

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: P961349

Luminaire Tested: **NAV-SB2A-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961349
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-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 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: 6689.1 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

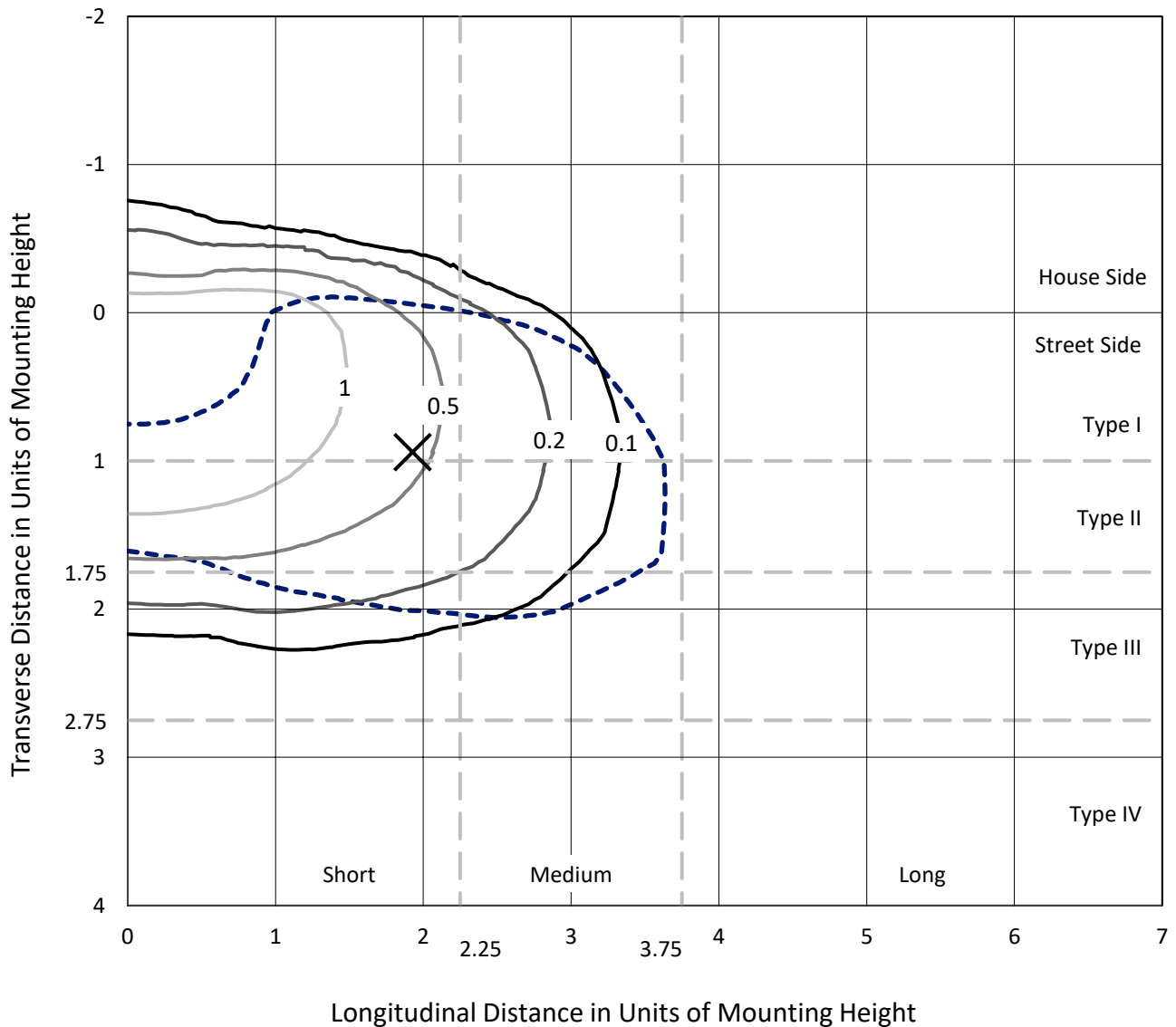
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

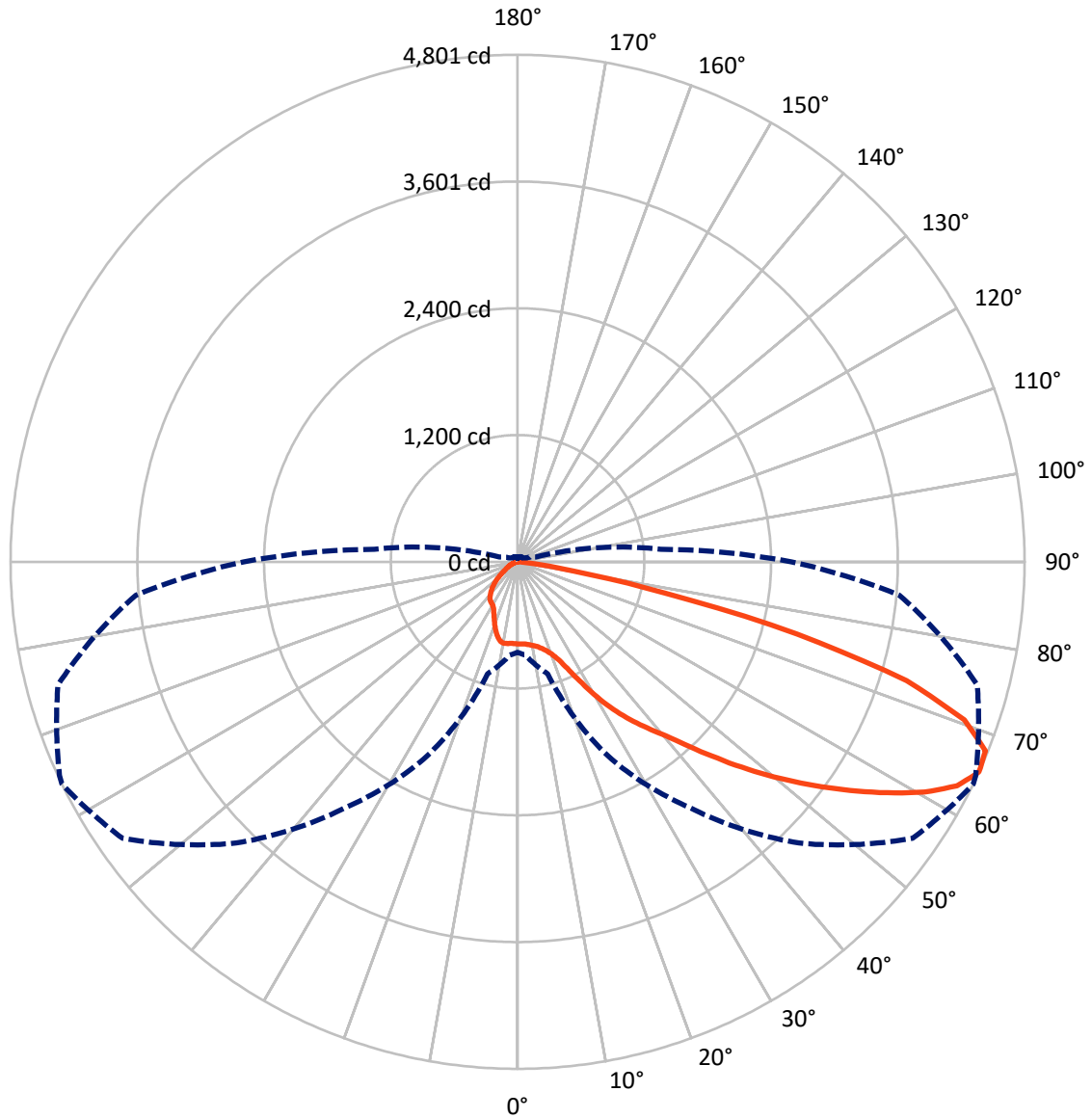
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	894.5	0.0	894.5
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	5794.6	0.0	5794.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	6689.1	0.0	6689.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	1.1
10°-20°	194.7	2.9
20°-30°	368.9	5.5
30°-40°	746.5	11.2
40°-50°	1271.7	19.0
50°-60°	1729.4	25.9
60°-70°	1624.0	24.3
70°-80°	650.6	9.7
80°-90°	31.5	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°	6689.1	100.0
0°-180°	6689.1	100.0

Coefficient of Utilization



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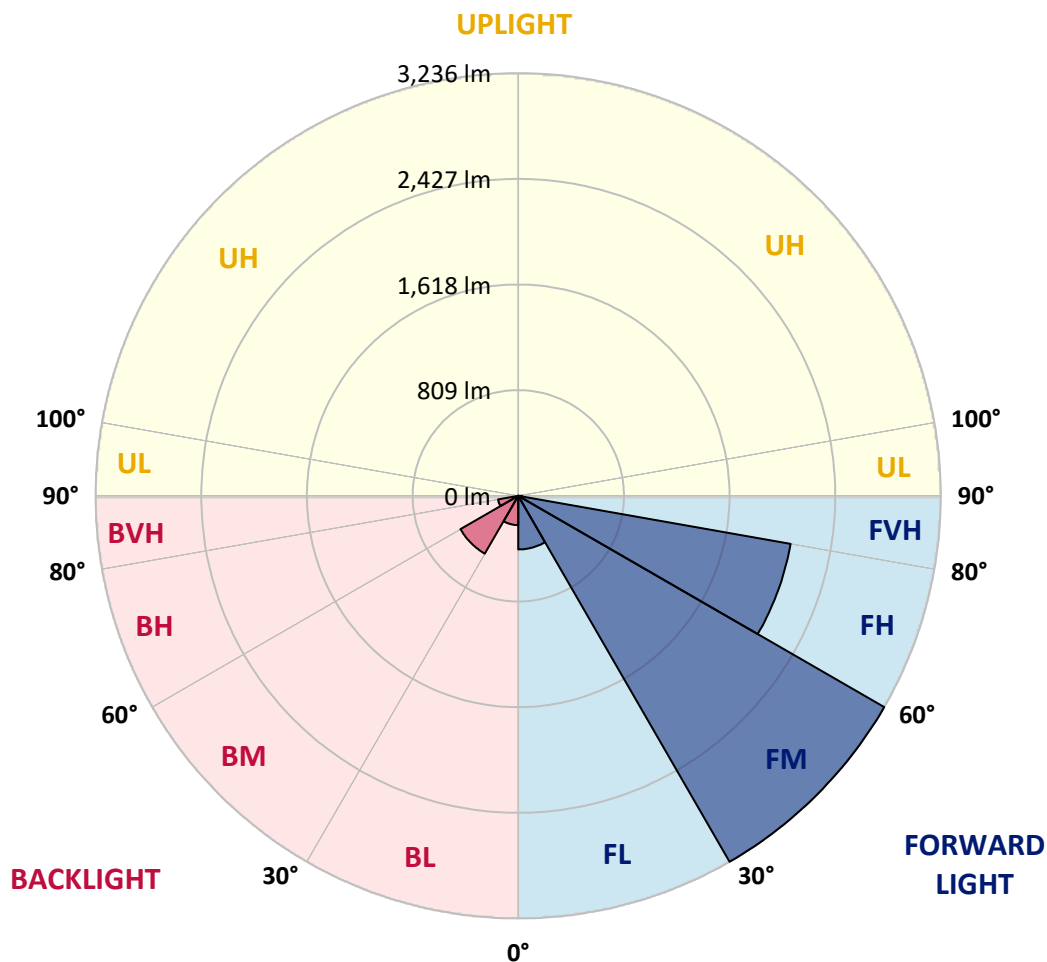
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	410.8	6.1			
FM (30°-60°)	3236.2	48.4			
FH (60°-80°)	2117.6	31.7			G2/5000
FVH (80°-90°)	30.0	0.4			G1/100
