

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: P968733

Luminaire Tested: **NAV-SB5C-727-U-T4W-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968733  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-727-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27704.7 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

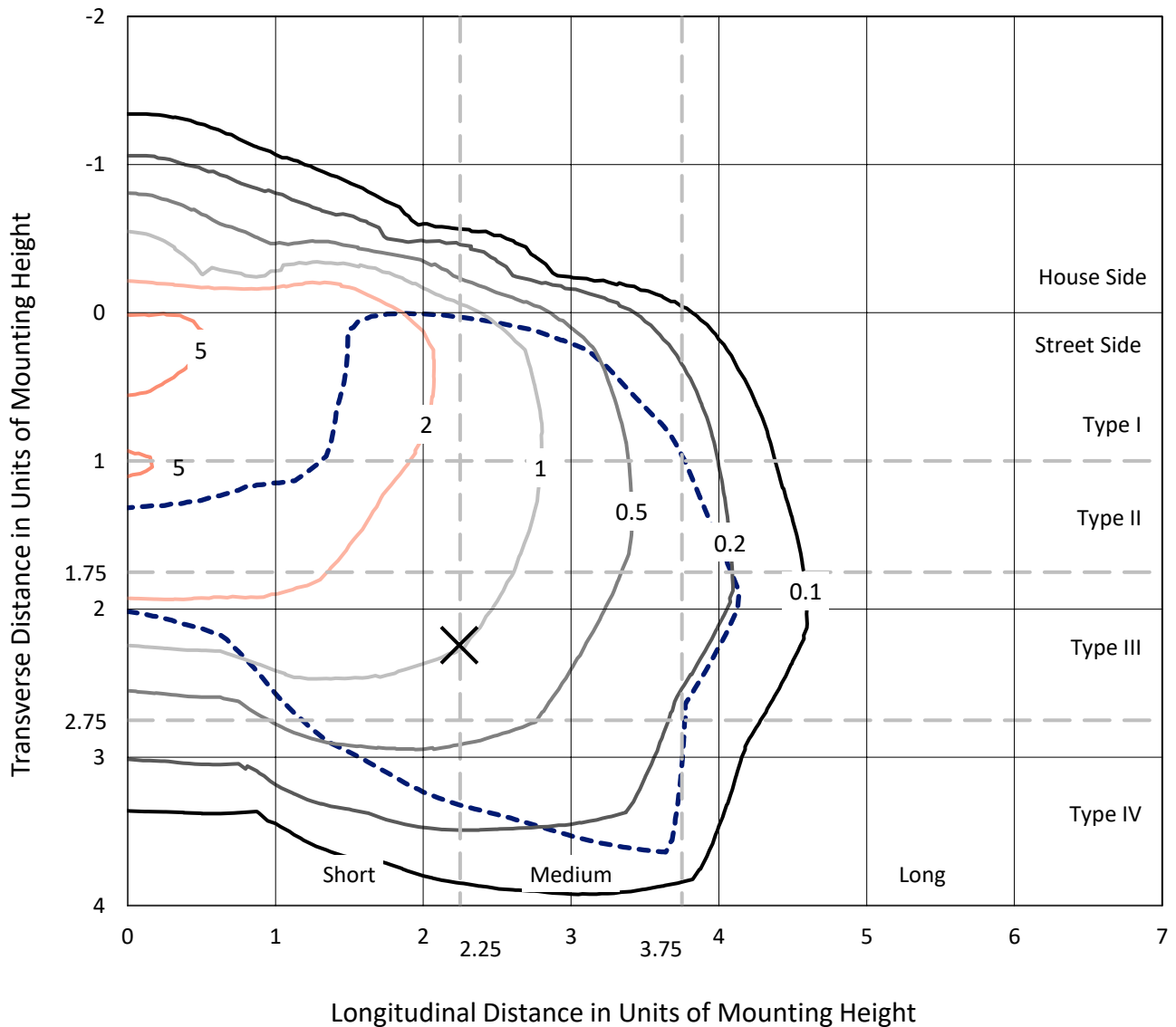
Input Watts (W): 249.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

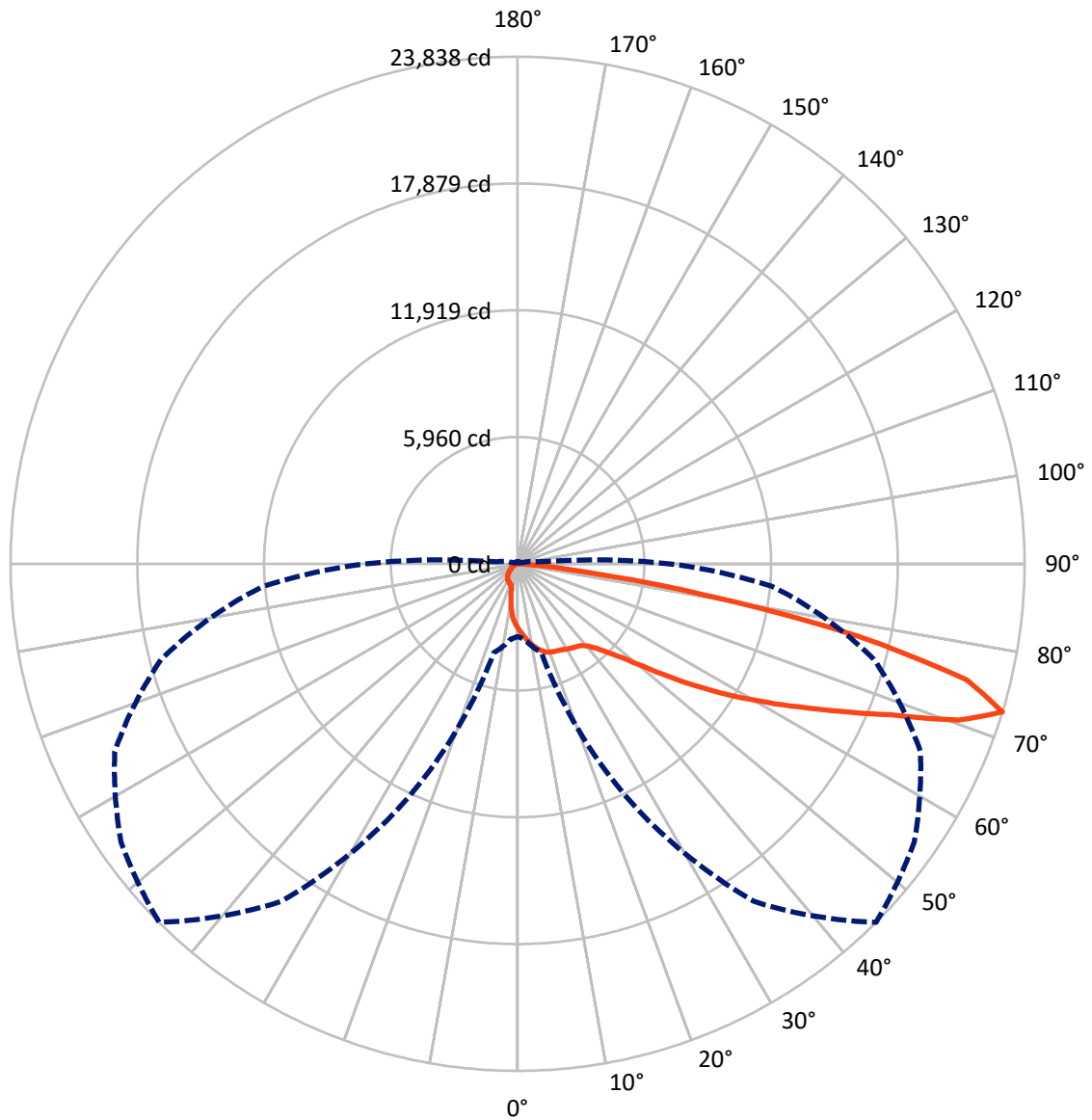
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2911.0	0.0	2911.0
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	24793.7	0.0	24793.7
	% Fixture	89.5	0.0	89.5
<b>Total</b>	Lumens	27704.7	0.0	27704.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	286.0	1.0
10°-20°	835.8	3.0
20°-30°	1372.5	5.0
30°-40°	1946.5	7.0
40°-50°	3217.3	11.6
50°-60°	5779.5	20.9
60°-70°	8025.2	29.0
70°-80°	5821.2	21.0
80°-90°	420.8	1.5
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°	27704.7	100.0
0°-180°	27704.7	100.0

**Coefficient of Utilization**

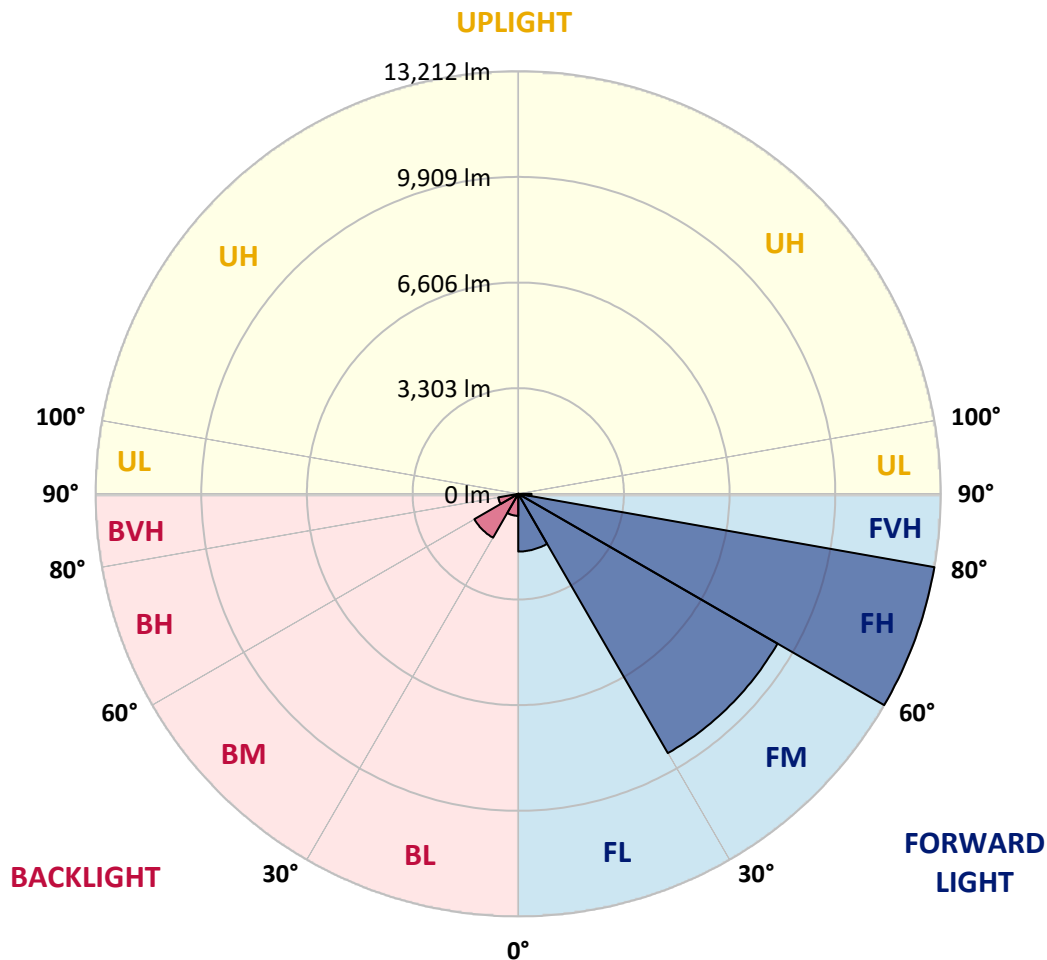


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1804.7	6.5			
FM (30°-60°)	9360.1	33.8			
FH (60°-80°)	13211.6	47.7			G5
FVH (80°-90°)	417.3	1.5			G3/500
BL (0°-30°)	689.5	2.5	B2/1000		
BM (30°-60°)	1583.2	5.7	B2/2500		
BH (60°-80°)	634.8	2.3	B2/1000		G2/1000
BVH (80°-90°)	3.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G5**  
 Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1
2.5°	3315.0	3320.7	3316.9	3294.1	3256.3	3235.5	3224.2	3186.4	3161.8	3118.4	3073.0
5°	3619.5	3642.1	3628.9	3583.5	3511.6	3460.6	3445.4	3367.9	3297.9	3216.7	3122.1
7.5°	3942.8	3954.1	3929.5	3870.9	3774.5	3687.5	3674.3	3566.5	3455.0	3330.1	3201.5
10°	4222.7	4235.9	4198.1	4113.0	4003.3	3895.5	3876.7	3757.4	3625.1	3472.0	3307.5
12.5°	4457.2	4470.4	4421.2	4319.1	4198.1	4086.6	4067.6	3942.8	3797.2	3627.0	3422.8
15°	4634.9	4659.5	4593.3	4483.7	4353.2	4241.6	4232.1	4109.2	3967.4	3778.3	3560.8
17.5°	4739.0	4763.5	4701.2	4568.7	4457.2	4362.6	4351.2	4249.1	4116.8	3935.3	3695.1
20°	4756.0	4778.7	4712.4	4597.1	4504.5	4428.8	4423.2	4349.4	4252.9	4079.0	3840.7
22.5°	4704.9	4733.2	4672.8	4580.1	4515.8	4476.1	4468.5	4426.9	4372.0	4224.5	3976.9
25°	4652.0	4674.6	4629.2	4547.9	4513.9	4510.1	4515.8	4508.3	4496.9	4372.0	4135.7
27.5°	4648.2	4672.8	4621.7	4544.1	4525.3	4564.9	4570.7	4606.6	4616.0	4506.3	4288.9
30°	4680.4	4697.4	4648.2	4566.9	4557.4	4648.2	4650.0	4714.4	4729.5	4619.8	4440.2
32.5°	4750.3	4769.2	4720.0	4600.9	4587.7	4714.4	4720.0	4805.1	4829.7	4740.8	4599.0
35°	4914.8	4937.5	4880.7	4695.4	4648.2	4776.7	4793.8	4894.0	4943.2	4869.4	4763.5
37.5°	5325.2	5259.0	5181.5	4886.5	4786.2	4875.1	4903.5	5020.7	5107.7	5022.6	4960.2
40°	6344.4	6136.4	5894.4	5211.7	5028.2	5085.0	5107.7	5224.9	5344.0	5260.8	5230.6
42.5°	7874.3	7628.5	7238.9	5960.6	5393.2	5421.6	5438.6	5540.7	5709.0	5642.8	5650.4
