

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: P884964

Luminaire Tested: **NAV-SB6A-740-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884964  
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-SB6A-740-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

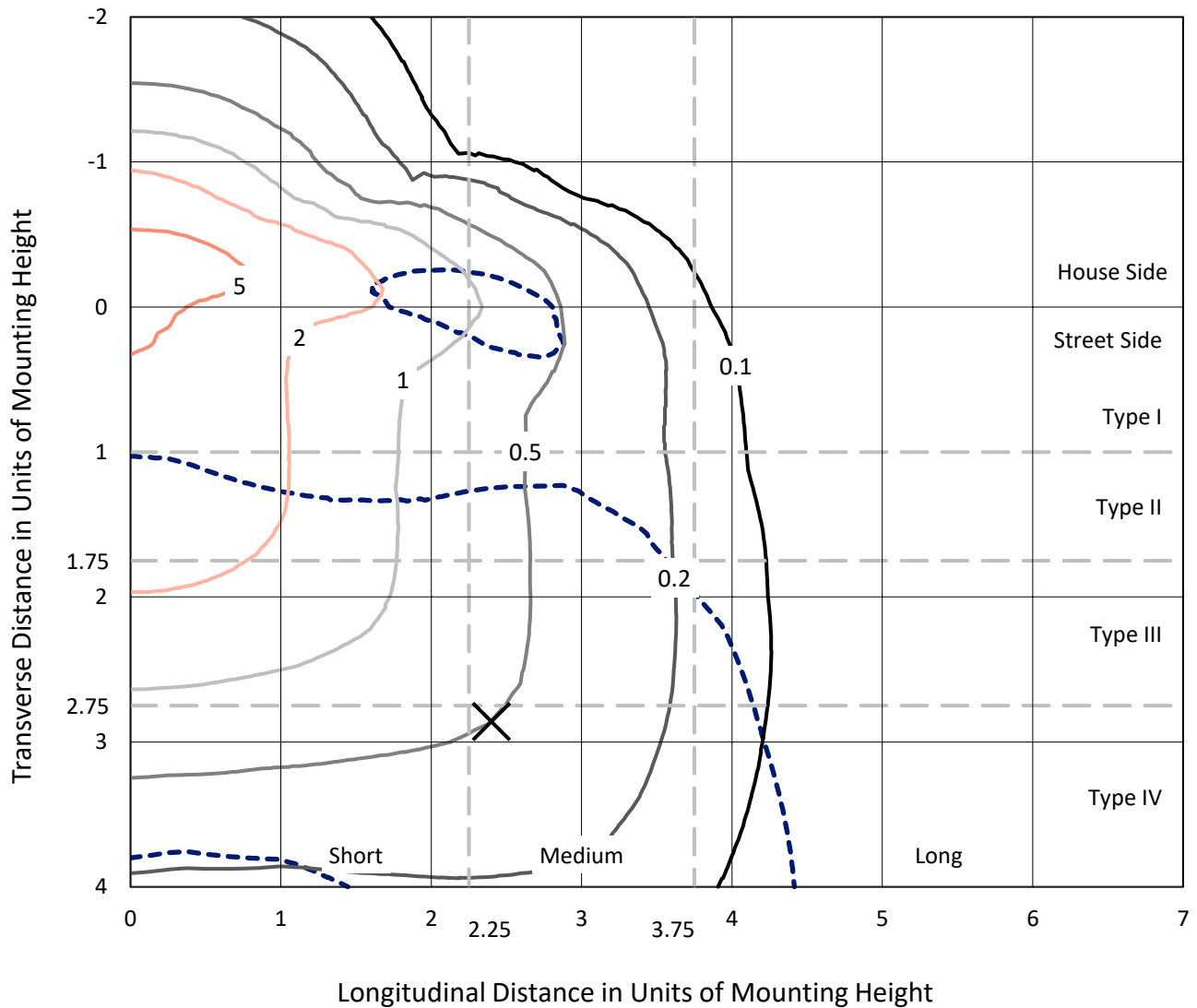
Lumens per Lamp: N/A  
Luminaire Lumens: 29098 lumens  
Efficiency: N/A  
Efficacy: 170.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 170.9  
Input Voltage (V): 120.0  
Input Current (Ain): 1.434  
Voltage Rise (V): NR  
Power Factor: 0.99  
Total Harmonic Distortion (THDi): 11.969  
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

