

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: P881621

Luminaire Tested: **NAV-SB1A-835-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-835-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3744 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

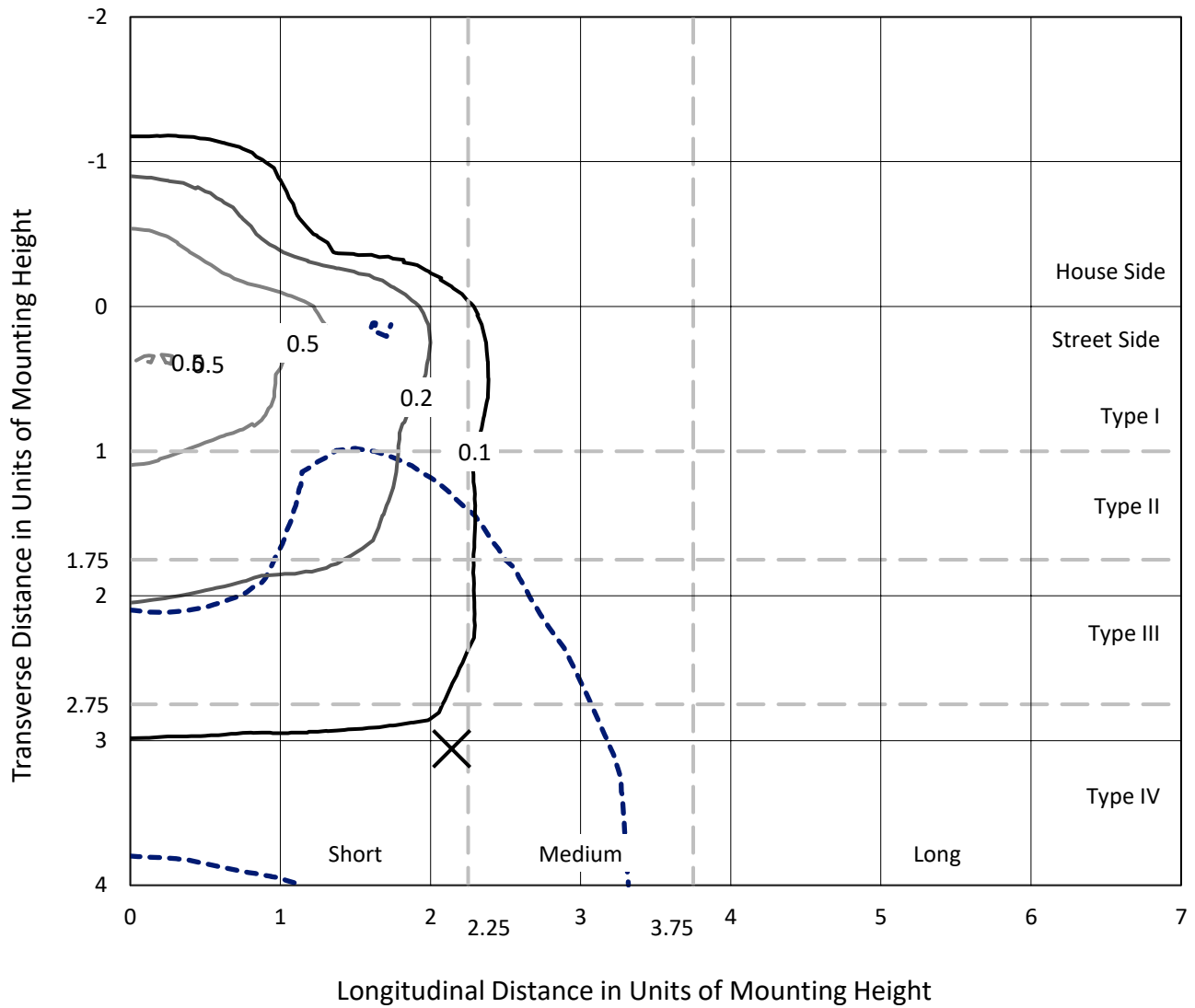
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

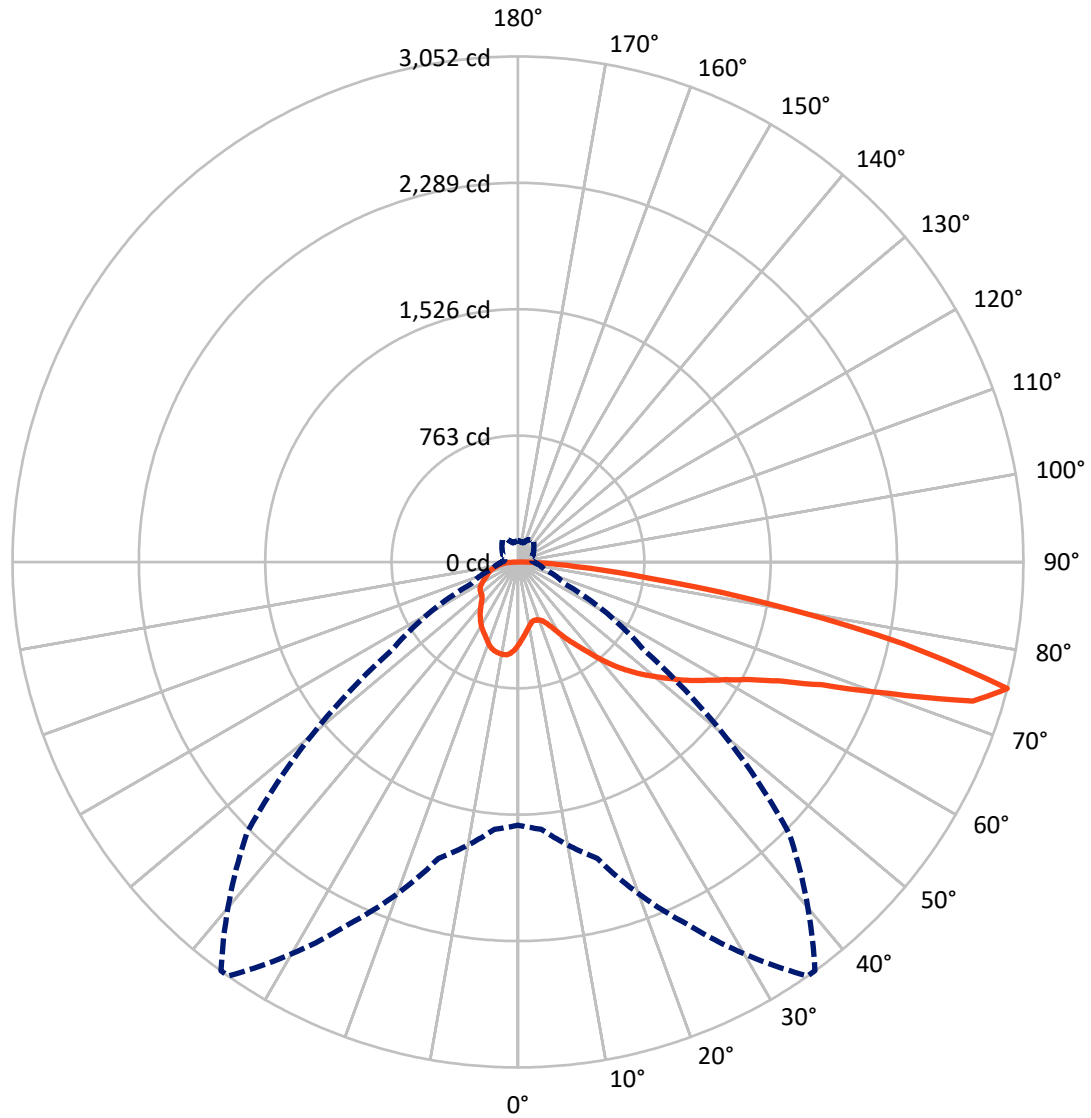
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	891.0	0.0	891.0
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	2853.0	0.0	2853.0
	% Fixture	76.2	0.0	76.2
Total	Lumens	3744.0	0.0	3744.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.2	1.3
10°-20°	136.3	3.6
20°-30°	228.8	6.1
30°-40°	355.6	9.5
40°-50°	527.8	14.1
50°-60°	728.7	19.5
60°-70°	884.0	23.6
70°-80°	730.6	19.5
80°-90°	105.1	2.8
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°	3744.0	100.0
0°-180°	3744.0	100.0

Coefficient of Utilization



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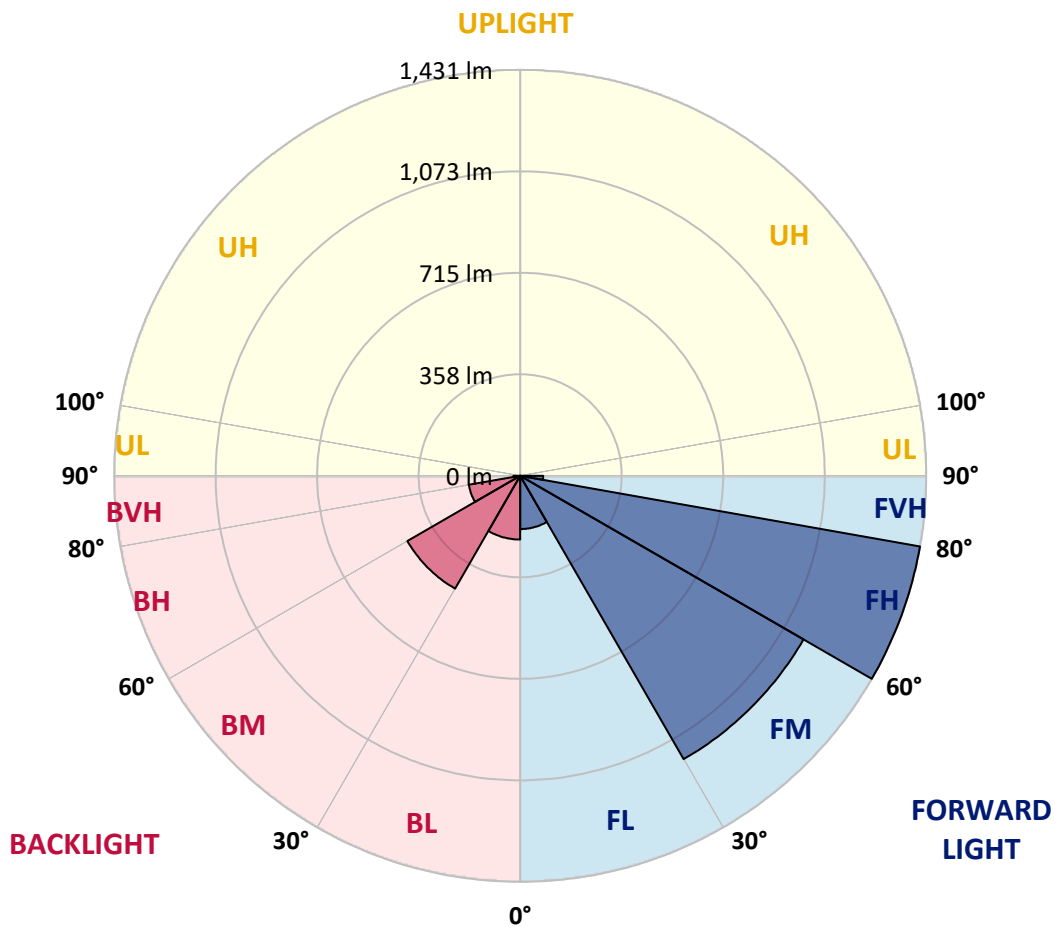
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	187.8	5.0			
FM (30°-60°)	1153.0	30.8			
FH (60°-80°)	1430.9	38.2			G1/1800
FVH (80°-90°)	81.4	2.2			G1/100
BL (0°-30°)	224.5	6.0	B1/500		
BM (30°-60°)	459.1	12.3	B1/1000		
BH (60°-80°)	183.7	4.9	B1/500		G1/500
