

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: P881530

Luminaire Tested: **NAV-SB1A-722-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881530  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-722-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

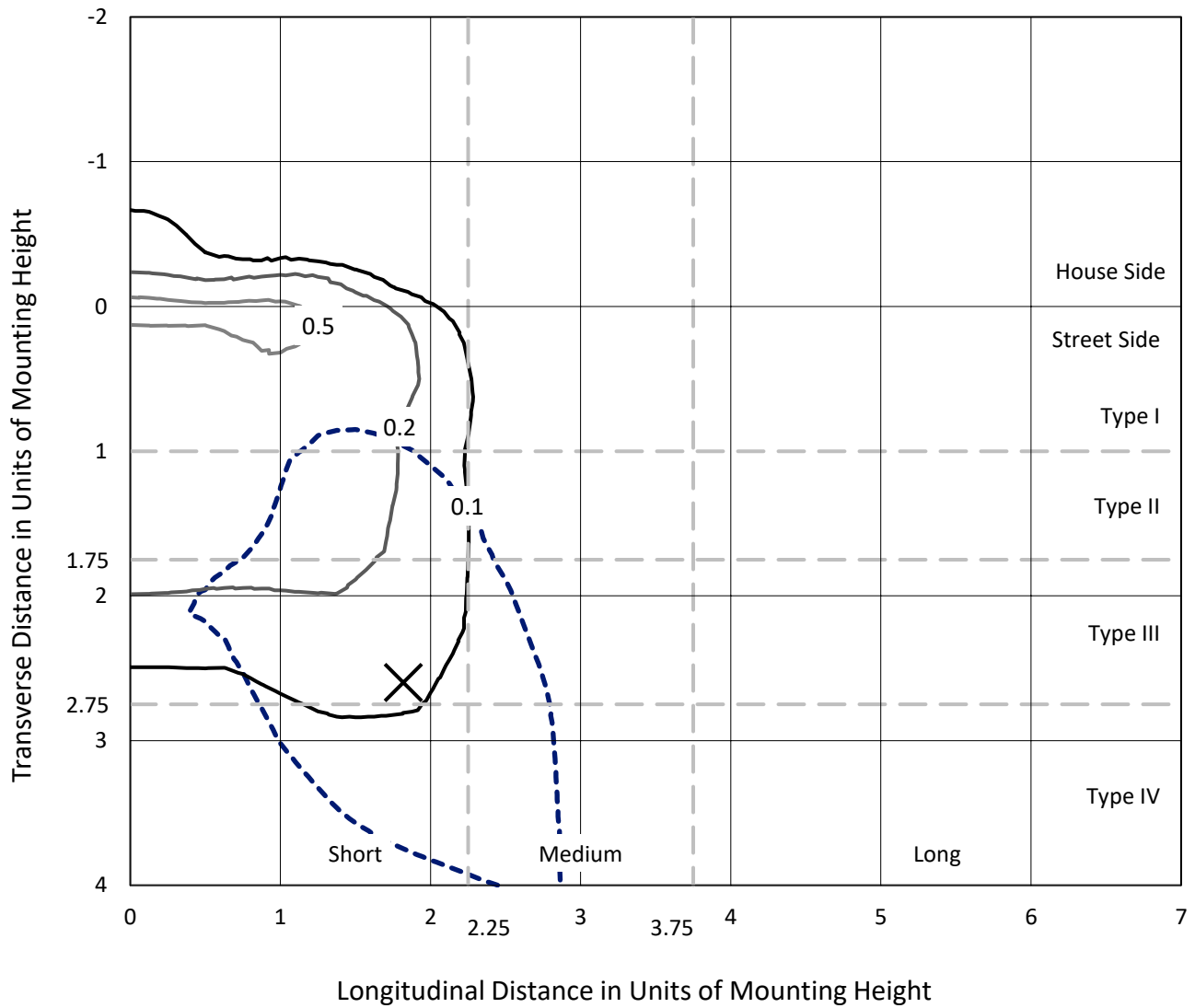
Lumens per Lamp: N/A  
Luminaire Lumens: 2709 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

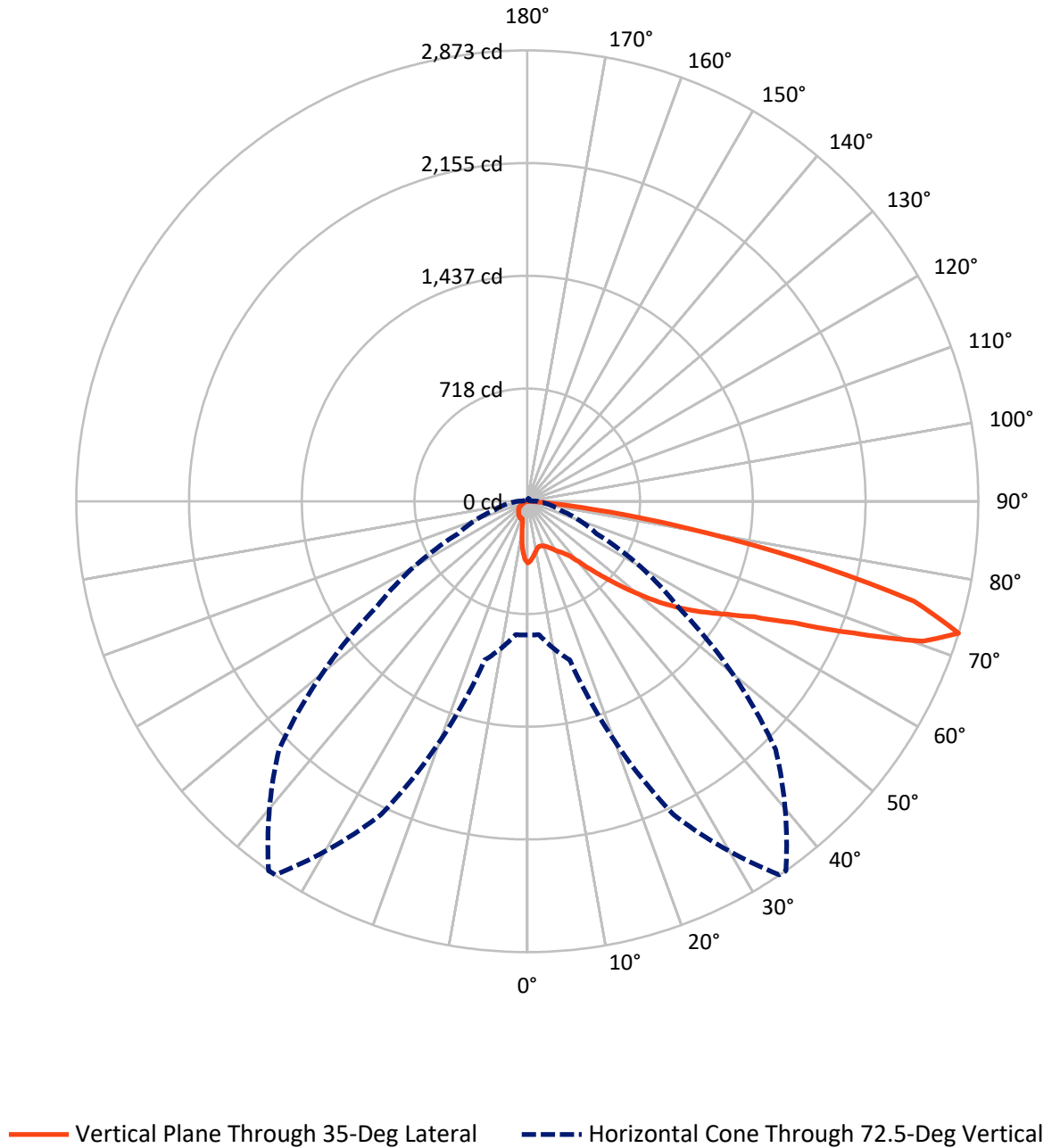
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	304.9	0.0	304.9
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	2404.1	0.0	2404.1
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	2709.0	0.0	2709.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	32.3	1.2
10°-20°	75.5	2.8
20°-30°	122.6	4.5
30°-40°	204.6	7.6
40°-50°	387.1	14.3
50°-60°	615.0	22.7
60°-70°	760.8	28.1
70°-80°	472.9	17.5
80°-90°	38.2	1.4
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°	2709.0	100.0
0°-180°	2709.0	100.0

**Coefficient of Utilization**



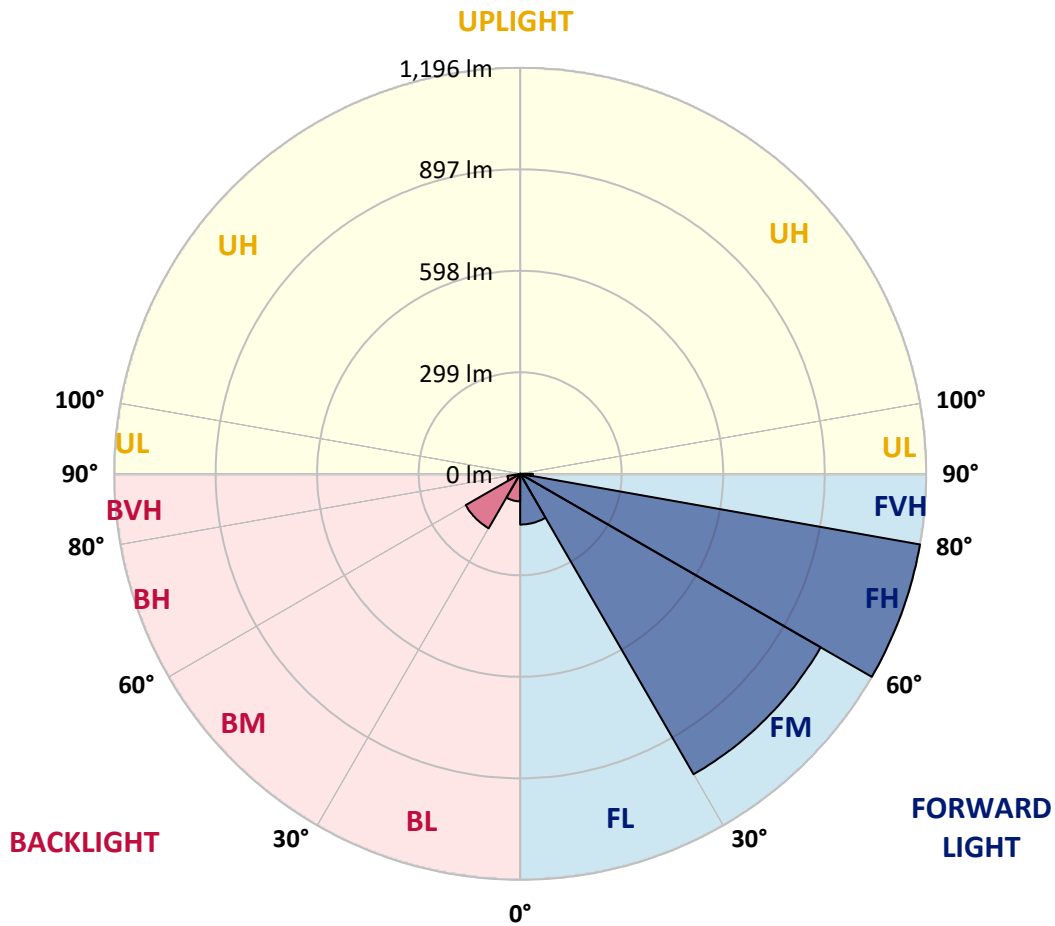
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	149.3	5.5			
FM (30°-60°)	1021.6	37.7			
FH (60°-80°)	1195.5	44.1			G1/1800
FVH (80°-90°)	37.7	1.4			G1/100
BL (0°-30°)	81.0	3.0	B0/110		
BM (30°-60°)	185.1	6.8	B0/220		
