

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: P961411

Luminaire Tested: **NAV-SB2A-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7211.9 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

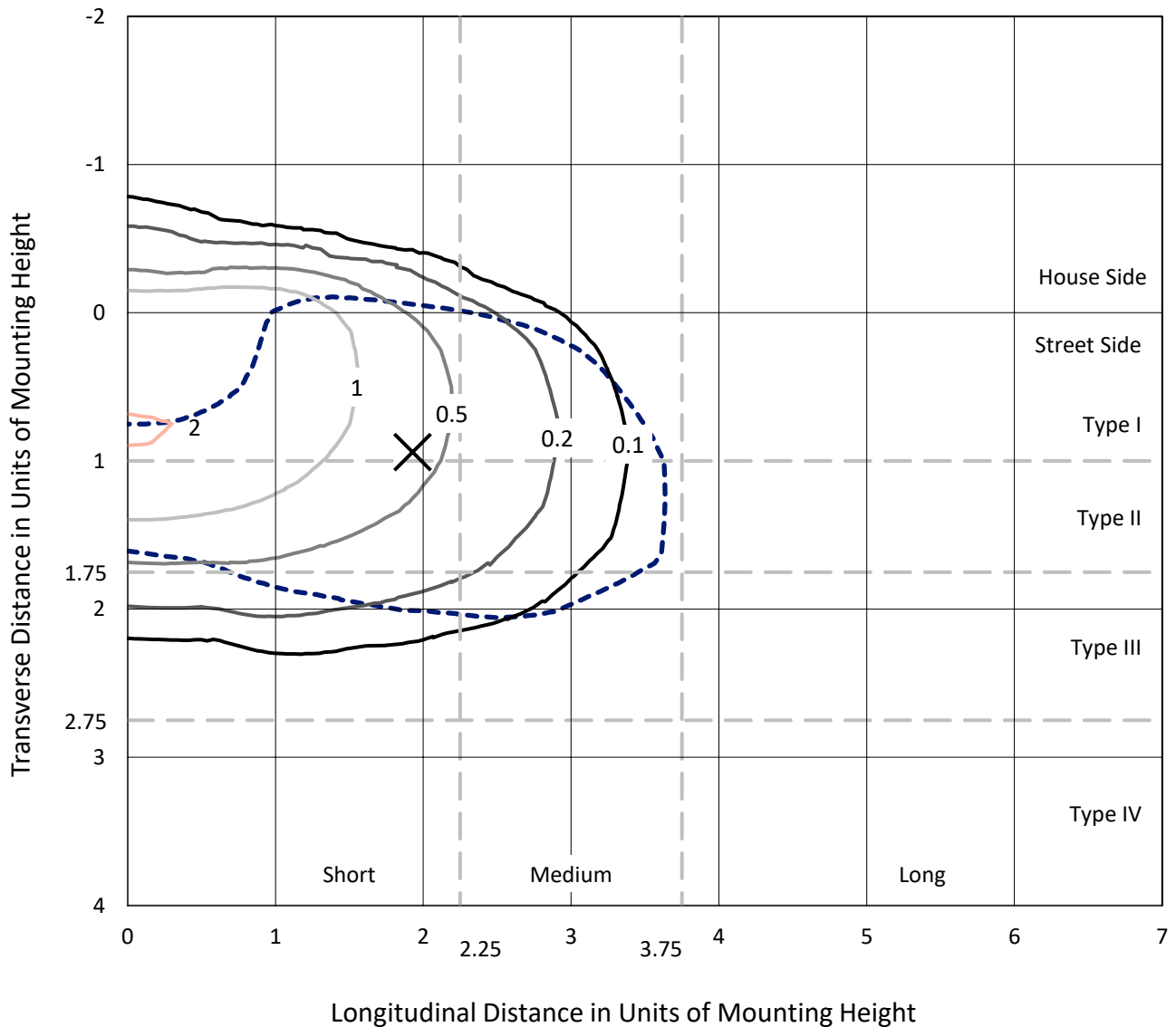
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

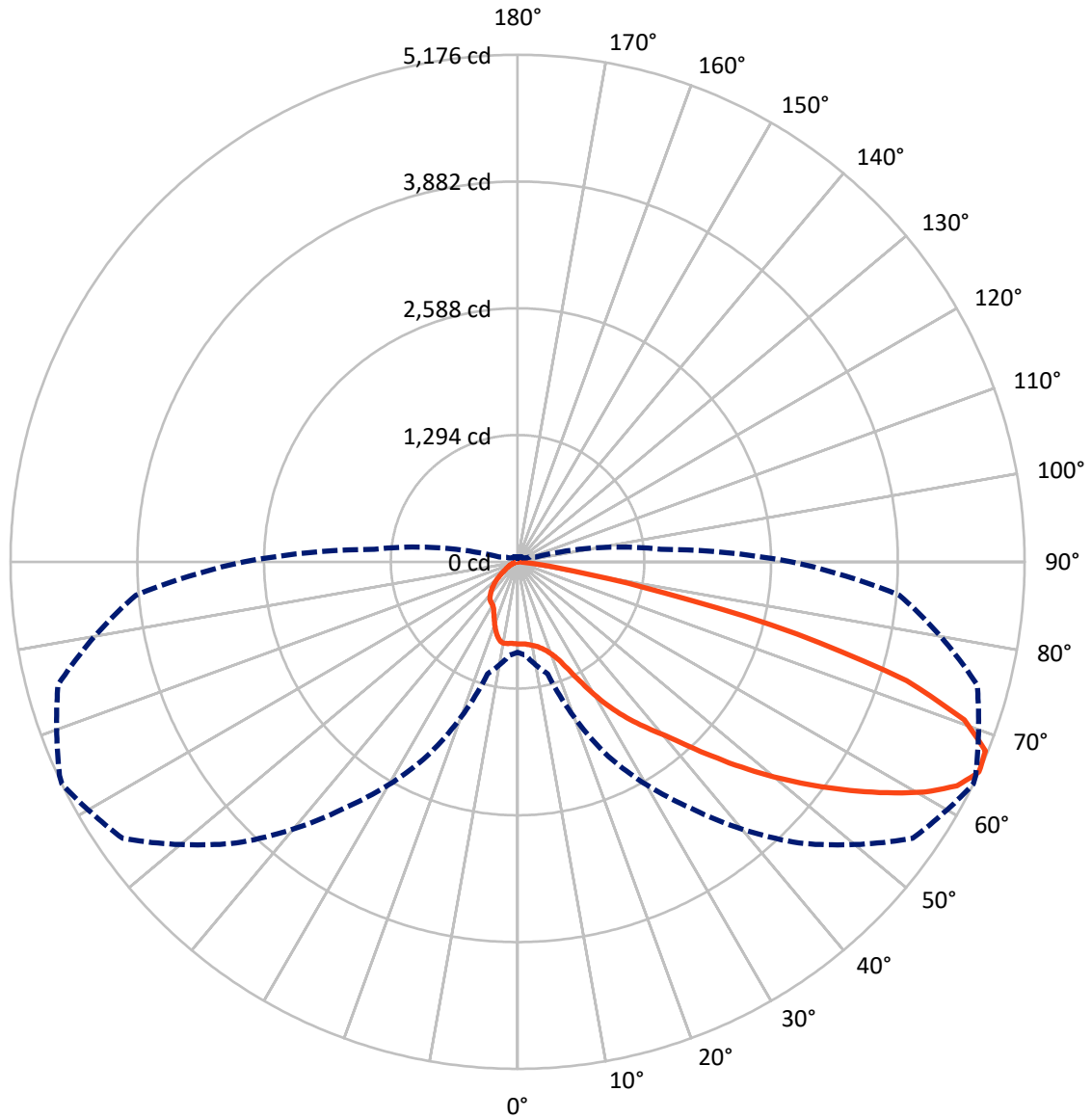
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	964.4	0.0	964.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6247.5	0.0	6247.5
	% Fixture	86.6	0.0	86.6
Total	Lumens	7211.9	0.0	7211.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	1.1
10°-20°	209.9	2.9
20°-30°	397.7	5.5
30°-40°	804.8	11.2
40°-50°	1371.1	19.0
50°-60°	1864.5	25.9
60°-70°	1750.9	24.3
70°-80°	701.5	9.7
80°-90°	34.0	0.5
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°	7211.9	100.0
0°-180°	7211.9	100.0

Coefficient of Utilization

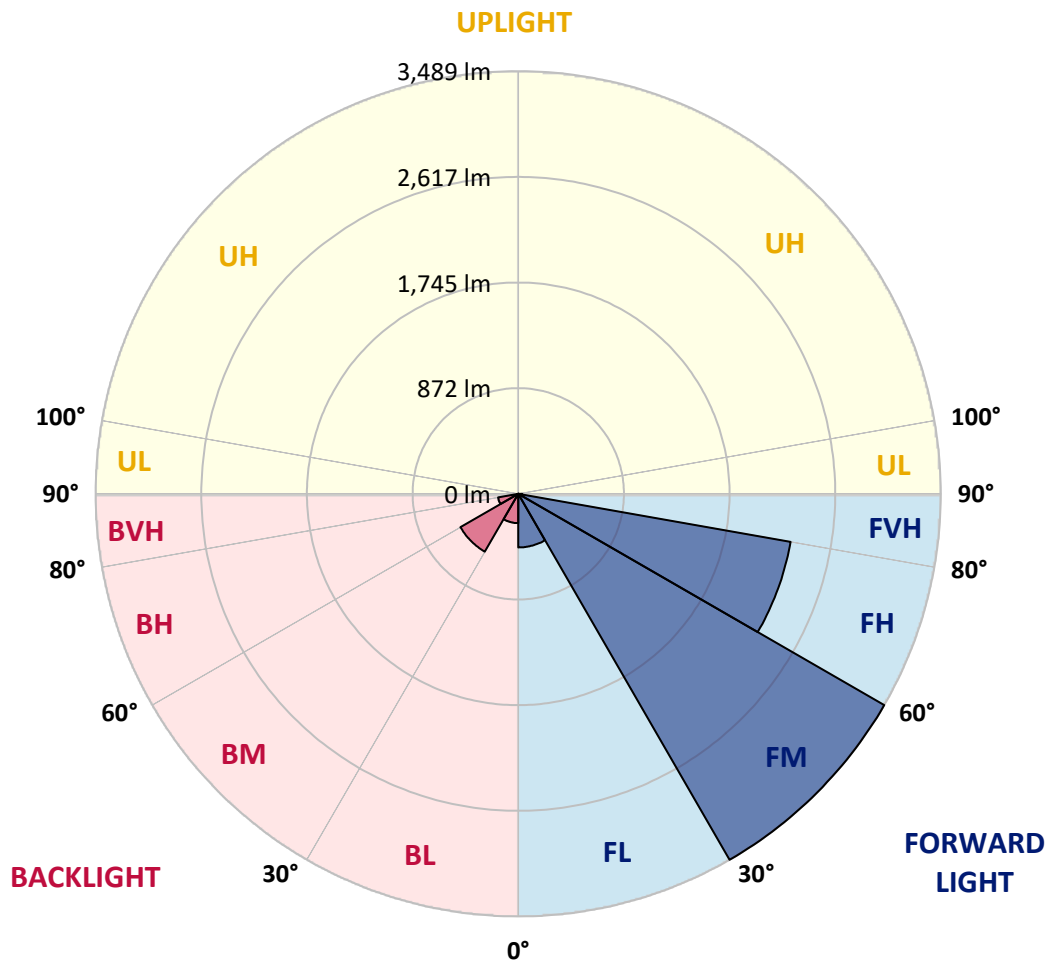


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	442.9	6.1			
FM (30°-60°)	3489.1	48.4			
FH (60°-80°)	2283.1	31.7			G2/5000
FVH (80°-90°)	32.3	0.4			G1/100
BL (0°-30°)	242.1	3.4	B1/500		
BM (30°-60°)	551.4	7.6	B1/1000		
BH (60°-80°)	169.3	2.3	B1/500		G1/500
BVH (80°-90°)	1.7	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9
