

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: P883934

Luminaire Tested: **NAV-SB4C-735-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883934  
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-SB4C-735-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

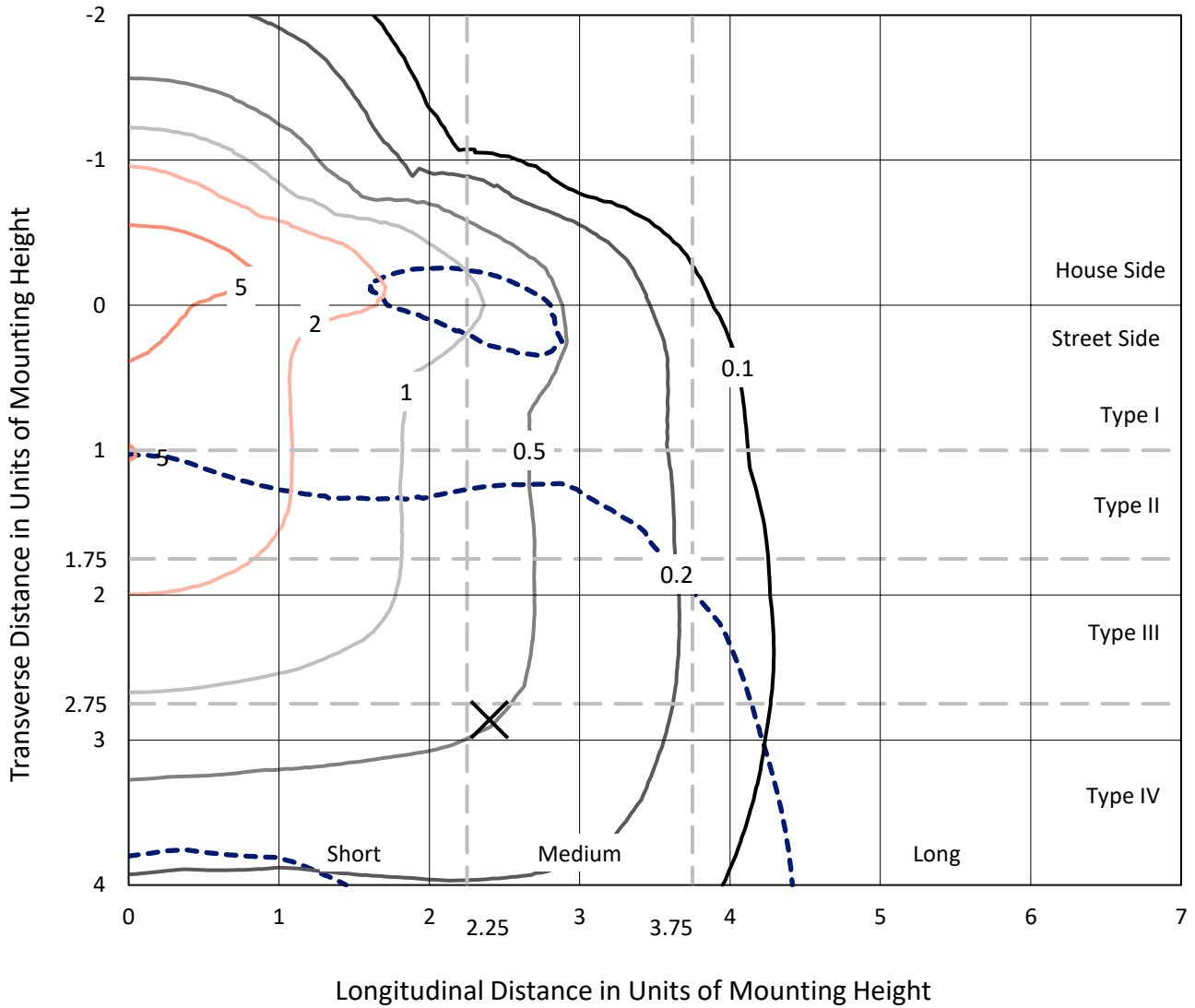
Lumens per Lamp: N/A  
Luminaire Lumens: 30086 lumens  
Efficiency: N/A  
Efficacy: 149.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.714  
Voltage Rise (V): NR  
Power Factor: 0.994  
Total Harmonic Distortion (THDi): 9.472  
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

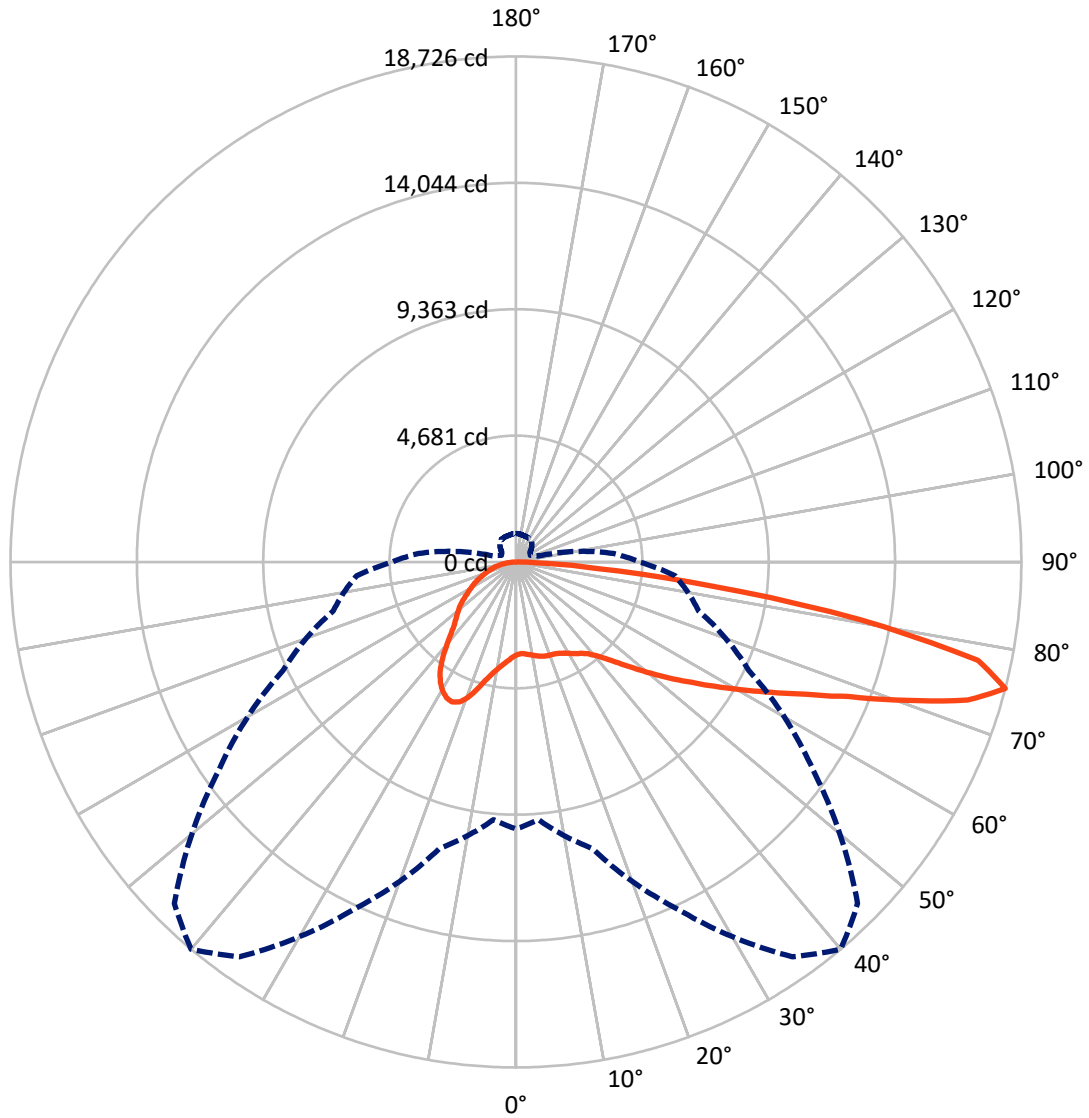
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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	9321.7	0.0	9321.7
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	20764.4	0.0	20764.4
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	30086.0	0.0	30086.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	343.4	1.1
10°-20°	1153.0	3.8
20°-30°	2105.3	7.0
30°-40°	2985.9	9.9
40°-50°	4031.8	13.4
50°-60°	5423.9	18.0
60°-70°	6884.2	22.9
70°-80°	6247.8	20.8
80°-90°	910.7	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°	30086.0	100.0
0°-180°	30086.0	100.0



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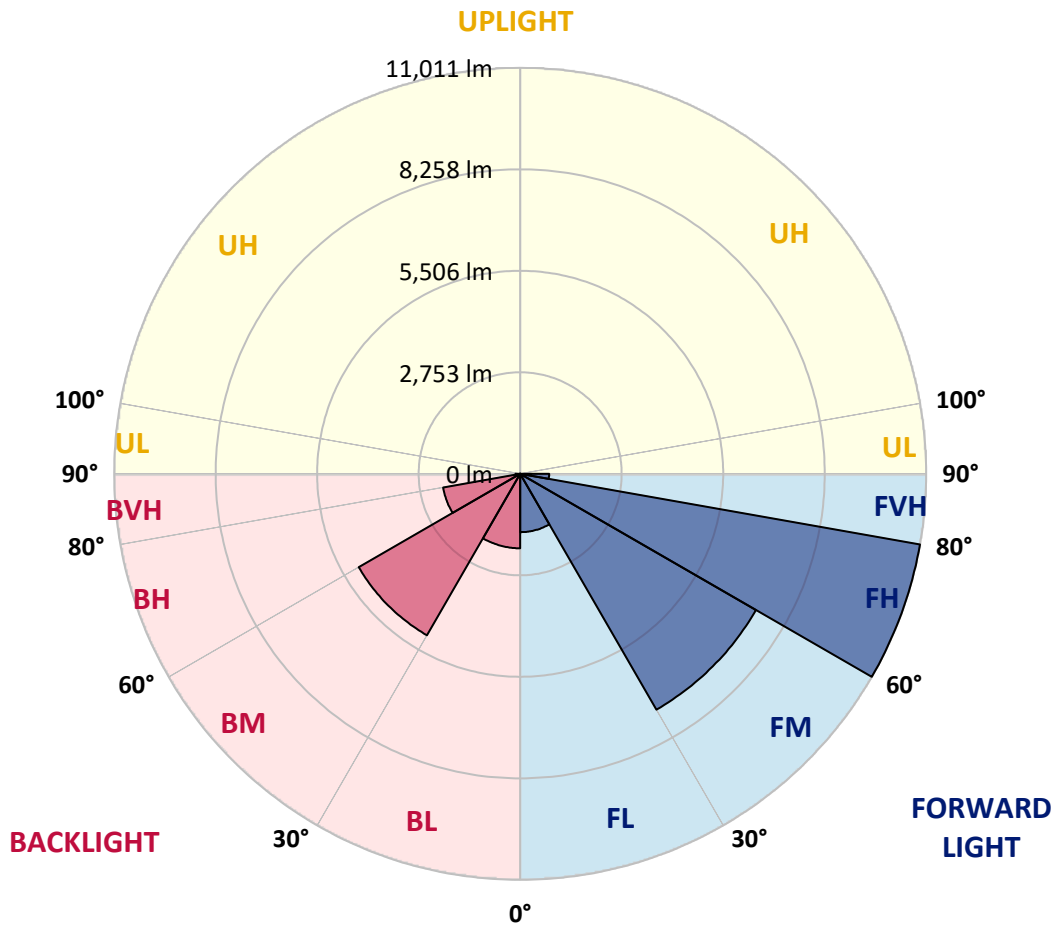
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1582.6	5.3			
FM (30°-60°)	7385.4	24.5			
FH (60°-80°)	11011.0	36.6			G4/12000
FVH (80°-90°)	785.3	2.6			G5
BL (0°-30°)	2019.2	6.7	B3/2500		
