

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: P881567

Luminaire Tested: **NAV-SB1A-740-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881567  
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-SB1A-740-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

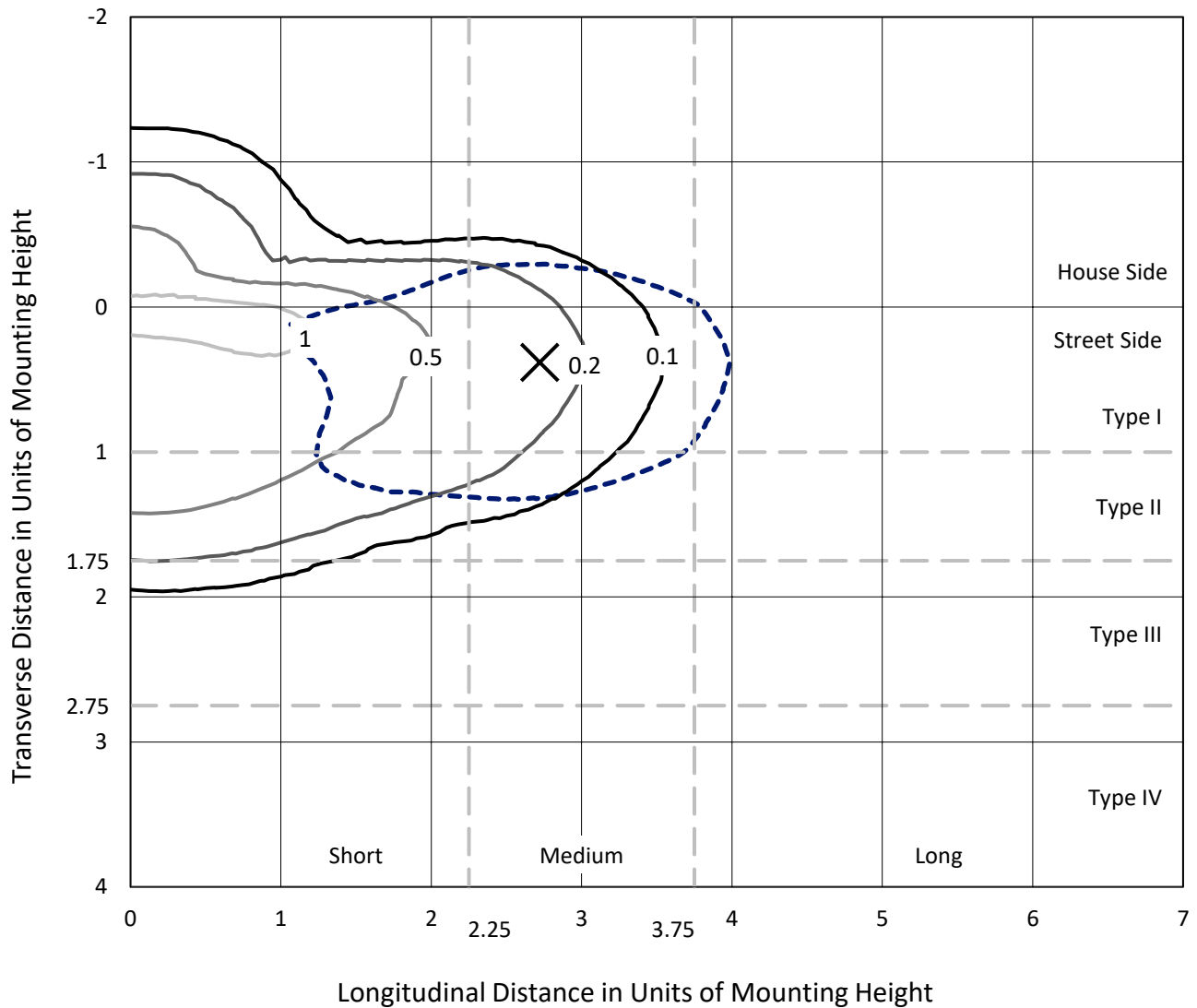
Lumens per Lamp: N/A  
Luminaire Lumens: 4796 lumens  
Efficiency: N/A  
Efficacy: 155.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

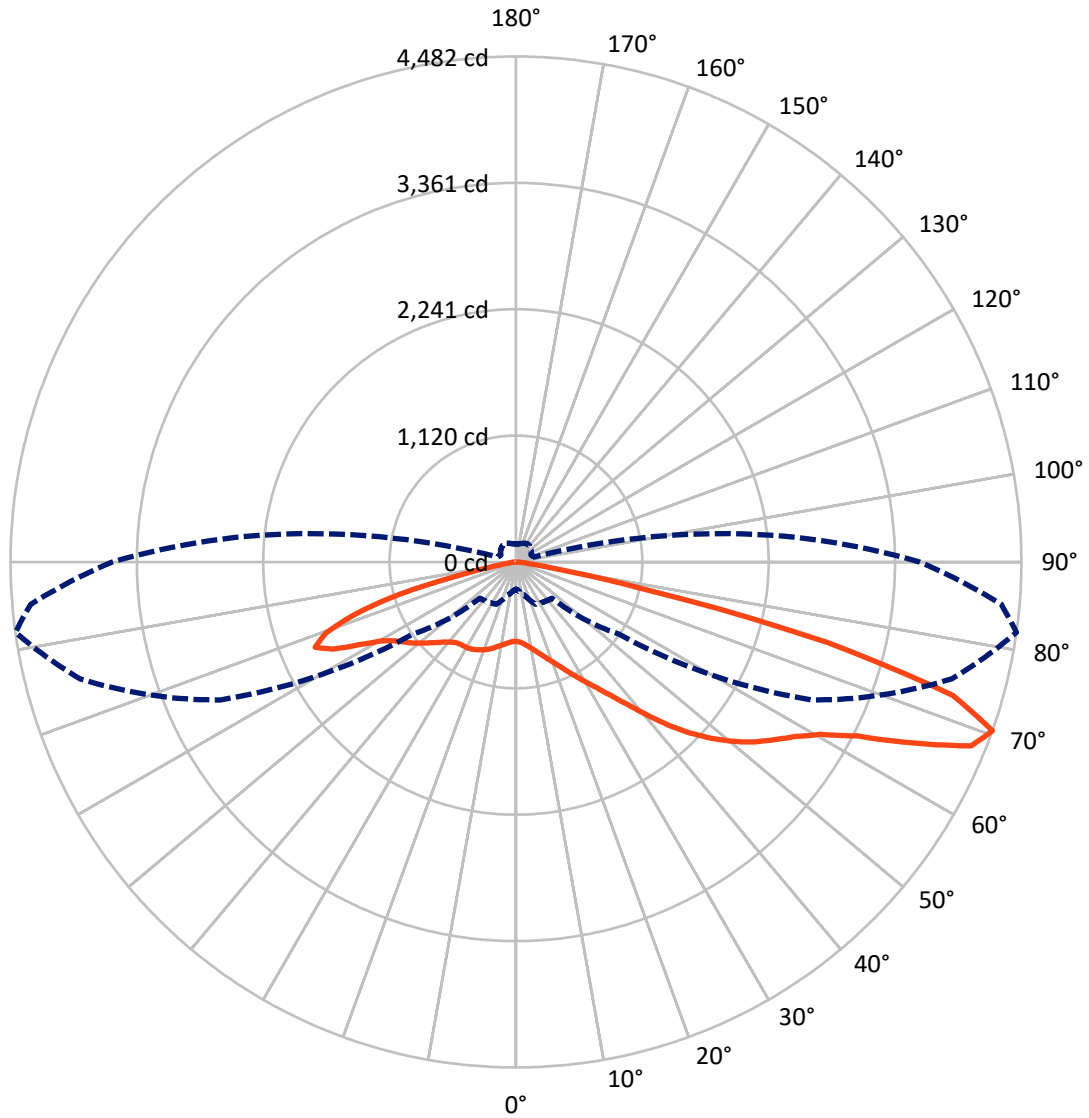
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1182.3	0.0	1182.3
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	3613.7	0.0	3613.7
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	4796.0	0.0	4796.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.4	1.4
10°-20°	190.7	4.0
20°-30°	319.1	6.7
30°-40°	498.5	10.4
40°-50°	793.9	16.6
50°-60°	1104.9	23.0
60°-70°	1155.7	24.1
70°-80°	604.0	12.6
80°-90°	62.7	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°	4796.0	100.0
0°-180°	4796.0	100.0

**Coefficient of Utilization**

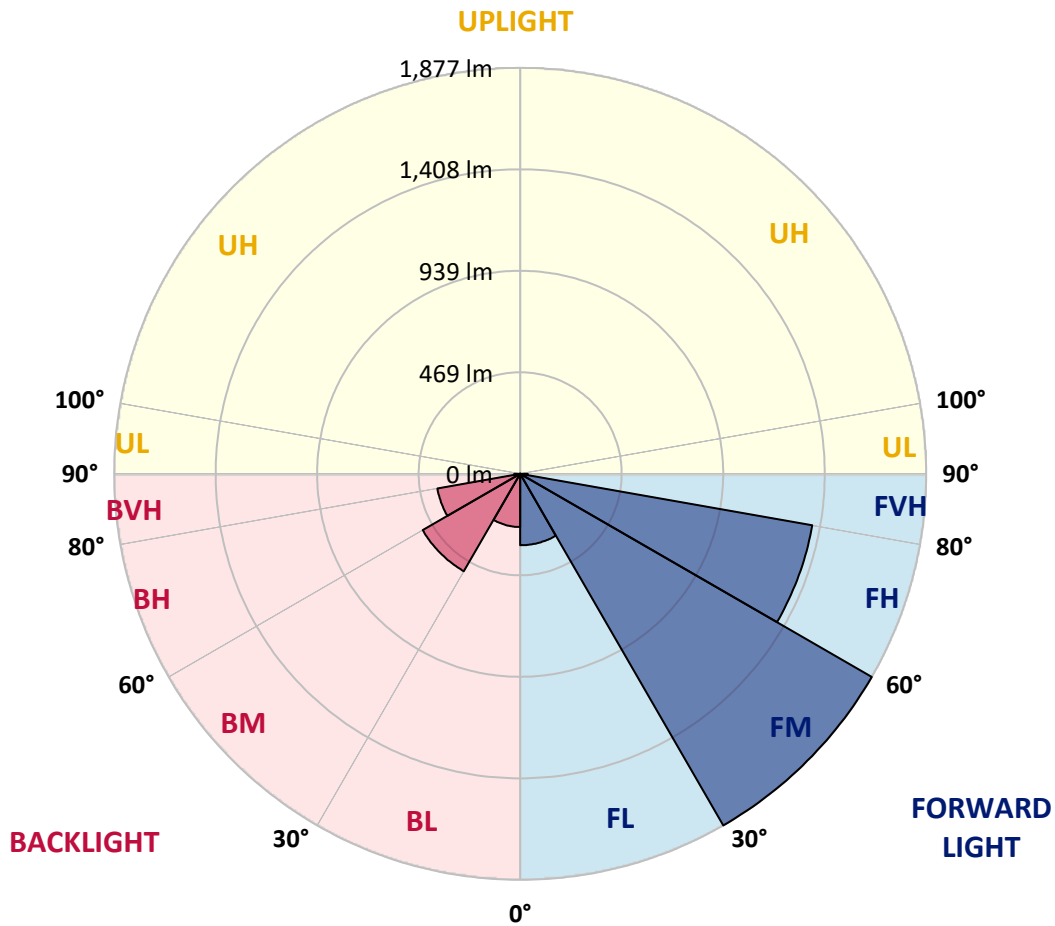


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	330.3	6.9			
FM (30°-60°)	1877.1	39.1			
FH (60°-80°)	1371.2	28.6			G1/1800
FVH (80°-90°)	35.1	0.7			G1/100
BL (0°-30°)	246.0	5.1	B1/500		
BM (30°-60°)	520.2	10.8	B1/1000		
BH (60°-80°)	388.6	8.1	B1/500		G1/500
