

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: P881571

Luminaire Tested: **NAV-SB1A-740-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881571
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-740-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 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: 4784 lumens
Efficiency: N/A
Efficacy: 154.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

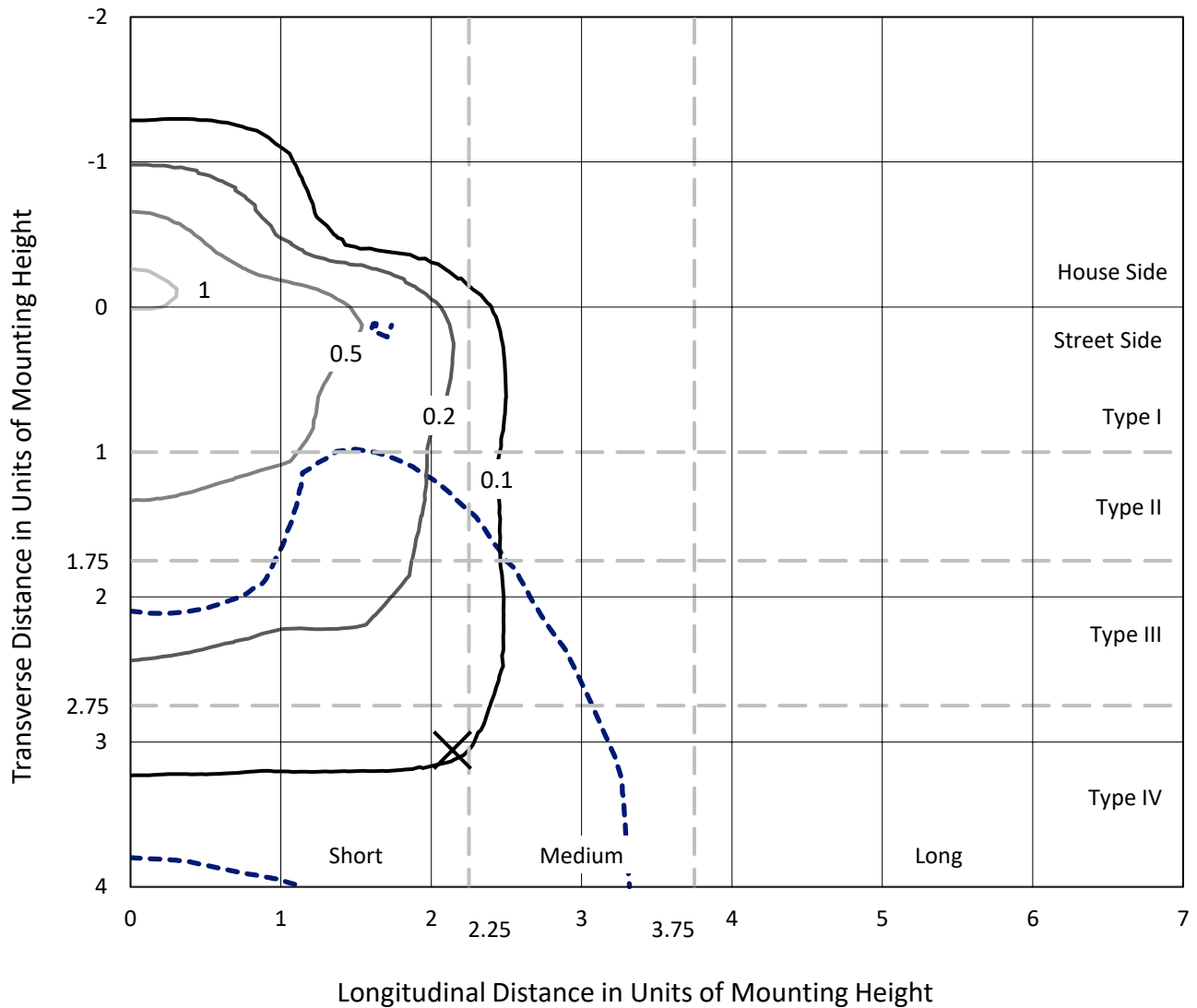
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

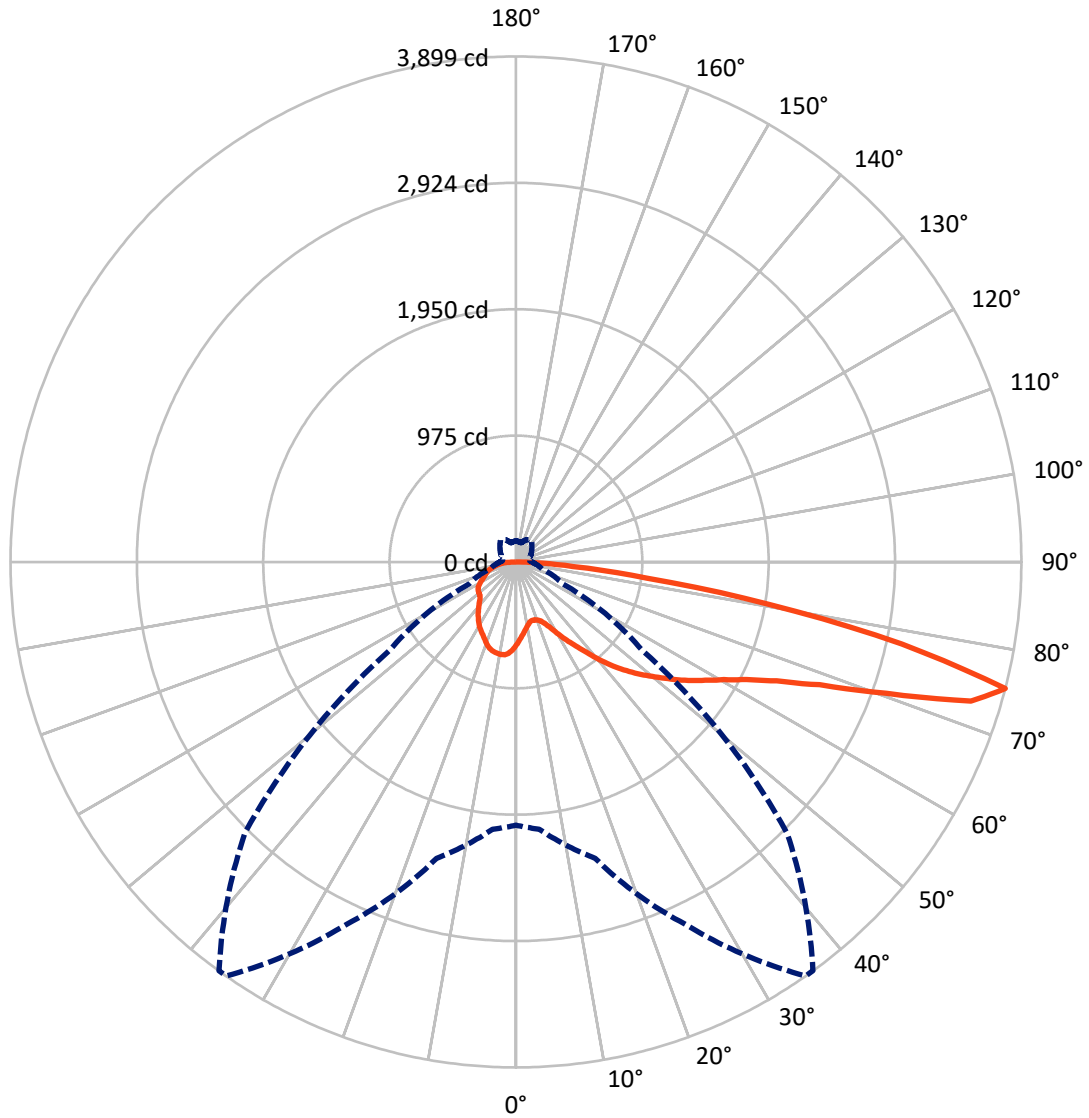
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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	1138.5	0.0	1138.5
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3645.5	0.0	3645.5
	% Fixture	76.2	0.0	76.2
Total	Lumens	4784.0	0.0	4784.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	1.3
10°-20°	174.1	3.6
20°-30°	292.4	6.1
30°-40°	454.4	9.5
40°-50°	674.4	14.1
50°-60°	931.0	19.5
60°-70°	1129.6	23.6
70°-80°	933.5	19.5
80°-90°	134.3	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°	4784.0	100.0
0°-180°	4784.0	100.0

Coefficient of Utilization



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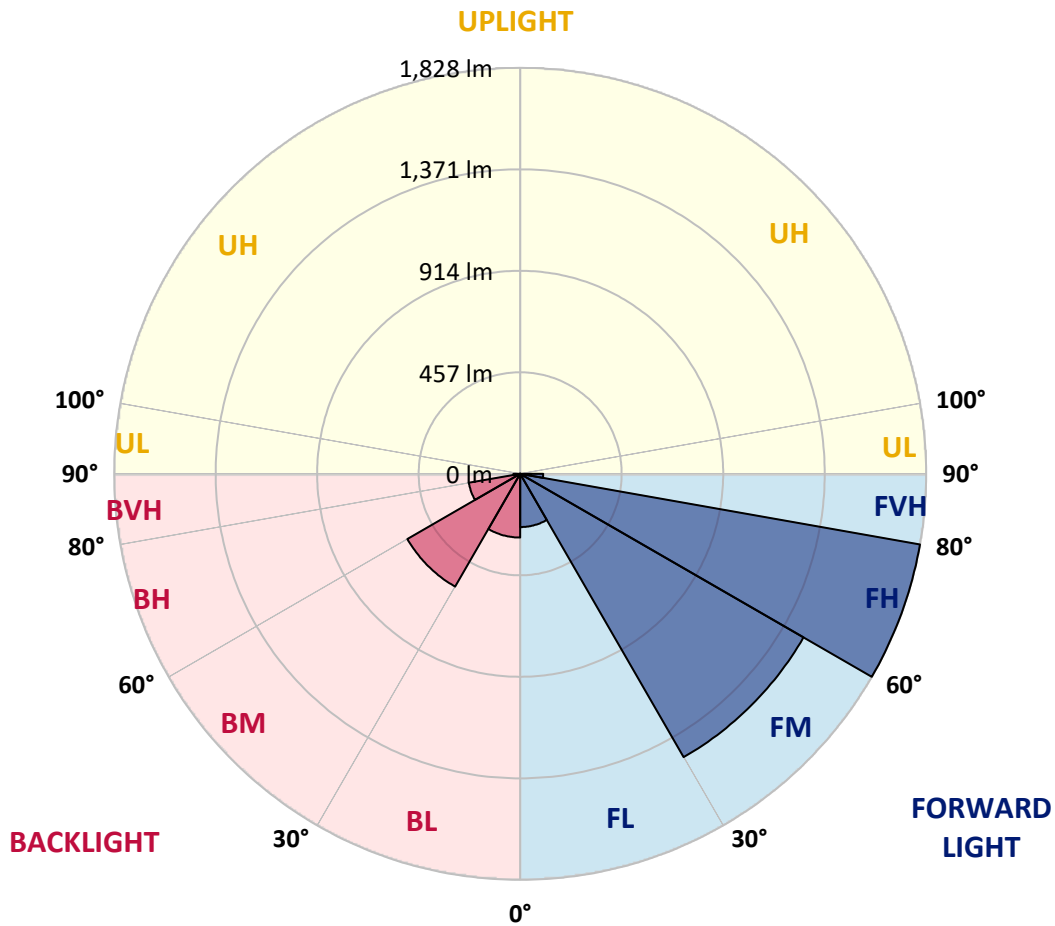
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	239.9	5.0			
FM (30°-60°)	1473.2	30.8			
FH (60°-80°)	1828.4	38.2			G2/5000
