

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: P884444

Luminaire Tested: **NAV-SB5B-735-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884444
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-SB5B-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 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: 28324 lumens
Efficiency: N/A
Efficacy: 155.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

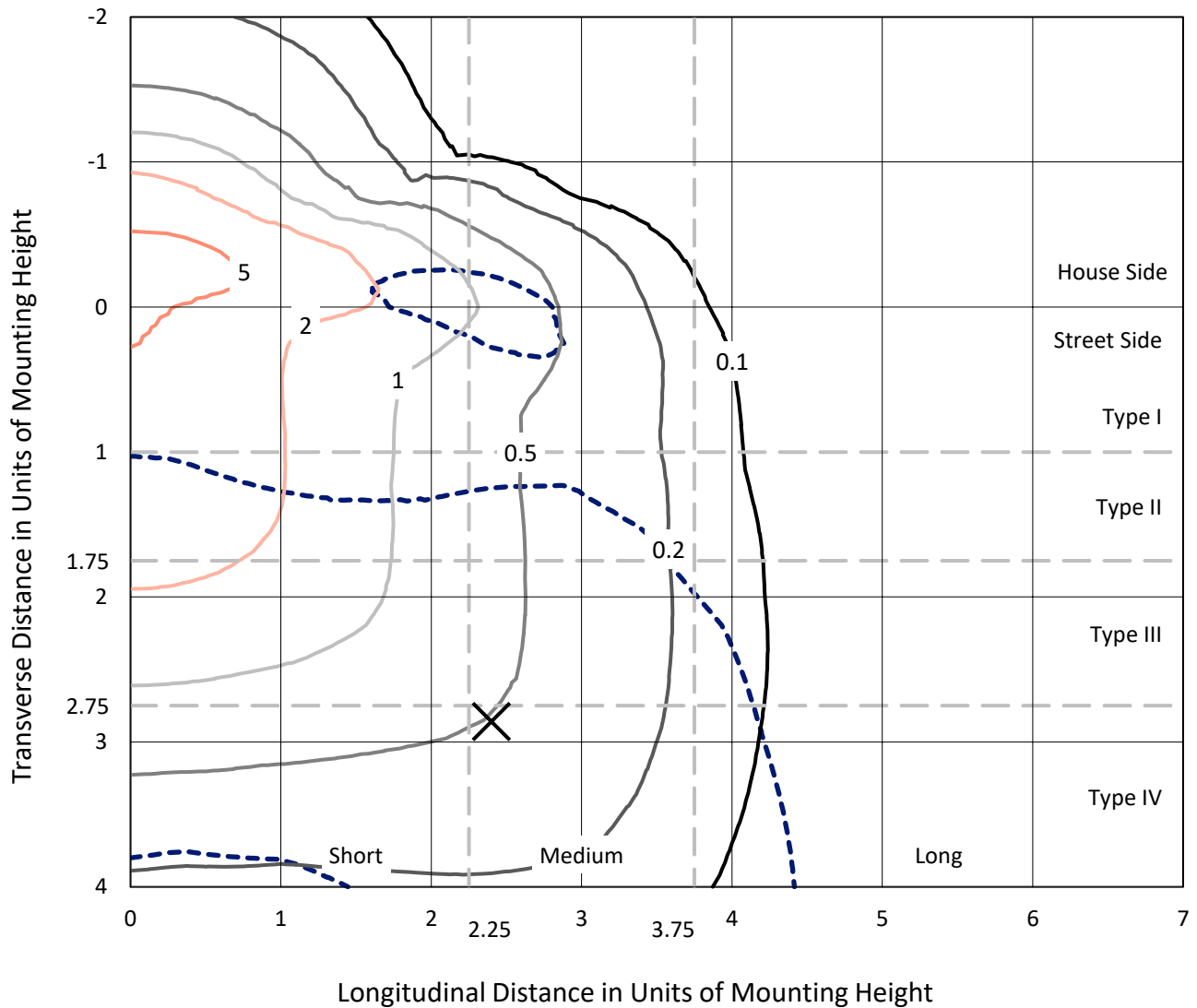
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884444
 CATALOG NUMBER: NAV-SB5B-735-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

