

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: P885184

Luminaire Tested: **NAV-SB6B-835-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P885184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6B-835-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

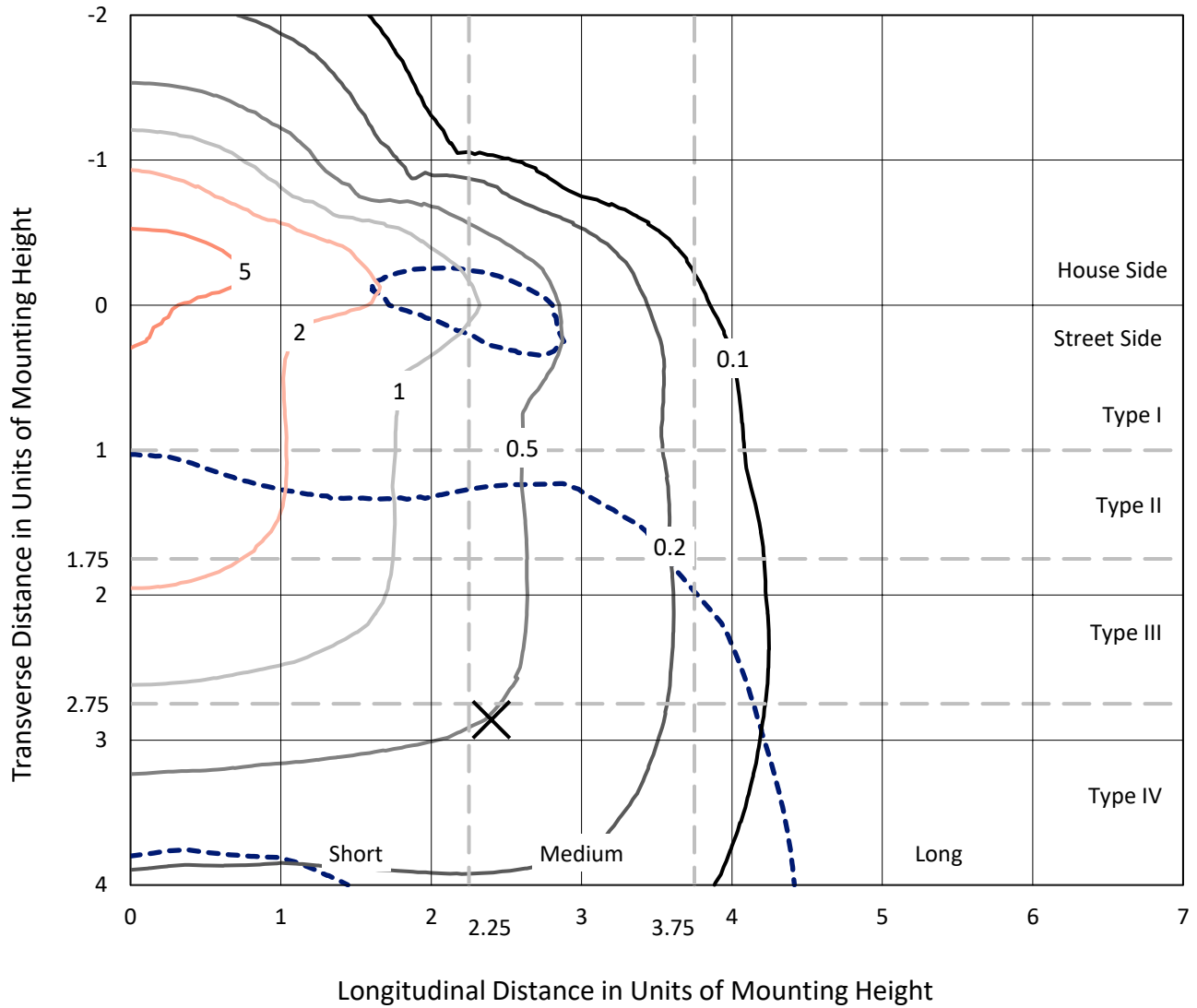
Lumens per Lamp: N/A  
Luminaire Lumens: 28586 lumens  
Efficiency: N/A  
Efficacy: 129.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 220.4  
Input Voltage (V): 120.0  
Input Current (Ain): 1.838  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

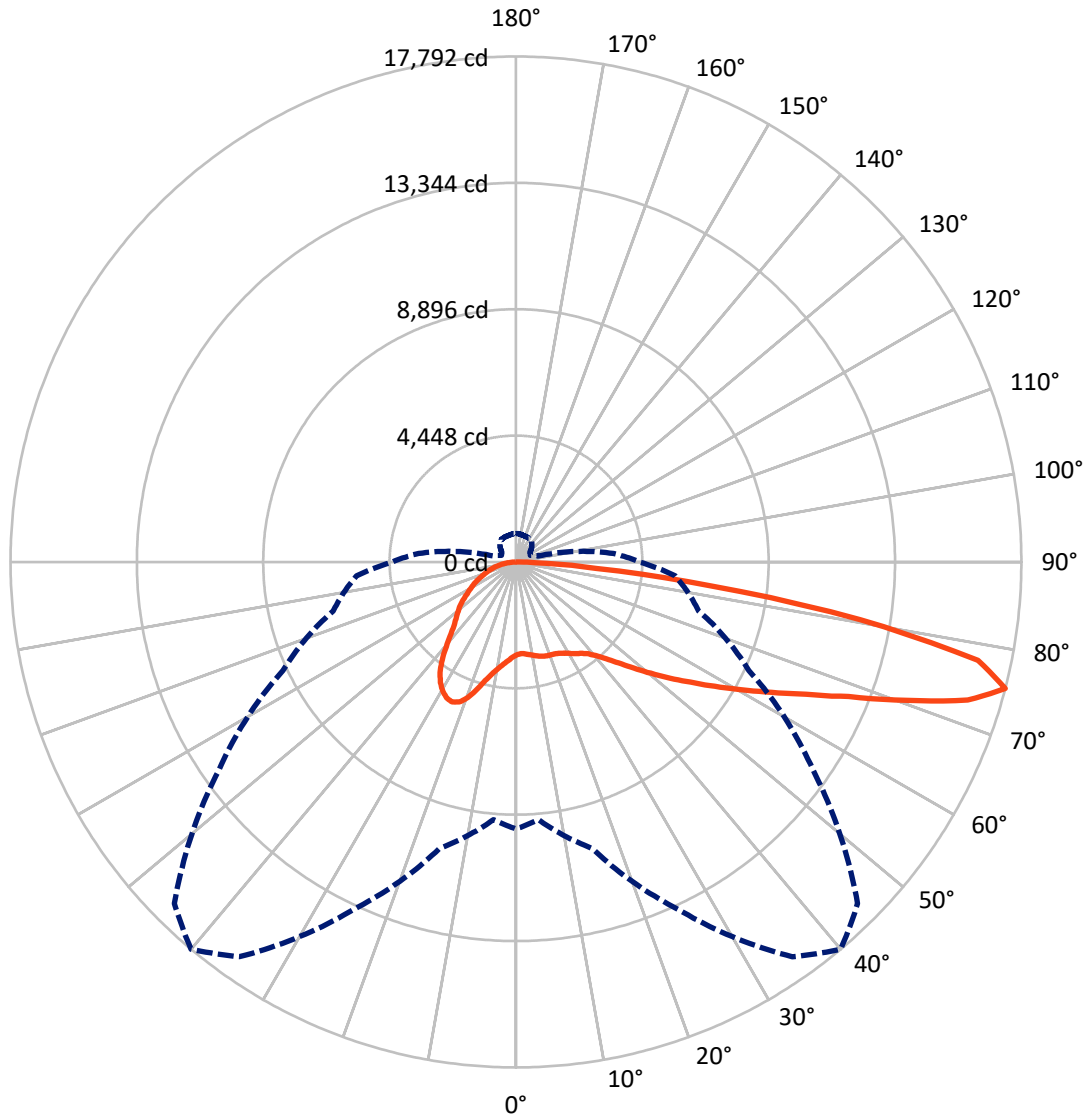
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8856.9	0.0	8856.9
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	19729.1	0.0	19729.1
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	28586.0	0.0	28586.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	326.3	1.1
10°-20°	1095.5	3.8
20°-30°	2000.3	7.0
30°-40°	2837.0	9.9
40°-50°	3830.8	13.4
50°-60°	5153.5	18.0
60°-70°	6540.9	22.9
70°-80°	5936.3	20.8
80°-90°	865.3	3.0
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°	28586.0	100.0
0°-180°	28586.0	100.0



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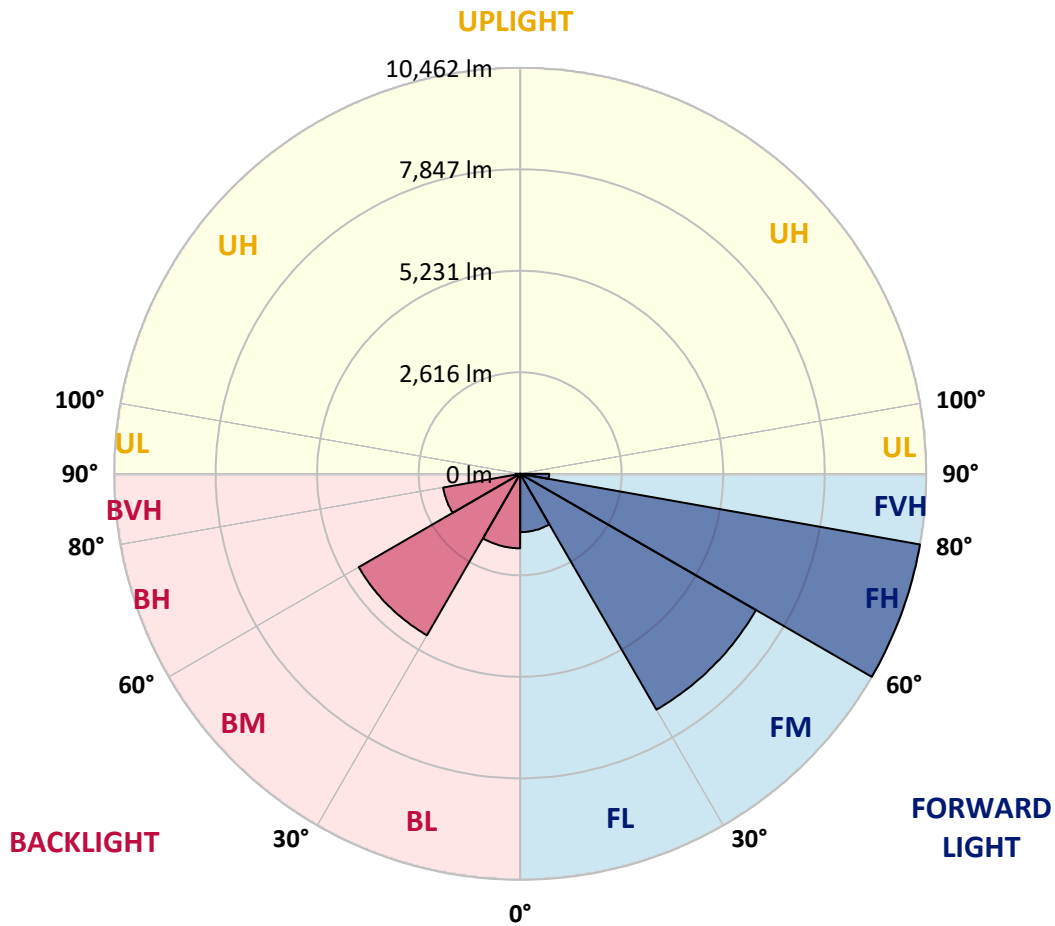
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1503.7	5.3			
FM (30°-60°)	7017.2	24.5			
FH (60°-80°)	10462.0	36.6			G4/12000
FVH (80°-90°)	746.2	2.6			G4/750
BL (0°-30°)	1918.5	6.7	B3/2500		
BM (30°-60°)	4804.1	16.8	B3/5000		
