

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: P881707

Luminaire Tested: **NAV-SB1B-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5061 lumens
Efficiency: N/A
Efficacy: 127.2 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

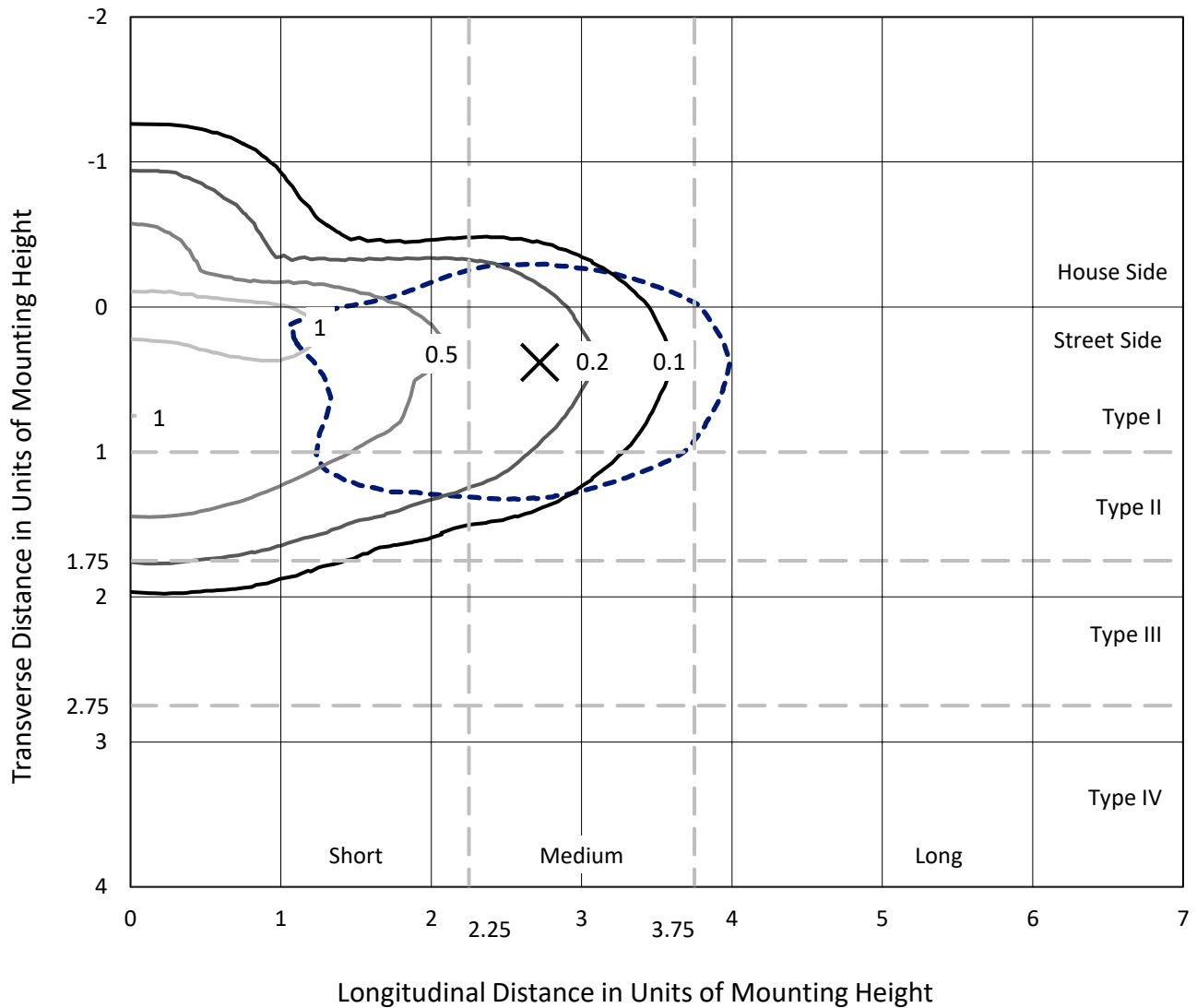
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881707
 CATALOG NUMBER: NAV-SB1B-727-U-T2

