

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: P883939

Luminaire Tested: **NAV-SB4C-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883939  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4C-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

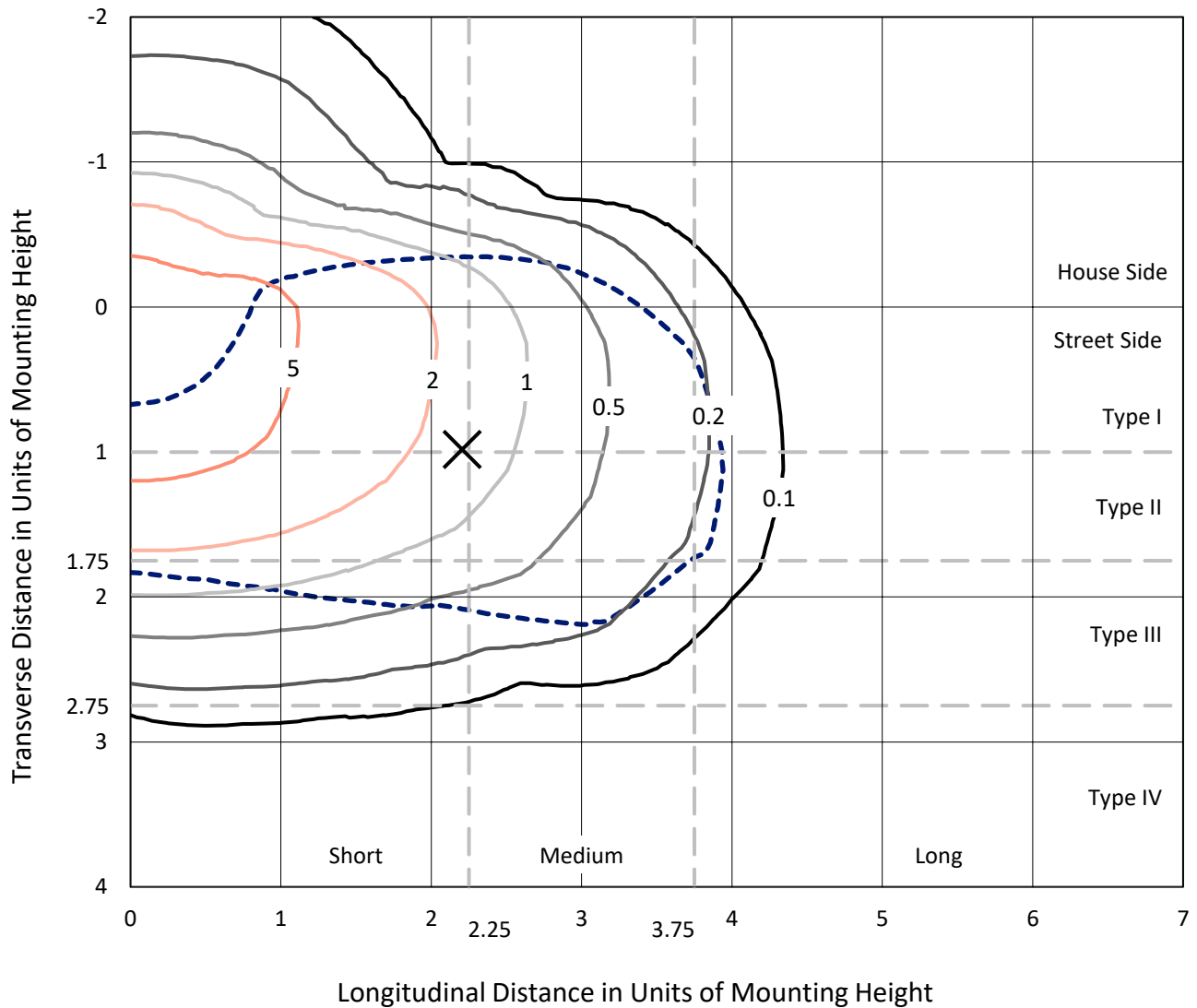
Lumens per Lamp: N/A  
Luminaire Lumens: 30371 lumens  
Efficiency: N/A  
Efficacy: 151.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 200.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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

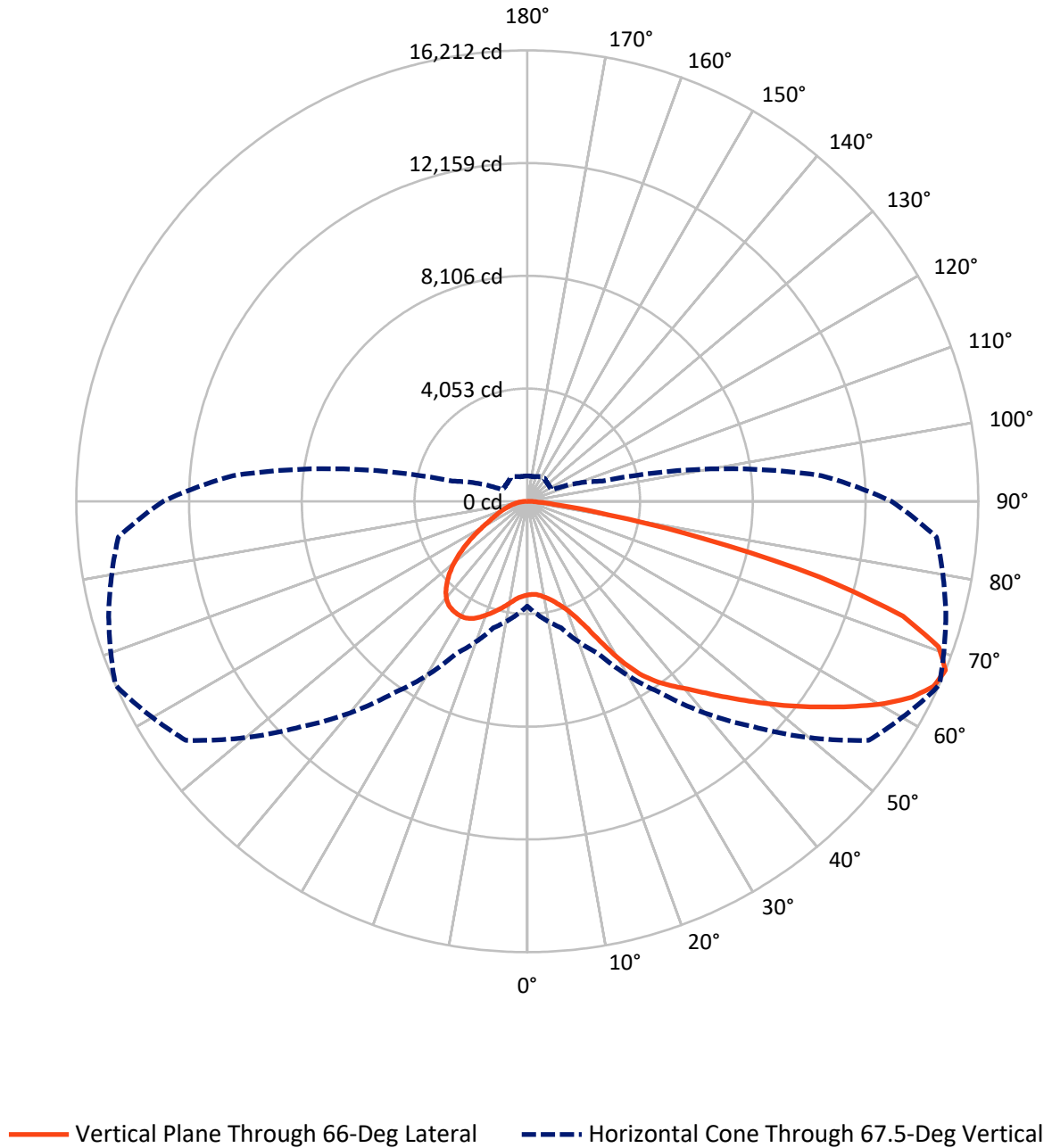
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7551.7	0.0	7551.7
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	22819.3	0.0	22819.3
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	30371.0	0.0	30371.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.0	1.1
10°-20°	1103.4	3.6
20°-30°	2126.8	7.0
30°-40°	3729.0	12.3
40°-50°	5543.8	18.3
50°-60°	7027.4	23.1
60°-70°	6876.1	22.6
70°-80°	3280.0	10.8
80°-90°	350.5	1.2
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°	30371.0	100.0
0°-180°	30371.0	100.0

**Coefficient of Utilization**



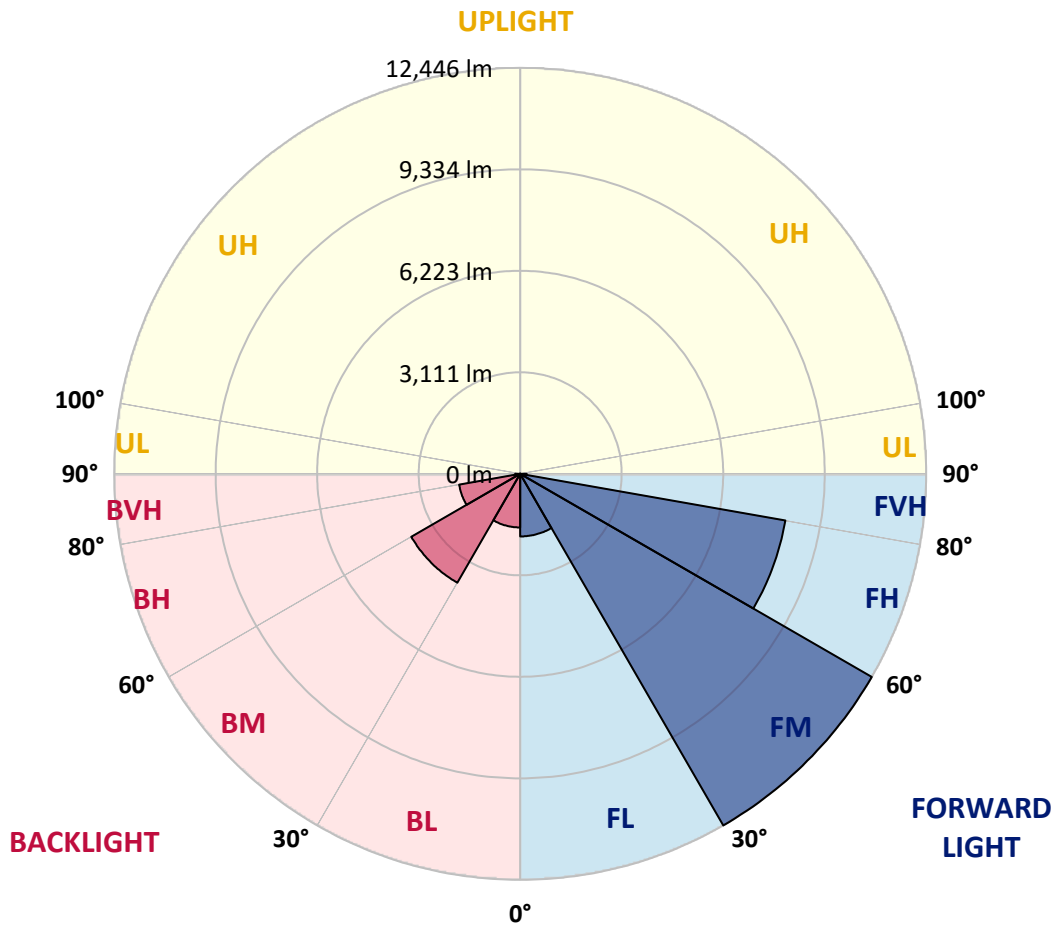
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1919.1	6.3			
FM (30°-60°)	12445.8	41.0			
FH (60°-80°)	8255.7	27.2			G4/12000
FVH (80°-90°)	198.7	0.7			G2/225
BL (0°-30°)	1645.0	5.4	B3/2500		
BM (30°-60°)	3854.5	12.7	B3/5000		
BH (60°-80°)	1900.4	6.3	B3/2500		G3/2500