FVH (80°-90°)	104.0	2.2			G2/225
BL (0°-30°)	286.9	6.0	B1/500		
BM (30°-60°)	586.6	12.3	B1/1000		
BH (60°-80°)	234.7	4.9	B1/500		G1/500
BVH (80°-90°)	30.2	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5
2.5°	587.8	591.5	593.0	592.2	596.1	595.6	601.0	607.8	617.1	626.1	639.3
5°	542.6	546.5	549.8	552.9	560.4	562.8	571.3	584.2	601.3	618.6	640.3
7.5°	500.4	503.8	509.0	514.7	527.3	529.7	543.9	564.1	587.8	613.2	643.2
10°	466.0	469.4	474.8	481.3	497.1	499.9	518.0	544.9	575.9	608.0	646.3
12.5°	451.3	452.3	455.4	461.9	475.6	477.4	497.3	528.1	564.3	604.1	650.9
15°	450.5	452.6	452.8	456.2	467.6	468.4	486.7	517.2	557.1	603.4	657.9
17.5°	458.3	459.8	457.5	459.6	469.1	470.4	484.9	512.1	554.7	606.7	669.8
20°	479.0	480.3	473.3	470.4	477.4	478.4	492.7	515.4	557.1	613.7	686.1
22.5°	522.9	523.7	506.6	495.0	495.5	496.0	508.4	529.1	566.1	626.4	706.8
25°	591.5	590.9	563.8	541.3	528.4	525.5	533.8	551.4	581.4	643.2	733.4
27.5°	671.6	667.8	640.6	607.0	578.8	574.7	572.8	580.3	603.1	665.4	766.0
30°	762.2	758.5	729.3	685.3	646.3	639.6	622.5	618.6	635.4	695.7	811.3
32.5°	861.5	859.1	824.2	770.9	718.7	710.9	682.2	671.9	685.1	741.5	874.4
35°	944.7	942.7	913.7	858.9	795.0	785.4	756.2	744.6	751.3	800.2	956.9
37.5°	1020.0	1019.0	994.1	950.9	885.0	873.4	840.5	836.6	835.3	877.5	1057.0
40°	1089.8	1087.2	1061.4	1038.6	989.7	979.1	950.2	946.8	937.0	972.7	1170.3
