

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: P881736

Luminaire Tested: **NAV-SB1B-740-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-740-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4437 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

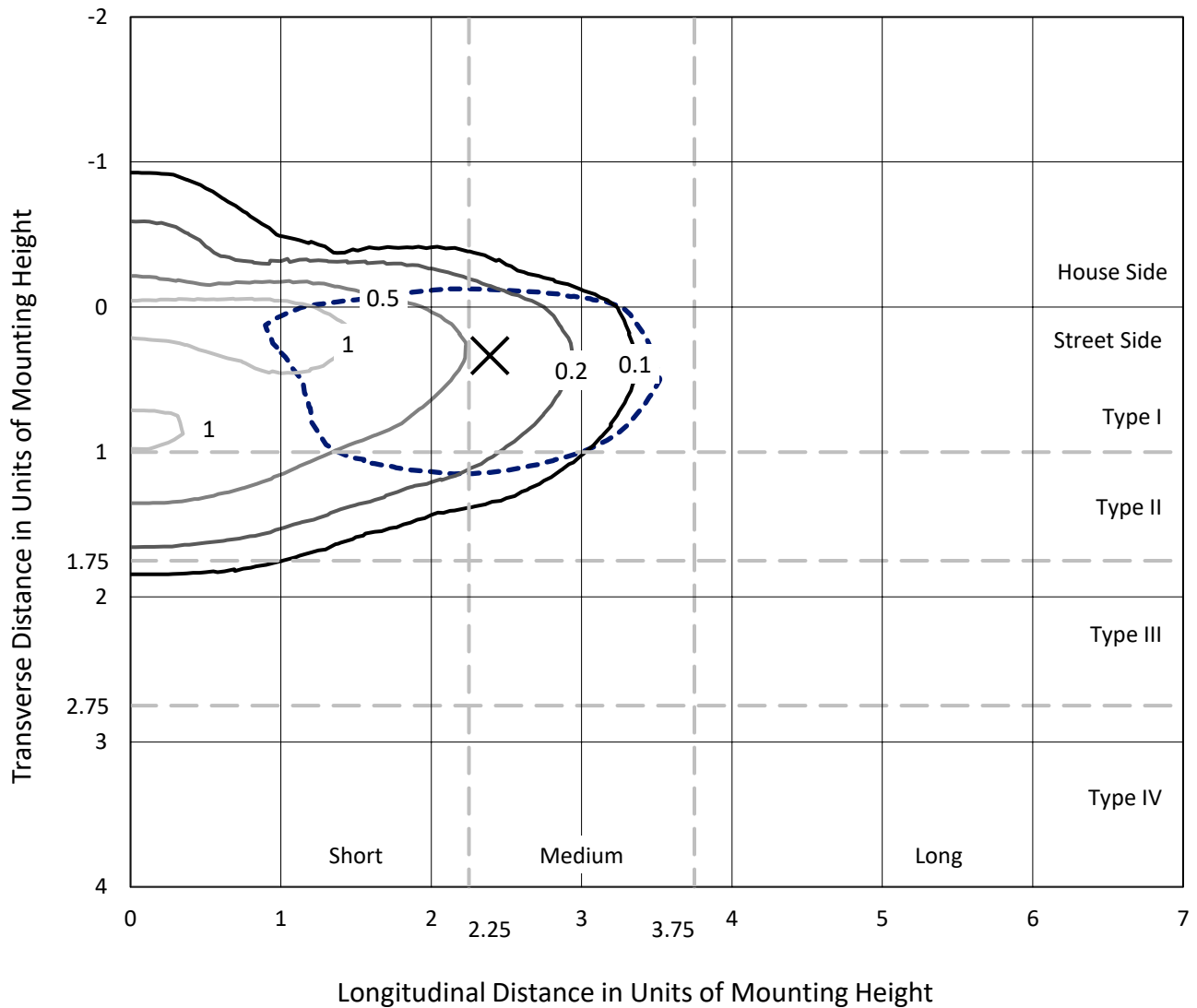
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881736
 CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

