

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: P961876

Luminaire Tested: **NAV-SB2B-727-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961876
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-SB2B-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 450mA 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: 8396.8 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

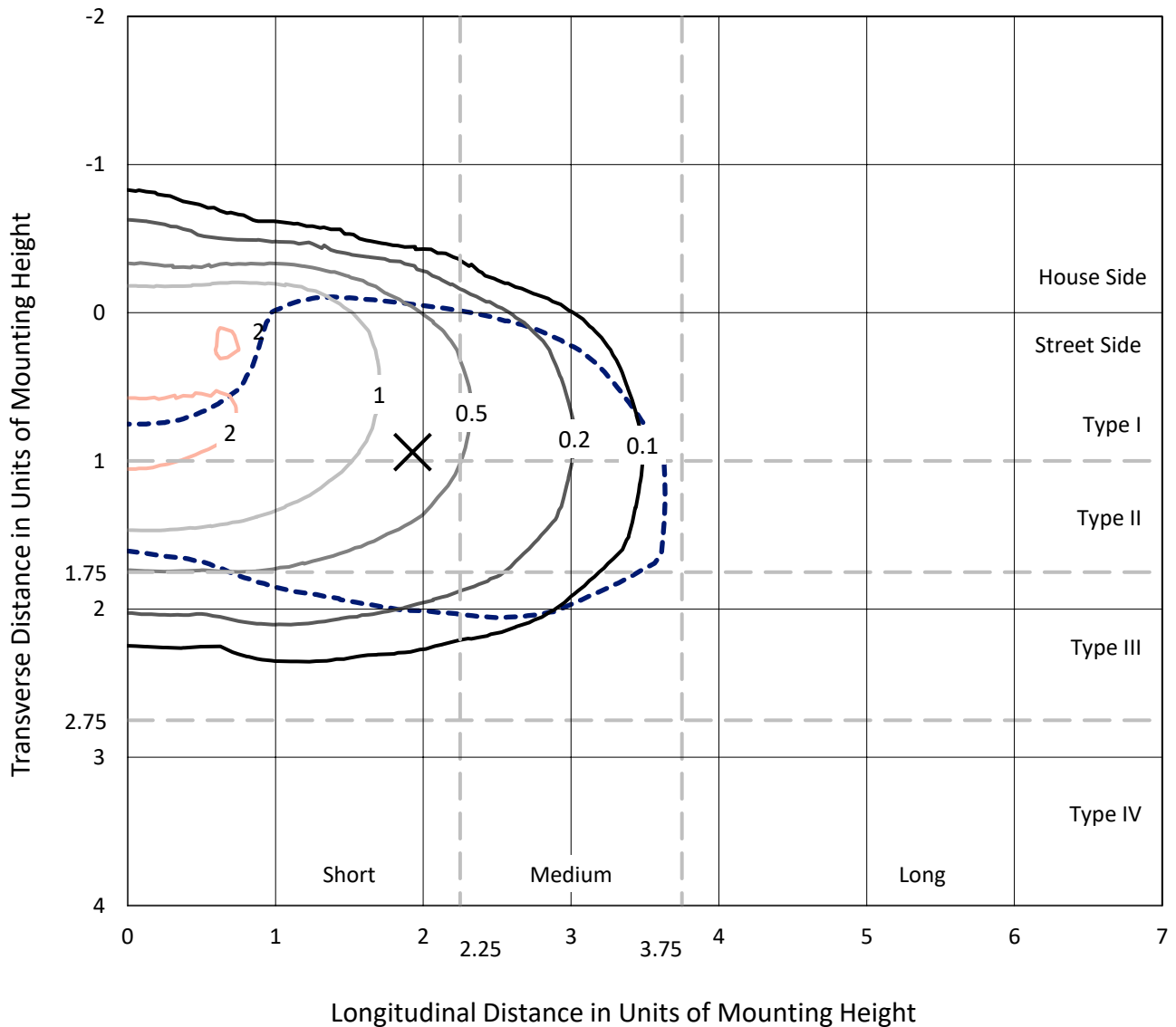
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

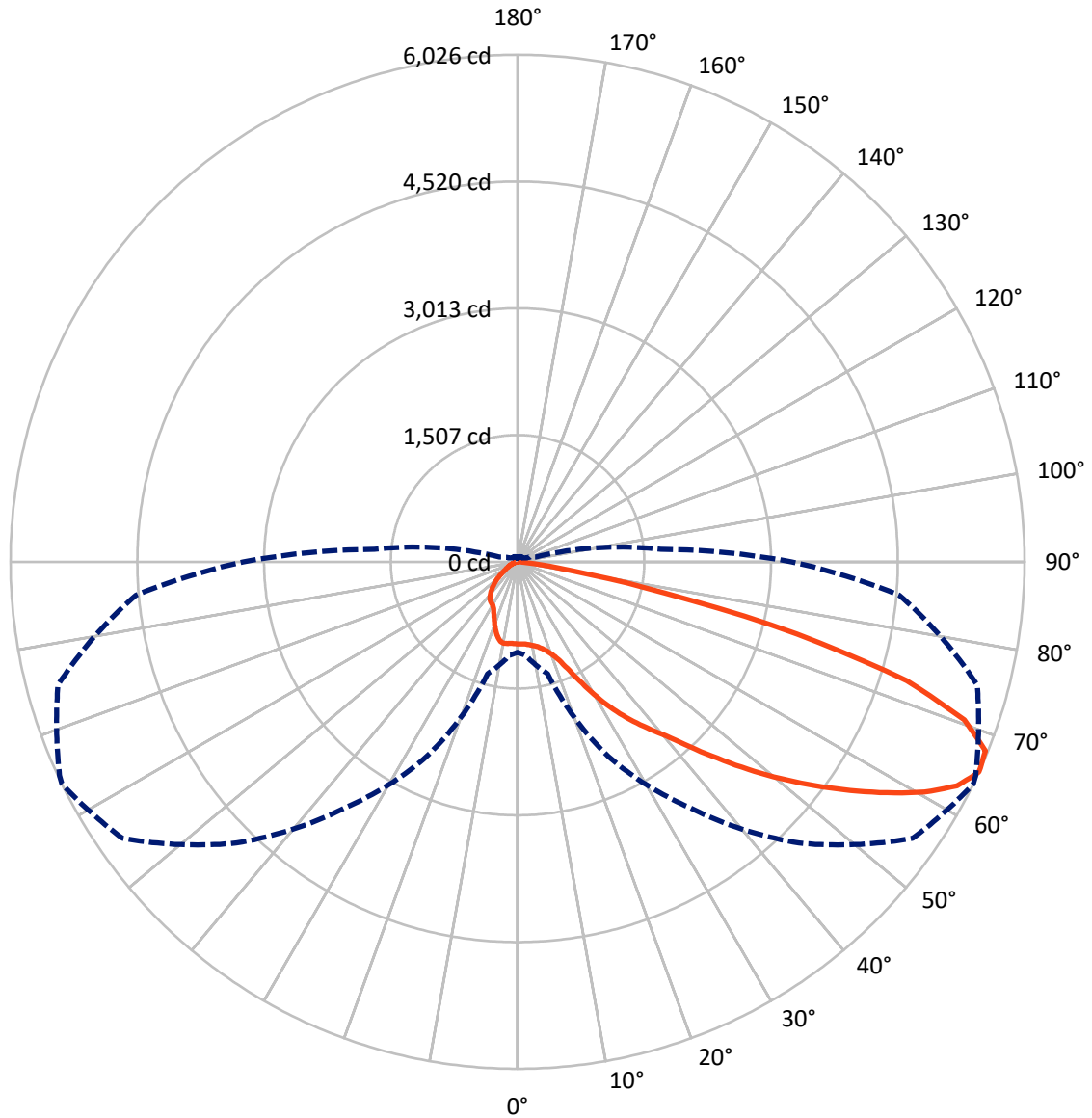
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	1122.9	0.0	1122.9
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	7273.9	0.0	7273.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	8396.8	0.0	8396.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	1.1
10°-20°	244.4	2.9
20°-30°	463.1	5.5
30°-40°	937.1	11.2
40°-50°	1596.3	19.0
50°-60°	2170.9	25.9
60°-70°	2038.6	24.3
70°-80°	816.7	9.7
80°-90°	39.6	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°	8396.8	100.0
0°-180°	8396.8	100.0

Coefficient of Utilization



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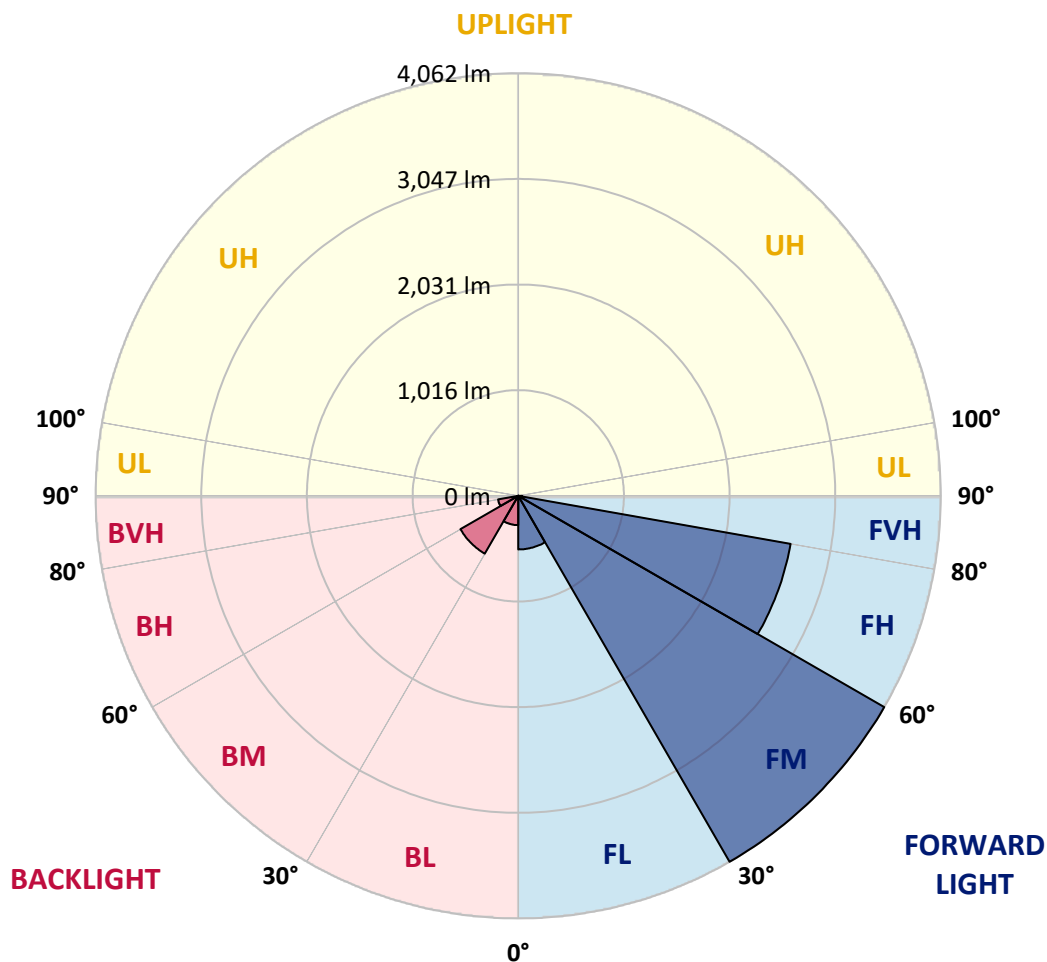
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	515.7	6.1			
FM (30°-60°)	4062.4	48.4			
FH (60°-80°)	2658.2	31.7			G2/5000
FVH (80°-90°)	37.6	0.4			G1/100
BL (0°-30°)	281.9	3.4	B1/500		
