

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: P881619

Luminaire Tested: **NAV-SB1A-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881619
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-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3791 lumens
Efficiency: N/A
Efficacy: 122.7 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

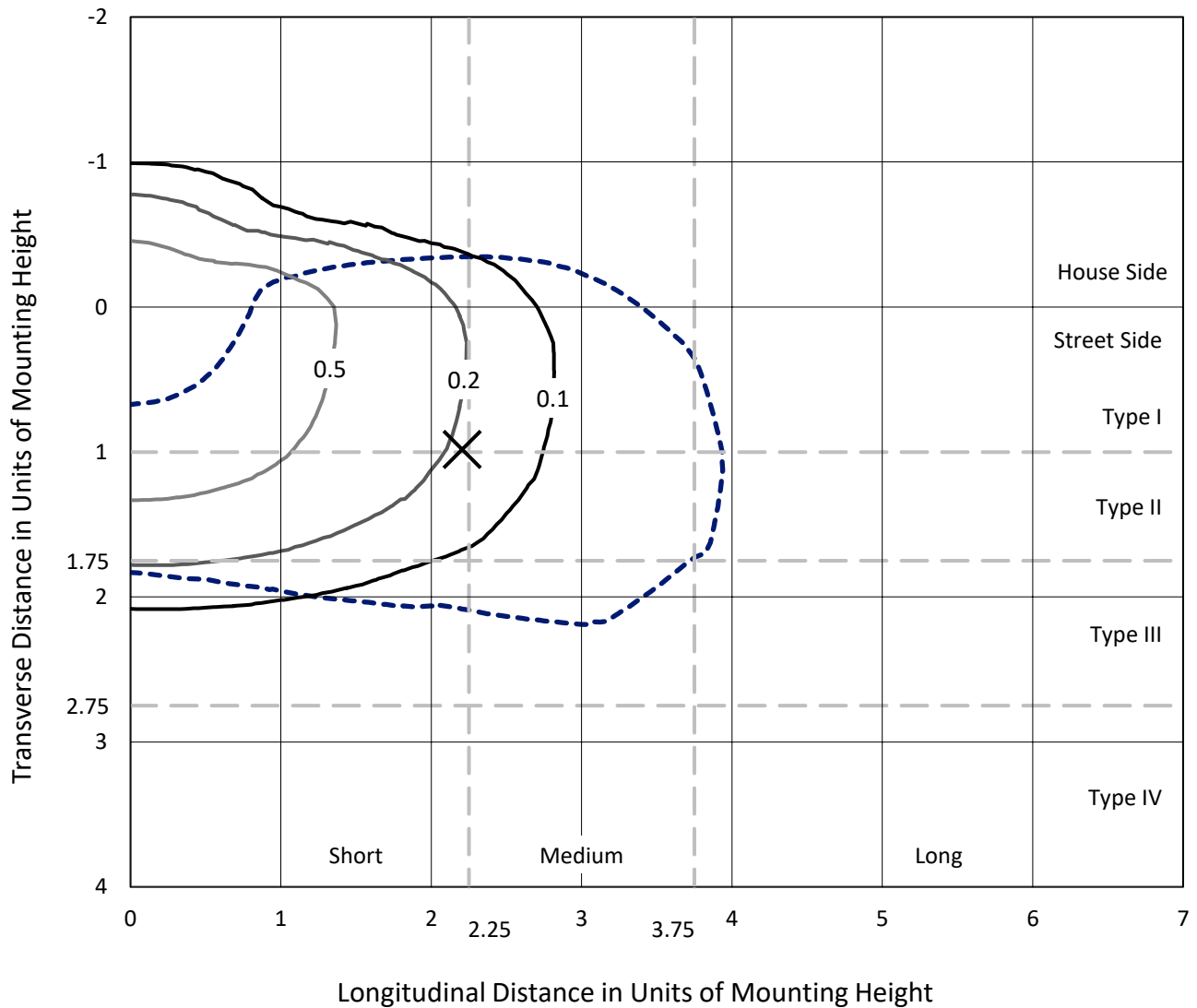
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

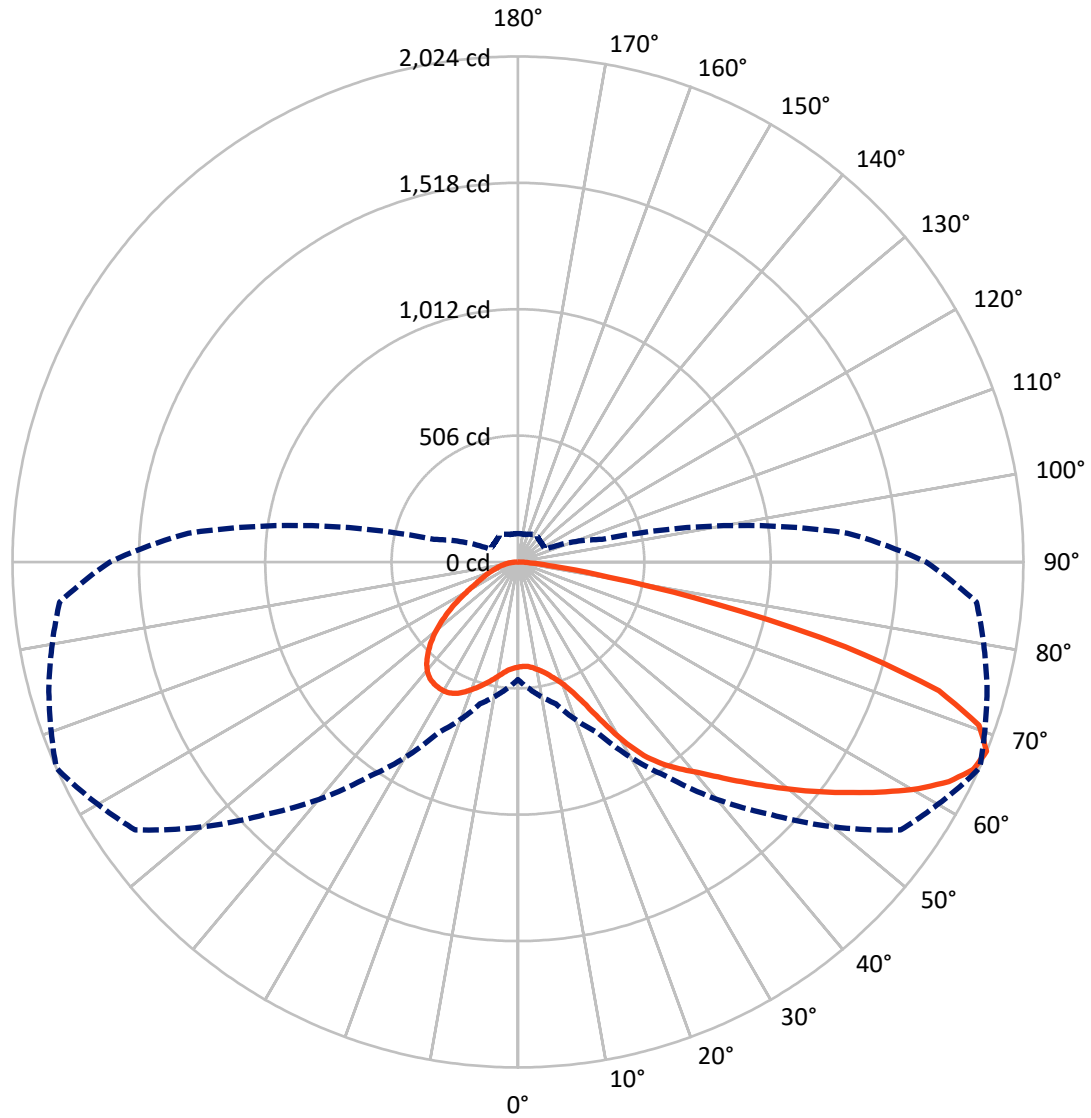
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type III - Short - N/A

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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	942.6	0.0	942.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	2848.4	0.0	2848.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	3791.0	0.0	3791.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	1.1
10°-20°	137.7	3.6
20°-30°	265.5	7.0
30°-40°	465.5	12.3
40°-50°	692.0	18.3
50°-60°	877.2	23.1
60°-70°	858.3	22.6
70°-80°	409.4	10.8
80°-90°	43.8	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°	3791.0	100.0
0°-180°	3791.0	100.0

Coefficient of Utilization



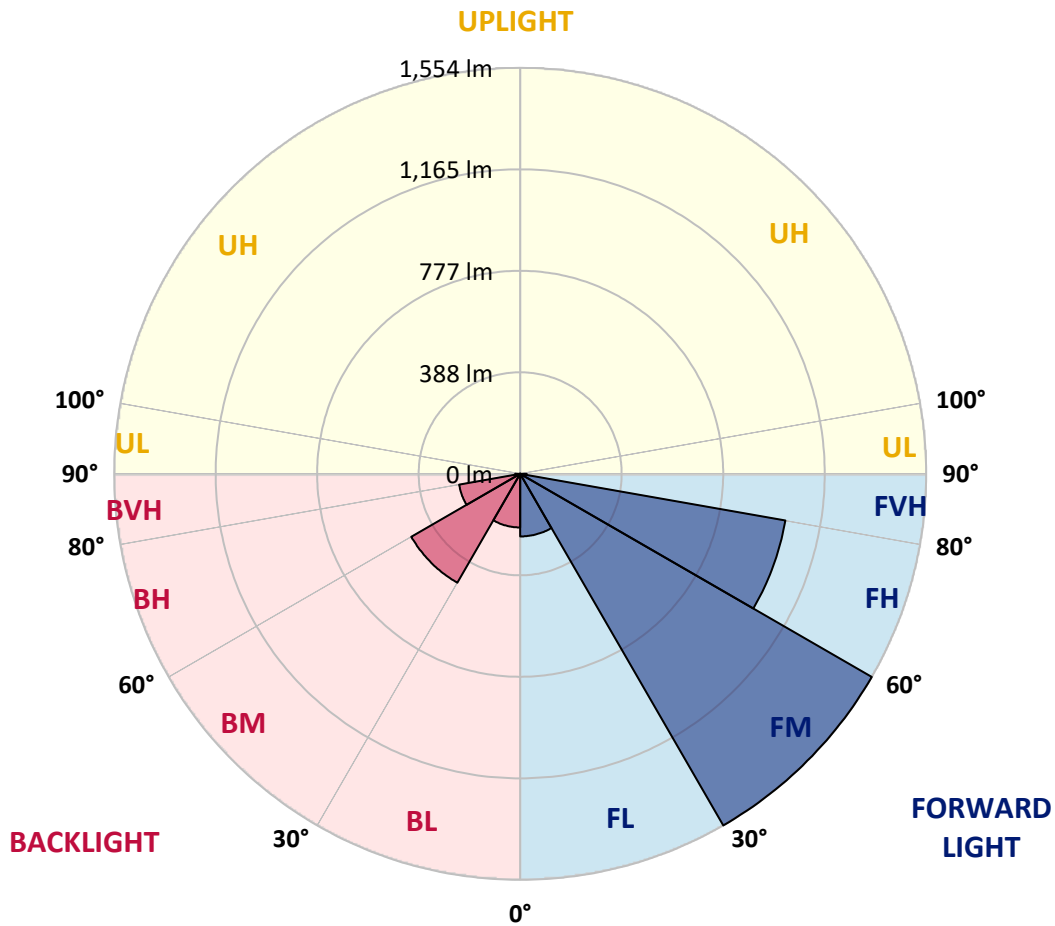
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	239.6	6.3			
FM (30°-60°)	1553.5	41.0			
FH (60°-80°)	1030.5	27.2			G1/1800
FVH (80°-90°)	24.8	0.7			G1/100