42.5°	1167.2	1160.4	1122.9	1112.3	1099.1	1090.3	1073.0	1073.5	1051.8	1080.0	1290.3
45°	1230.3	1226.4	1187.8	1181.6	1195.9	1192.2	1207.2	1211.1	1169.0	1192.5	1414.9
47.5°	1298.0	1294.4	1261.8	1257.4	1295.9	1297.0	1350.0	1351.3	1283.3	1309.4	1539.8
50°	1381.6	1376.4	1344.1	1349.5	1392.7	1396.6	1493.5	1484.7	1388.5	1428.1	1663.7
52.5°	1436.6	1439.7	1432.8	1441.6	1500.5	1504.1	1634.7	1612.2	1492.8	1545.3	1785.3
55°	1477.2	1483.4	1505.2	1525.3	1614.3	1617.9	1767.9	1733.5	1579.1	1653.9	1899.6
57.5°	1529.5	1520.7	1561.3	1600.6	1722.4	1732.0	1897.5	1850.4	1655.7	1747.5	1977.9
60°	1604.5	1598.3	1629.8	1688.0	1843.4	1858.7	2034.6	1955.7	1711.8	1821.7	1993.2
62.5°	1756.6	1741.0	1745.9	1797.4	1996.0	2016.2	2189.2	2047.5	1739.7	1850.7	1911.5
65°	1983.9	1957.2	1932.4	1968.1	2210.9	2230.9	2363.8	2119.7	1729.4	1794.6	1694.5
67.5°	2270.2	2243.8	2213.3	2246.9	2527.5	2543.3	2579.2	2160.3	1647.9	1578.4	1310.9
70°	2506.3	2496.5	2532.9	2671.3	3033.1	3033.6	2855.4	2126.6	1424.7	1119.1	758.5
72.5°	2475.0	2469.1	2661.2	3089.0	3670.3	3656.6	3116.9	1872.2	959.7	504.8	284.2
75°	2030.4	2069.0	2366.6	3081.5	3899.2	3897.4	2956.8	1190.2	397.0	209.2	146.9
77.5°	1088.8	1149.8	1536.5	2275.1	3044.0	3089.7	2078.8	416.4	170.4	134.0	101.6
80°	355.1	408.4	612.4	1158.4	1977.9	1969.4	890.9	163.4	116.6	94.9	70.3
82.5°	150.8	157.0	273.6	547.0	1015.1	999.3	283.7	93.9	82.0	64.9	43.4