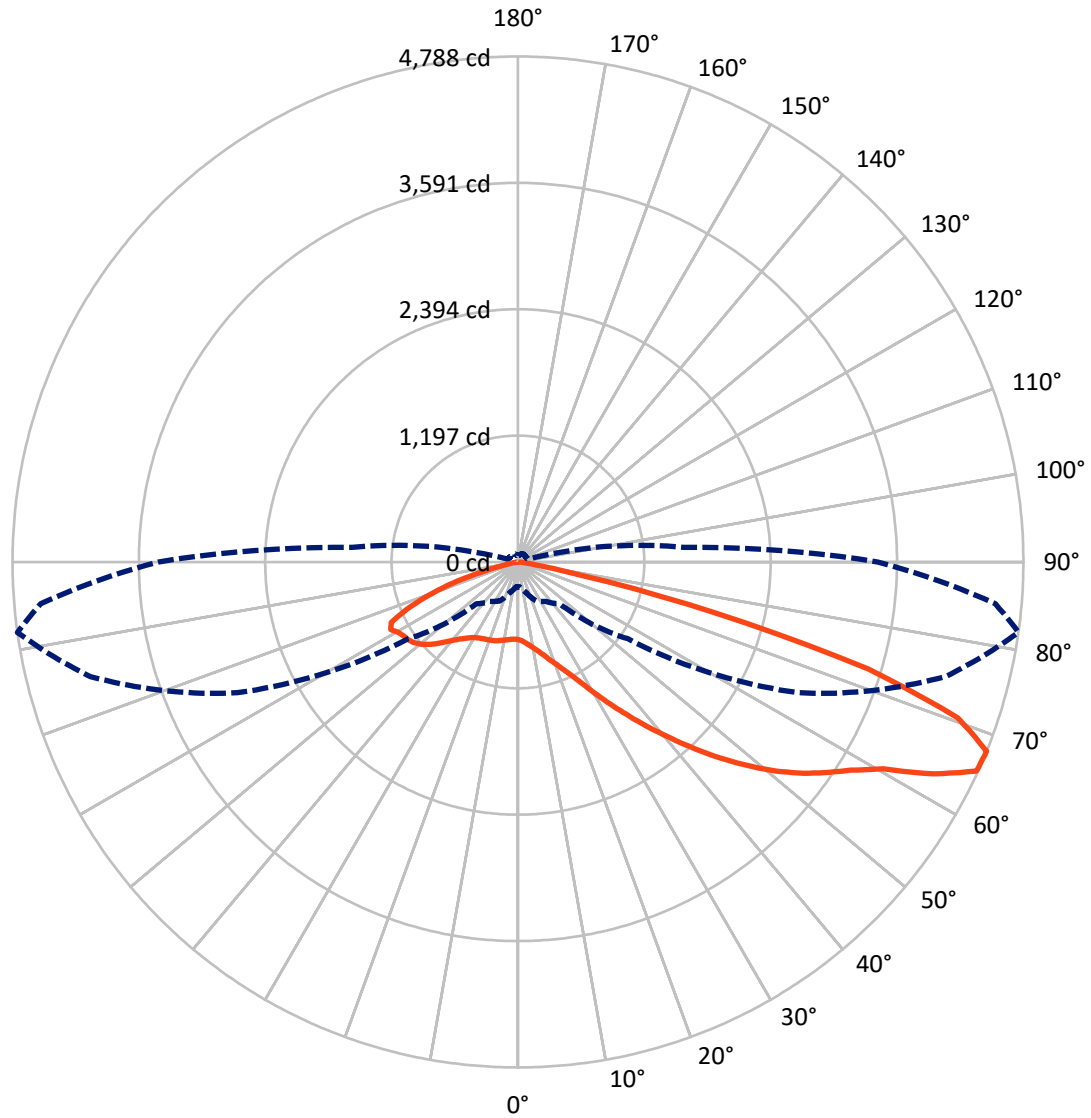
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P881736
CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881736

CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	803.7	0.0	803.7
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	3633.3	0.0	3633.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	4437.0	0.0	4437.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.5	1.5
10°-20°	170.2	3.8
20°-30°	272.6	6.1
30°-40°	482.0	10.9
40°-50°	844.5	19.0
50°-60°	1126.3	25.4
60°-70°	1048.5	23.6
70°-80°	402.4	9.1
80°-90°	25.0	0.6
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°	4437.0	100.0
0°-180°	4437.0	100.0