BH (60°-80°)	38.3	1.4	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6
2.5°	375.2	378.3	378.9	379.9	379.9	381.1	383.1	385.9	390.4	392.8	394.4
5°	345.8	348.2	351.1	353.5	358.1	358.7	366.4	374.0	384.5	392.4	398.0
7.5°	316.2	319.0	323.0	328.7	334.7	336.5	348.2	360.9	377.5	392.4	401.8
10°	295.4	295.6	299.1	304.9	314.4	316.6	330.9	349.0	369.8	390.0	405.3
12.5°	283.7	285.0	286.6	291.0	300.1	301.5	316.8	338.0	362.1	388.7	409.5
15°	283.7	284.6	285.6	287.8	295.2	296.4	309.9	331.1	358.1	389.3	416.2
17.5°	286.6	288.2	287.4	290.0	297.7	298.5	310.4	329.1	357.9	393.0	426.6
20°	293.8	295.0	293.4	295.0	302.7	304.3	316.6	332.9	361.3	399.6	439.5
22.5°	305.1	305.7	301.9	303.1	311.0	313.0	327.3	343.6	369.4	410.1	456.7
25°	319.4	320.6	314.8	316.2	323.7	326.1	342.6	359.7	382.3	424.6	478.8
27.5°	335.9	336.5	331.5	331.3	341.0	344.4	361.1	379.5	399.6	442.8	506.6
30°	354.7	356.5	351.7	350.9	363.2	366.0	382.5	403.9	425.0	470.2	546.1
32.5°	369.6	371.0	368.2	370.2	382.7	384.9	408.5	438.5	464.9	509.1	599.9
35°	391.0	391.8	385.5	389.1	403.3	408.9	444.0	486.9	515.1	558.0	670.1
37.5°	468.6	468.6	441.7	424.0	437.7	442.6	492.7	547.8	577.0	623.5	758.7
40°	576.0	574.2	534.7	498.6	496.8	506.6	561.9	624.7	657.0	702.1	858.3