BL (0°-30°)	205.3	5.4	B1/500		
BM (30°-60°)	481.1	12.7	B1/1000		
BH (60°-80°)	237.2	6.3	B1/500		G1/500
BVH (80°-90°)	18.9	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5
2.5°	416.1	418.5	417.9	416.9	416.7	417.1	417.7	418.3	418.1	419.1	420.7
5°	414.9	417.3	417.1	417.1	417.9	419.5	420.5	421.5	420.5	421.7	423.9
7.5°	415.7	417.5	418.3	419.1	421.1	424.1	426.4	428.6	427.4	428.8	431.6
10°	425.8	427.2	428.0	428.0	429.4	432.8	435.2	439.2	438.2	440.4	444.0
12.5°	444.4	445.8	445.8	445.0	446.0	448.2	449.0	453.3	451.5	455.1	458.7
15°	467.1	469.9	467.7	466.3	466.7	468.9	468.7	472.1	470.3	473.3	476.4
17.5°	492.2	495.8	492.2	492.0	491.2	493.6	493.8	496.8	493.6	495.8	498.0
20°	521.9	526.8	523.8	524.8	523.1	524.0	525.0	529.4	524.4	526.0	525.4
22.5°	563.7	569.7	566.5	570.3	569.1	568.3	568.1	575.8	568.1	568.7	562.9
25°	624.6	631.8	626.2	631.4	631.4	634.0	637.0	646.9	634.0	630.2	615.3
27.5°	714.7	721.8	710.9	714.1	713.1	719.4	716.3	741.0	727.0	720.8	690.8
30°	823.0	835.8	815.1	814.3	813.3	823.4	828.0	844.3	830.2	824.0	787.8
32.5°	940.1	953.5	928.8	921.6	917.8	924.0	920.2	933.4	923.6	914.0	869.2
35°	1064.0	1077.2	1053.7	1039.7	1024.6	1011.6	998.1	1001.5	992.3	977.8	931.4
37.5°	1181.1	1205.2	1180.3	1165.4	1137.5	1112.2	1074.4	1058.6	1050.1	1036.7	989.9
40°	1300.5	1314.2	1295.3	1282.5	1252.3	1212.6	1152.1	1118.8	1107.2	1094.3	1054.7