BH (60°-80°)	2015.2	7.0	B3/2500		G3/2500
BVH (80°-90°)	119.1	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8
2.5°	3218.8	3237.0	3232.5	3226.4	3226.4	3227.9	3226.4	3237.0	3247.6	3258.2	3274.9
5°	3252.2	3270.4	3261.3	3253.7	3247.6	3246.1	3241.6	3240.0	3246.1	3259.8	3282.5
7.5°	3317.4	3335.6	3321.9	3308.3	3296.1	3290.1	3284.0	3274.9	3270.4	3277.9	3309.8
10°	3390.1	3408.3	3391.7	3367.4	3347.7	3340.1	3334.0	3324.9	3318.9	3323.4	3358.3
12.5°	3462.9	3481.1	3458.4	3425.0	3399.2	3394.7	3387.1	3384.1	3382.6	3381.0	3415.9
15°	3531.1	3546.3	3517.5	3478.1	3450.8	3443.2	3435.6	3440.2	3447.8	3456.9	3496.3
17.5°	3584.2	3599.4	3556.9	3505.4	3479.6	3476.6	3472.0	3487.2	3508.4	3531.1	3579.7
20°	3632.7	3647.9	3593.3	3523.6	3493.2	3493.2	3494.8	3526.6	3556.9	3590.3	3657.0
22.5°	3701.0	3713.1	3646.4	3550.9	3506.9	3509.9	3522.0	3553.9	3591.8	3637.3	3729.8
25°	3802.5	3811.6	3729.8	3602.4	3552.4	3561.5	3572.1	3587.2	3623.6	3676.7	3801.0
27.5°	3966.3	3973.9	3866.2	3693.4	3617.6	3632.7	3647.9	3637.3	3654.0	3699.4	3858.6
30°	4196.7	4201.3	4064.8	3835.9	3728.2	3735.8	3738.9	3694.9	3663.0	3699.4	3899.6
32.5°	4469.6	4468.1	4305.9	4008.7	3854.1	3846.5	3820.7	3734.3	3660.0	3691.9	3936.0
35°	4892.7	4876.0	4666.7	4251.3	3996.6	3949.6	3889.0	3778.3	3675.2	3684.3	3967.8
37.5°	5593.1	5541.6	5252.0	4648.6	4208.9	4089.1	3999.6	3849.5	3708.5	3681.2	4005.7
40°	6383.0	6317.9	5999.5	5192.9	4527.3	4334.7	4190.7	3951.1	3763.1	3694.9	4061.8
42.5°	7320.0	7227.5	6884.9	5834.2	4930.6	4651.6	4434.8	4080.0	3843.5	3738.9	4137.6