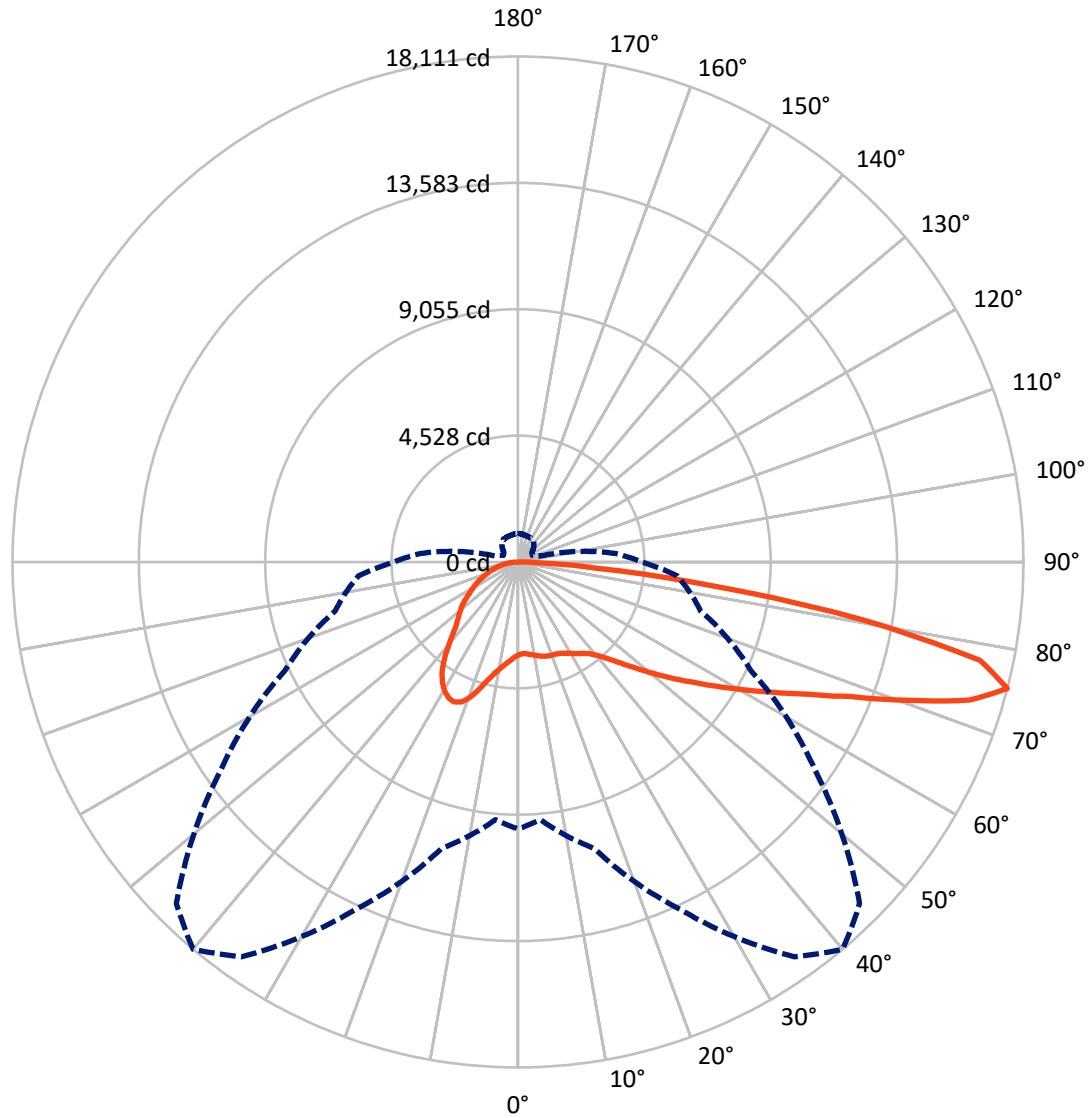
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P884964  
CATALOG NUMBER: NAV-SB6A-740-U-SL4

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P884964

CATALOG NUMBER: NAV-SB6A-740-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9015.5	0.0	9015.5
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	20082.5	0.0	20082.5
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	29098.0	0.0	29098.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.1	1.1
10°-20°	1115.1	3.8
20°-30°	2036.2	7.0
30°-40°	2887.8	9.9
40°-50°	3899.4	13.4
50°-60°	5245.8	18.0
60°-70°	6658.1	22.9
70°-80°	6042.6	20.8
80°-90°	880.8	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°	29098.0	100.0
0°-180°	29098.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P884964