BVH (80°-90°)	23.7	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	460.1	462.9	464.1	463.5	466.5	466.1	470.4	475.6	482.9	490.0	500.3
5°	424.6	427.7	430.3	432.7	438.6	440.4	447.1	457.2	470.6	484.1	501.1
7.5°	391.6	394.3	398.3	402.8	412.7	414.5	425.6	441.4	460.1	479.9	503.4
10°	364.7	367.4	371.6	376.7	389.0	391.2	405.4	426.5	450.7	475.8	505.8
12.5°	353.2	354.0	356.4	361.5	372.2	373.6	389.2	413.3	441.6	472.8	509.4
15°	352.6	354.2	354.4	357.0	365.9	366.5	380.9	404.8	436.0	472.2	514.9
17.5°	358.7	359.9	358.0	359.7	367.2	368.2	379.5	400.7	434.1	474.8	524.2
20°	374.8	375.9	370.4	368.2	373.6	374.4	385.6	403.4	436.0	480.3	537.0
22.5°	409.3	409.9	396.5	387.4	387.8	388.2	397.9	414.1	443.1	490.2	553.2
25°	462.9	462.5	441.2	423.6	413.5	411.3	417.8	431.5	455.0	503.4	574.0
27.5°	525.6	522.6	501.3	475.0	453.0	449.7	448.3	454.2	472.0	520.8	599.5
30°	596.5	593.6	570.8	536.4	505.8	500.5	487.2	484.1	497.3	544.5	634.9
32.5°	674.2	672.4	645.0	603.4	562.5	556.4	533.9	525.8	536.2	580.3	684.3
35°	739.4	737.7	715.1	672.2	622.2	614.7	591.8	582.7	588.0	626.2	748.9
37.5°	798.3	797.5	778.0	744.2	692.6	683.5	657.8	654.8	653.7	686.7	827.2
40°	852.9	850.9	830.6	812.8	774.6	766.3	743.6	741.0	733.3	761.2	915.9
42.5°	913.4	908.2	878.8	870.5	860.2	853.3	839.8	840.2	823.2	845.2	1009.8
45°	962.8	959.8	929.6	924.8	935.9	933.1	944.8	947.8	914.8	933.3	1107.3