Iso-Footcandle Lines of Horizontal Illumination

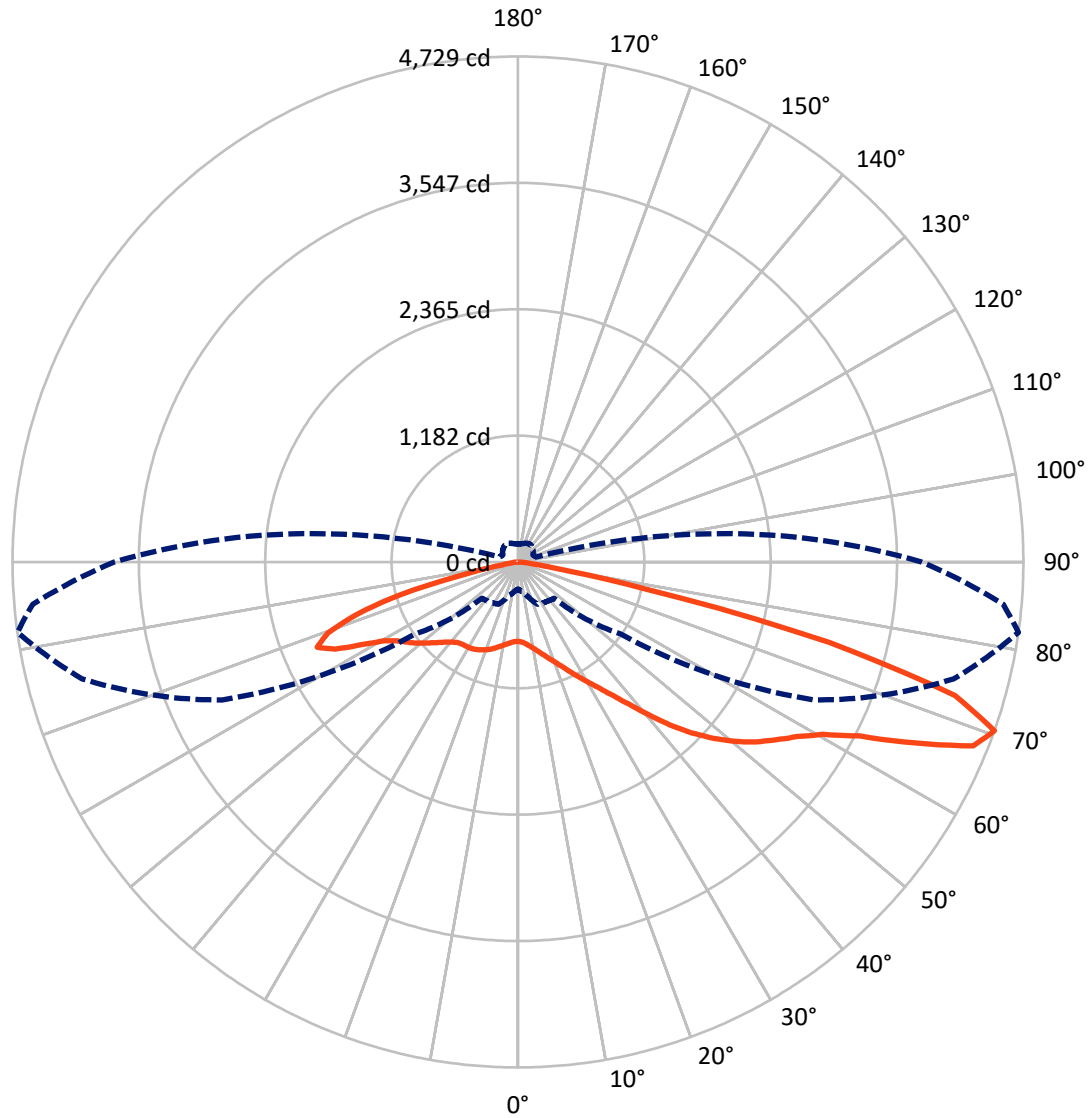
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P881707
CATALOG NUMBER: NAV-SB1B-727-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P881707
 CATALOG NUMBER: NAV-SB1B-727-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1247.7	0.0	1247.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	3813.3	0.0	3813.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	5061.0	0.0	5061.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	1.4
10°-20°	201.3	4.0
20°-30°	336.7	6.7
30°-40°	526.0	10.4
40°-50°	837.8	16.6
50°-60°	1165.9	23.0
60°-70°	1219.6	24.1
70°-80°	637.4	12.6
80°-90°	66.2	1.3
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°	5061.0	100.0
0°-180°	5061.0	100.0