BVH (80°-90°)	27.6	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2
2.5°	719.9	724.0	722.7	721.5	721.5	719.7	719.4	716.9	714.9	711.6	710.8
5°	729.1	733.4	732.9	733.9	737.3	738.0	738.8	737.3	733.2	729.1	727.3
7.5°	721.0	725.8	727.3	733.4	743.6	752.8	759.7	762.4	758.6	752.8	750.0
10°	693.5	698.8	704.2	718.7	736.7	758.4	776.7	787.6	786.9	781.3	776.4
12.5°	637.7	643.3	654.8	683.0	716.1	754.3	788.4	811.3	819.2	815.1	806.7
15°	593.2	598.0	606.7	635.7	678.7	736.7	792.7	837.3	857.4	855.1	844.9
17.5°	591.9	594.0	599.3	613.1	646.1	709.3	788.2	862.7	901.1	900.9	888.2
20°	614.3	615.1	618.2	621.0	639.8	688.4	776.4	883.8	950.3	950.3	936.5
22.5°	645.4	644.9	647.9	645.4	654.5	686.6	769.1	902.4	1005.0	1009.0	991.7
25°	692.0	689.4	688.6	682.8	684.6	703.2	777.2	923.5	1069.9	1078.3	1056.6
27.5°	754.1	750.0	747.2	733.7	729.1	737.3	802.1	949.0	1142.1	1156.7	1129.2
30°	835.0	827.6	823.5	800.1	783.6	784.8	839.8	982.8	1217.7	1241.1	1206.3
32.5°	945.4	934.0	923.0	884.6	854.3	844.4	888.4	1029.7	1299.7	1337.1	1292.3
35°	1069.1	1059.9	1048.2	988.9	942.4	919.5	954.1	1095.1	1395.6	1454.9	1396.6
37.5°	1188.2	1180.3	1185.9	1106.0	1046.0	1012.6	1040.1	1182.9	1514.0	1601.5	1527.4
40°	1311.4	1305.3	1306.0	1229.7	1159.7	1122.3	1144.4	1293.1	1649.6	1775.8	1684.7
42.5°	1445.2	1440.7	1425.4	1357.7	1279.1	1244.2	1264.6	1420.3	1795.2	1974.3	1857.3