BM (30°-60°)	642.0	7.6	B1/1000		
BH (60°-80°)	197.1	2.3	B1/500		G1/500
BVH (80°-90°)	1.9	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°	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6
2.5°	973.2	980.0	978.4	976.6	976.1	977.2	977.7	977.2	977.2	977.2	977.7
5°	954.7	960.3	960.3	964.2	969.9	976.6	981.7	982.9	984.0	985.6	985.1
7.5°	919.2	923.7	927.1	940.0	954.1	972.1	987.3	995.2	996.3	1002.6	1004.8
10°	895.0	900.7	906.3	919.7	940.0	967.1	992.9	1012.1	1015.0	1029.5	1036.3
12.5°	893.9	899.5	906.8	921.5	945.2	973.9	1005.3	1032.9	1038.0	1059.3	1073.5
15°	905.7	912.5	919.2	937.3	962.6	997.4	1031.3	1065.6	1070.6	1101.1	1116.2
17.5°	929.9	938.9	944.0	962.0	989.0	1027.9	1072.4	1111.7	1116.2	1151.7	1170.9
20°	977.7	988.4	990.1	1004.8	1031.3	1072.9	1125.8	1174.8	1180.4	1221.0	1242.3
22.5°	1076.9	1092.0	1078.5	1085.9	1109.5	1151.2	1208.6	1270.5	1278.4	1324.5	1343.7
25°	1251.3	1272.7	1237.8	1225.4	1235.5	1278.9	1350.9	1429.2	1438.2	1475.4	1484.9
27.5°	1594.2	1566.5	1513.6	1461.9	1431.4	1456.2	1537.3	1634.1	1645.3	1681.4	1670.1
30°	1970.8	1946.5	1875.0	1760.2	1688.2	1684.2	1759.1	1867.1	1880.1	1914.4	1880.1
32.5°	2347.9	2324.8	2247.1	2105.9	1980.8	1918.9	1970.8	2090.6	2097.4	2119.3	2068.7
35°	2718.8	2695.1	2617.5	2472.8	2319.2	2178.4	2168.3	2303.4	2305.6	2328.7	2253.3
37.5°	3092.0	3072.3	2989.6	2847.8	2696.3	2502.1	2408.1	2504.9	2507.8	2530.2	2452.0