85°	59.0	65.9	120.8	252.9	439.7	430.1	102.4	46.6	52.5	42.4	25.9
87.5°	19.4	23.5	43.2	86.6	136.8	131.9	25.1	16.0	22.8	19.4	9.3
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°	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5	637.5
2.5°	642.9	647.1	652.0	659.2	665.4	670.6	676.0	679.4	680.7	684.6	684.3
5°	647.6	656.6	668.8	680.7	692.3	699.3	705.5	708.6	711.5	713.5	714.1
7.5°	655.3	667.0	686.1	701.6	711.5	717.2	721.3	720.3	721.3	721.8	722.6
10°	662.1	678.4	701.1	715.9	723.4	723.6	722.6	719.0	717.2	717.4	717.9
12.5°	670.1	688.2	712.8	725.2	727.2	721.6	717.2	710.9	708.6	707.6	707.1
15°	680.9	701.6	725.4	730.1	724.9	717.7	710.2	700.1	694.9	690.8	692.1
17.5°	694.1	716.9	735.3	731.9	720.8	708.9	696.7	681.5	670.9	666.5	666.7
20°	712.5	732.9	742.8	728.0	711.2	693.1	672.4	653.8	644.0	639.6	639.1
22.5°	734.7	754.4	750.0	721.3	697.5	668.5	642.7	629.0	624.1	620.9	621.5
25°	761.4	778.2	755.2	711.5	675.0	635.9	616.0	611.6	609.3	607.0	607.0
27.5°	796.0	805.1	759.1	697.0	639.8	601.3	594.1	594.8	594.1	590.2	590.9
30°	841.8	840.0	762.7	673.4	599.5	570.0	570.5	573.9	574.4	571.8	573.1
32.5°	902.1	883.7	764.5	642.9	560.9	542.6	543.1	546.7	549.3	544.9	547.0
35°	975.0	934.7	761.6	604.7	531.2	516.5	512.6	513.6	514.4	510.3	513.1
37.5°	1060.1	991.8	749.0	562.2	506.6	490.9	482.6	475.6	471.5	467.6	470.2
40°	1153.4	1054.1	725.7	520.9	479.2	463.7	451.3	438.1	424.1	419.0	421.3
