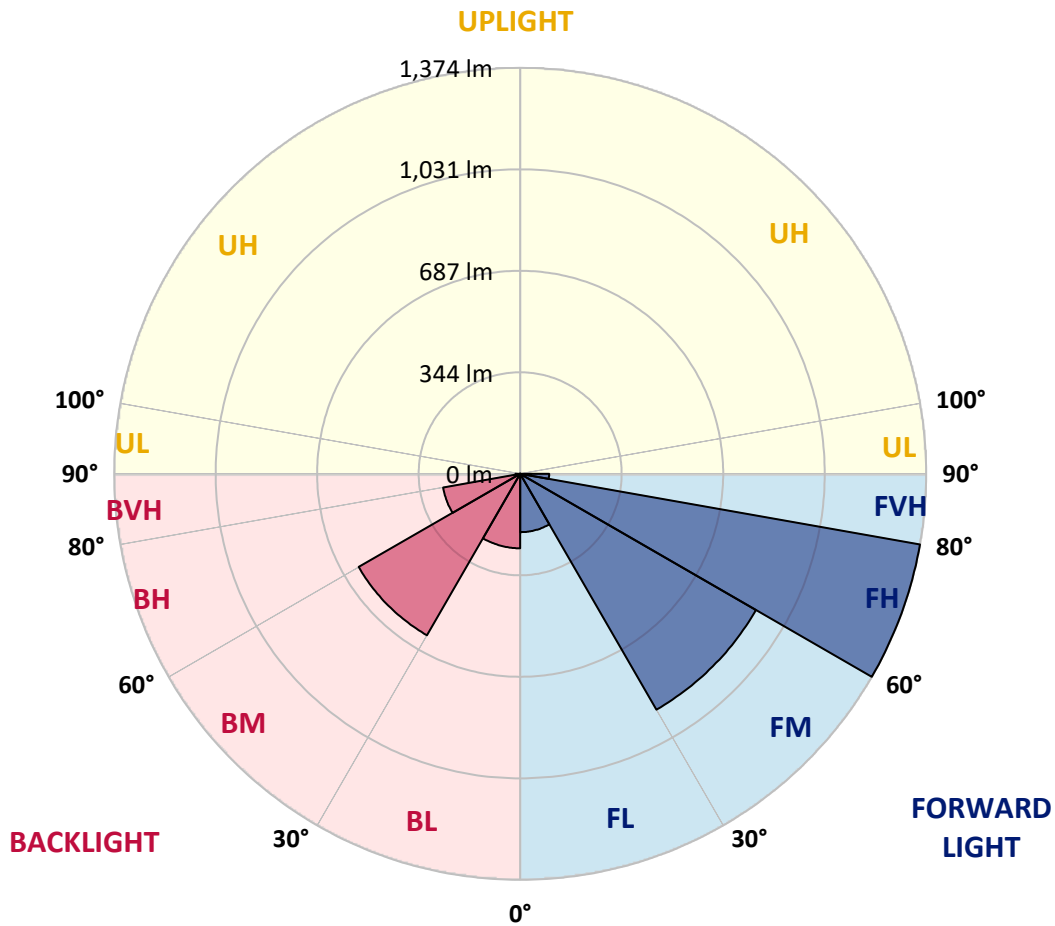
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	197.5	5.3			
FM (30°-60°)	921.8	24.5			
FH (60°-80°)	1374.3	36.6			G1/1800
FVH (80°-90°)	98.0	2.6			G1/100
BL (0°-30°)	252.0	6.7	B1/500		
BM (30°-60°)	631.1	16.8	B1/1000		
BH (60°-80°)	264.7	7.0	B1/500		G1/500
BVH (80°-90°)	15.6	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-G1

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4
2.5°	422.8	425.2	424.6	423.8	423.8	424.0	423.8	425.2	426.6	428.0	430.2
5°	427.2	429.6	428.4	427.4	426.6	426.4	425.8	425.6	426.4	428.2	431.2
7.5°	435.8	438.2	436.4	434.6	433.0	432.2	431.4	430.2	429.6	430.6	434.8
10°	445.3	447.7	445.5	442.3	439.7	438.7	438.0	436.8	436.0	436.6	441.1
12.5°	454.9	457.3	454.3	449.9	446.5	445.9	444.9	444.5	444.3	444.1	448.7
15°	463.8	465.8	462.1	456.9	453.3	452.3	451.3	451.9	452.9	454.1	459.3
17.5°	470.8	472.8	467.2	460.5	457.1	456.7	456.1	458.1	460.9	463.8	470.2
20°	477.2	479.2	472.0	462.8	458.9	458.9	459.1	463.2	467.2	471.6	480.4
22.5°	486.1	487.7	479.0	466.4	460.7	461.1	462.6	466.8	471.8	477.8	489.9
25°	499.5	500.7	489.9	473.2	466.6	467.8	469.2	471.2	476.0	483.0	499.3
27.5°	521.0	522.0	507.9	485.2	475.2	477.2	479.2	477.8	480.0	486.0	506.9
30°	551.3	551.9	533.9	503.9	489.7	490.7	491.1	485.4	481.2	486.0	512.2
32.5°	587.1	586.9	565.6	526.6	506.3	505.3	501.9	490.5	480.8	485.0	517.0
35°	642.7	640.5	613.0	558.4	525.0	518.8	510.8	496.3	482.8	484.0	521.2
37.5°	734.7	727.9	689.9	610.6	552.9	537.1	525.4	505.7	487.1	483.6	526.2
40°	838.5	829.9	788.1	682.1	594.7	569.4	550.5	519.0	494.3	485.4	533.6
42.5°	961.5	949.4	904.4	766.4	647.7	611.0	582.5	535.9	504.9	491.1	543.5
45°	1112.7	1096.6	1032.8	861.4	714.4	665.6	627.6	561.6	521.0	502.3	558.4
47.5°	1265.5	1269.4	1178.8	970.1	794.4	732.9	683.9	600.3	544.5	520.2	582.5
50°	1427.8	1430.6	1324.0	1090.6	885.3	809.0	747.2	643.5	577.2	545.7	618.6