42.5°	690.6	687.8	634.0	598.3	592.3	595.7	641.9	719.3	752.3	798.0	965.5
45°	792.2	791.4	742.2	694.1	683.4	694.1	741.8	830.1	853.7	901.8	1072.5
47.5°	877.4	877.4	841.4	810.1	804.5	810.9	877.0	953.0	950.8	1012.3	1176.7
50°	975.4	974.6	940.5	927.0	932.7	941.7	1032.6	1082.4	1051.2	1120.9	1269.8
52.5°	1044.1	1048.9	1037.1	1035.0	1064.3	1079.8	1190.6	1209.0	1141.2	1223.9	1339.5
55°	1098.5	1104.0	1117.5	1132.8	1189.4	1209.6	1343.6	1329.1	1216.4	1313.2	1379.5
57.5°	1175.5	1167.6	1188.4	1218.6	1310.1	1334.5	1491.9	1442.5	1276.9	1385.7	1383.9
60°	1269.0	1270.2	1273.7	1311.9	1430.6	1461.9	1638.0	1549.7	1315.8	1430.2	1335.5
62.5°	1381.3	1383.1	1390.5	1449.0	1592.3	1621.9	1793.6	1637.4	1333.7	1417.7	1210.4
65°	1373.6	1381.1	1463.1	1663.4	1838.3	1867.4	1975.2	1698.9	1306.7	1303.3	985.5
67.5°	1251.3	1263.6	1400.8	1919.5	2209.1	2241.6	2194.8	1711.0	1190.2	1013.5	642.9
70°	1090.9	1095.3	1260.3	2149.7	2638.4	2671.4	2391.3	1577.8	903.2	565.3	288.0
72.5°	851.9	852.9	1046.5	2203.1	2871.4	2873.2	2237.0	1171.3	485.7	217.2	100.0
75°	608.6	602.6	700.9	1786.7	2526.3	2546.5	1677.1	549.4	185.6	102.6	49.8
77.5°	326.3	332.9	396.6	1059.6	1745.2	1779.7	915.1	158.4	94.5	69.9	33.0
80°	100.8	106.4	162.6	485.1	988.5	1009.4	339.2	70.5	65.9	49.8	21.6
82.5°	31.8	33.0	75.8	203.9	410.3	419.8	98.3	39.9	45.1	33.0	12.7