Coefficient of Utilization

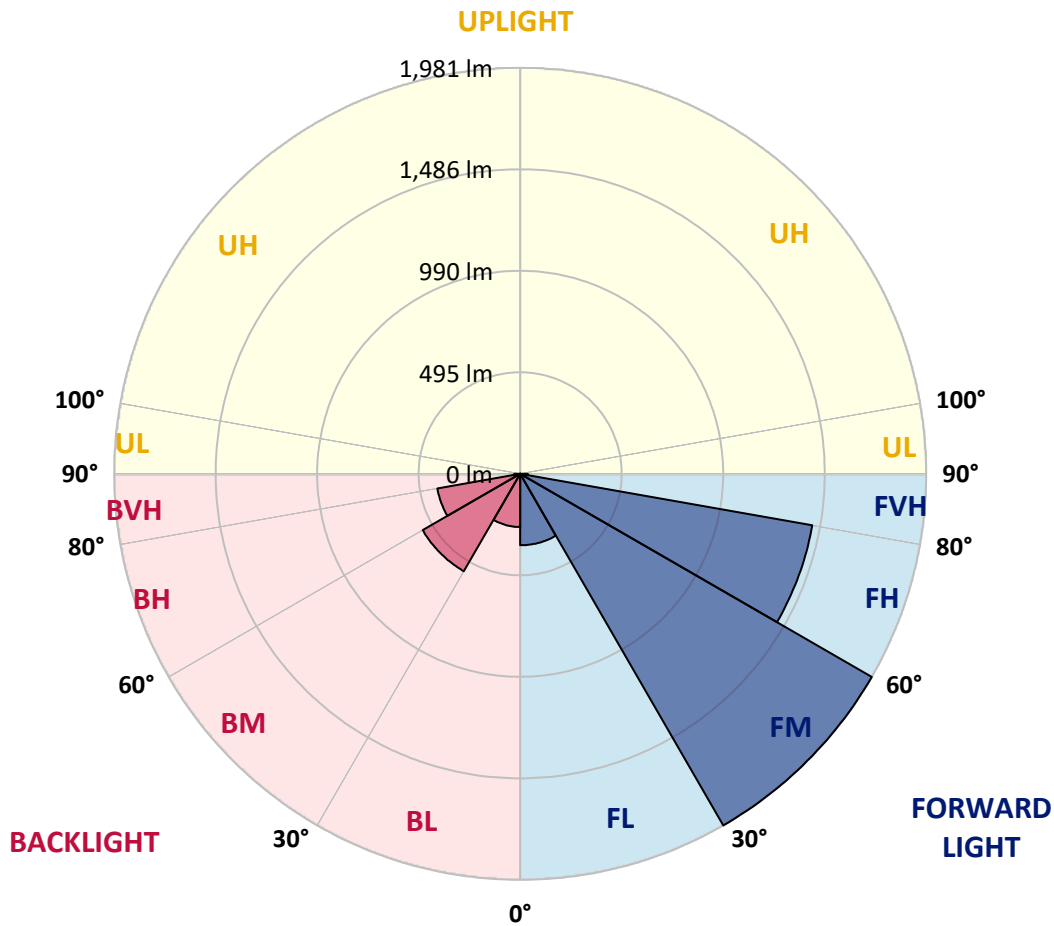


REPORT NUMBER: P881707
 CATALOG NUMBER: NAV-SB1B-727-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	348.5	6.9			
FM (30°-60°)	1980.8	39.1			
FH (60°-80°)	1447.0	28.6			G1/1800
FVH (80°-90°)	37.1	0.7			G1/100
BL (0°-30°)	259.6	5.1	B1/500		
BM (30°-60°)	548.9	10.8	B1/1000		
BH (60°-80°)	410.1	8.1	B1/500		G1/500
BVH (80°-90°)	29.1	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 II Medium