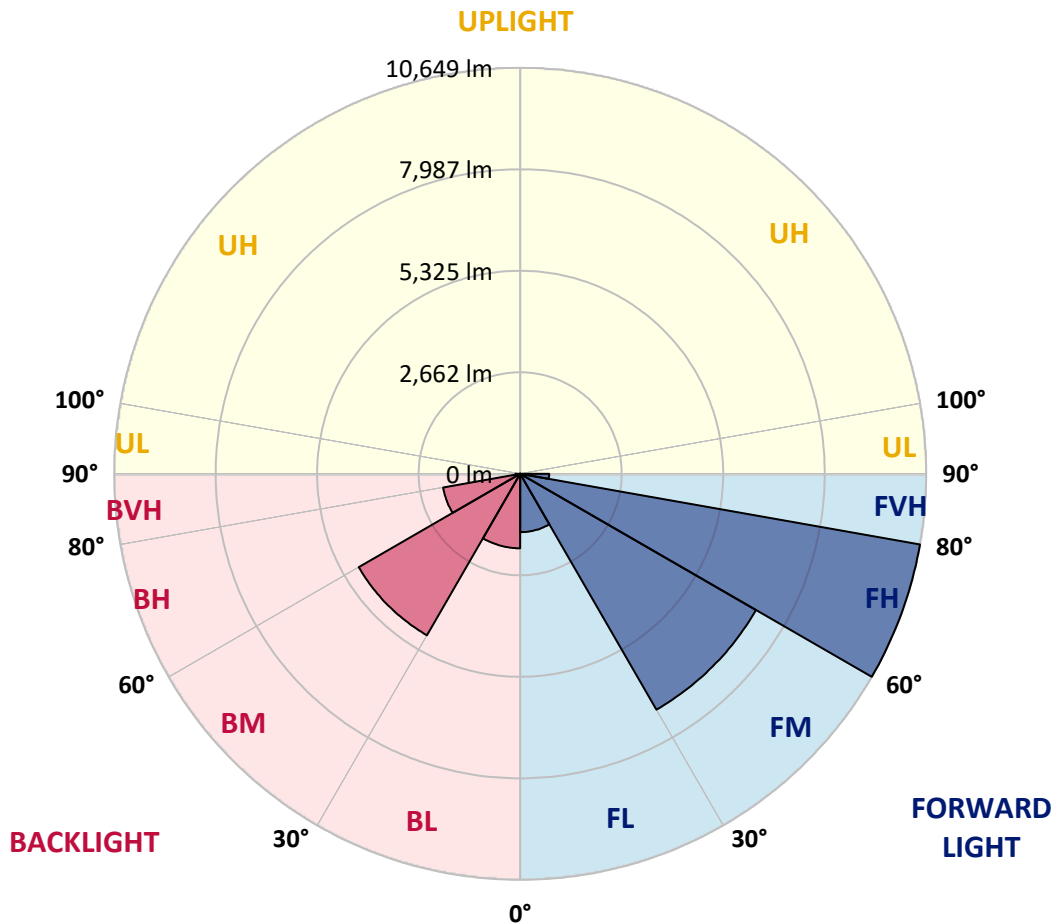
CATALOG NUMBER: NAV-SB6A-740-U-SL4

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1530.6	5.3			
FM (30°-60°)	7142.9	24.5			
FH (60°-80°)	10649.4	36.6			G4/12000
FVH (80°-90°)	759.6	2.6			G5
BL (0°-30°)	1952.8	6.7	B3/2500		
BM (30°-60°)	4890.1	16.8	B3/5000		
BH (60°-80°)	2051.3	7.0	B3/2500		G3/2500
BVH (80°-90°)	121.3	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-G5**