45°	8470.8	8348.0	7862.8	6557.4	5438.5	5067.0	4777.4	4275.6	3966.3	3823.8	4251.3
47.5°	9633.7	9664.0	8974.2	7385.2	6048.0	5579.5	5206.5	4569.7	4145.2	3960.2	4434.8
50°	10869.4	10890.6	10079.5	8302.5	6739.3	6158.7	5688.6	4898.7	4393.8	4154.3	4709.2
52.5°	11833.7	11836.7	11083.2	9262.2	7459.5	6795.4	6208.7	5274.7	4681.9	4412.0	5074.6
55°	12437.1	12429.5	11786.7	10170.4	8287.3	7464.1	6784.8	5702.3	5033.7	4715.3	5534.0
57.5°	12875.3	12852.5	12271.8	10951.2	9169.8	8254.0	7436.8	6187.5	5449.1	5076.1	6138.9
60°	13042.0	13028.4	12600.8	11625.9	10097.6	9127.3	8188.8	6730.2	5920.6	5502.2	6916.7
62.5°	13105.7	13131.5	12923.8	12279.4	11090.7	10094.6	9015.1	7379.2	6451.3	5984.3	7737.0
65°	13330.1	13377.1	13334.7	13134.5	12212.7	11227.2	10111.3	8150.9	7030.4	6501.3	8593.6
67.5°	13774.3	13821.3	13839.5	14157.9	13583.3	12638.7	11478.9	9112.1	7708.2	7038.0	9238.0
70°	13763.7	13750.1	14071.5	14972.1	15299.6	14593.1	13322.5	10294.7	8516.3	7483.8	9319.9
72.5°	12528.1	12418.9	13178.5	14963.0	16727.8	16633.8	15574.0	11820.0	9213.7	7538.4	8087.2
75°	9398.7	9107.6	10449.4	13484.8	16965.9	17792.2	17005.3	12766.1	9048.5	6660.5	5628.0
77.5°	4019.3	3726.7	5308.1	9982.4	15184.4	16632.3	15692.3	11137.7	7223.0	4404.5	2764.0
80°	1052.2	1050.7	1604.1	4525.7	10326.6	12282.4	10775.4	7192.7	4127.0	1573.8	762.6
82.5°	435.1	424.5	589.8	1760.3	5045.8	6892.5	5625.0	3208.2	1490.4	426.0	253.2
85°	162.2	160.7	286.6	608.0	1780.0	2842.8	2057.4	820.2	371.5	207.7	113.7
87.5°	45.5	44.0	62.2	210.7	433.6	658.0	351.7	134.9	104.6	81.9	33.4