BL (0°-30°)	224.6	3.4	B1/500		
BM (30°-60°)	511.4	7.6	B1/1000		
BH (60°-80°)	157.0	2.3	B1/500		G1/500
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0
2.5°	775.3	780.7	779.4	778.0	777.6	778.5	778.9	778.5	778.5	778.5	778.9
5°	760.6	765.1	765.1	768.1	772.6	778.0	782.1	783.0	783.8	785.2	784.7
7.5°	732.3	735.8	738.5	748.9	760.0	774.4	786.6	792.8	793.8	798.7	800.4
10°	713.0	717.5	722.0	732.8	748.9	770.4	791.0	806.3	808.5	820.2	825.5
12.5°	712.1	716.6	722.4	734.1	752.9	775.8	800.9	822.9	826.9	844.0	855.2
15°	721.5	726.9	732.3	746.6	766.8	794.6	821.5	848.9	852.9	877.1	889.2
17.5°	740.8	747.9	752.0	766.4	787.9	818.9	854.2	885.6	889.2	917.5	932.7
20°	778.9	787.4	788.7	800.4	821.5	854.7	896.9	935.8	940.3	972.6	989.6
22.5°	857.8	869.9	859.2	865.0	883.9	917.1	962.8	1012.1	1018.3	1055.1	1070.4
25°	996.8	1013.9	986.0	976.2	984.3	1018.8	1076.2	1138.6	1145.7	1175.4	1183.0
27.5°	1270.0	1247.9	1205.8	1164.6	1140.3	1160.1	1224.7	1301.8	1310.8	1339.5	1330.4
30°	1569.9	1550.6	1493.7	1402.2	1344.8	1341.7	1401.3	1487.4	1497.7	1525.1	1497.7
32.5°	1870.4	1852.0	1790.2	1677.5	1578.0	1528.7	1569.9	1665.4	1670.9	1688.3	1648.0
35°	2165.9	2147.1	2085.2	1969.9	1847.6	1735.4	1727.3	1835.0	1836.8	1855.1	1795.1
37.5°	2463.2	2447.5	2381.6	2268.6	2148.0	1993.2	1918.4	1995.5	1997.7	2015.7	1953.3
40°	2675.4	2682.0	2636.7	2549.3	2445.8	2276.6	2132.7	2166.3	2152.9	2182.9	2145.7