Coefficient of Utilization



REPORT NUMBER: P881736

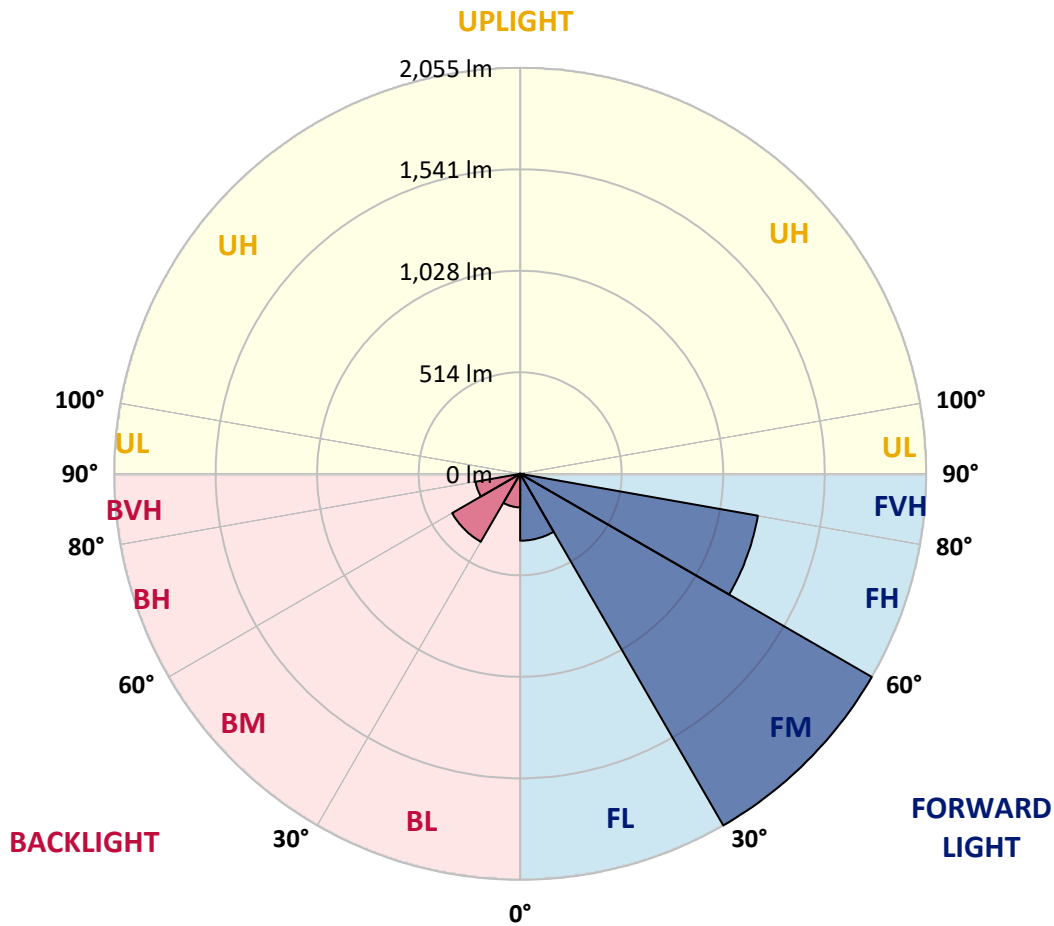
CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	338.5	7.6			
FM (30°-60°)	2055.0	46.3			
FH (60°-80°)	1221.6	27.5			G1/1800
FVH (80°-90°)	18.2	0.4			G1/100
BL (0°-30°)	169.7	3.8	B1/500		
BM (30°-60°)	397.8	9.0	B1/1000		
BH (60°-80°)	229.4	5.2	B1/500		G1/500
BVH (80°-90°)	6.8	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