BVH (80°-90°)	151.8	0.5			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 III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5
2.5°	3333.4	3352.6	3347.8	3339.8	3338.2	3341.4	3346.2	3351.0	3349.4	3357.4	3370.1
5°	3323.9	3343.0	3341.4	3341.4	3347.8	3360.6	3368.5	3376.5	3368.5	3378.1	3395.7
7.5°	3330.2	3344.6	3351.0	3357.4	3373.3	3397.3	3416.4	3434.0	3424.4	3435.6	3457.9
10°	3411.6	3422.8	3429.2	3429.2	3440.4	3467.5	3486.6	3518.5	3510.6	3528.1	3556.8
12.5°	3560.0	3571.2	3571.2	3564.8	3572.8	3590.3	3596.7	3631.8	3617.5	3646.2	3674.9
15°	3741.9	3764.3	3746.7	3735.6	3738.8	3756.3	3754.7	3781.8	3767.5	3791.4	3816.9
17.5°	3943.0	3971.7	3943.0	3941.4	3935.0	3954.2	3955.8	3979.7	3954.2	3971.7	3989.3
20°	4180.8	4220.7	4196.7	4204.7	4190.3	4198.3	4206.3	4241.4	4201.5	4214.3	4209.5
22.5°	4515.9	4563.7	4538.2	4568.5	4558.9	4552.6	4551.0	4613.2	4551.0	4555.8	4509.5
25°	5004.1	5061.6	5016.9	5058.4	5058.4	5079.1	5103.1	5182.9	5079.1	5048.8	4929.2
27.5°	5725.4	5782.9	5695.1	5720.6	5712.6	5763.7	5738.2	5936.0	5824.3	5774.9	5533.9
30°	6593.5	6695.6	6529.6	6523.3	6515.3	6596.7	6633.4	6764.2	6650.9	6601.5	6311.0
32.5°	7531.8	7638.7	7440.8	7383.4	7353.0	7402.5	7372.2	7477.5	7399.3	7322.7	6963.7
35°	8524.3	8629.6	8441.3	8329.6	8208.3	8104.6	7996.1	8023.2	7949.8	7833.3	7461.5
37.5°	9462.6	9655.6	9456.2	9336.5	9113.1	8910.4	8607.3	8481.2	8412.6	8305.7	7930.7
40°	10418.4	10528.5	10376.9	10274.8	10032.2	9714.7	9229.6	8963.1	8870.6	8766.8	8449.3