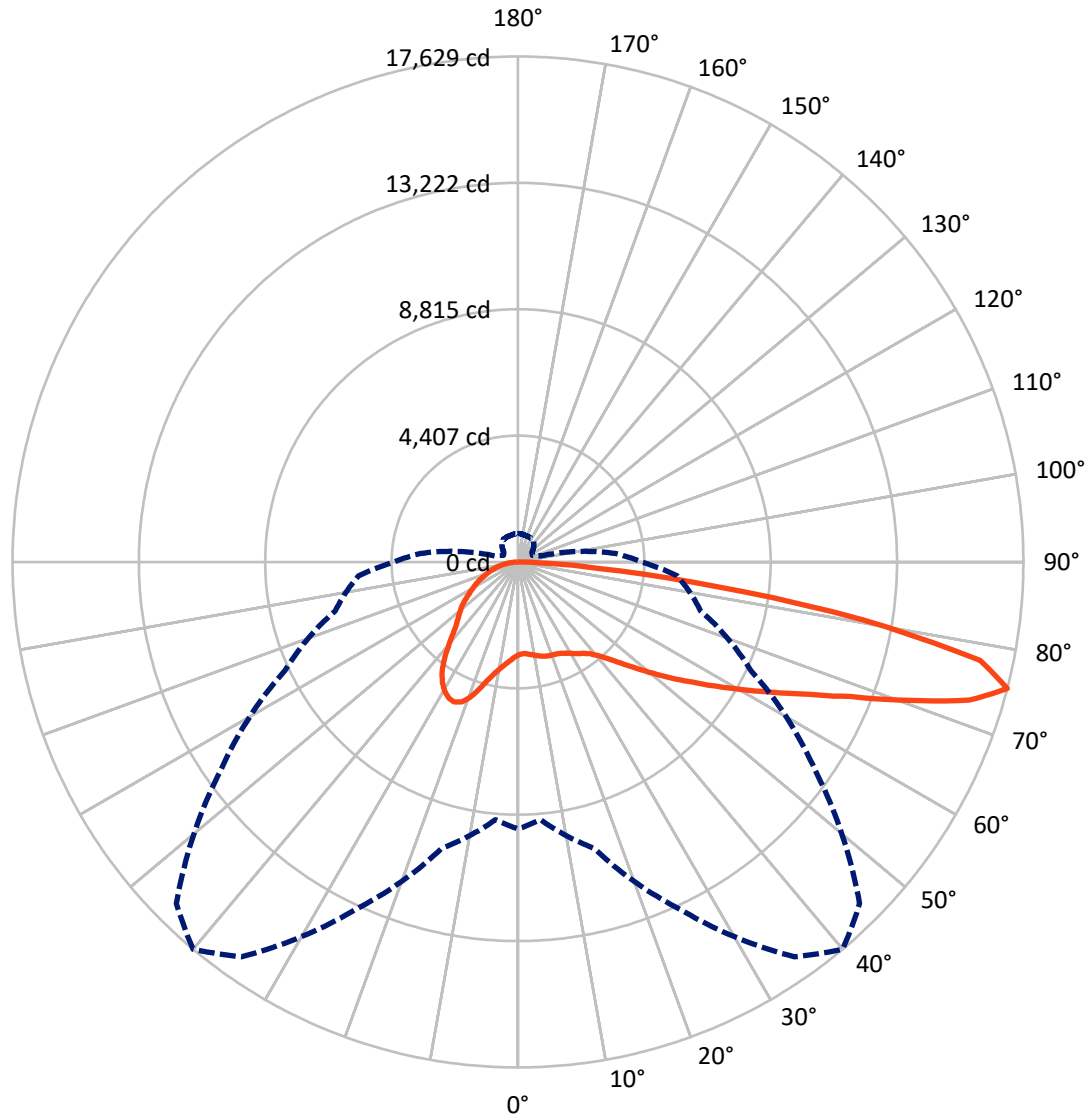
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P884444
CATALOG NUMBER: NAV-SB5B-735-U-SL4

Luminous Intensity Polar Plot



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

REPORT NUMBER: P884444

CATALOG NUMBER: NAV-SB5B-735-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8775.7	0.0	8775.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	19548.3	0.0	19548.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	28324.0	0.0	28324.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	323.3	1.1
10°-20°	1085.5	3.8
20°-30°	1982.0	7.0
30°-40°	2811.0	9.9
40°-50°	3795.7	13.4
50°-60°	5106.2	18.0
60°-70°	6481.0	22.9
70°-80°	5881.9	20.8
80°-90°	857.4	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°	28324.0	100.0
0°-180°	28324.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884444