45°	1595.1	1592.3	1578.1	1500.5	1410.4	1371.2	1398.7	1560.8	1941.5	2161.1	2030.6
47.5°	1724.7	1727.0	1725.2	1659.8	1566.4	1508.9	1541.7	1707.4	2077.6	2336.7	2196.8
50°	1787.0	1799.0	1816.5	1796.2	1738.2	1679.6	1686.0	1848.9	2207.4	2501.4	2356.1
52.5°	1754.4	1777.1	1824.9	1857.5	1879.9	1867.7	1850.6	1989.3	2329.6	2650.0	2506.7
55°	1633.1	1664.9	1744.3	1822.9	1937.2	2026.0	2048.4	2145.1	2448.7	2780.8	2649.2
57.5°	1411.9	1463.6	1534.8	1693.9	1886.3	2102.6	2279.0	2361.2	2574.9	2920.5	2798.4
60°	1032.7	1101.9	1190.5	1427.2	1708.1	2061.6	2475.2	2693.0	2754.3	3101.5	2992.5
62.5°	660.9	703.7	785.1	1008.0	1331.0	1851.7	2535.2	3107.8	3058.5	3398.2	3283.7
65°	452.5	480.0	554.5	679.7	860.4	1378.3	2374.4	3418.8	3541.5	3868.5	3781.5
67.5°	328.8	349.7	413.3	523.0	560.6	815.6	1842.5	3404.6	4011.0	4353.0	4217.6
70°	239.7	254.5	307.9	413.3	431.4	453.8	1116.2	2894.1	4000.8	4481.8	4319.7
72.5°	177.6	187.8	223.7	320.7	349.2	306.4	552.5	2103.4	3437.9	4053.8	3923.7
75°	128.5	136.2	162.6	245.3	279.4	233.4	275.6	1229.2	2398.1	2851.6	2874.5
77.5°	98.2	104.1	121.4	179.7	223.7	175.1	171.0	565.5	1137.1	1142.7	1206.8
80°	78.9	82.7	92.1	126.5	171.5	131.1	111.5	228.3	359.3	304.1	319.1
82.5°	58.0	64.4	77.9	88.8	122.7	90.3	67.9	115.3	136.7	117.6	118.6
85°	33.1	37.4	47.1	63.6	78.4	55.2	38.9	51.2	63.6	52.2	46.6
87.5°	11.7	15.3	16.5	24.9	34.1	22.9	15.0	14.8	20.9	15.5	13.0