REPORT NUMBER: P881736

CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1
2.5°	776.9	781.4	778.8	777.5	775.3	772.1	769.6	761.6	753.3	747.8	745.9
5°	792.6	797.0	796.7	798.0	799.6	800.5	799.9	791.0	779.1	769.9	764.5
7.5°	779.1	784.3	788.4	794.8	806.0	817.8	823.5	821.6	809.5	796.7	790.0
10°	741.1	746.6	756.5	771.5	795.1	820.7	842.1	852.0	844.3	830.3	821.0
12.5°	671.5	676.9	696.4	729.0	768.6	813.0	853.9	880.4	882.3	868.3	857.4
15°	593.2	598.7	619.4	660.3	720.7	791.9	860.3	910.4	927.4	915.2	902.1
17.5°	544.7	549.5	565.1	598.0	660.9	749.8	858.1	942.4	981.0	971.5	955.8
20°	530.0	534.1	541.5	564.5	616.9	706.0	843.4	972.4	1038.9	1033.4	1015.9
22.5°	545.6	549.5	551.7	561.9	594.8	677.2	824.8	1003.1	1105.9	1106.6	1085.2
25°	581.7	585.6	583.0	589.4	603.8	668.3	817.8	1039.2	1190.3	1197.3	1173.0
27.5°	641.1	641.5	635.4	635.1	637.3	681.7	825.1	1077.8	1296.7	1309.8	1279.7
30°	760.3	755.5	732.2	706.9	695.4	722.0	845.6	1123.5	1422.2	1445.5	1407.8
32.5°	944.0	937.0	894.1	833.8	773.1	786.8	882.3	1175.6	1558.9	1601.1	1555.1
35°	1143.3	1141.4	1096.7	1006.9	900.9	879.1	942.1	1243.9	1708.1	1775.2	1720.6
37.5°	1328.6	1327.6	1302.1	1196.4	1067.3	1007.9	1037.9	1333.4	1867.8	1965.0	1900.4
40°	1497.9	1500.8	1475.2	1380.7	1250.7	1173.0	1168.2	1443.9	2045.5	2171.6	2095.0
42.5°	1644.2	1647.4	1621.5	1551.6	1431.8	1355.8	1328.3	1579.4	2218.9	2393.7	2302.9
45°	1743.6	1763.4	1759.5	1703.6	1617.7	1538.8	1520.6	1749.3	2416.7	2629.1	2522.7
47.5°	1771.7	1789.9	1818.6	1826.3	1773.9	1696.3	1718.0	1954.1	2616.6	2864.9	2743.8
50°	1702.4	1719.3	1779.0	1858.6	1895.0	1871.0	1910.0	2173.6	2821.4	3100.0	2960.7
52.5°	1565.6	1582.9	1658.3	1784.1	1932.7	2008.1	2102.6	2389.8	3019.8	3322.6	3166.1
55°	1367.9	1386.1	1482.9	1625.4	1860.8	2064.6	2263.3	2605.8	3201.6	3522.9	3351.4
57.5°	1098.9	1112.3	1213.0	1412.3	1680.0	2008.4	2381.8	2841.5	3372.8	3719.7	3535.1
60°	716.2	728.0	845.0	1067.3	1380.4	1820.6	2405.5	3104.4	3600.2	3975.6	3782.6
62.5°	476.3	484.3	553.6	716.9	972.1	1459.9	2267.2	3314.3	3933.7	4420.9	4207.2
65°	326.8	334.8	404.1	517.8	628.0	965.7	1869.4	3286.5	4235.9	4774.5	4521.9
67.5°	233.2	239.9	298.7	406.0	454.6	561.0	1267.3	2931.3	4192.5	4788.0	4538.8
70°	167.1	170.9	219.5	316.3	361.3	337.0	704.7	2241.9	3670.8	4421.2	4193.1
72.5°	116.9	118.2	152.4	240.9	291.0	246.0	335.4	1494.7	2776.4	3470.2	3250.8
75°	79.2	80.8	102.5	176.7	233.5	187.8	177.6	801.5	1629.8	1920.9	1721.9
77.5°	48.6	49.2	66.1	120.8	174.7	143.1	114.4	339.6	630.6	619.1	527.7
80°	27.5	27.5	42.2	75.1	119.2	92.3	80.2	144.4	199.7	175.4	154.6
82.5°	15.3	15.7	30.7	46.6	78.9	54.6	44.1	66.8	86.3	76.3	66.4
85°	6.4	7.0	18.8	22.0	37.7	27.2	17.9	28.1	31.9	28.4	20.8