BM (30°-60°)	5056.2	16.8	B4/8500		
BH (60°-80°)	2121.0	7.0	B3/2500		G3/2500
BVH (80°-90°)	125.4	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4
2.5°	3387.7	3406.9	3402.1	3395.7	3395.7	3397.3	3395.7	3406.9	3418.0	3429.2	3446.8
5°	3422.8	3442.0	3432.4	3424.4	3418.0	3416.4	3411.7	3410.1	3416.4	3430.8	3454.7
7.5°	3491.4	3510.6	3496.2	3481.9	3469.1	3462.7	3456.3	3446.8	3442.0	3449.9	3483.5
10°	3568.0	3587.2	3569.6	3544.1	3523.4	3515.4	3509.0	3499.4	3493.0	3497.8	3534.5
12.5°	3644.6	3663.8	3639.8	3604.7	3577.6	3572.8	3564.8	3561.6	3560.1	3558.5	3595.2
15°	3716.4	3732.4	3702.1	3660.6	3631.9	3623.9	3615.9	3620.7	3628.7	3638.2	3679.7
17.5°	3772.3	3788.2	3743.6	3689.3	3662.2	3659.0	3654.2	3670.2	3692.5	3716.4	3767.5
20°	3823.3	3839.3	3781.9	3708.5	3676.5	3676.5	3678.1	3711.6	3743.6	3778.7	3848.9
22.5°	3895.2	3907.9	3837.7	3737.2	3690.9	3694.1	3706.9	3740.4	3780.3	3828.1	3925.5
25°	4002.1	4011.6	3925.5	3791.4	3738.8	3748.3	3759.5	3775.5	3813.8	3869.6	4000.5
27.5°	4174.4	4182.4	4069.1	3887.2	3807.4	3823.3	3839.3	3828.1	3845.7	3893.6	4061.1
30°	4417.0	4421.7	4278.1	4037.2	3923.9	3931.9	3935.0	3888.8	3855.3	3893.6	4104.2
32.5°	4704.2	4702.6	4531.8	4219.1	4056.3	4048.3	4021.2	3930.3	3852.1	3885.6	4142.5
35°	5149.4	5131.8	4911.6	4474.4	4206.3	4156.9	4093.0	3976.5	3868.0	3877.6	4176.0
37.5°	5886.6	5832.4	5527.6	4892.5	4429.7	4303.7	4209.5	4051.5	3903.1	3874.4	4215.9
40°	6718.0	6649.4	6314.3	5465.3	4764.8	4562.2	4410.6	4158.4	3960.6	3888.8	4274.9
