

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: P881873

Luminaire Tested: **NAV-SB1C-727-U-SL4-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881873  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1C-727-U-SL4-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

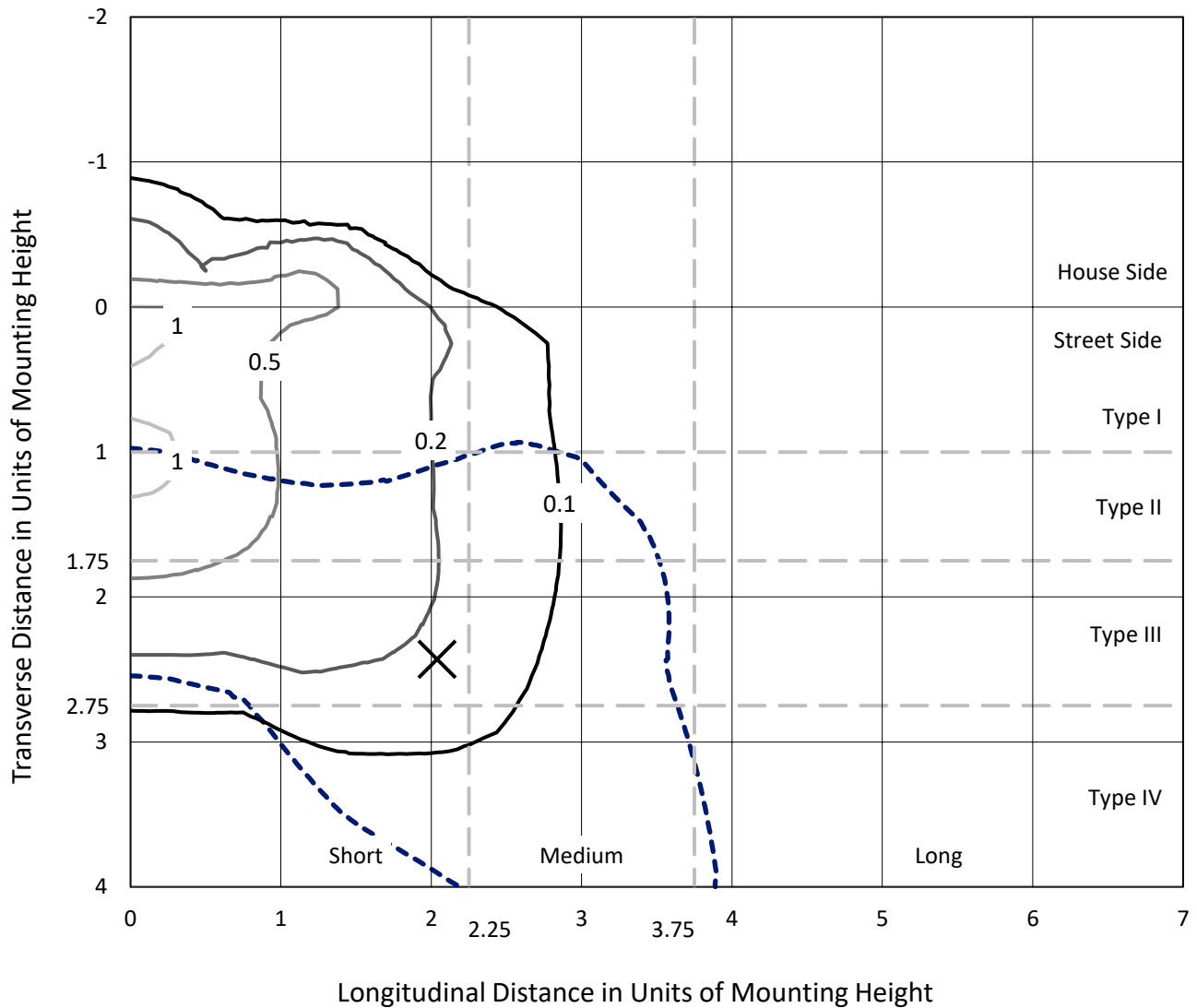
Lumens per Lamp: N/A  
Luminaire Lumens: 4742 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 54.4  
Input Voltage (V): 120.0  
Input Current (Ain): 0.437  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 9.314  
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

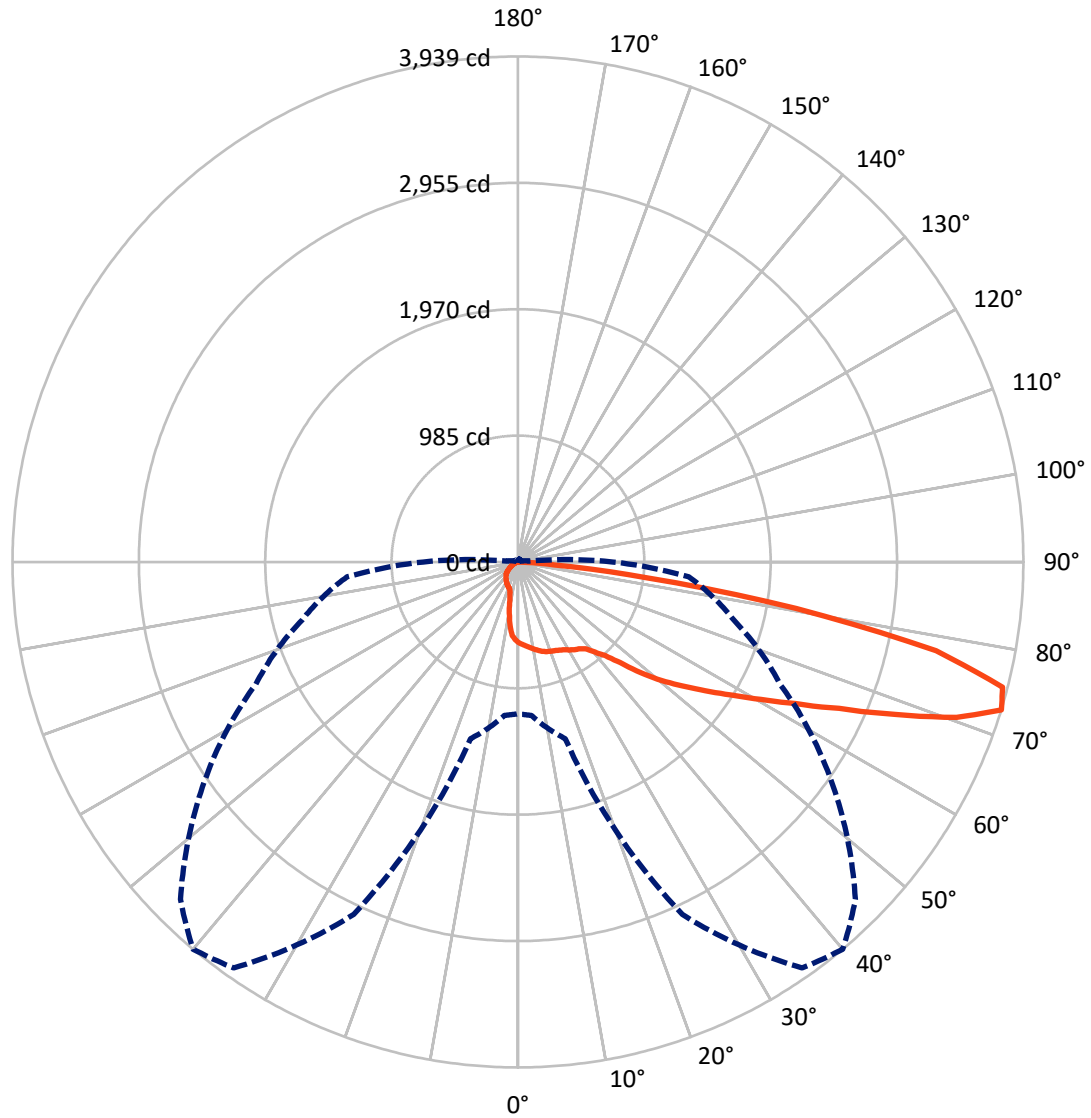
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	612.4	0.0	612.4
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	4129.6	0.0	4129.6
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	4742.0	0.0	4742.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.3	1.2
10°-20°	155.7	3.3
20°-30°	252.0	5.3
30°-40°	372.0	7.8
40°-50°	626.1	13.2
50°-60°	972.1	20.5
60°-70°	1216.4	25.7
70°-80°	995.9	21.0
80°-90°	94.4	2.0
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°	4742.0	100.0
0°-180°	4742.0	100.0

**Coefficient of Utilization**



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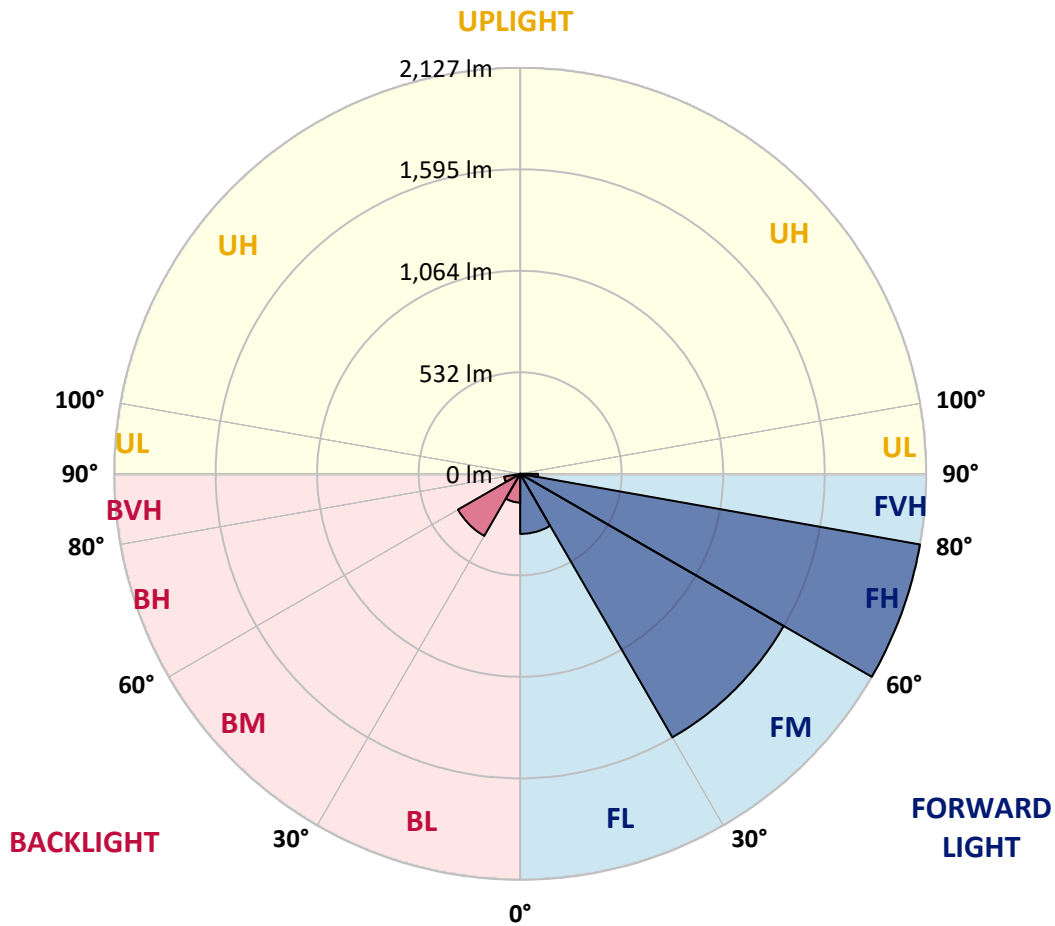
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	314.7	6.6			