42.5°	11122.1	11227.4	11146.0	11075.8	10885.9	10517.3	9890.2	9556.7	9422.7	9306.2	9036.5
45°	11680.6	11758.8	11707.7	11733.3	11651.9	11294.4	10574.8	10193.4	10054.6	9912.6	9700.3
47.5°	11905.6	11988.6	12070.0	12221.5	12360.4	12097.1	11310.4	10882.7	10735.9	10590.7	10381.7
50°	11880.1	11964.6	12200.8	12523.1	12954.0	12866.2	12085.9	11616.8	11481.1	11315.2	11122.1
52.5°	11675.8	11771.6	12074.7	12610.9	13297.1	13442.3	12875.8	12374.7	12247.1	12049.2	11856.1
55°	11139.7	11197.1	11651.9	12411.4	13378.4	13844.4	13649.7	13182.2	13054.5	12778.5	12567.8
57.5°	10145.5	10228.5	10890.7	11873.7	13174.2	14117.3	14329.5	14031.1	13908.2	13510.9	13290.7
60°	8848.2	8980.7	9738.6	10970.5	12654.0	14115.7	14947.0	14865.6	14763.5	14232.1	14002.4
62.5°	7380.2	7533.4	8262.6	9693.9	11744.4	13715.1	15333.2	15564.6	15511.9	14897.6	14603.9
65°	5668.0	5773.3	6499.3	8042.4	10329.0	12855.0	15377.9	16041.7	16051.3	15403.4	14918.3
67.5°	3773.9	4077.0	4707.3	6035.0	8433.3	11449.2	14985.3	16119.9	16212.4	15577.3	14760.3
70°	1841.5	2240.4	2857.9	3922.3	6035.0	9293.4	13959.3	15478.4	15684.2	15069.9	13818.9
72.5°	764.3	893.6	1230.3	1935.6	3464.3	6271.1	11897.6	13739.1	14120.4	13352.9	11618.4
75°	515.4	558.5	703.7	992.5	1578.2	3092.5	8580.1	10244.5	10858.8	10084.9	8243.4
77.5°	397.3	424.5	512.2	694.1	938.3	1169.7	4592.5	6173.8	6491.4	6009.4	4289.3
80°	312.8	333.5	383.0	505.8	665.4	625.5	1565.4	2797.3	2980.8	2500.5	1378.7