87.5°	0.6	1.0	5.8	4.2	4.5	5.4	2.6	5.4	4.5	4.5	3.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P881736
 CATALOG NUMBER: NAV-SB1B-740-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1
2.5°	739.9	735.1	722.9	708.9	690.3	681.4	669.3	660.9	653.9	654.6	648.2
5°	754.2	742.1	714.9	681.1	638.9	608.9	576.9	554.9	537.0	533.2	524.5
7.5°	774.0	754.9	707.3	646.3	575.0	521.0	472.8	441.8	419.8	412.7	405.7
10°	799.6	771.8	697.4	602.5	499.9	431.3	379.5	355.2	340.2	335.1	331.3
12.5°	829.3	791.3	684.3	549.1	422.6	356.5	323.6	311.5	306.7	305.1	304.1
15°	866.7	815.6	664.5	485.9	357.1	310.8	296.8	295.2	295.8	295.2	294.9
17.5°	911.1	842.1	632.2	420.7	313.1	287.5	282.4	283.7	285.3	285.0	284.3
20°	959.6	868.3	591.0	362.9	283.0	270.9	268.0	269.3	270.6	269.9	269.6
22.5°	1014.9	896.4	545.3	317.9	262.9	255.6	252.4	252.7	252.7	251.4	250.8
25°	1081.0	927.4	497.4	285.9	247.6	241.8	238.0	236.7	234.8	231.0	230.3
27.5°	1159.9	960.3	451.4	263.5	235.4	230.0	225.5	222.3	217.5	211.2	210.5
30°	1248.7	1000.2	412.4	249.5	225.9	220.4	215.3	210.5	203.5	195.5	194.9
32.5°	1353.2	1043.0	384.0	240.2	217.2	211.5	205.4	199.7	192.0	184.0	184.3
35°	1477.8	1094.8	367.4	233.8	210.5	202.9	196.1	189.8	184.0	177.0	176.3
37.5°	1612.9	1149.7	362.3	230.6	206.0	194.2	186.6	182.1	181.4	177.3	177.0
40°	1760.8	1214.9	366.1	228.7	201.3	185.9	177.6	176.7	178.3	170.9	171.2
42.5°	1917.4	1292.2	372.5	226.5	194.5	177.6	169.6	169.6	168.4	158.1	158.1
45°	2086.7	1381.3	378.9	221.1	186.6	169.3	163.2	161.0	155.6	145.7	145.4
47.5°	2257.3	1472.0	383.7	211.2	177.0	162.3	156.9	151.7	143.8	134.8	134.5
50°	2419.2	1553.5	378.6	196.5	166.1	155.6	149.8	142.8	134.2	128.1	127.1
52.5°	2563.9	1624.1	356.8	179.2	154.6	148.5	143.4	136.1	129.1	122.7	122.0
55°	2689.8	1681.3	318.5	162.9	144.4	142.5	137.4	128.1	118.5	113.1	112.4
57.5°	2810.5	1724.7	270.6	149.5	135.1	135.8	128.1	119.8	110.9	105.1	104.5
60°	2971.2	1782.9	222.0	137.0	125.2	127.1	118.8	112.8	101.6	94.2	93.3
62.5°	3228.1	1873.3	176.3	121.7	113.7	114.4	110.9	103.5	90.1	81.5	80.8
65°	3431.9	1840.0	139.0	105.1	100.6	101.6	101.6	93.6	79.2	69.3	68.4
67.5°	3408.9	1575.5	110.9	88.8	88.2	88.8	91.0	84.3	70.3	62.3	61.0
70°	3140.2	1253.2	88.8	73.8	76.7	75.1	81.5	77.0	63.3	55.3	54.3
72.5°	2562.3	902.8	67.7	61.0	58.8	61.3	73.5	69.3	52.7	43.8	42.8
75°	1497.3	481.7	50.5	48.2	42.5	51.1	65.2	59.1	40.3	32.3	31.3
77.5°	487.5	168.0	37.1	35.5	31.6	41.2	55.6	49.8	32.9	25.6	24.6
80°	130.7	50.8	25.2	23.3	20.4	30.7	44.1	39.6	23.6	16.6	16.3
82.5°	52.4	21.4	14.7	13.1	11.2	21.1	34.8	31.9	17.6	10.5	10.5
85°	16.9	7.0	5.4	4.2	5.1	13.1	20.8	21.7	12.5	5.4	4.2
87.5°	2.2	1.0	1.0	1.3	1.0	2.2	6.4	6.1	3.5	0.6	0.0
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)