FM (30°-60°)	1594.2	33.6			
FH (60°-80°)	2127.0	44.9			G2/5000
FVH (80°-90°)	93.7	2.0			G1/100
BL (0°-30°)	150.3	3.2	B1/500		
BM (30°-60°)	376.0	7.9	B1/1000		
BH (60°-80°)	85.3	1.8	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
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°	40°	45°	55°	65°	75°	85°
0°	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9
2.5°	646.8	649.3	647.9	645.0	644.3	642.9	641.1	640.4	637.9	635.7	633.2
5°	665.0	667.5	665.7	661.8	660.0	658.2	655.7	653.6	648.6	644.0	638.2
7.5°	685.0	687.2	685.0	679.3	676.5	674.3	670.7	667.5	661.8	655.0	647.9
10°	707.2	709.0	705.7	698.2	693.6	690.4	687.2	683.6	678.2	670.7	662.2
12.5°	727.9	730.0	725.0	716.1	710.7	707.5	704.0	701.1	695.7	688.6	679.7
15°	746.8	750.0	741.5	731.8	725.7	723.2	719.7	717.9	714.3	709.3	701.1
17.5°	761.1	763.2	754.3	742.9	736.1	734.3	731.8	732.9	732.2	729.7	724.3
20°	773.2	774.7	762.9	749.0	741.5	741.8	741.1	744.7	746.1	746.1	745.7
22.5°	788.2	788.6	773.6	756.1	747.2	749.7	750.7	754.7	757.5	760.4	766.8
25°	807.9	807.2	789.3	765.4	757.5	761.1	763.6	765.0	768.2	772.9	787.5
27.5°	837.2	835.0	812.2	780.4	771.1	774.3	779.0	778.2	776.8	780.4	805.0
30°	874.3	871.5	841.1	801.5	792.9	795.7	797.2	790.7	780.4	783.6	820.4
32.5°	933.2	928.2	886.1	825.0	811.8	815.0	813.2	800.0	784.7	787.9	835.7
35°	1035.8	1023.6	964.0	874.3	833.2	829.7	825.4	812.5	793.6	790.4	848.6
