

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: P882209

Luminaire Tested: **NAV-SB2A-722-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882209
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-SB2A-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7290 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

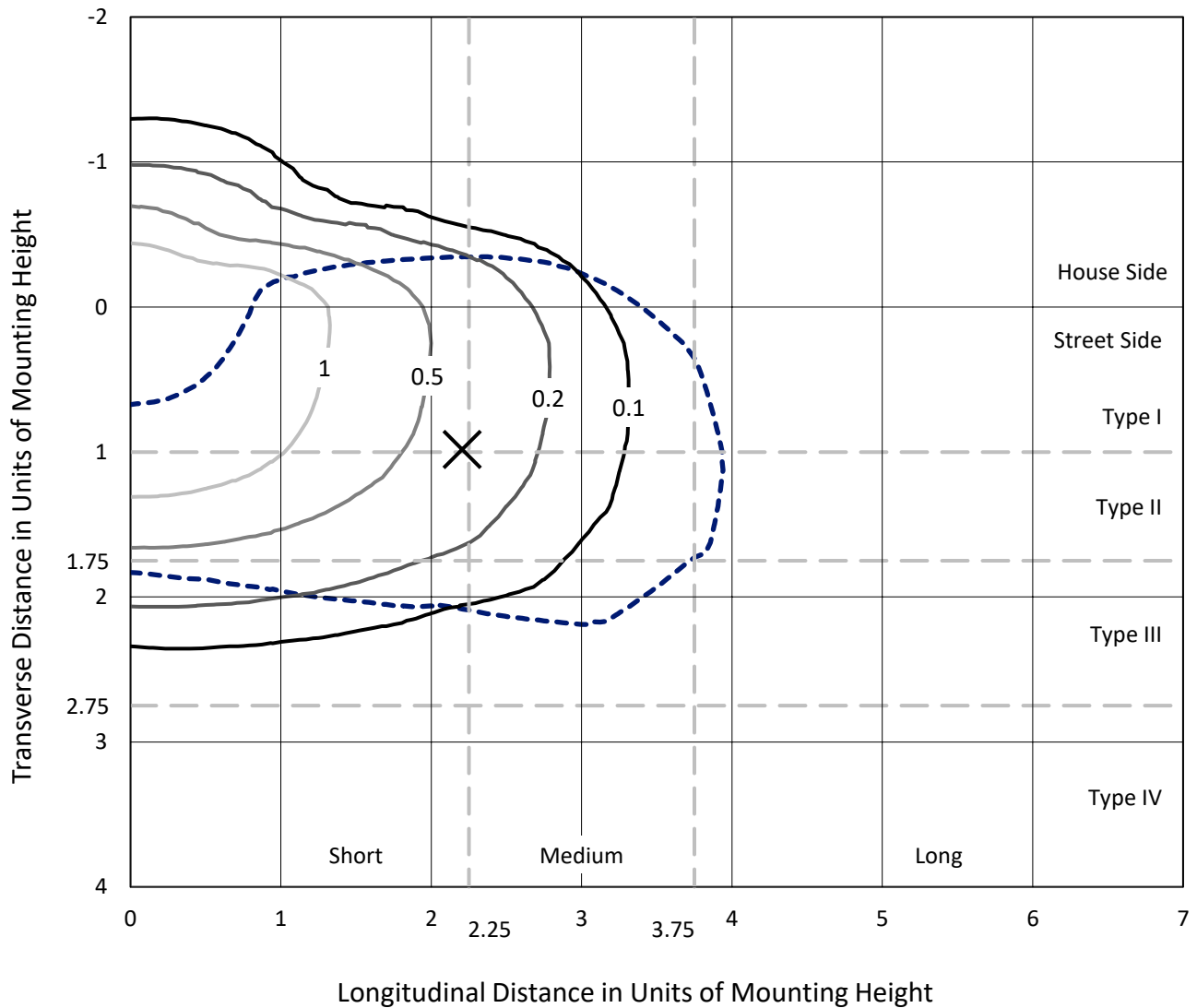
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882209
 CATALOG NUMBER: NAV-SB2A-722-U-T3