42.5°	1388.3	1401.4	1391.3	1382.5	1358.8	1312.8	1234.5	1192.9	1176.2	1161.6	1128.0
45°	1458.0	1467.8	1461.4	1464.6	1454.4	1409.8	1320.0	1272.4	1255.0	1237.3	1210.8
47.5°	1486.1	1496.5	1506.6	1525.5	1542.9	1510.0	1411.8	1358.4	1340.1	1322.0	1295.9
50°	1482.9	1493.5	1522.9	1563.2	1617.0	1606.0	1508.6	1450.0	1433.1	1412.4	1388.3
52.5°	1457.4	1469.4	1507.2	1574.1	1659.8	1677.9	1607.2	1544.7	1528.7	1504.0	1479.9
55°	1390.5	1397.7	1454.4	1549.2	1669.9	1728.1	1703.8	1645.4	1629.5	1595.0	1568.8
57.5°	1266.4	1276.8	1359.4	1482.1	1644.4	1762.2	1788.6	1751.4	1736.1	1686.5	1659.0
60°	1104.5	1121.0	1215.6	1369.4	1579.5	1762.0	1865.7	1855.6	1842.8	1776.5	1747.8
62.5°	921.2	940.3	1031.4	1210.0	1466.0	1712.0	1913.9	1942.8	1936.2	1859.6	1822.9
65°	707.5	720.6	811.3	1003.9	1289.3	1604.6	1919.5	2002.4	2003.6	1922.7	1862.1
67.5°	471.1	508.9	587.6	753.3	1052.7	1429.1	1870.5	2012.1	2023.7	1944.4	1842.4
70°	229.9	279.7	356.7	489.6	753.3	1160.0	1742.4	1932.1	1957.8	1881.1	1724.9
72.5°	95.4	111.5	153.6	241.6	432.4	782.8	1485.1	1715.0	1762.6	1666.8	1450.2
75°	64.3	69.7	87.8	123.9	197.0	386.0	1071.0	1278.7	1355.4	1258.8	1029.0
77.5°	49.6	53.0	63.9	86.6	117.1	146.0	573.2	770.6	810.3	750.1	535.4
80°	39.0	41.6	47.8	63.1	83.1	78.1	195.4	349.2	372.1	312.1	172.1
82.5°	33.9	34.9	34.3	42.8	55.2	45.6	64.1	128.9	142.2	103.2	56.2
85°	24.5	27.3	28.5	26.5	29.3	23.1	26.3	45.6	50.2	44.8	31.7