37.5°	1253.6	1232.2	1130.4	970.4	881.8	858.6	845.4	832.5	803.2	790.4	863.2
40°	1499.3	1477.6	1360.0	1131.1	962.5	923.2	891.8	856.1	813.2	795.0	886.1
42.5°	1755.8	1731.8	1611.1	1330.4	1077.9	997.2	938.6	875.0	829.7	809.3	916.5
45°	2042.2	2012.2	1854.4	1538.3	1245.4	1120.0	1014.0	914.0	858.2	834.7	957.9
47.5°	2344.4	2305.4	2096.9	1740.1	1425.8	1290.0	1151.8	983.6	900.4	872.5	1014.0
50°	2612.2	2573.7	2347.2	1951.1	1594.3	1451.8	1309.0	1080.0	963.6	926.1	1089.3
52.5°	2804.7	2775.5	2575.1	2169.0	1769.7	1603.6	1451.5	1192.2	1043.6	994.7	1178.3
55°	2933.7	2906.9	2736.5	2375.4	1973.6	1770.8	1591.8	1314.0	1140.0	1076.8	1276.5
57.5°	3011.9	2996.5	2853.3	2559.7	2175.8	1953.6	1752.6	1447.9	1253.6	1173.6	1386.1
60°	3039.7	3027.2	2925.8	2735.5	2420.1	2173.3	1941.5	1599.0	1391.5	1283.6	1498.6
62.5°	2965.5	2968.0	2978.0	2943.7	2677.6	2430.4	2167.9	1780.4	1544.3	1408.3	1604.3
65°	2615.8	2636.5	2826.5	3174.4	3018.7	2752.6	2456.2	2001.9	1719.3	1550.1	1688.3
67.5°	2165.8	2195.8	2432.2	3309.4	3382.3	3170.8	2857.6	2284.0	1927.9	1694.3	1720.1
70°	1657.9	1690.1	1976.5	3281.2	3722.6	3628.0	3354.0	2643.0	2144.0	1794.3	1639.0
72.5°	1183.3	1199.7	1425.4	3030.1	3862.3	3939.4	3719.8	2983.0	2254.4	1739.0	1336.8
75°	831.5	828.6	978.2	2440.1	3644.8	3901.6	3591.6	2799.0	2040.1	1381.5	824.3
77.5°	362.2	362.9	488.6	1481.8	2909.0	3332.3	2985.5	1753.3	1422.2	732.2	347.9