Iso-Footcandle Lines of Horizontal Illumination

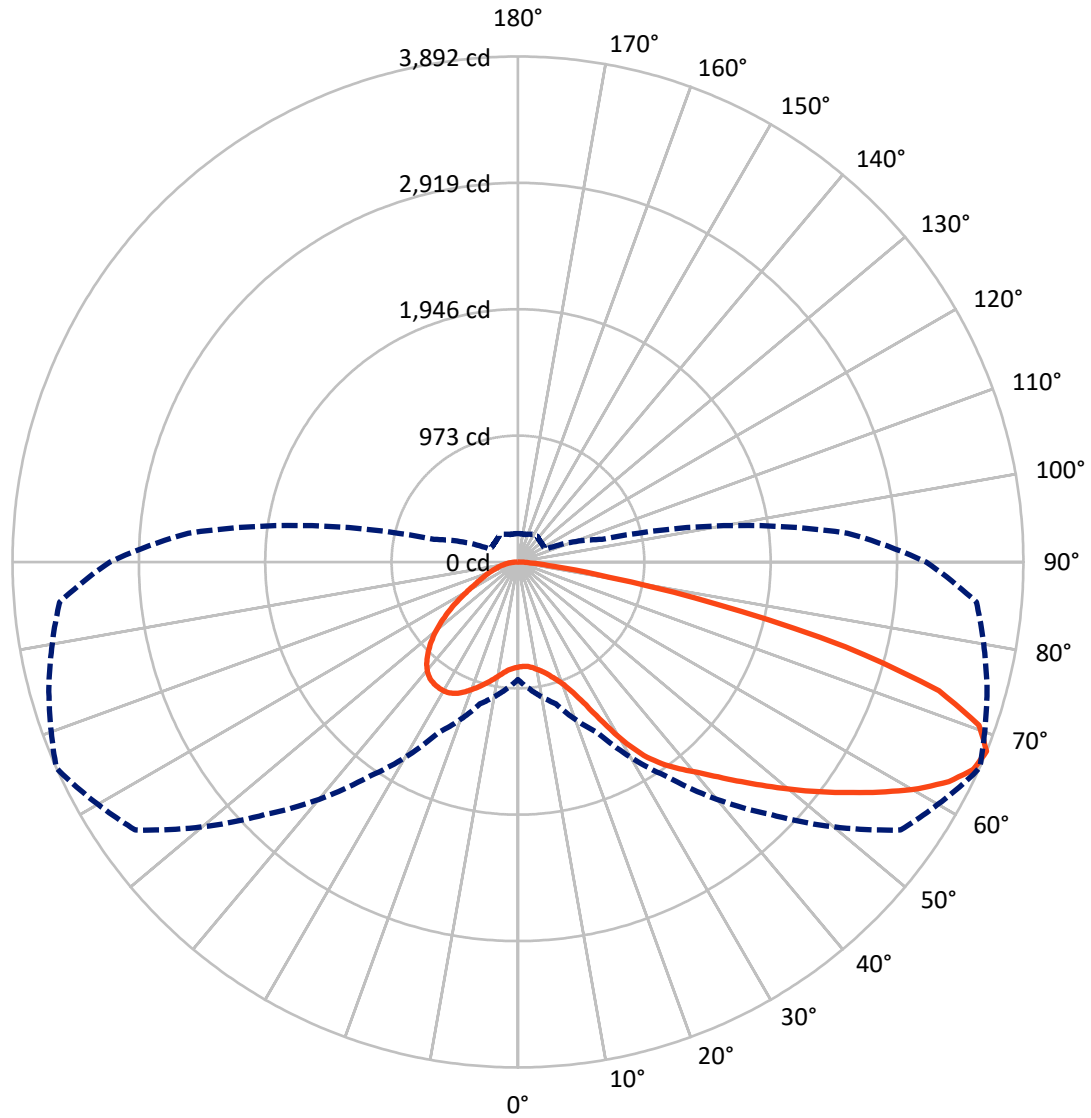
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Short - N/A

REPORT NUMBER: P882209
CATALOG NUMBER: NAV-SB2A-722-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P882209
 CATALOG NUMBER: NAV-SB2A-722-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1812.6	0.0	1812.6
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	5477.4	0.0	5477.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	7290.0	0.0	7290.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	1.1
10°-20°	264.9	3.6
20°-30°	510.5	7.0
30°-40°	895.1	12.3
40°-50°	1330.7	18.3
50°-60°	1686.8	23.1
60°-70°	1650.5	22.6
70°-80°	787.3	10.8
80°-90°	84.1	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°	7290.0	100.0
0°-180°	7290.0	100.0