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°	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2	703.2
2.5°	708.2	707.0	701.9	695.0	687.9	681.0	678.7	673.9	670.6	668.8	670.8
5°	722.5	718.4	706.5	691.2	675.2	657.9	645.6	634.4	626.3	618.7	621.7
7.5°	742.9	735.7	715.1	688.4	659.9	631.1	609.8	593.5	582.5	575.4	576.9
10°	766.5	755.6	724.0	684.1	640.0	598.8	573.6	559.6	552.8	548.9	550.0
12.5°	793.8	778.2	733.2	674.1	609.8	562.7	545.4	541.3	541.6	541.8	542.3
15°	827.3	805.7	740.6	652.5	570.3	534.9	531.9	538.5	545.4	548.7	548.4
17.5°	865.3	834.7	741.8	616.9	531.6	517.1	526.8	541.0	551.5	556.1	557.1
20°	906.0	864.2	732.7	566.5	499.8	502.6	519.9	538.2	549.7	555.5	557.1
22.5°	952.6	895.8	710.8	513.6	473.9	486.8	507.2	525.0	537.0	542.8	544.4
25°	1005.7	931.2	676.4	469.0	451.5	469.0	489.4	504.1	513.8	519.2	520.7
27.5°	1064.8	968.1	630.6	433.6	431.9	450.7	467.5	478.9	484.0	488.1	489.6
30°	1124.1	1001.7	575.1	406.9	414.8	432.6	444.6	449.7	451.2	452.0	453.8
32.5°	1188.2	1030.7	516.9	384.8	398.5	415.1	422.2	424.5	417.4	412.5	414.1
35°	1265.8	1061.7	459.9	367.2	382.5	396.7	399.0	397.0	388.6	378.7	379.2
37.5°	1361.8	1100.4	414.3	354.8	367.5	376.9	374.1	373.6	374.4	362.6	363.4
40°	1479.3	1150.8	381.0	345.1	355.3	357.3	349.4	353.7	357.6	339.7	340.3
42.5°	1609.9	1211.6	359.8	338.5	345.1	340.3	328.0	332.9	332.4	308.9	308.7