47.5°	1015.8	1013.0	987.5	984.1	1014.2	1015.0	1056.5	1057.5	1004.3	1024.7	1205.1
50°	1081.2	1077.2	1051.9	1056.1	1089.9	1093.0	1168.9	1162.0	1086.7	1117.6	1302.0
52.5°	1124.3	1126.8	1121.3	1128.2	1174.3	1177.2	1279.4	1261.8	1168.2	1209.3	1397.2
55°	1156.1	1161.0	1178.0	1193.7	1263.4	1266.2	1383.6	1356.7	1235.8	1294.3	1486.6
57.5°	1197.0	1190.1	1221.9	1252.6	1348.0	1355.5	1485.0	1448.2	1295.8	1367.6	1547.9
60°	1255.7	1250.8	1275.5	1321.1	1442.7	1454.6	1592.3	1530.5	1339.7	1425.7	1559.9
62.5°	1374.7	1362.5	1366.4	1406.7	1562.1	1577.9	1713.3	1602.4	1361.5	1448.4	1495.9
65°	1552.6	1531.8	1512.3	1540.3	1730.3	1745.9	1849.9	1658.9	1353.4	1404.4	1326.1
67.5°	1776.7	1756.0	1732.1	1758.4	1978.0	1990.4	2018.5	1690.6	1289.7	1235.2	1026.0
70°	1961.4	1953.8	1982.3	2090.6	2373.7	2374.1	2234.7	1664.3	1115.0	875.8	593.6
72.5°	1937.0	1932.3	2082.7	2417.5	2872.4	2861.7	2439.3	1465.2	751.1	395.1	222.4
75°	1589.0	1619.2	1852.2	2411.6	3051.6	3050.2	2314.0	931.4	310.7	163.7	115.0
77.5°	852.1	899.9	1202.5	1780.5	2382.2	2418.1	1626.9	325.9	133.4	104.8	79.5
80°	277.9	319.6	479.3	906.5	1547.9	1541.3	697.3	127.9	91.3	74.3	55.1
82.5°	118.0	122.9	214.1	428.1	794.4	782.1	222.0	73.5	64.2	50.8	34.0
85°	46.1	51.6	94.5	197.9	344.1	336.6	80.1	36.4	41.1	33.2	20.2
87.5°	15.2	18.4	33.8	67.8	107.1	103.2	19.6	12.5	17.8	15.2	7.3