Coefficient of Utilization



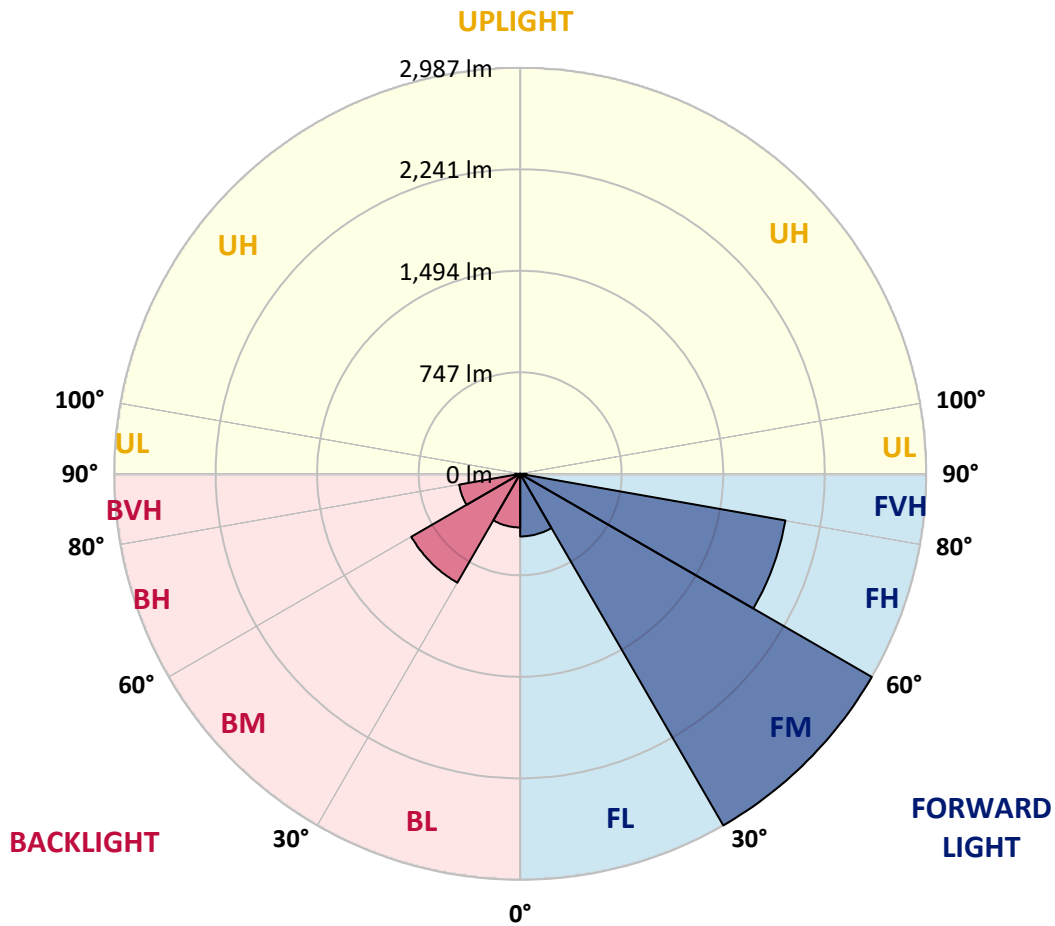
REPORT NUMBER: P882209
 CATALOG NUMBER: NAV-SB2A-722-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	460.7	6.3			
FM (30°-60°)	2987.4	41.0			
FH (60°-80°)	1981.6	27.2			G2/5000
FVH (80°-90°)	47.7	0.7			G1/100
BL (0°-30°)	394.9	5.4	B1/500		
BM (30°-60°)	925.2	12.7	B1/1000		
BH (60°-80°)	456.2	6.3	B1/500		G1/500
BVH (80°-90°)	36.4	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-G2