85°	9.1	9.3	33.7	76.0	101.4	103.4	27.6	15.5	25.8	20.4	6.6
87.5°	1.0	3.2	12.7	12.7	8.9	8.7	3.0	3.4	7.3	2.6	1.2
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°	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6	392.6
2.5°	393.4	393.6	391.0	386.7	381.9	377.9	373.0	369.0	366.2	365.4	366.8
5°	396.2	394.8	387.5	374.2	358.3	344.6	329.3	317.2	309.3	305.9	307.1
7.5°	400.4	396.4	380.3	354.1	323.7	296.8	269.4	248.1	234.6	227.9	228.9
10°	403.9	396.0	368.4	325.1	278.7	237.8	200.9	175.3	161.0	154.2	154.4
12.5°	407.3	395.8	352.9	290.8	227.9	177.9	143.5	130.8	126.8	125.4	125.1
15°	413.7	396.4	333.5	251.5	177.3	134.4	121.9	121.7	122.5	122.1	121.9
17.5°	422.4	397.0	311.4	209.8	136.8	118.5	117.9	119.7	120.9	120.3	120.1
20°	433.7	399.4	288.0	168.5	117.5	114.5	115.9	117.5	118.5	117.5	117.3
22.5°	449.6	403.5	262.4	135.4	111.4	112.2	113.3	115.1	116.1	114.7	114.5
25°	469.0	410.1	237.2	117.7	108.4	109.4	111.2	113.1	114.3	112.9	112.7
27.5°	494.3	420.6	214.0	113.7	105.4	106.0	108.6	111.6	113.1	111.4	111.4
30°	530.8	437.9	193.9	115.5	103.6	102.2	105.8	110.0	111.8	110.2	110.0
32.5°	579.2	462.3	181.6	118.3	102.8	97.9	101.2	106.6	109.6	108.6	108.6
35°	642.7	499.4	176.9	121.5	102.2	93.3	95.7	101.4	106.6	107.6	107.6