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°	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9	498.9
2.5°	503.2	506.4	510.2	515.9	520.8	524.8	529.1	531.7	532.7	535.7	535.5
5°	506.8	513.9	523.4	532.7	541.8	547.3	552.1	554.6	556.8	558.4	558.8
7.5°	512.9	522.0	537.0	549.1	556.8	561.3	564.5	563.7	564.5	564.9	565.5
10°	518.1	530.9	548.7	560.2	566.1	566.3	565.5	562.7	561.3	561.5	561.9
12.5°	524.4	538.6	557.8	567.5	569.1	564.7	561.3	556.4	554.6	553.8	553.4
15°	532.9	549.1	567.7	571.4	567.3	561.7	555.8	547.9	543.8	540.6	541.6
17.5°	543.2	561.0	575.4	572.8	564.1	554.8	545.3	533.3	525.0	521.6	521.8
20°	557.6	573.6	581.3	569.8	556.6	542.4	526.2	511.7	504.0	500.5	500.1
22.5°	575.0	590.4	587.0	564.5	545.9	523.2	503.0	492.2	488.4	486.0	486.4
25°	595.9	609.0	591.0	556.8	528.3	497.7	482.1	478.7	476.9	475.0	475.0
27.5°	623.0	630.1	594.0	545.5	500.7	470.6	464.9	465.5	464.9	461.9	462.5
30°	658.8	657.4	596.9	527.0	469.2	446.1	446.5	449.1	449.5	447.5	448.5
32.5°	706.0	691.6	598.3	503.2	439.0	424.6	425.0	427.9	429.9	426.5	428.1
35°	763.0	731.5	596.1	473.2	415.7	404.2	401.2	402.0	402.6	399.3	401.6
37.5°	829.6	776.2	586.1	440.0	396.5	384.2	377.7	372.2	369.0	365.9	368.0
40°	902.7	825.0	567.9	407.6	375.0	362.9	353.2	342.9	331.9	327.9	329.7
42.5°	979.2	875.2	545.9	376.7	350.4	340.4	330.1	315.1	298.7	290.4	291.5