REPORT NUMBER: P881707

CATALOG NUMBER: NAV-SB1B-727-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0
2.5°	759.7	764.0	762.7	761.3	761.3	759.5	759.2	756.5	754.4	750.9	750.1
5°	769.4	774.0	773.4	774.5	778.0	778.8	779.6	778.0	773.7	769.4	767.5
7.5°	760.8	765.9	767.5	774.0	784.7	794.4	801.6	804.6	800.5	794.4	791.4
10°	731.8	737.4	743.1	758.4	777.5	800.3	819.6	831.2	830.4	824.5	819.3
12.5°	673.0	678.9	691.0	720.8	755.7	796.0	832.0	856.1	864.5	860.2	851.3
15°	626.0	631.1	640.2	670.8	716.2	777.5	836.5	883.5	904.7	902.3	891.6
17.5°	624.6	626.8	632.4	646.9	681.9	748.5	831.7	910.4	950.9	950.7	937.2
20°	648.3	649.1	652.3	655.3	675.1	726.4	819.3	932.7	1002.8	1002.8	988.3
22.5°	681.0	680.5	683.7	681.0	690.7	724.6	811.6	952.3	1060.5	1064.8	1046.5
25°	730.2	727.5	726.7	720.5	722.4	742.0	820.2	974.6	1129.0	1137.8	1115.0
27.5°	795.7	791.4	788.5	774.2	769.4	778.0	846.5	1001.4	1205.3	1220.6	1191.6
30°	881.1	873.3	869.0	844.3	826.9	828.2	886.2	1037.1	1285.0	1309.7	1272.9
32.5°	997.7	985.6	974.0	933.5	901.5	891.1	937.5	1086.6	1371.5	1411.0	1363.7
35°	1128.2	1118.5	1106.2	1043.6	994.4	970.3	1006.8	1155.6	1472.7	1535.3	1473.8
37.5°	1253.9	1245.5	1251.4	1167.1	1103.7	1068.6	1097.6	1248.2	1597.6	1690.0	1611.8
40°	1383.8	1377.4	1378.2	1297.6	1223.8	1184.3	1207.7	1364.5	1740.7	1873.9	1777.8
42.5°	1525.1	1520.3	1504.2	1432.7	1349.7	1312.9	1334.4	1498.8	1894.4	2083.4	1959.9
45°	1683.3	1680.3	1665.3	1583.4	1488.3	1447.0	1476.0	1647.0	2048.8	2280.5	2142.8
47.5°	1820.0	1822.4	1820.5	1751.5	1652.9	1592.2	1626.9	1801.7	2192.4	2465.8	2318.1
50°	1885.8	1898.4	1916.9	1895.4	1834.2	1772.4	1779.1	1951.0	2329.4	2639.6	2486.2
52.5°	1851.4	1875.3	1925.8	1960.2	1983.8	1970.9	1952.9	2099.3	2458.3	2796.4	2645.2
55°	1723.3	1756.9	1840.6	1923.6	2044.2	2137.9	2161.6	2263.6	2584.0	2934.5	2795.6
57.5°	1489.9	1544.4	1619.6	1787.5	1990.5	2218.8	2404.9	2491.6	2717.2	3081.9	2953.0
60°	1089.8	1162.8	1256.3	1506.0	1802.5	2175.5	2611.9	2841.8	2906.5	3272.8	3157.9
62.5°	697.4	742.5	828.5	1063.7	1404.5	1954.0	2675.3	3279.5	3227.4	3586.0	3465.1
65°	477.5	506.5	585.2	717.3	908.0	1454.5	2505.6	3607.7	3737.2	4082.2	3990.4
67.5°	347.0	369.0	436.1	551.9	591.6	860.7	1944.3	3592.7	4232.6	4593.6	4450.7
70°	253.0	268.6	324.9	436.1	455.2	478.8	1177.9	3054.0	4221.9	4729.4	4558.4
72.5°	187.4	198.2	236.1	338.4	368.5	323.3	583.0	2219.6	3627.9	4277.7	4140.5
75°	135.6	143.7	171.6	258.9	294.9	246.3	290.8	1297.1	2530.6	3009.1	3033.3
77.5°	103.7	109.8	128.1	189.6	236.1	184.8	180.5	596.7	1199.9	1205.8	1273.5
80°	83.3	87.3	97.2	133.5	181.0	138.3	117.6	240.9	379.2	320.9	336.8
82.5°	61.2	67.9	82.2	93.7	129.4	95.3	71.7	121.7	144.2	124.1	125.1
85°	34.9	39.5	49.7	67.1	82.7	58.3	41.1	54.0	67.1	55.1	49.1
87.5°	12.4	16.1	17.5	26.3	36.0	24.2	15.8	15.6	22.0	16.4	13.7