Type III Short



REPORT NUMBER: P882209
 CATALOG NUMBER: NAV-SB2A-722-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6
2.5°	800.1	804.7	803.6	801.7	801.3	802.0	803.2	804.3	804.0	805.9	808.9
5°	797.8	802.4	802.0	802.0	803.6	806.6	808.6	810.5	808.6	810.9	815.1
7.5°	799.4	802.8	804.3	805.9	809.7	815.5	820.0	824.3	822.0	824.6	830.0
10°	818.9	821.6	823.1	823.1	825.8	832.3	836.9	844.6	842.6	846.9	853.8
12.5°	854.5	857.2	857.2	855.7	857.6	861.8	863.3	871.8	868.3	875.2	882.1
15°	898.2	903.5	899.3	896.7	897.4	901.6	901.2	907.8	904.3	910.1	916.2
17.5°	946.4	953.3	946.4	946.1	944.5	949.1	949.5	955.3	949.1	953.3	957.6
20°	1003.5	1013.1	1007.3	1009.3	1005.8	1007.7	1009.6	1018.1	1008.5	1011.6	1010.4
22.5°	1083.9	1095.4	1089.3	1096.6	1094.3	1092.8	1092.4	1107.3	1092.4	1093.5	1082.4
25°	1201.2	1214.9	1204.2	1214.2	1214.2	1219.2	1224.9	1244.1	1219.2	1211.9	1183.2
27.5°	1374.3	1388.1	1367.0	1373.1	1371.2	1383.5	1377.3	1424.8	1398.0	1386.2	1328.3
30°	1582.6	1607.2	1567.3	1565.8	1563.9	1583.4	1592.2	1623.6	1596.4	1584.6	1514.8
32.5°	1807.9	1833.5	1786.0	1772.2	1765.0	1776.8	1769.6	1794.8	1776.1	1757.7	1671.5
35°	2046.1	2071.4	2026.2	1999.4	1970.3	1945.4	1919.3	1925.8	1908.2	1880.3	1791.0
37.5°	2271.3	2317.7	2269.8	2241.1	2187.4	2138.8	2066.0	2035.8	2019.3	1993.6	1903.6
40°	2500.7	2527.2	2490.8	2466.3	2408.1	2331.8	2215.4	2151.4	2129.2	2104.3	2028.1
42.5°	2669.7	2694.9	2675.4	2658.5	2613.0	2524.5	2374.0	2293.9	2261.7	2233.8	2169.0
45°	2803.7	2822.5	2810.2	2816.4	2796.8	2711.0	2538.3	2446.7	2413.4	2379.3	2328.4
47.5°	2857.7	2877.6	2897.2	2933.6	2966.9	2903.7	2714.9	2612.2	2577.0	2542.1	2491.9
50°	2851.6	2871.9	2928.6	3005.9	3109.4	3088.3	2901.0	2788.4	2755.8	2716.0	2669.7
52.5°	2802.6	2825.5	2898.3	3027.0	3191.7	3226.6	3090.6	2970.3	2939.7	2892.2	2845.8
55°	2673.9	2687.7	2796.8	2979.1	3211.2	3323.1	3276.4	3164.1	3133.5	3067.2	3016.7
57.5°	2435.2	2455.2	2614.1	2850.1	3162.2	3388.6	3439.5	3367.9	3338.4	3243.0	3190.2
60°	2123.9	2155.6	2337.6	2633.3	3037.4	3388.2	3587.8	3568.2	3543.7	3416.2	3361.0
62.5°	1771.5	1808.2	1983.3	2326.9	2819.0	3292.1	3680.4	3736.0	3723.3	3575.9	3505.4
65°	1360.5	1385.8	1560.0	1930.4	2479.3	3085.6	3691.2	3850.5	3852.8	3697.3	3580.9
67.5°	905.8	978.6	1129.9	1448.6	2024.3	2748.2	3597.0	3869.3	3891.5	3739.1	3542.9
70°	442.0	537.8	686.0	941.5	1448.6	2230.7	3350.7	3715.3	3764.7	3617.3	3317.0
72.5°	183.5	214.5	295.3	464.6	831.5	1505.3	2855.8	3297.8	3389.4	3205.1	2788.8
75°	123.7	134.1	168.9	238.2	378.8	742.3	2059.5	2459.0	2606.5	2420.7	1978.7
77.5°	95.4	101.9	122.9	166.6	225.2	280.8	1102.3	1481.9	1558.1	1442.5	1029.6
80°	75.1	80.1	91.9	121.4	159.7	150.1	375.7	671.4	715.5	600.2	330.9
82.5°	65.1	67.0	65.9	82.3	106.1	87.7	123.3	247.8	273.5	198.4	108.0
85°	47.1	52.5	54.8	50.9	56.3	44.4	50.6	87.7	96.5	86.2	60.9