52.5°	1554.4	1554.8	1455.9	1216.7	979.9	892.6	815.6	692.9	615.0	579.6	666.6
55°	1633.7	1632.7	1548.3	1336.0	1088.6	980.5	891.2	749.0	661.2	619.4	726.9
57.5°	1691.3	1688.3	1612.0	1438.5	1204.5	1084.2	976.9	812.8	715.8	666.8	806.4
60°	1713.2	1711.4	1655.2	1527.2	1326.4	1198.9	1075.7	884.1	777.7	722.8	908.6
62.5°	1721.5	1724.9	1697.6	1613.0	1456.9	1326.0	1184.2	969.3	847.4	786.1	1016.3
65°	1751.0	1757.2	1751.6	1725.3	1604.2	1474.8	1328.2	1070.7	923.5	854.0	1128.8
67.5°	1809.4	1815.5	1817.9	1859.8	1784.3	1660.2	1507.8	1197.0	1012.5	924.5	1213.5
70°	1808.0	1806.2	1848.4	1966.7	2009.7	1916.9	1750.0	1352.3	1118.7	983.1	1224.2
72.5°	1645.7	1631.3	1731.1	1965.5	2197.3	2185.0	2045.8	1552.7	1210.3	990.2	1062.3
75°	1234.6	1196.4	1372.6	1771.3	2228.6	2337.1	2233.8	1676.9	1188.6	874.9	739.3
77.5°	528.0	489.5	697.3	1311.3	1994.6	2184.8	2061.3	1463.0	948.8	578.6	363.1
80°	138.2	138.0	210.7	594.5	1356.5	1613.4	1415.4	944.8	542.1	206.7	100.2
82.5°	57.2	55.8	77.5	231.2	662.8	905.4	738.9	421.4	195.8	56.0	33.3
85°	21.3	21.1	37.6	79.9	233.8	373.4	270.3	107.7	48.8	27.3	14.9
87.5°	6.0	5.8	8.2	27.7	57.0	86.4	46.2	17.7	13.7	10.8	4.4
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°	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4	429.4
2.5°	430.8	431.8	433.6	435.0	436.8	438.7	441.5	443.3	445.1	446.3	445.5
5°	432.6	434.8	439.3	443.9	449.3	454.3	460.1	464.2	467.6	468.6	469.0
7.5°	436.6	440.1	447.9	455.7	464.2	472.4	480.8	487.9	493.7	495.9	496.1
10°	443.5	448.3	459.3	470.2	481.6	494.1	504.9	515.2	523.4	526.8	527.0
12.5°	452.3	458.3	472.6	487.7	503.5	520.8	534.7	547.5	557.6	562.2	562.2
15°	463.6	471.4	489.7	510.0	533.2	557.3	575.0	589.1	600.5	606.0	605.6
17.5°	476.0	486.3	509.5	540.1	573.2	604.8	625.6	635.9	647.7	653.0	652.8
20°	487.9	500.7	533.7	578.4	622.4	656.0	672.8	675.6	676.3	676.9	678.5
22.5°	500.3	517.4	564.2	626.6	673.8	697.1	699.5	687.5	670.8	663.0	665.2