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°	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8	3268.8
2.5°	3279.5	3287.0	3300.7	3311.3	3324.9	3340.1	3361.3	3375.0	3388.6	3397.7	3391.7
5°	3293.1	3309.8	3344.7	3379.5	3420.5	3458.4	3502.3	3534.2	3560.0	3567.5	3570.6
7.5°	3323.4	3350.7	3409.9	3469.0	3534.2	3596.3	3660.0	3714.6	3758.6	3775.2	3776.8
10°	3376.5	3412.9	3496.3	3579.7	3666.1	3761.6	3843.5	3922.3	3984.5	4010.3	4011.8
12.5°	3443.2	3488.7	3597.9	3713.1	3832.9	3964.8	4070.9	4167.9	4245.3	4280.1	4280.1
15°	3529.6	3588.8	3728.2	3882.9	4058.8	4242.2	4377.2	4484.8	4571.2	4613.7	4610.7
17.5°	3623.6	3702.5	3878.3	4111.8	4363.5	4604.6	4762.3	4841.1	4930.6	4971.5	4970.0
20°	3714.6	3811.6	4063.3	4402.9	4738.0	4994.2	5121.6	5142.8	5148.9	5153.4	5165.6
22.5°	3808.6	3939.0	4295.3	4769.8	5129.2	5306.6	5324.8	5233.8	5106.4	5047.3	5064.0
25°	3911.7	4084.5	4598.5	5174.7	5465.8	5487.0	5347.5	5126.1	4885.1	4774.4	4791.1
27.5°	4011.8	4252.8	4962.4	5561.3	5708.4	5521.9	5221.7	4907.8	4616.7	4500.0	4513.6
30°	4111.8	4445.4	5364.2	5899.4	5819.0	5435.4	5023.0	4672.8	4380.2	4257.4	4271.0
32.5°	4213.4	4669.8	5826.6	6143.5	5799.3	5252.0	4775.9	4409.0	4151.3	4022.4	4039.1
35°	4328.6	4945.7	6264.8	6276.9	5667.4	4982.1	4449.9	4093.6	3869.2	3766.1	3788.9
37.5°	4478.7	5296.0	6651.4	6310.3	5437.0	4586.4	4045.1	3720.7	3535.7	3488.7	3522.0
40°	4665.2	5717.5	6947.1	6257.2	5095.8	4105.8	3602.4	3343.1	3238.5	3249.1	3285.5
42.5°	4907.8	6189.0	7154.8	6120.7	4621.3	3610.0	3214.3	3099.0	3149.1	3191.5	3230.9