45°	9237.7	9148.8	8751.8	7238.9	6075.9	5936.0	5956.8	6009.7	6257.4	6232.8	6282.0
47.5°	10285.4	10234.3	9927.9	8706.3	7229.4	6565.6	6624.3	6648.9	7006.3	7093.3	7225.6
50°	11090.9	11072.0	10797.8	10011.2	8736.6	7494.2	7515.0	7462.0	7997.2	8212.8	8464.2
52.5°	11851.2	11915.4	11713.1	11223.3	10345.8	8710.1	8706.3	8456.7	9179.1	9504.3	9933.6
55°	12537.6	12560.2	12581.1	12460.0	11964.6	10094.3	10058.4	9650.0	10550.1	10886.7	11351.9
57.5°	13182.4	13191.9	13377.2	13624.9	13649.5	11580.7	11514.5	11024.7	12047.7	12287.9	12573.5
60°	13615.5	13658.9	14050.4	14738.7	15039.4	13114.4	13078.4	12579.2	13571.9	13683.5	13630.6
62.5°	12991.4	13256.1	14243.3	15608.6	16351.8	14814.3	14797.3	14328.4	15175.5	15084.8	14631.0
65°	10516.1	10964.2	12700.2	16196.7	17639.5	16712.9	16737.5	16238.4	16822.6	16527.6	15444.1
67.5°	7356.1	7828.8	9882.5	16244.0	19078.6	18942.5	19084.4	18301.5	18571.9	17910.0	15637.0
70°	5086.9	5330.8	6667.8	15226.6	20200.1	22013.5	22009.7	20835.4	20311.6	18539.7	14653.6
72.5°	3420.8	3547.6	4330.4	12079.9	19375.6	23838.4	23728.7	22771.8	20897.8	17338.9	11972.1
75°	1442.9	1535.6	2004.5	6788.8	15328.8	21809.3	21512.4	20124.4	18568.1	13653.3	7469.6
77.5°	457.7	497.3	790.5	2430.0	8443.4	16393.3	16079.5	12567.8	12444.9	6849.4	2730.7
80°	217.5	253.4	444.4	975.8	3322.5	8916.3	8872.7	5701.5	5353.5	1849.4	548.4
82.5°	94.5	111.5	245.8	521.9	1486.4	3180.7	3245.0	1940.2	1605.5	701.6	168.3