45°	1058.5	926.6	524.2	346.1	325.1	320.8	308.9	290.8	273.0	262.5	261.7
47.5°	1136.3	975.2	492.4	315.3	301.4	306.0	296.7	280.1	260.3	243.7	241.9
50°	1210.5	1020.7	440.4	284.2	282.1	301.6	292.7	268.8	246.1	224.9	223.0
52.5°	1284.2	1057.5	373.8	255.8	271.8	300.4	287.4	261.1	233.4	211.1	208.7
55°	1346.8	1076.6	309.7	231.5	256.8	290.0	281.1	252.0	215.4	191.7	189.6
57.5°	1382.4	1061.2	256.2	207.7	236.2	273.0	270.4	232.6	193.9	175.7	173.3
60°	1367.0	998.8	212.5	186.8	216.6	254.6	251.8	213.3	177.5	160.3	157.9
62.5°	1282.2	880.0	177.9	168.6	198.8	235.8	233.2	198.6	165.0	148.4	145.7
65°	1111.4	715.9	151.0	153.4	180.7	213.1	217.0	186.2	155.0	138.8	136.2
67.5°	847.6	518.5	129.9	140.3	163.1	190.9	202.0	177.3	146.7	131.4	128.9
70°	483.1	294.5	112.1	127.5	147.5	170.2	190.5	170.2	137.8	125.1	123.5
72.5°	183.2	135.2	96.9	114.8	132.6	152.8	177.7	159.1	127.5	118.0	116.4
75°	97.8	82.4	81.6	99.8	115.4	135.8	161.7	148.2	119.8	124.7	128.7
77.5°	66.6	58.3	68.2	85.4	96.5	117.0	144.7	131.6	103.8	103.4	95.3
80°	46.1	41.3	55.5	68.8	74.7	98.4	126.3	112.9	84.6	78.9	75.5
82.5°	27.7	26.9	41.5	51.4	52.8	75.9	104.6	94.7	69.2	60.3	60.7
85°	15.2	16.0	26.5	30.2	30.8	53.0	82.0	73.3	53.2	44.7	45.1
87.5°	4.3	5.5	9.7	11.9	14.8	27.5	48.8	43.5	26.7	18.6	18.6
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)