Type IV Medium



REPORT NUMBER: P884964

CATALOG NUMBER: NAV-SB6A-740-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4
2.5°	3276.5	3295.0	3290.4	3284.2	3284.2	3285.7	3284.2	3295.0	3305.8	3316.6	3333.6
5°	3310.4	3328.9	3319.7	3312.0	3305.8	3304.2	3299.6	3298.1	3304.2	3318.1	3341.3
7.5°	3376.8	3395.3	3381.4	3367.5	3355.2	3349.0	3342.8	3333.6	3328.9	3336.7	3369.1
10°	3450.9	3469.4	3452.4	3427.7	3407.6	3399.9	3393.8	3384.5	3378.3	3383.0	3418.5
12.5°	3524.9	3543.5	3520.3	3486.4	3460.1	3455.5	3447.8	3444.7	3443.1	3441.6	3477.1
15°	3594.4	3609.8	3580.5	3540.4	3512.6	3504.9	3497.2	3501.8	3509.5	3518.8	3558.9
17.5°	3648.4	3663.8	3620.6	3568.2	3541.9	3538.8	3534.2	3549.6	3571.2	3594.4	3643.8
20°	3697.8	3713.2	3657.7	3586.7	3555.8	3555.8	3557.3	3589.8	3620.6	3654.6	3722.5
22.5°	3767.2	3779.6	3711.7	3614.5	3569.7	3572.8	3585.1	3617.5	3656.1	3702.4	3796.6
25°	3870.6	3879.9	3796.6	3666.9	3616.0	3625.3	3636.1	3651.5	3688.5	3742.5	3869.1
27.5°	4037.3	4045.0	3935.5	3759.5	3682.4	3697.8	3713.2	3702.4	3719.4	3765.7	3927.7
30°	4271.9	4276.5	4137.6	3904.6	3795.0	3802.7	3805.8	3761.1	3728.7	3765.7	3969.4
32.5°	4549.7	4548.2	4383.0	4080.5	3923.1	3915.4	3889.2	3801.2	3725.6	3758.0	4006.5
35°	4980.3	4963.3	4750.3	4327.5	4068.2	4020.3	3958.6	3846.0	3741.0	3750.3	4038.9
37.5°	5693.3	5640.8	5346.1	4731.8	4284.3	4162.3	4071.3	3918.5	3775.0	3747.2	4077.4
40°	6497.4	6431.0	6106.9	5285.9	4608.3	4412.3	4265.7	4021.9	3830.5	3761.1	4134.6
42.5°	7451.1	7357.0	7008.2	5938.7	5018.9	4734.9	4514.2	4153.1	3912.3	3805.8	4211.7
45°	8622.5	8497.5	8003.7	6674.9	5535.9	5157.8	4863.0	4352.2	4037.3	3892.2	4327.5
47.5°	9806.2	9837.1	9134.9	7517.5	6156.3	5679.4	5299.8	4651.6	4219.4	4031.1	4514.2
50°	11064.1	11085.7	10260.0	8451.2	6860.1	6269.0	5790.5	4986.5	4472.5	4228.7	4793.5
52.5°	12045.6	12048.7	11281.7	9428.1	7593.1	6917.2	6319.9	5369.2	4765.8	4491.1	5165.5
55°	12659.8	12652.1	11997.8	10352.6	8435.8	7597.8	6906.4	5804.4	5123.8	4799.7	5633.1
57.5°	13105.9	13082.7	12491.6	11147.4	9334.0	8401.8	7570.0	6298.3	5546.7	5167.0	6248.9
60°	13275.6	13261.7	12826.5	11834.2	10278.5	9290.8	8335.5	6850.8	6026.7	5600.7	7040.6
62.5°	13340.4	13366.7	13155.2	12499.3	11289.4	10275.4	9176.6	7511.3	6566.8	6091.5	7875.6
65°	13568.9	13616.7	13573.5	13369.8	12431.4	11428.3	10292.4	8296.9	7156.4	6617.8	8747.5
67.5°	14021.1	14068.9	14087.4	14411.5	13826.6	12865.1	11684.5	9275.3	7846.2	7164.1	9403.4
70°	14010.2	13996.4	14323.5	15240.3	15573.6	14854.4	13561.1	10479.1	8668.8	7617.8	9486.8
72.5°	12752.4	12641.3	13414.5	15231.0	17027.4	16931.7	15853.0	12031.7	9378.7	7673.4	8232.1
75°	9567.0	9270.7	10636.6	13726.3	17269.7	18110.8	17309.9	12994.7	9210.5	6779.8	5728.8
77.5°	4091.3	3793.5	5403.2	10161.2	15456.3	16930.2	15973.3	11337.2	7352.4	4483.3	2813.5
80°	1071.1	1069.5	1632.8	4606.8	10511.5	12502.4	10968.4	7321.5	4200.9	1602.0	776.3
82.5°	442.9	432.1	600.4	1791.8	5136.2	7015.9	5725.7	3265.7	1517.1	433.7	257.7
85°	165.1	163.6	291.7	618.9	1811.9	2893.7	2094.3	834.9	378.1	211.4	115.7
87.5°	46.3	44.8	63.3	214.5	441.4	669.8	358.0	137.4	106.5	83.3	34.0
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: P884964