85°	30.2	39.7	113.5	240.2	627.8	790.5	780.9	461.5	646.8	382.0	58.6
87.5°	0.0	0.0	37.8	54.8	64.3	45.4	51.0	39.7	179.7	105.9	20.8
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°	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1	3035.1
2.5°	3050.2	3020.0	2967.1	2917.9	2874.4	2830.8	2804.4	2766.6	2762.8	2762.8	2772.2
5°	3071.0	3021.9	2927.3	2827.1	2711.7	2602.1	2492.4	2386.5	2352.5	2327.9	2339.3
7.5°	3131.6	3054.0	2904.6	2713.6	2494.2	2254.1	2085.8	1904.2	1834.3	1796.5	1802.2
10°	3218.5	3112.6	2885.7	2551.0	2195.4	1868.4	1628.2	1431.5	1355.9	1323.7	1323.7
12.5°	3315.0	3184.5	2851.7	2348.7	1868.4	1476.9	1242.4	1151.7	1140.3	1140.3	1140.3
15°	3430.4	3271.5	2793.0	2110.4	1526.0	1168.7	1085.5	1089.3	1100.5	1108.1	1108.1
17.5°	3549.5	3364.2	2700.4	1843.8	1223.5	1051.4	1053.3	1059.0	1068.5	1076.0	1076.0
20°	3678.1	3456.8	2577.5	1560.2	1049.5	1017.4	1023.1	1028.7	1036.3	1040.1	1041.9
22.5°	3816.1	3543.8	2431.9	1282.2	990.9	989.0	990.9	996.6	1006.0	1006.0	1009.8
25°	3963.6	3640.3	2265.5	1079.7	960.6	960.6	964.4	968.2	975.8	975.8	977.6
27.5°	4114.9	3729.2	2089.6	973.9	934.2	932.2	932.2	938.0	941.8	943.6	945.6
30°	4281.3	3833.1	1913.8	951.2	913.4	903.9	898.2	902.0	905.8	907.7	911.4
32.5°	4451.5	3933.3	1756.7	960.6	892.6	875.6	856.6	852.9	852.9	860.4	866.1
35°	4640.6	4043.0	1635.7	992.8	881.2	833.9	803.7	786.7	788.5	799.9	805.5
37.5°	4867.5	4175.4	1546.8	1021.2	873.6	786.7	737.5	716.7	703.5	716.7	712.9