80°	93.9	96.8	179.3	590.0	1751.5	2199.4	1820.8	770.7	657.2	178.6	66.4
82.5°	33.2	35.4	82.5	185.4	646.1	1008.6	810.7	246.4	171.4	51.1	17.9
85°	9.6	11.4	44.3	56.8	133.6	285.0	196.8	47.9	42.1	26.4	4.6
87.5°	0.0	1.4	8.9	7.9	7.9	5.4	10.0	5.4	6.8	3.2	1.4
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°	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9	627.9
2.5°	631.1	628.6	623.2	617.5	612.2	607.2	605.7	600.4	597.9	598.2	597.9
5°	634.3	629.7	619.3	606.8	593.9	579.3	567.2	550.0	535.4	533.6	532.5
7.5°	642.9	635.4	618.6	594.3	562.2	521.8	484.3	447.2	426.1	414.7	413.9
10°	656.1	646.1	620.4	573.9	505.7	433.6	376.8	330.0	306.1	295.0	292.9
12.5°	671.8	660.7	623.2	539.3	432.9	338.2	276.8	248.2	243.2	242.5	242.2
15°	694.0	681.8	626.5	492.5	353.9	257.5	229.3	229.7	233.6	235.7	235.4
17.5°	718.6	706.5	621.8	435.4	276.1	220.0	219.3	222.5	228.2	230.4	230.0
20°	743.6	732.2	605.4	368.2	223.2	209.7	212.5	216.1	221.8	224.7	224.7
22.5°	769.3	759.3	579.3	296.8	201.4	202.1	205.7	209.3	215.7	218.9	218.9
25°	796.8	788.2	544.7	237.9	192.1	194.3	198.9	203.2	210.0	213.9	213.9
27.5°	824.7	818.2	505.4	198.6	183.6	186.1	191.4	197.1	203.9	208.6	208.9
30°	855.0	851.5	473.9	183.9	175.4	177.5	183.6	190.0	197.5	203.2	203.9
32.5°	886.1	885.4	458.6	194.6	167.9	169.3	174.6	181.1	190.4	197.5	198.2