87.5°	10.0	14.7	18.1	17.1	10.8	6.6	8.2	13.3	15.3	16.7	10.4
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°	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5
2.5°	420.9	422.3	423.3	424.5	425.3	426.4	428.8	430.2	430.4	431.4	431.2
5°	424.7	426.6	428.8	432.0	435.6	438.6	443.2	446.4	447.6	448.6	448.4
7.5°	432.8	435.6	439.6	445.2	450.3	454.3	459.9	463.7	467.5	468.9	469.1
10°	445.0	449.0	454.7	462.3	467.9	473.1	478.8	482.0	485.8	487.4	488.2
12.5°	460.1	464.3	471.9	482.4	487.6	491.2	493.2	492.4	493.2	494.6	495.0
15°	477.4	482.0	490.6	501.9	505.5	502.3	498.0	494.0	493.4	493.8	495.2
17.5°	498.0	501.3	511.3	520.9	518.3	505.1	495.6	489.2	486.0	485.0	486.4
20°	526.6	526.6	534.8	540.8	523.4	501.1	486.2	475.8	469.3	466.5	465.9
22.5°	561.5	558.3	563.5	559.3	522.5	490.0	469.3	451.3	441.4	437.4	436.8
25°	605.7	601.9	600.5	574.6	515.3	472.3	438.6	416.9	408.1	405.9	406.3
27.5°	672.4	662.9	644.8	583.0	502.1	444.4	402.7	382.6	377.6	377.8	378.4
30°	761.3	742.2	697.7	584.4	480.6	404.9	366.1	351.8	349.4	350.4	353.7
32.5°	843.5	825.4	751.9	578.0	447.6	366.3	333.2	323.7	320.1	321.3	322.9
35°	908.1	903.1	802.1	569.1	406.9	330.0	303.8	295.6	288.6	287.0	288.2
37.5°	969.0	967.0	839.7	556.5	366.7	304.3	280.0	269.3	259.1	253.6	253.8
40°	1035.9	1034.0	864.4	537.2	331.0	282.0	258.7	244.6	232.0	221.9	222.9