40°	3358.3	3366.7	3309.8	3200.0	3070.1	2857.8	2677.2	2719.4	2702.5	2740.2	2693.5
42.5°	3586.8	3603.7	3554.2	3499.0	3423.6	3236.6	3010.4	3003.0	2976.1	2996.3	2947.9
45°	3784.4	3798.4	3754.0	3741.0	3739.4	3608.2	3374.6	3330.7	3293.0	3289.0	3231.1
47.5°	3857.0	3884.0	3903.2	3946.5	4030.9	3975.8	3751.2	3683.0	3640.8	3609.8	3518.1
50°	3884.5	3913.2	3978.6	4104.7	4304.5	4328.2	4126.0	4049.5	3997.7	3941.4	3806.3
52.5°	3847.4	3898.7	3986.4	4198.7	4488.6	4610.8	4485.8	4418.8	4359.6	4267.9	4067.5
55°	3628.5	3679.6	3859.2	4197.6	4580.3	4808.9	4825.8	4796.0	4729.5	4584.8	4278.7
57.5°	3166.8	3242.9	3527.1	4054.6	4578.7	4979.4	5159.0	5180.3	5106.0	4899.0	4444.7
60°	2527.4	2630.5	2977.2	3737.7	4437.3	5071.7	5451.2	5558.1	5479.2	5208.5	4579.2
62.5°	1763.6	1882.9	2211.1	3241.2	4114.2	5005.3	5664.5	5862.1	5802.4	5485.5	4631.0
65°	1075.7	1114.0	1378.5	2550.5	3564.8	4727.3	5730.4	6026.4	6006.7	5654.9	4554.5
67.5°	716.6	748.7	824.6	1749.0	2767.2	4171.6	5572.7	5997.7	6003.3	5627.4	4274.1
70°	431.7	459.3	508.9	1017.2	1793.4	3301.9	5084.7	5631.9	5664.5	5258.7	3742.7
72.5°	177.8	196.5	241.5	461.0	928.8	2095.7	4049.0	4835.3	4911.3	4421.6	2872.5
75°	100.8	110.3	141.9	231.3	403.0	976.6	2452.5	3432.6	3544.6	3047.5	1728.2
77.5°	67.0	71.4	91.7	149.8	226.8	333.2	1048.2	1788.3	2002.2	1664.5	748.1
80°	45.0	49.0	63.0	100.2	147.5	143.0	333.8	662.6	815.1	571.9	182.3