35°	916.8	918.2	449.7	225.0	165.4	161.4	165.0	170.7	181.8	190.7	192.1
37.5°	956.1	959.7	449.3	257.9	171.4	153.6	156.1	160.0	169.6	180.0	181.8
40°	1014.7	1033.6	472.2	286.1	182.1	146.4	147.1	147.9	152.9	161.4	164.3
42.5°	1092.5	1147.9	554.7	305.4	186.4	140.0	137.5	133.6	132.9	137.5	140.0
45°	1189.3	1286.1	699.7	316.1	182.1	132.9	126.1	115.7	111.8	115.0	115.0
47.5°	1303.3	1437.6	871.5	318.6	175.0	123.9	111.8	98.2	95.0	96.1	95.7
50°	1414.3	1551.1	1022.5	297.9	163.2	112.5	96.1	84.6	82.5	82.9	82.9
52.5°	1512.6	1590.1	1065.4	248.9	147.5	98.6	82.5	74.6	73.2	73.2	72.9
55°	1577.6	1547.9	950.0	190.4	127.9	84.3	70.7	66.8	66.1	65.7	65.0
57.5°	1591.1	1410.8	717.5	137.5	100.0	71.1	62.9	60.7	59.3	57.9	57.1
60°	1542.6	1182.2	456.8	96.1	75.0	60.7	55.7	54.3	51.4	48.6	47.5
62.5°	1437.6	892.9	252.9	66.8	60.4	51.8	49.3	47.5	42.1	37.5	36.1
65°	1296.5	593.6	111.8	52.1	49.3	43.6	42.1	39.6	33.2	27.9	26.8
67.5°	1154.7	341.8	50.4	41.8	39.6	35.7	34.6	32.9	28.2	23.2	22.5
70°	992.9	173.2	34.6	33.2	30.7	27.1	28.2	27.9	23.2	18.9	18.2
72.5°	739.3	86.1	26.1	25.0	22.1	19.3	23.2	22.9	18.2	14.3	13.6
75°	418.6	42.5	18.9	17.5	13.2	14.3	18.6	17.5	12.5	9.3	8.6
77.5°	166.1	21.8	12.5	10.7	7.9	9.6	13.6	11.8	6.4	3.9	3.6
80°	38.2	10.7	6.4	4.6	3.6	5.7	7.1	4.3	1.8	0.4	0.0
82.5°	10.7	4.6	2.1	1.8	1.8	2.1	1.8	0.7	0.0	0.0	0.0
85°	3.6	2.1	0.7	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)