2.5°	835.9	841.7	840.3	838.9	838.3	839.3	839.8	839.3	839.3	839.3	839.8
5°	820.0	824.8	824.8	828.2	833.0	838.9	843.2	844.1	845.1	846.5	846.0
7.5°	789.5	793.3	796.3	807.4	819.5	835.0	848.0	854.7	855.8	861.1	862.9
10°	768.7	773.6	778.4	790.0	807.4	830.6	852.8	869.3	871.7	884.3	890.1
12.5°	767.7	772.5	778.9	791.4	811.7	836.4	863.5	887.1	891.5	909.9	922.0
15°	777.9	783.7	789.5	804.9	826.8	856.7	885.7	915.2	919.5	945.7	958.7
17.5°	798.7	806.5	810.8	826.3	849.4	882.8	921.0	954.9	958.7	989.2	1005.6
20°	839.8	849.0	850.4	862.9	885.7	921.5	967.0	1009.0	1013.8	1048.7	1067.0
22.5°	924.9	938.0	926.3	932.6	952.9	988.7	1038.0	1091.2	1098.0	1137.6	1154.0
25°	1074.7	1093.2	1063.1	1052.5	1061.2	1098.5	1160.3	1227.5	1235.2	1267.2	1275.4
27.5°	1369.2	1345.5	1300.0	1255.5	1229.5	1250.7	1320.4	1403.5	1413.2	1444.1	1434.5
30°	1692.6	1671.9	1610.5	1511.8	1450.0	1446.6	1510.8	1603.7	1614.8	1644.3	1614.8
32.5°	2016.6	1996.7	1930.0	1808.6	1701.3	1648.1	1692.6	1795.6	1801.4	1820.3	1776.7
35°	2335.2	2314.9	2248.1	2123.9	1991.9	1871.0	1862.3	1978.4	1980.3	2000.1	1935.3
37.5°	2655.7	2638.8	2567.7	2445.9	2315.8	2149.0	2068.2	2151.5	2153.8	2173.2	2106.0
40°	2884.4	2891.6	2842.8	2748.5	2636.8	2454.6	2299.4	2335.7	2321.1	2353.5	2313.4
42.5°	3080.6	3095.2	3052.7	3005.2	2940.4	2779.9	2585.6	2579.3	2556.1	2573.5	2532.0