42.5°	1251.2	1118.3	697.5	481.3	447.7	435.0	421.8	402.7	381.7	371.1	372.4
45°	1352.6	1184.0	669.8	442.2	415.3	409.9	394.7	371.6	348.9	335.4	334.4
47.5°	1451.9	1246.0	629.2	402.9	385.1	391.0	379.1	357.9	332.6	311.4	309.1
50°	1546.8	1304.2	562.8	363.1	360.5	385.3	374.0	343.4	314.5	287.3	285.0
52.5°	1640.9	1351.3	477.7	326.9	347.3	383.8	367.2	333.6	298.2	269.7	266.6
55°	1720.9	1375.6	395.7	295.9	328.2	370.6	359.2	322.0	275.2	244.9	242.3
57.5°	1766.4	1355.9	327.4	265.3	301.8	348.9	345.5	297.2	247.8	224.5	221.4
60°	1746.7	1276.3	271.6	238.7	276.7	325.3	321.7	272.6	226.8	204.8	201.7
62.5°	1638.4	1124.5	227.3	215.4	254.0	301.3	297.9	253.7	210.8	189.6	186.2
65°	1420.1	914.7	192.9	196.0	230.9	272.3	277.2	237.9	198.1	177.4	174.1
67.5°	1083.1	662.6	166.0	179.2	208.4	243.9	258.1	226.6	187.5	167.8	164.7
70°	617.3	376.3	143.3	162.9	188.5	217.5	243.4	217.5	176.1	159.8	157.8
72.5°	234.1	172.8	123.9	146.6	169.4	195.3	227.1	203.3	162.9	150.8	148.7
75°	124.9	105.3	104.2	127.5	147.4	173.5	206.6	189.3	153.1	159.3	164.5
77.5°	85.1	74.5	87.2	109.1	123.4	149.5	184.9	168.1	132.7	132.2	121.8
80°	59.0	52.8	70.9	87.9	95.4	125.7	161.4	144.3	108.1	100.9	96.5
82.5°	35.4	34.4	53.0	65.7	67.5	97.0	133.7	121.0	88.4	77.1	77.6
85°	19.4	20.4	33.9	38.5	39.3	67.8	104.7	93.6	68.0	57.2	57.7
87.5°	5.4	7.0	12.4	15.3	18.9	35.2	62.3	55.6	34.1	23.8	23.8
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)