42.5°	7704.1	7606.8	7246.2	6140.3	5189.3	4895.7	4667.5	4294.1	4045.2	3935.0	4354.7
45°	8915.3	8786.0	8275.4	6901.5	5723.9	5332.9	5028.1	4499.9	4174.4	4024.4	4474.4
47.5°	10139.2	10171.1	9445.1	7772.8	6365.3	5872.3	5479.7	4809.5	4362.7	4168.0	4667.5
50°	11439.7	11462.1	10608.4	8738.2	7093.0	6481.8	5987.1	5155.8	4624.4	4372.3	4956.3
52.5°	12454.6	12457.8	11664.7	9748.3	7850.9	7152.0	6534.5	5551.5	4927.6	4643.5	5340.9
55°	13089.7	13081.7	12405.1	10704.1	8722.2	7855.7	7140.9	6001.5	5297.8	4962.7	5824.4
57.5°	13550.9	13526.9	12915.8	11525.9	9650.9	8687.1	7827.0	6512.1	5735.0	5342.5	6461.1
60°	13726.4	13712.0	13262.0	12236.0	10627.5	9606.2	8618.5	7083.4	6231.3	5790.9	7279.7
62.5°	13793.4	13820.5	13601.9	12923.7	11672.7	10624.3	9488.2	7766.4	6789.8	6298.3	8143.0
65°	14029.6	14079.0	14034.4	13823.7	12853.5	11816.3	10641.9	8578.6	7399.4	6842.5	9044.5
67.5°	14497.1	14546.6	14565.7	14900.8	14296.1	13301.9	12081.2	9590.3	8112.6	7407.3	9722.7
70°	14486.0	14471.6	14809.9	15757.7	16102.4	15358.8	14021.6	10834.9	8963.2	7876.5	9808.9
72.5°	13185.4	13070.5	13870.0	15748.2	17605.6	17506.7	16391.2	12440.2	9697.2	7933.9	8511.6
75°	9891.9	9585.5	10997.7	14192.3	17856.1	18725.8	17897.6	13436.0	9523.3	7010.0	5923.3
77.5°	4230.3	3922.3	5586.6	10506.2	15981.1	17505.1	16515.7	11722.2	7602.0	4635.6	2909.0
80°	1107.4	1105.8	1688.3	4763.2	10868.5	12926.9	11340.8	7570.1	4343.6	1656.4	802.6
82.5°	458.0	446.8	620.7	1852.6	5310.6	7254.1	5920.1	3376.5	1568.6	448.4	266.5
85°	170.7	169.1	301.6	639.9	1873.4	2992.0	2165.4	863.3	391.0	218.6	119.7