45°	3250.4	3262.5	3224.2	3213.2	3211.7	3099.1	2898.4	2860.7	2828.3	2824.9	2775.1
47.5°	3312.7	3336.0	3352.4	3389.6	3462.1	3414.8	3221.9	3163.4	3127.1	3100.5	3021.7
50°	3336.4	3361.1	3417.1	3525.5	3697.1	3717.4	3543.8	3478.0	3433.6	3385.3	3269.2
52.5°	3304.5	3348.5	3423.9	3606.2	3855.2	3960.1	3852.8	3795.3	3744.4	3665.7	3493.5
55°	3116.4	3160.5	3314.6	3605.2	3934.0	4130.2	4144.8	4119.2	4062.1	3937.8	3674.8
57.5°	2720.0	2785.2	3029.4	3482.4	3932.5	4276.8	4431.0	4449.3	4385.6	4207.6	3817.5
60°	2170.7	2259.2	2557.1	3210.2	3811.2	4356.0	4681.9	4773.7	4706.1	4473.5	3933.0
62.5°	1514.7	1617.2	1899.0	2783.8	3533.7	4299.1	4865.2	5034.8	4983.5	4711.4	3977.5
65°	923.9	956.7	1184.0	2190.6	3061.8	4060.1	4921.7	5176.0	5159.1	4857.0	3911.7
67.5°	615.4	643.0	708.3	1502.1	2376.8	3583.0	4786.3	5151.3	5156.2	4833.3	3670.9
70°	370.8	394.5	437.1	873.6	1540.4	2836.1	4367.2	4837.1	4865.2	4516.6	3214.6
72.5°	152.7	168.7	207.4	396.0	797.8	1800.0	3477.6	4153.0	4218.3	3797.6	2467.2
75°	86.5	94.7	121.9	198.7	346.1	838.9	2106.5	2948.2	3044.5	2617.5	1484.2
77.5°	57.5	61.4	78.8	128.6	194.9	286.2	900.3	1536.0	1719.7	1429.6	642.6
80°	38.6	42.0	54.1	86.1	126.7	122.8	286.7	569.1	700.1	491.2	156.6
82.5°	26.1	26.5	38.6	56.6	80.3	59.4	84.6	176.9	222.4	142.2	59.4
85°	15.0	14.6	28.5	32.9	35.8	24.7	25.6	53.2	69.6	60.0	33.8