45°	5223.2	6678.7	7283.6	5888.8	4084.5	3190.0	2985.3	3012.6	3050.5	3055.1	3085.4
47.5°	5626.5	7174.5	7368.6	5538.5	3537.2	2894.4	2839.8	2845.8	2838.3	2806.4	2830.7
50°	6129.8	7656.6	7444.4	5074.6	3071.7	2709.4	2636.6	2615.4	2510.8	2407.7	2421.3
52.5°	6703.0	8099.3	7476.2	4498.5	2709.4	2554.7	2436.5	2303.1	2107.5	2075.6	2086.2
55°	7339.7	8508.7	7394.3	3790.4	2404.6	2356.1	2177.2	2016.5	1995.3	1968.0	1972.5
57.5°	8100.9	8949.9	7227.5	3000.5	2092.3	2124.1	1949.8	1968.0	1930.1	1887.6	1880.0
60°	8933.2	9406.3	6934.9	2280.3	1769.4	1834.6	1890.7	1889.1	1878.5	1843.7	1831.5
62.5°	9682.2	9706.5	6358.8	1746.6	1485.8	1610.2	1763.3	1761.8	1752.7	1733.0	1725.4
65°	10128.0	9661.0	5397.5	1375.2	1252.4	1425.2	1590.5	1602.6	1604.1	1602.6	1602.6
67.5°	10049.1	9128.8	4078.5	1094.7	1059.8	1237.2	1419.1	1435.8	1447.9	1451.0	1454.0
70°	9157.6	7959.9	2659.3	873.3	888.5	1071.9	1256.9	1273.6	1284.2	1296.3	1302.4
72.5°	7138.1	5852.4	1522.2	706.5	738.4	929.4	1096.2	1115.9	1122.0	1144.7	1153.8
75°	4349.9	3441.7	821.8	556.4	606.5	794.5	937.0	959.7	970.3	997.6	1000.7
77.5°	2068.0	1490.4	468.5	433.6	488.2	648.9	791.4	817.2	788.4	803.6	791.4
80°	699.0	553.4	295.7	330.5	373.0	506.4	633.8	659.5	598.9	595.9	589.8
82.5°	244.1	224.4	188.0	219.8	241.1	362.4	479.1	512.5	445.8	444.2	423.0
85°	95.5	91.0	104.6	119.8	144.0	222.9	315.4	332.0	274.4	221.4	218.3
87.5°	19.7	21.2	25.8	27.3	44.0	77.3	113.7	139.5	110.7	94.0	86.4
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)