87.5°	47.9	46.3	65.4	221.8	456.4	692.5	370.2	142.0	110.1	86.2	35.1
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°	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4	3440.4
2.5°	3451.5	3459.5	3473.9	3485.1	3499.4	3515.4	3537.7	3552.1	3566.4	3576.0	3569.6
5°	3465.9	3483.5	3520.2	3556.9	3599.9	3639.8	3686.1	3719.6	3746.8	3754.7	3757.9
7.5°	3497.8	3526.5	3588.8	3651.0	3719.6	3785.0	3852.1	3909.5	3955.8	3973.3	3974.9
10°	3553.7	3592.0	3679.7	3767.5	3858.5	3959.0	4045.2	4128.1	4193.6	4220.7	4222.3
12.5°	3623.9	3671.8	3786.6	3907.9	4034.0	4172.8	4284.5	4386.6	4468.0	4504.7	4504.7
15°	3714.8	3777.1	3923.9	4086.6	4271.7	4464.8	4606.8	4720.1	4811.1	4855.8	4852.6
17.5°	3813.8	3896.8	4081.9	4327.6	4592.5	4846.2	5012.2	5095.1	5189.3	5232.4	5230.8
20°	3909.5	4011.6	4276.5	4634.0	4986.6	5256.3	5390.3	5412.7	5419.1	5423.9	5436.6
22.5°	4008.5	4145.7	4520.7	5020.1	5398.3	5585.0	5604.2	5508.4	5374.4	5312.2	5329.7
25°	4117.0	4298.9	4839.8	5446.2	5752.6	5774.9	5628.1	5395.1	5141.4	5024.9	5042.5
27.5°	4222.3	4476.0	5222.8	5853.1	6007.9	5811.6	5495.7	5165.3	4859.0	4736.1	4750.5
30°	4327.6	4678.7	5645.7	6208.9	6124.4	5720.7	5286.6	4918.0	4610.0	4480.8	4495.1
32.5°	4434.5	4914.8	6132.4	6465.9	6103.6	5527.6	5026.5	4640.4	4369.1	4233.4	4251.0
35°	4555.8	5205.2	6593.5	6606.3	5964.8	5243.5	4683.4	4308.4	4072.3	3963.8	3987.7
37.5°	4713.8	5573.9	7000.4	6641.4	5722.3	4827.1	4257.4	3915.9	3721.2	3671.8	3706.9
40°	4910.0	6017.5	7311.6	6585.5	5363.2	4321.2	3791.4	3518.6	3408.5	3419.6	3457.9