87.5°	1.9	2.9	11.1	8.7	4.8	5.3	5.3	9.2	13.5	14.6	7.3
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°	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9	838.9
2.5°	839.8	839.3	837.8	836.4	833.0	831.1	832.1	831.1	830.6	831.1	833.0
5°	846.0	844.6	840.7	835.9	829.1	820.9	815.6	807.9	800.6	796.3	797.2
7.5°	862.9	861.5	856.2	842.7	820.9	786.6	755.2	727.6	706.8	694.7	695.3
10°	890.1	887.6	879.4	849.4	792.4	717.5	655.1	603.4	569.5	553.6	552.2
12.5°	922.0	919.1	904.6	843.2	738.3	621.3	535.2	477.6	446.3	432.2	430.8
15°	959.7	955.8	927.3	813.2	659.5	514.9	436.1	393.1	372.8	360.2	360.7
17.5°	1006.6	999.8	944.2	768.2	573.9	433.7	375.2	342.8	324.9	312.8	311.8
20°	1067.5	1056.4	957.8	714.5	495.1	382.4	334.0	307.0	293.5	282.8	280.8
22.5°	1152.6	1136.6	974.2	656.5	439.5	347.2	303.6	283.8	272.6	260.6	258.6
25°	1258.0	1239.1	994.5	602.9	401.3	316.6	281.4	265.0	251.8	237.9	236.5
27.5°	1405.5	1371.6	1018.6	558.9	368.4	290.6	261.1	242.7	227.8	216.1	213.7
30°	1569.8	1514.2	1040.0	532.3	338.5	266.4	234.5	216.1	202.1	193.8	192.4
32.5°	1725.5	1650.0	1054.0	520.7	311.4	238.8	205.5	185.6	175.0	172.6	174.0
35°	1872.5	1772.8	1052.5	509.5	287.2	211.3	176.9	156.6	148.4	149.9	149.9
37.5°	2041.7	1903.9	1042.3	492.2	267.3	186.1	152.3	134.4	127.2	127.6	129.6