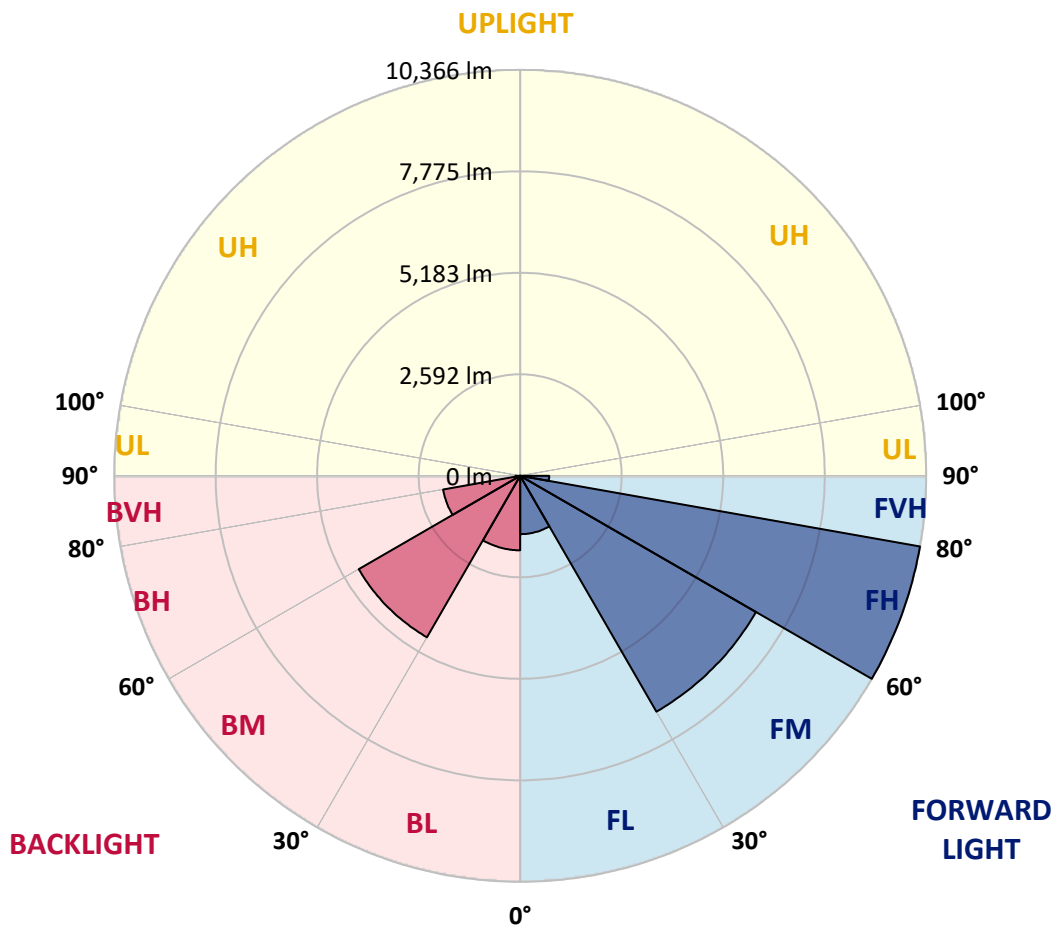
CATALOG NUMBER: NAV-SB5B-735-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1489.9	5.3			
FM (30°-60°)	6952.9	24.5			
FH (60°-80°)	10366.2	36.6			G4/12000
FVH (80°-90°)	739.4	2.6			G4/750
BL (0°-30°)	1900.9	6.7	B3/2500		
BM (30°-60°)	4760.0	16.8	B3/5000		
BH (60°-80°)	1996.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	118.0	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