82.5°	271.3	279.2	274.5	343.1	442.0	365.4	513.8	1032.4	1139.3	826.6	450.0
85°	196.3	218.6	228.2	212.2	234.6	185.1	210.6	365.4	402.1	359.0	253.7
87.5°	79.8	118.1	145.2	137.2	86.2	52.7	65.4	106.9	122.9	134.0	83.0
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°	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5	3368.5
2.5°	3371.7	3382.9	3390.9	3400.5	3406.8	3416.4	3435.6	3446.7	3448.3	3456.3	3454.7
5°	3402.1	3418.0	3435.6	3461.1	3489.8	3513.8	3550.5	3576.0	3585.6	3593.5	3591.9
7.5°	3467.5	3489.8	3521.7	3566.4	3607.9	3639.8	3684.5	3714.8	3745.1	3756.3	3757.9
10°	3564.8	3596.7	3643.0	3703.6	3748.3	3789.8	3836.1	3861.6	3891.9	3904.7	3911.1
12.5°	3686.1	3719.6	3780.2	3864.8	3906.3	3935.0	3951.0	3944.6	3951.0	3962.1	3965.3
15°	3824.9	3861.6	3930.2	4021.2	4049.9	4024.4	3989.3	3957.4	3952.6	3955.8	3966.9
17.5°	3989.3	4016.4	4096.2	4172.8	4152.0	4046.7	3970.1	3919.1	3893.5	3885.6	3896.7
20°	4219.1	4219.1	4284.5	4332.4	4193.5	4014.8	3895.1	3812.2	3759.5	3737.2	3732.4
22.5°	4498.3	4472.8	4514.3	4480.8	4185.5	3925.4	3759.5	3615.9	3536.1	3504.2	3499.4
25°	4852.6	4822.2	4811.1	4603.6	4128.1	3783.4	3513.8	3339.8	3269.6	3252.1	3255.2
27.5°	5387.1	5310.5	5165.3	4670.6	4022.8	3560.0	3226.5	3065.4	3025.5	3027.1	3031.9
30°	6098.8	5945.6	5589.8	4681.8	3850.4	3244.1	2932.9	2818.0	2798.9	2806.9	2834.0
32.5°	6757.8	6612.6	6023.8	4630.8	3585.6	2934.5	2669.6	2593.0	2564.3	2573.9	2586.6
35°	7274.8	7235.0	6425.9	4558.9	3260.0	2644.1	2433.5	2368.0	2312.2	2299.4	2309.0