42.5°	2857.4	2870.8	2831.4	2787.4	2727.3	2578.5	2398.2	2392.4	2370.8	2386.9	2348.4
45°	3014.7	3026.0	2990.5	2980.2	2978.9	2874.4	2688.3	2653.3	2623.3	2620.1	2574.0
47.5°	3072.6	3094.2	3109.3	3143.9	3211.2	3167.2	2988.3	2934.1	2900.4	2875.7	2802.7
50°	3094.6	3117.4	3169.5	3270.0	3429.1	3447.9	3287.0	3226.0	3184.7	3139.9	3032.3
52.5°	3065.0	3105.7	3175.8	3344.8	3575.7	3673.1	3573.5	3520.2	3473.0	3399.9	3240.3
55°	2890.5	2931.4	3074.4	3343.9	3648.8	3830.9	3844.4	3820.6	3767.7	3652.4	3408.4
57.5°	2522.8	2583.4	2809.8	3230.0	3647.5	3966.7	4109.8	4126.9	4067.7	3902.7	3540.8
60°	2013.4	2095.5	2371.7	2977.5	3534.9	4040.3	4342.5	4427.8	4365.0	4149.3	3648.0
62.5°	1404.9	1500.0	1761.5	2582.1	3277.5	3987.4	4512.5	4669.9	4622.3	4369.9	3689.2
65°	856.9	887.4	1098.2	2031.9	2839.9	3765.8	4564.9	4800.8	4785.1	4504.9	3628.2
67.5°	570.8	596.4	656.9	1393.3	2204.5	3323.3	4439.4	4777.9	4782.4	4482.9	3404.8
70°	344.0	365.9	405.4	810.3	1428.6	2630.5	4050.6	4486.5	4512.5	4189.2	2981.6
72.5°	141.7	156.5	192.4	367.3	739.9	1669.5	3225.6	3852.0	3912.5	3522.4	2288.3
75°	80.3	87.8	113.0	184.3	321.0	778.0	1953.8	2734.5	2823.8	2427.8	1376.7
77.5°	53.4	57.0	73.1	119.3	180.7	265.5	835.0	1424.6	1595.0	1326.0	595.9
80°	35.9	39.1	50.2	79.8	117.5	113.9	265.9	527.8	649.3	455.6	145.2