25°	513.8	536.5	604.1	679.7	718.0	720.8	702.4	673.4	641.7	627.2	629.3
27.5°	527.0	558.6	651.9	730.5	749.8	725.3	685.9	644.7	606.4	591.1	592.9
30°	540.1	583.9	704.6	774.9	764.4	714.0	659.8	613.8	575.4	559.2	561.0
32.5°	553.5	613.4	765.4	807.0	761.8	689.9	627.4	579.2	545.3	528.4	530.6
35°	568.6	649.7	822.9	824.5	744.5	654.4	584.5	537.7	508.3	494.7	497.7
37.5°	588.3	695.7	873.7	828.9	714.2	602.5	531.4	488.7	464.4	458.3	462.6
40°	612.8	751.0	912.6	821.9	669.4	539.3	473.2	439.1	425.4	426.8	431.6
42.5°	644.7	813.0	939.8	804.0	607.0	474.2	422.2	407.1	413.7	419.2	424.4
45°	686.1	877.3	956.8	773.5	536.5	419.0	392.1	395.7	400.7	401.3	405.3
47.5°	739.1	942.4	967.9	727.5	464.6	380.2	373.0	373.8	372.8	368.6	371.8
50°	805.2	1005.8	977.9	666.6	403.5	355.9	346.3	343.6	329.8	316.3	318.1
52.5°	880.5	1063.9	982.1	590.9	355.9	335.6	320.1	302.5	276.8	272.7	274.0
55°	964.1	1117.7	971.3	497.9	315.9	309.5	286.0	264.9	262.1	258.5	259.1
57.5°	1064.1	1175.6	949.4	394.1	274.8	279.0	256.1	258.5	253.5	248.0	247.0
60°	1173.5	1235.6	911.0	299.5	232.4	241.0	248.4	248.2	246.8	242.2	240.6
62.5°	1271.8	1275.0	835.3	229.4	195.2	211.5	231.6	231.4	230.2	227.6	226.6
65°	1330.4	1269.0	709.0	180.6	164.5	187.2	208.9	210.5	210.7	210.5	210.5
67.5°	1320.0	1199.1	535.7	143.8	139.2	162.5	186.4	188.6	190.2	190.6	191.0
70°	1202.9	1045.6	349.3	114.7	116.7	140.8	165.1	167.3	168.7	170.3	171.1
72.5°	937.6	768.8	200.0	92.8	97.0	122.1	144.0	146.6	147.4	150.4	151.6
75°	571.4	452.1	107.9	73.1	79.7	104.4	123.1	126.1	127.5	131.0	131.4
77.5°	271.7	195.8	61.5	57.0	64.1	85.2	104.0	107.3	103.6	105.6	104.0
80°	91.8	72.7	38.8	43.4	49.0	66.5	83.2	86.6	78.7	78.3	77.5
82.5°	32.1	29.5	24.7	28.9	31.7	47.6	62.9	67.3	58.6	58.4	55.6
85°	12.5	11.9	13.7	15.7	18.9	29.3	41.4	43.6	36.0	29.1	28.7
87.5°	2.6	2.8	3.4	3.6	5.8	10.2	14.9	18.3	14.5	12.3	11.4
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)