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: P881707
 CATALOG NUMBER: NAV-SB1B-727-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0	742.0
2.5°	747.4	746.0	740.7	733.4	725.9	718.6	716.2	711.1	707.6	705.8	707.9
5°	762.4	758.1	745.5	729.4	712.5	694.2	681.3	669.5	660.9	652.8	656.1
7.5°	783.9	776.4	754.6	726.4	696.4	666.0	643.4	626.3	614.7	607.2	608.8
10°	808.9	797.3	764.0	721.9	675.4	631.9	605.3	590.5	583.3	579.3	580.3
12.5°	837.6	821.2	773.7	711.4	643.4	593.8	575.5	571.2	571.5	571.7	572.3
15°	873.1	850.2	781.5	688.6	601.8	564.5	561.3	568.3	575.5	579.0	578.7
17.5°	913.1	880.8	782.8	651.0	561.0	545.7	555.9	570.9	581.9	586.8	587.9
20°	956.0	912.0	773.2	597.8	527.4	530.4	548.6	568.0	580.1	586.2	587.9
22.5°	1005.2	945.3	750.1	541.9	500.0	513.7	535.2	554.0	566.6	572.8	574.4
25°	1061.3	982.6	713.8	494.9	476.4	494.9	516.4	532.0	542.2	547.8	549.5
27.5°	1123.6	1021.6	665.5	457.6	455.7	475.6	493.3	505.4	510.8	515.1	516.7
30°	1186.2	1057.0	606.9	429.4	437.7	456.5	469.2	474.5	476.1	476.9	478.8
32.5°	1253.9	1087.6	545.4	406.0	420.6	438.0	445.5	447.9	440.4	435.3	436.9
35°	1335.8	1120.4	485.3	387.5	403.6	418.7	421.1	418.9	410.1	399.6	400.1
37.5°	1437.0	1161.2	437.2	374.4	387.8	397.7	394.8	394.2	395.0	382.7	383.5
40°	1561.1	1214.4	402.0	364.2	374.9	377.0	368.7	373.3	377.3	358.5	359.1
42.5°	1698.9	1278.6	379.7	357.2	364.2	359.1	346.2	351.3	350.7	326.0	325.8
45°	1839.3	1348.4	371.9	352.1	354.2	344.0	329.8	331.1	319.8	297.6	298.4
47.5°	1979.0	1423.3	376.8	347.8	341.9	330.3	319.3	313.4	296.7	280.1	280.1
50°	2115.9	1502.0	394.5	339.2	324.9	318.2	310.2	299.7	282.0	267.7	266.7
52.5°	2242.9	1581.2	414.4	324.9	303.7	307.8	302.7	290.6	273.1	258.6	258.9
55°	2363.2	1660.4	422.2	305.3	283.9	298.6	295.7	273.4	252.4	240.6	239.5
57.5°	2494.3	1755.8	413.6	280.4	267.7	288.2	276.9	252.2	240.1	231.2	230.4
60°	2675.8	1905.4	395.0	249.5	252.4	272.6	253.2	243.0	229.9	219.9	219.4
62.5°	2977.4	2184.4	365.2	218.9	234.4	249.5	242.0	231.8	218.3	208.7	208.7
65°	3423.2	2572.2	309.1	195.0	214.3	226.9	229.9	219.7	205.7	195.5	196.0
67.5°	3799.2	2815.5	233.9	175.1	193.6	208.7	217.0	207.1	192.3	182.3	182.6
70°	3778.5	2638.8	178.6	155.5	175.4	190.7	201.4	193.6	177.8	168.4	169.2
72.5°	3356.1	2207.5	144.5	135.6	156.8	171.9	184.8	178.9	162.7	153.6	153.6
75°	2465.6	1567.0	115.5	115.5	133.7	152.3	166.5	162.7	148.0	141.5	139.6
77.5°	1039.3	657.4	90.5	95.9	111.2	130.8	148.5	149.9	137.0	145.0	131.6
80°	276.3	181.3	69.0	75.5	87.3	108.0	129.2	128.6	114.7	107.2	99.6
82.5°	105.3	71.4	49.1	53.2	63.1	82.7	102.3	105.5	91.6	79.2	79.2
85°	40.6	30.6	30.3	32.0	36.8	54.8	77.3	80.0	69.0	58.5	60.4
87.5°	10.5	9.1	11.3	10.7	16.9	29.3	44.3	45.9	42.2	24.4	34.9
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)