82.5°	24.2	24.7	35.9	52.5	74.4	55.1	78.5	164.1	206.2	131.8	55.1
85°	13.9	13.4	26.4	30.4	33.2	22.9	23.8	49.3	64.6	55.6	31.4
87.5°	1.7	2.7	10.4	8.1	4.5	4.9	4.9	8.5	12.5	13.4	6.8
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°	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0	778.0
2.5°	778.9	778.5	777.2	775.8	772.6	770.8	771.7	770.8	770.4	770.8	772.6
5°	784.7	783.4	779.8	775.3	769.1	761.5	756.4	749.3	742.6	738.5	739.4
7.5°	800.4	799.1	794.2	781.6	761.5	729.6	700.5	674.9	655.6	644.4	644.8
10°	825.5	823.3	815.7	787.9	734.9	665.4	607.6	559.6	528.3	513.4	512.1
12.5°	855.2	852.5	839.0	782.1	684.7	576.3	496.4	443.0	413.9	400.9	399.5
15°	890.1	886.5	860.1	754.3	611.6	477.5	404.5	364.6	345.7	334.0	334.6
17.5°	933.6	927.3	875.8	712.6	532.3	402.2	348.0	318.0	301.3	290.2	289.3
20°	990.1	979.8	888.4	662.8	459.2	354.8	309.9	284.7	272.2	262.3	260.6
22.5°	1069.1	1054.2	903.5	609.0	407.6	322.0	281.6	263.2	252.9	241.7	240.0
25°	1166.8	1149.3	922.4	559.1	372.2	293.8	261.0	245.7	233.6	220.6	219.2
27.5°	1303.6	1272.2	944.8	518.3	341.7	269.5	242.1	225.1	211.3	200.5	198.2
30°	1456.0	1404.5	964.5	493.7	313.9	247.1	217.5	200.5	187.5	179.8	178.5
32.5°	1600.4	1530.4	977.5	483.0	288.7	221.5	190.5	172.2	162.4	160.1	161.4
35°	1736.8	1644.4	976.2	472.6	266.4	196.0	164.1	145.2	137.7	139.0	139.0
37.5°	1893.7	1765.9	966.8	456.5	247.9	172.6	141.2	124.6	118.0	118.4	120.1