82.5°	30.4	31.0	45.0	65.9	93.5	69.2	98.5	206.0	258.9	165.5	69.2
85°	17.4	16.9	33.2	38.2	41.6	28.7	29.8	61.9	81.1	69.8	39.4
87.5°	2.3	3.4	12.9	10.1	5.6	6.1	6.1	10.7	15.8	16.9	8.4
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°	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6	976.6
2.5°	977.7	977.2	975.5	973.9	969.9	967.6	968.7	967.6	967.1	967.6	969.9
5°	985.1	983.4	978.9	973.2	965.3	955.8	949.7	940.6	932.1	927.1	928.2
7.5°	1004.8	1003.1	996.9	981.1	955.8	915.8	879.2	847.2	823.0	808.9	809.4
10°	1036.3	1033.5	1023.9	989.0	922.6	835.4	762.7	702.5	663.1	644.5	642.9
12.5°	1073.5	1070.1	1053.2	981.7	859.6	723.3	623.1	556.2	519.6	503.3	501.5
15°	1117.4	1112.8	1079.6	946.8	767.8	599.5	507.8	457.7	434.0	419.3	419.9
17.5°	1172.0	1164.1	1099.3	894.4	668.2	504.9	436.9	399.1	378.2	364.2	363.1
20°	1242.9	1229.9	1115.1	832.0	576.5	445.3	389.0	357.4	341.6	329.3	327.1
22.5°	1341.9	1323.4	1134.3	764.4	511.7	404.2	353.5	330.5	317.4	303.4	301.1
25°	1464.6	1442.7	1157.8	701.9	467.2	368.7	327.6	308.4	293.3	277.0	275.2
27.5°	1636.3	1596.9	1186.0	650.7	429.0	338.4	304.0	282.6	265.2	251.6	248.8
30°	1827.8	1763.0	1210.8	619.7	394.0	310.2	273.0	251.6	235.3	225.7	224.1
32.5°	2009.0	1921.2	1227.1	606.3	362.5	278.1	239.2	216.2	203.8	201.0	202.6
35°	2180.1	2064.1	1225.4	593.3	334.4	246.0	206.0	182.3	172.8	174.5	174.5
37.5°	2377.2	2216.7	1213.6	573.1	311.3	216.7	177.3	156.5	148.0	148.6	150.9