REPORT NUMBER: P884444

CATALOG NUMBER: NAV-SB5B-735-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9
2.5°	3189.3	3207.3	3202.8	3196.8	3196.8	3198.3	3196.8	3207.3	3217.9	3228.4	3244.9
5°	3222.4	3240.4	3231.4	3223.9	3217.9	3216.4	3211.8	3210.3	3216.4	3229.9	3252.4
7.5°	3287.0	3305.0	3291.5	3277.9	3265.9	3259.9	3253.9	3244.9	3240.4	3247.9	3279.4
10°	3359.1	3377.1	3360.6	3336.5	3317.0	3309.5	3303.5	3294.5	3288.5	3293.0	3327.5
12.5°	3431.2	3449.2	3426.7	3393.6	3368.1	3363.6	3356.1	3353.1	3351.6	3350.1	3384.6
15°	3498.8	3513.8	3485.3	3446.2	3419.2	3411.6	3404.1	3408.6	3416.2	3425.2	3464.2
17.5°	3551.4	3566.4	3524.3	3473.2	3447.7	3444.7	3440.2	3455.2	3476.2	3498.8	3546.9
20°	3599.4	3614.5	3560.4	3491.3	3461.2	3461.2	3462.7	3494.3	3524.3	3557.4	3623.5
22.5°	3667.0	3679.1	3613.0	3518.3	3474.7	3477.7	3489.8	3521.3	3558.9	3603.9	3695.6
25°	3767.7	3776.7	3695.6	3569.4	3519.8	3528.8	3539.3	3554.4	3590.4	3643.0	3766.2
27.5°	3929.9	3937.4	3830.8	3659.5	3584.4	3599.4	3614.5	3603.9	3620.5	3665.5	3823.3
30°	4158.3	4162.8	4027.6	3800.7	3694.1	3701.6	3704.6	3661.0	3629.5	3665.5	3863.8
32.5°	4428.7	4427.2	4266.4	3972.0	3818.8	3811.3	3785.7	3700.1	3626.5	3658.0	3899.9
35°	4847.8	4831.3	4624.0	4212.4	3960.0	3913.4	3853.3	3743.6	3641.5	3650.5	3931.4
37.5°	5541.9	5490.8	5203.9	4605.9	4170.3	4051.6	3963.0	3814.3	3674.5	3647.5	3969.0
40°	6324.5	6259.9	5944.5	5145.3	4485.8	4295.0	4152.3	3914.9	3728.6	3661.0	4024.6
42.5°	7252.9	7161.3	6821.8	5780.7	4885.4	4609.0	4394.1	4042.6	3808.2	3704.6	4099.7
45°	8393.2	8271.5	7790.8	6497.3	5388.6	5020.6	4733.6	4236.4	3929.9	3788.7	4212.4
47.5°	9545.4	9575.4	8891.9	7317.5	5992.5	5528.3	5158.8	4527.8	4107.2	3923.9	4394.1
50°	10769.8	10790.8	9987.1	8226.4	6677.6	6102.2	5636.5	4853.8	4353.6	4116.2	4666.0
52.5°	11725.2	11728.2	10981.6	9177.3	7391.2	6733.2	6151.8	5226.4	4639.0	4371.6	5028.1
55°	12323.1	12315.6	11678.6	10077.2	8211.4	7395.7	6722.6	5650.0	4987.5	4672.0	5483.3
57.5°	12757.2	12734.7	12159.3	10850.9	9085.7	8178.3	7368.6	6130.8	5399.1	5029.6	6082.7
60°	12922.5	12909.0	12485.3	11519.4	10005.1	9043.6	8113.7	6668.6	5866.4	5451.7	6853.3
62.5°	12985.6	13011.1	12805.3	12166.9	10989.1	10002.1	8932.5	7311.5	6392.1	5929.4	7666.1
65°	13207.9	13254.5	13212.4	13014.1	12100.8	11124.3	10018.6	8076.2	6966.0	6441.7	8514.8
67.5°	13648.1	13694.7	13712.7	14028.2	13458.8	12522.9	11373.7	9028.6	7637.5	6973.5	9153.3
70°	13637.6	13624.1	13942.5	14834.9	15159.4	14459.3	13200.4	10200.4	8438.2	7415.2	9234.4
72.5°	12413.2	12305.1	13057.7	14825.9	16574.5	16481.4	15431.3	11711.7	9129.3	7469.3	8013.1
75°	9312.6	9024.1	10353.6	13361.2	16810.4	17629.1	16849.4	12649.1	8965.5	6599.5	5576.4
77.5°	3982.5	3692.6	5259.4	9890.9	15045.2	16479.9	15548.5	11035.7	7156.8	4364.1	2738.6
80°	1042.6	1041.1	1589.4	4484.3	10231.9	12169.9	10676.6	7126.8	4089.2	1559.4	755.6
82.5°	431.2	420.6	584.4	1744.1	4999.5	6829.3	5573.4	3178.8	1476.7	422.1	250.9
85°	160.7	159.2	283.9	602.4	1763.7	2816.8	2038.6	812.7	368.1	205.8	112.7
87.5°	45.1	43.6	61.6	208.8	429.6	652.0	348.5	133.7	103.7	81.1	33.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P884444