40°	2076.2	1906.3	960.9	426.0	227.8	151.1	122.4	109.0	104.0	102.2	101.8
42.5°	2270.8	2042.1	961.9	391.4	202.6	131.8	109.4	98.2	93.7	92.4	91.9
45°	2466.4	2171.8	963.2	355.6	176.2	117.1	100.0	90.6	87.8	86.1	86.1
47.5°	2650.2	2282.1	938.1	317.0	150.3	105.8	92.4	86.1	83.8	81.6	81.6
50°	2821.5	2355.6	877.6	272.2	129.6	96.9	86.5	82.1	79.8	77.6	77.6
52.5°	2954.7	2367.2	777.6	226.0	115.2	90.1	82.9	78.9	76.3	74.0	73.5
55°	3013.9	2294.2	635.4	183.0	104.0	84.3	79.3	75.3	72.2	69.9	69.5
57.5°	2998.6	2140.3	495.5	147.1	93.3	78.5	74.9	72.2	68.6	65.0	64.6
60°	2923.7	1934.5	373.5	122.4	83.4	72.2	69.9	67.8	62.7	57.4	56.5
62.5°	2794.1	1675.8	266.4	101.4	72.7	65.0	64.2	62.3	55.1	45.3	44.4
65°	2595.9	1361.4	179.4	84.3	62.3	57.0	57.4	54.2	44.8	33.6	32.7
67.5°	2306.2	995.5	114.8	69.1	52.0	47.6	48.0	46.2	38.1	28.7	27.4
70°	1937.1	659.2	74.9	52.5	41.7	36.8	39.5	39.9	32.3	23.3	22.4
72.5°	1420.1	389.2	52.5	39.1	30.4	25.5	32.3	33.2	26.0	17.5	16.6
75°	809.4	184.7	39.5	28.3	18.9	17.9	25.1	25.1	17.9	11.7	10.8
77.5°	339.9	77.1	27.8	18.3	10.8	10.4	17.0	15.7	8.9	5.3	5.3
80°	98.2	34.5	14.8	8.9	4.5	4.0	6.8	4.9	2.3	0.9	0.9
82.5°	38.5	15.3	5.8	3.6	1.7	1.7	0.9	0.0	0.0	0.0	0.0
85°	22.9	6.3	2.7	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	1.3	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)