45°	1743.0	1277.8	352.5	333.6	335.7	326.0	312.5	313.8	303.1	282.0	282.7
47.5°	1875.3	1348.8	357.0	329.6	324.0	313.0	302.6	297.0	281.2	265.4	265.4
50°	2005.1	1423.4	373.8	321.4	307.9	301.6	293.9	284.0	267.2	253.7	252.7
52.5°	2125.5	1498.4	392.7	307.9	287.8	291.6	286.8	275.4	258.8	245.1	245.3
55°	2239.5	1573.5	400.1	289.4	269.0	283.0	280.2	259.1	239.2	228.0	227.0
57.5°	2363.7	1663.9	391.9	265.7	253.7	273.1	262.4	239.0	227.5	219.1	218.4
60°	2535.7	1805.6	374.4	236.4	239.2	258.3	240.0	230.3	217.8	208.4	207.9
62.5°	2821.5	2070.0	346.1	207.4	222.2	236.4	229.3	219.6	206.9	197.7	197.7
65°	3244.0	2437.5	292.9	184.8	203.1	215.0	217.8	208.2	194.9	185.3	185.8
67.5°	3600.3	2668.1	221.7	165.9	183.5	197.7	205.6	196.2	182.2	172.8	173.1
70°	3580.7	2500.6	169.2	147.3	166.2	180.7	190.9	183.5	168.5	159.6	160.3
72.5°	3180.4	2091.9	136.9	128.5	148.6	162.9	175.1	169.5	154.2	145.6	145.6
75°	2336.5	1484.9	109.4	109.4	126.7	144.3	157.8	154.2	140.2	134.1	132.3
77.5°	984.9	623.0	85.8	90.9	105.4	123.9	140.7	142.0	129.8	137.4	124.7
80°	261.9	171.8	65.4	71.5	82.7	102.3	122.4	121.9	108.7	101.5	94.4
82.5°	99.8	67.7	46.6	50.4	59.8	78.4	97.0	100.0	86.8	75.1	75.1
85°	38.4	29.0	28.8	30.3	34.9	51.9	73.3	75.8	65.4	55.5	57.3
87.5°	9.9	8.7	10.7	10.2	16.0	27.7	42.0	43.5	40.0	23.2	33.1
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)