40°	5164.5	4370.2	1482.6	1043.9	864.2	731.8	665.6	631.6	607.0	614.6	610.8
42.5°	5601.2	4676.6	1458.0	1045.7	843.4	667.6	591.9	546.5	510.6	512.5	504.9
45°	6214.0	5160.7	1584.6	1021.2	798.1	597.6	514.3	453.9	431.1	425.5	417.9
47.5°	7053.5	5866.0	1877.8	970.1	731.8	529.5	438.7	387.7	370.6	361.2	355.5
50°	8178.7	6771.8	2203.0	913.4	665.6	465.1	376.3	344.2	332.8	323.4	321.4
52.5°	9483.5	7690.9	2469.7	856.6	599.4	408.5	336.6	317.6	308.2	300.6	298.8
55°	10680.6	8324.3	2454.6	796.1	535.2	363.1	308.2	296.9	285.6	278.0	274.2
57.5°	11425.7	8413.2	2023.5	729.9	461.5	327.2	281.8	274.2	261.0	251.5	249.6
60°	11767.9	7906.4	1418.3	643.0	387.7	293.2	253.4	249.6	232.6	219.4	215.6
62.5°	11830.3	6964.7	945.6	535.2	323.4	261.0	225.0	219.4	196.7	173.9	162.7
65°	11577.0	5618.2	654.3	417.9	276.1	226.9	192.9	181.5	156.9	134.3	126.7
67.5°	10775.1	3944.7	455.7	300.6	234.5	179.7	153.1	149.3	130.5	111.5	105.9
70°	9305.8	2248.4	304.4	225.0	185.3	122.9	121.1	124.8	105.9	90.8	83.2
72.5°	7134.9	1028.7	189.1	164.5	126.7	83.2	96.5	98.3	81.3	68.1	60.5
75°	4200.0	440.6	119.1	105.9	64.3	54.8	70.0	71.9	54.8	43.5	37.8
77.5°	1429.7	166.5	75.6	62.4	32.2	30.2	45.4	45.4	30.2	17.0	13.2
80°	325.2	62.4	37.8	24.6	15.2	13.2	15.2	13.2	7.6	1.8	0.0
82.5°	92.7	24.6	15.2	9.4	5.6	5.6	1.8	0.0	0.0	0.0	0.0
85°	26.4	11.4	3.8	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.4	1.8	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)