42.5°	1111.2	1099.5	876.2	509.5	300.8	263.1	241.4	222.3	205.8	196.4	197.0
45°	1193.5	1167.0	876.0	474.3	275.3	245.8	222.9	195.8	180.5	171.7	171.3
47.5°	1280.7	1231.5	865.2	435.2	250.6	226.7	194.2	173.5	163.3	158.0	156.8
50°	1370.8	1291.9	846.9	390.4	225.3	205.0	176.3	162.1	154.4	149.4	147.6
52.5°	1455.4	1346.7	824.8	339.6	199.6	183.8	168.3	157.4	149.2	143.6	141.2
55°	1534.1	1393.9	793.5	287.6	178.7	169.7	164.5	155.4	146.0	139.4	136.8
57.5°	1604.0	1424.5	739.6	238.8	163.7	159.9	160.5	152.0	141.2	135.6	132.1
60°	1662.2	1447.1	659.7	193.6	151.6	150.4	154.4	145.6	133.1	126.7	123.9
62.5°	1697.0	1446.7	561.7	158.5	141.2	141.6	146.2	137.6	124.9	118.9	117.1
65°	1694.0	1411.2	454.1	135.6	131.3	131.7	137.6	128.9	118.1	114.5	114.3
67.5°	1634.1	1324.8	348.4	120.7	120.3	122.1	129.1	122.9	113.9	113.5	114.1
70°	1471.8	1145.3	251.0	108.8	109.0	111.5	120.7	119.1	111.7	112.5	112.3
72.5°	1180.1	873.2	168.5	96.2	96.4	100.6	112.7	116.1	109.5	120.1	121.7
75°	786.0	544.6	108.4	82.9	83.1	88.4	105.8	110.3	103.6	119.7	120.7
77.5°	377.6	244.8	78.5	69.7	69.7	74.7	91.4	98.8	88.2	93.0	85.2
80°	130.5	92.0	61.7	56.2	55.0	58.4	77.1	85.6	76.1	70.1	65.7
82.5°	51.4	47.8	49.6	43.6	39.6	41.8	60.0	70.7	56.0	50.6	50.4
85°	29.5	31.1	35.1	28.9	22.9	25.7	44.0	50.8	42.2	37.2	38.0
87.5°	8.0	11.0	16.1	14.9	10.4	11.0	20.9	28.1	24.3	18.7	19.3
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)