42.5°	5165.3	6513.7	7530.2	6441.9	4863.8	3799.4	3382.9	3261.7	3314.3	3359.0	3400.5
45°	5497.3	7029.2	7665.8	6197.8	4298.9	3357.4	3142.0	3170.7	3210.6	3215.4	3247.3
47.5°	5921.7	7551.0	7755.2	5829.2	3722.8	3046.2	2988.8	2995.2	2987.2	2953.7	2979.2
50°	6451.5	8058.4	7835.0	5340.9	3232.9	2851.6	2775.0	2752.6	2642.5	2534.0	2548.4
52.5°	7054.7	8524.3	7868.5	4734.5	2851.6	2688.8	2564.3	2423.9	2218.1	2184.5	2195.7
55°	7724.9	8955.2	7782.3	3989.3	2530.8	2479.8	2291.5	2122.3	2100.0	2071.2	2076.0
57.5°	8525.9	9419.5	7606.8	3157.9	2202.1	2235.6	2052.1	2071.2	2031.4	1986.7	1978.7
60°	9402.0	9899.9	7298.8	2400.0	1862.2	1930.8	1989.9	1988.3	1977.1	1940.4	1927.6
62.5°	10190.3	10215.8	6692.5	1838.3	1563.8	1694.7	1855.8	1854.2	1844.7	1823.9	1815.9
65°	10659.4	10167.9	5680.8	1447.3	1318.1	1500.0	1673.9	1686.7	1688.3	1686.7	1686.7
67.5°	10576.4	9607.8	4292.5	1152.1	1115.4	1302.1	1493.6	1511.1	1523.9	1527.1	1530.3
70°	9638.2	8377.5	2798.9	919.1	935.1	1128.2	1322.9	1340.4	1351.6	1364.3	1370.7
72.5°	7512.7	6159.5	1602.1	743.6	777.1	978.2	1153.7	1174.5	1180.8	1204.8	1214.3
75°	4578.1	3622.3	864.9	585.6	638.3	836.2	986.2	1010.1	1021.3	1050.0	1053.2
77.5°	2176.6	1568.6	493.1	456.4	513.8	683.0	833.0	860.1	829.8	845.7	833.0
80°	735.6	582.4	311.2	347.9	392.5	533.0	667.0	694.1	630.3	627.1	620.7
82.5°	256.9	236.2	197.9	231.4	253.7	381.4	504.2	539.4	469.1	467.5	445.2
85°	100.5	95.7	110.1	126.1	151.6	234.6	331.9	349.5	288.8	233.0	229.8
87.5°	20.7	22.3	27.1	28.7	46.3	81.4	119.7	146.8	116.5	98.9	91.0
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)