CATALOG NUMBER: NAV-SB5B-735-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9	3238.9
2.5°	3249.4	3256.9	3270.4	3281.0	3294.5	3309.5	3330.5	3344.0	3357.6	3366.6	3360.6
5°	3262.9	3279.4	3314.0	3348.6	3389.1	3426.7	3470.2	3501.8	3527.3	3534.8	3537.8
7.5°	3293.0	3320.0	3378.6	3437.2	3501.8	3563.4	3626.5	3680.6	3724.1	3740.6	3742.1
10°	3345.5	3381.6	3464.2	3546.9	3632.5	3727.1	3808.2	3886.4	3948.0	3973.5	3975.0
12.5°	3411.6	3456.7	3564.9	3679.1	3797.7	3928.4	4033.6	4129.7	4206.3	4240.9	4240.9
15°	3497.3	3555.9	3694.1	3847.3	4021.6	4203.3	4337.0	4443.7	4529.3	4571.4	4568.4
17.5°	3590.4	3668.5	3842.8	4074.1	4323.5	4562.4	4718.6	4796.7	4885.4	4925.9	4924.4
20°	3680.6	3776.7	4026.1	4362.6	4694.6	4948.5	5074.7	5095.7	5101.7	5106.2	5118.2
22.5°	3773.7	3902.9	4255.9	4726.1	5082.2	5257.9	5276.0	5185.8	5059.6	5001.0	5017.6
25°	3875.8	4047.1	4556.4	5127.2	5415.7	5436.7	5298.5	5079.2	4840.3	4730.6	4747.2
27.5°	3975.0	4213.9	4916.9	5510.3	5656.0	5471.3	5173.8	4862.8	4574.4	4458.7	4472.2
30°	4074.1	4404.6	5315.0	5845.3	5765.7	5385.6	4977.0	4630.0	4340.0	4218.4	4231.9
32.5°	4174.8	4627.0	5773.2	6087.2	5746.2	5203.9	4732.1	4368.6	4113.2	3985.5	4002.0
35°	4289.0	4900.4	6207.4	6219.4	5615.5	4936.4	4409.2	4056.1	3833.8	3731.6	3754.2
37.5°	4437.7	5247.4	6590.4	6252.4	5387.1	4544.4	4008.0	3686.6	3503.3	3456.7	3489.8
40°	4622.5	5665.0	6883.4	6199.9	5049.1	4068.1	3569.4	3312.5	3208.8	3219.4	3255.4
42.5°	4862.8	6132.3	7089.2	6064.7	4578.9	3576.9	3184.8	3070.6	3120.2	3162.3	3201.3
45°	5175.3	6617.5	7216.9	5834.8	4047.1	3160.8	2958.0	2985.0	3022.6	3027.1	3057.1
47.5°	5574.9	7108.7	7301.0	5487.8	3504.8	2867.8	2813.7	2819.8	2812.2	2780.7	2804.7
50°	6073.7	7586.4	7376.1	5028.1	3043.6	2684.6	2612.4	2591.4	2487.8	2385.6	2399.1
52.5°	6641.5	8025.1	7407.7	4457.2	2684.6	2531.3	2414.1	2281.9	2088.2	2056.6	2067.1
55°	7272.5	8430.7	7326.6	3755.7	2382.6	2334.5	2157.3	1998.0	1977.0	1949.9	1954.4
57.5°	8026.6	8867.9	7161.3	2973.0	2073.1	2104.7	1931.9	1949.9	1912.4	1870.3	1862.8
60°	8851.4	9320.1	6871.4	2259.4	1753.1	1817.7	1873.3	1871.8	1861.3	1826.8	1814.7
62.5°	9593.5	9617.5	6300.5	1730.6	1472.2	1595.4	1747.1	1745.6	1736.6	1717.1	1709.6
65°	10035.1	9572.4	5348.1	1362.6	1240.9	1412.1	1575.9	1587.9	1589.4	1587.9	1587.9
67.5°	9957.0	9045.1	4041.1	1084.6	1050.1	1225.8	1406.1	1422.6	1434.7	1437.7	1440.7
70°	9073.7	7886.9	2635.0	865.3	880.3	1062.1	1245.4	1261.9	1272.4	1284.4	1290.4
72.5°	7072.7	5798.7	1508.3	700.1	731.6	920.9	1086.1	1105.7	1111.7	1134.2	1143.2
75°	4310.0	3410.1	814.2	551.3	600.9	787.2	928.4	950.9	961.5	988.5	991.5
77.5°	2049.1	1476.7	464.2	429.6	483.7	643.0	784.2	809.7	781.2	796.2	784.2
80°	692.5	548.3	292.9	327.5	369.6	501.8	627.9	653.5	593.4	590.4	584.4
82.5°	241.9	222.3	186.3	217.8	238.9	359.0	474.7	507.8	441.7	440.2	419.1
85°	94.6	90.1	103.7	118.7	142.7	220.8	312.5	329.0	271.9	219.3	216.3
87.5°	19.5	21.0	25.5	27.0	43.6	76.6	112.7	138.2	109.7	93.1	85.6
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)