CATALOG NUMBER: NAV-SB6A-740-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4	3327.4
2.5°	3338.2	3345.9	3359.8	3370.6	3384.5	3399.9	3421.5	3435.4	3449.3	3458.6	3452.4
5°	3352.1	3369.1	3404.6	3440.1	3481.7	3520.3	3565.1	3597.5	3623.7	3631.4	3634.5
7.5°	3383.0	3410.7	3470.9	3531.1	3597.5	3660.8	3725.6	3781.1	3825.9	3842.9	3844.4
10°	3437.0	3474.0	3558.9	3643.8	3731.7	3829.0	3912.3	3992.6	4055.8	4082.1	4083.6
12.5°	3504.9	3551.2	3662.3	3779.6	3901.5	4035.8	4143.8	4242.6	4321.3	4356.8	4356.8
15°	3592.8	3653.0	3795.0	3952.4	4131.5	4318.2	4455.6	4565.1	4653.1	4696.3	4693.2
17.5°	3688.5	3768.8	3947.8	4185.5	4441.7	4687.1	4847.6	4927.8	5018.9	5060.5	5059.0
20°	3781.1	3879.9	4136.1	4481.8	4822.9	5083.7	5213.3	5234.9	5241.1	5245.7	5258.1
22.5°	3876.8	4009.5	4372.2	4855.3	5221.0	5401.6	5420.1	5327.5	5197.9	5137.7	5154.7
25°	3981.8	4157.7	4680.9	5267.3	5563.7	5585.3	5443.3	5218.0	4972.6	4859.9	4876.9
27.5°	4083.6	4329.0	5051.3	5660.9	5810.6	5620.8	5315.2	4995.7	4699.4	4580.6	4594.5
30°	4185.5	4525.0	5460.3	6005.1	5923.3	5532.8	5113.0	4756.5	4458.6	4333.6	4347.5
32.5°	4288.9	4753.4	5931.0	6253.5	5903.2	5346.1	4861.5	4488.0	4225.6	4094.4	4111.4
35°	4406.2	5034.3	6377.0	6389.3	5768.9	5071.3	4529.6	4167.0	3938.5	3833.6	3856.8
37.5°	4559.0	5390.8	6770.5	6423.3	5534.3	4668.5	4117.6	3787.3	3599.0	3551.2	3585.1
40°	4748.8	5819.9	7071.5	6369.3	5187.1	4179.3	3666.9	3403.0	3296.5	3307.3	3344.4
42.5°	4995.7	6299.8	7282.9	6230.4	4704.0	3674.6	3271.8	3154.5	3205.5	3248.7	3288.8
45°	5316.7	6798.3	7414.1	5994.2	4157.7	3247.1	3038.8	3066.6	3105.2	3109.8	3140.7
47.5°	5727.3	7303.0	7500.5	5637.7	3600.6	2946.2	2890.6	2896.8	2889.1	2856.7	2881.4
50°	6239.6	7793.8	7577.7	5165.5	3126.8	2757.9	2683.8	2662.2	2555.7	2450.8	2464.7
52.5°	6823.0	8244.4	7610.1	4579.0	2757.9	2600.5	2480.1	2344.3	2145.2	2112.8	2123.6
55°	7471.2	8661.1	7526.8	3858.3	2447.7	2398.3	2216.2	2052.6	2031.0	2003.2	2007.9
57.5°	8246.0	9110.2	7357.0	3054.2	2129.8	2162.2	1984.7	2003.2	1964.6	1921.4	1913.7
60°	9093.2	9574.7	7059.1	2321.2	1801.1	1867.4	1924.5	1923.0	1912.2	1876.7	1864.3
62.5°	9855.6	9880.3	6472.7	1777.9	1512.5	1639.0	1794.9	1793.3	1784.1	1764.0	1756.3
65°	10309.4	9834.0	5494.2	1399.8	1274.8	1450.7	1618.9	1631.3	1632.8	1631.3	1631.3
67.5°	10229.1	9292.3	4151.5	1114.3	1078.8	1259.3	1444.5	1461.5	1473.9	1477.0	1480.0
70°	9321.6	8102.4	2707.0	889.0	904.4	1091.1	1279.4	1296.4	1307.2	1319.5	1325.7
72.5°	7265.9	5957.2	1549.5	719.2	751.6	946.1	1115.8	1135.9	1142.1	1165.2	1174.5
75°	4427.8	3503.3	836.5	566.4	617.3	808.7	953.8	976.9	987.7	1015.5	1018.6
77.5°	2105.1	1517.1	476.9	441.4	496.9	660.5	805.6	831.8	802.5	818.0	805.6
80°	711.5	563.3	300.9	336.4	379.7	515.5	645.1	671.3	609.6	606.5	600.4
82.5°	248.5	228.4	191.4	223.8	245.4	368.9	487.7	521.6	453.7	452.2	430.6
85°	97.2	92.6	106.5	121.9	146.6	226.9	321.0	338.0	279.3	225.3	222.2
87.5°	20.1	21.6	26.2	27.8	44.8	78.7	115.7	142.0	112.7	95.7	88.0
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)