37.5°	719.7	551.0	178.2	122.9	100.4	89.5	90.7	95.7	102.4	105.6	106.4
40°	807.3	611.2	186.2	121.5	98.5	86.3	86.5	90.3	96.3	101.0	102.6
42.5°	897.6	681.4	200.9	116.3	96.7	83.6	83.0	85.6	89.5	92.9	94.3
45°	983.5	753.7	215.4	109.2	94.5	80.8	79.4	80.4	81.2	82.6	83.4
47.5°	1058.6	804.5	211.2	102.6	91.5	77.6	75.2	74.8	72.5	72.3	72.1
50°	1110.4	815.6	187.6	96.1	87.1	74.0	70.3	67.9	63.7	61.7	61.9
52.5°	1126.9	771.8	153.2	89.5	80.0	69.3	63.9	60.1	55.0	53.2	53.0
55°	1105.0	685.8	122.5	81.6	70.1	62.9	57.0	52.0	47.8	45.7	45.7
57.5°	1051.6	576.4	96.9	72.3	59.5	55.8	49.8	44.9	41.3	39.1	38.7
60°	963.1	457.7	76.6	61.1	50.8	48.0	41.9	38.7	35.5	33.0	32.4
62.5°	828.7	326.7	60.1	48.4	42.5	39.3	35.7	33.3	29.6	26.0	25.4
65°	646.7	199.9	46.4	35.5	34.1	32.6	30.4	28.2	23.6	20.0	19.5
67.5°	407.9	94.7	33.1	26.8	27.0	26.2	25.2	23.4	20.0	16.9	16.5
70°	179.6	45.9	21.8	20.4	20.0	20.0	20.8	20.2	17.1	14.1	13.5
72.5°	61.1	24.6	16.3	15.5	14.5	14.3	17.5	16.9	13.7	10.9	10.3
75°	32.0	16.5	11.9	11.1	8.7	10.5	13.9	13.1	9.7	7.1	6.6
77.5°	20.8	11.7	8.1	7.1	5.0	6.9	10.3	9.1	5.8	3.6	3.2
80°	13.1	7.7	4.8	3.4	2.4	3.8	5.6	4.0	2.2	0.8	0.6
82.5°	6.9	4.0	1.8	1.2	1.0	1.2	1.4	1.0	0.4	0.0	0.0
85°	2.8	1.4	0.6	0.4	0.2	0.0	0.4	0.2	0.0	0.0	0.0
87.5°	1.0	0.2	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)