87.5°	19.2	28.3	34.9	32.9	20.7	12.6	15.7	25.7	29.5	32.2	19.9
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: P882209
 CATALOG NUMBER: NAV-SB2A-722-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6	808.6
2.5°	809.3	812.0	813.9	816.2	817.7	820.0	824.6	827.3	827.7	829.6	829.2
5°	816.6	820.4	824.6	830.8	837.7	843.4	852.2	858.4	860.6	862.6	862.2
7.5°	832.3	837.7	845.3	856.1	866.0	873.7	884.4	891.7	899.0	901.6	902.0
10°	855.7	863.3	874.4	889.0	899.7	909.7	920.8	926.9	934.2	937.3	938.8
12.5°	884.8	892.8	907.4	927.7	937.6	944.5	948.4	946.8	948.4	951.0	951.8
15°	918.1	926.9	943.4	965.2	972.1	966.0	957.6	949.9	948.7	949.5	952.2
17.5°	957.6	964.1	983.2	1001.6	996.6	971.3	953.0	940.7	934.6	932.7	935.3
20°	1012.7	1012.7	1028.4	1039.9	1006.6	963.7	935.0	915.0	902.4	897.0	895.9
22.5°	1079.7	1073.6	1083.6	1075.5	1004.7	942.2	902.4	867.9	848.8	841.1	840.0
25°	1164.8	1157.5	1154.8	1105.0	990.9	908.1	843.4	801.7	784.8	780.6	781.4
27.5°	1293.1	1274.7	1239.8	1121.1	965.6	854.5	774.5	735.8	726.2	726.6	727.7
30°	1463.9	1427.1	1341.7	1123.8	924.2	778.7	704.0	676.4	671.8	673.7	680.2
32.5°	1622.1	1587.2	1445.9	1111.5	860.6	704.4	640.8	622.4	615.5	617.8	620.9
35°	1746.2	1736.6	1542.4	1094.3	782.5	634.7	584.1	568.4	555.0	551.9	554.2
37.5°	1863.4	1859.6	1614.8	1070.2	705.1	585.3	538.5	517.8	498.3	487.6	488.0
40°	1992.1	1988.3	1662.3	1033.0	636.6	542.4	497.5	470.3	446.2	426.7	428.6
42.5°	2136.9	2114.3	1684.9	979.8	578.4	506.0	464.2	427.5	395.7	377.7	378.8
45°	2295.1	2244.1	1684.5	912.0	529.3	472.6	428.6	376.5	347.0	330.2	329.4
47.5°	2462.8	2368.2	1663.8	836.9	481.8	435.9	373.4	333.6	314.1	303.7	301.4
50°	2636.0	2484.3	1628.6	750.7	433.2	394.1	339.0	311.8	296.8	287.3	283.8
52.5°	2798.7	2589.6	1586.1	653.1	383.8	353.5	323.7	302.6	286.9	276.2	271.6
55°	2950.0	2680.4	1526.0	553.1	343.6	326.3	316.4	298.8	280.8	268.1	263.1
57.5°	3084.5	2739.4	1422.2	459.2	314.8	307.6	308.7	292.2	271.6	260.8	253.9
60°	3196.3	2782.6	1268.6	372.3	291.5	289.2	296.8	280.0	255.9	243.6	238.2
62.5°	3263.3	2781.9	1080.1	304.9	271.6	272.3	281.1	264.7	240.2	228.7	225.2
65°	3257.6	2713.7	873.3	260.8	252.4	253.2	264.7	247.8	227.1	220.2	219.9
67.5°	3142.3	2547.5	669.9	232.1	231.3	234.8	248.2	236.3	219.1	218.3	219.5
70°	2830.1	2202.4	482.6	209.1	209.5	214.5	232.1	229.0	214.9	216.4	216.0
72.5°	2269.4	1679.2	324.0	185.0	185.4	193.4	216.8	223.3	210.7	231.0	234.0
75°	1511.4	1047.2	208.4	159.3	159.7	170.1	203.4	212.2	199.2	230.2	232.1
77.5°	726.2	470.7	150.9	134.1	134.1	143.6	175.8	190.0	169.7	178.9	163.9
80°	250.9	177.0	118.7	108.0	105.7	112.2	148.2	164.7	146.3	134.8	126.4
82.5°	98.8	91.9	95.4	83.9	76.2	80.4	115.3	136.0	107.6	97.3	96.9
85°	56.7	59.8	67.4	55.5	44.0	49.4	84.6	97.7	81.2	71.6	73.2
87.5°	15.3	21.1	31.0	28.7	19.9	21.1	40.2	54.0	46.7	36.0	37.2
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)