40°	2606.3	2392.9	1206.3	534.7	286.0	189.7	153.6	136.7	130.6	128.3	127.8
42.5°	2850.5	2563.4	1207.4	491.4	254.4	165.5	137.4	123.3	117.7	115.9	115.4
45°	3095.9	2726.1	1209.1	446.4	221.2	146.9	125.6	113.7	110.3	108.0	108.0
47.5°	3326.7	2864.6	1177.6	398.0	188.6	132.8	115.9	108.0	105.3	102.4	102.4
50°	3541.8	2956.9	1101.6	341.6	162.7	121.6	108.6	103.0	100.2	97.4	97.4
52.5°	3709.0	2971.6	976.1	283.7	144.6	113.2	104.1	99.1	95.7	92.9	92.4
55°	3783.3	2879.8	797.7	229.7	130.6	105.8	99.6	94.6	90.6	87.8	87.2
57.5°	3764.1	2686.7	622.0	184.6	117.1	98.5	94.0	90.6	86.1	81.6	81.1
60°	3670.1	2428.3	468.9	153.6	104.7	90.6	87.8	85.0	78.8	72.1	70.9
62.5°	3507.4	2103.6	334.4	127.2	91.2	81.6	80.5	78.2	69.2	56.9	55.8
65°	3258.7	1709.0	225.2	105.8	78.2	71.4	72.1	68.1	56.3	42.2	41.1
67.5°	2895.0	1249.7	144.1	86.7	65.3	59.7	60.3	58.0	47.9	36.0	34.3
70°	2431.7	827.5	94.0	65.9	52.4	46.1	49.5	50.1	40.5	29.3	28.2
72.5°	1782.7	488.6	65.9	49.0	38.2	32.1	40.5	41.6	32.7	21.9	20.8
75°	1016.1	232.0	49.5	35.5	23.7	22.5	31.6	31.6	22.5	14.7	13.5
77.5°	426.7	96.9	34.8	23.1	13.5	12.9	21.4	19.7	11.3	6.8	6.8
80°	123.3	43.4	18.6	11.3	5.6	5.0	8.4	6.1	2.8	1.1	1.1
82.5°	48.4	19.2	7.3	4.5	2.3	2.3	1.1	0.0	0.0	0.0	0.0
85°	28.7	7.9	3.4	1.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.3	1.6	1.1	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)