40°	2238.5	2055.2	1036.1	459.3	245.6	163.0	132.0	117.5	112.1	110.2	109.8
42.5°	2448.3	2201.7	1037.0	422.1	218.5	142.2	118.0	105.9	101.1	99.6	99.1
45°	2659.1	2341.4	1038.5	383.3	190.0	126.2	107.8	97.7	94.7	92.9	92.9
47.5°	2857.3	2460.4	1011.4	341.8	162.0	114.1	99.6	92.9	90.4	87.9	87.9
50°	3042.0	2539.6	946.2	293.5	139.7	104.4	93.3	88.5	86.1	83.6	83.6
52.5°	3185.6	2552.2	838.3	243.6	124.2	97.2	89.5	85.1	82.2	79.7	79.3
55°	3249.4	2473.4	685.1	197.2	112.1	90.9	85.6	81.2	77.8	75.4	74.9
57.5°	3233.0	2307.6	534.2	158.6	100.6	84.6	80.8	77.8	74.0	70.1	69.6
60°	3152.2	2085.7	402.7	132.0	89.9	77.8	75.4	73.0	67.6	61.9	60.9
62.5°	3012.5	1806.8	287.2	109.3	78.3	70.1	69.1	67.2	59.4	48.8	47.9
65°	2798.8	1467.8	193.4	90.9	67.2	61.4	61.9	58.5	48.4	36.3	35.3
67.5°	2486.4	1073.3	123.7	74.4	56.1	51.2	51.8	49.8	41.1	31.0	29.5
70°	2088.5	710.7	80.8	56.6	45.0	39.7	42.5	43.0	34.8	25.1	24.2
72.5°	1531.1	419.6	56.6	42.0	32.9	27.6	34.8	35.8	28.1	18.9	17.9
75°	872.7	199.2	42.5	30.4	20.3	19.4	27.1	27.1	19.4	12.6	11.6
77.5°	366.4	83.1	29.9	19.8	11.6	11.1	18.3	16.9	9.6	5.8	5.8
80°	105.9	37.2	16.0	9.6	4.8	4.3	7.3	5.3	2.5	0.9	0.9
82.5°	41.6	16.4	6.3	3.9	1.9	1.9	0.9	0.0	0.0	0.0	0.0
85°	24.7	6.8	2.9	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	1.4	0.9	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)