37.5°	7763.1	7747.2	6727.5	4458.4	2937.7	2438.2	2243.6	2157.4	2076.0	2031.3	2032.9
40°	8299.3	8283.3	6925.4	4303.6	2652.1	2259.5	2072.8	1959.5	1859.0	1777.6	1785.6
42.5°	8902.5	8808.3	7019.5	4081.8	2409.5	2107.9	1934.0	1780.8	1648.4	1573.4	1578.2
45°	9561.5	9349.3	7017.9	3799.4	2205.3	1969.1	1785.6	1568.6	1445.7	1375.5	1372.3
47.5°	10260.4	9866.3	6931.8	3486.6	2007.4	1815.9	1555.8	1389.9	1308.5	1265.4	1255.8
50°	10981.7	10349.8	6785.0	3127.6	1804.7	1642.0	1412.2	1298.9	1236.7	1196.8	1182.4
52.5°	11659.9	10788.6	6607.8	2720.7	1598.9	1472.8	1348.4	1260.6	1195.2	1150.5	1131.4
55°	12290.2	11166.8	6357.3	2304.2	1431.4	1359.5	1318.1	1244.7	1169.7	1117.0	1096.3
57.5°	12850.3	11412.5	5924.9	1913.3	1311.7	1281.4	1286.1	1217.5	1131.4	1086.7	1058.0
60°	13316.2	11592.8	5285.0	1551.0	1214.3	1204.8	1236.7	1166.5	1065.9	1014.9	992.5
62.5°	13595.5	11589.6	4499.9	1270.2	1131.4	1134.6	1171.3	1102.6	1000.5	952.6	938.3
65°	13571.5	11305.6	3638.2	1086.7	1051.6	1054.8	1102.6	1032.4	946.3	917.5	915.9
67.5°	13091.2	10613.1	2790.9	967.0	963.8	978.2	1034.0	984.6	912.7	909.6	914.3
70°	11790.7	9175.3	2010.6	871.3	872.9	893.6	967.0	954.2	895.2	901.6	900.0
72.5°	9454.6	6995.6	1350.0	770.7	772.3	805.8	903.2	930.3	877.6	962.2	975.0
75°	6296.7	4362.7	868.1	663.8	665.4	708.5	847.3	884.0	829.8	959.0	967.0
77.5°	3025.5	1961.1	628.7	558.5	558.5	598.4	732.4	791.5	706.9	745.2	683.0
80°	1045.2	737.2	494.7	450.0	440.4	467.5	617.5	686.2	609.6	561.7	526.6
82.5°	411.7	383.0	397.3	349.5	317.5	335.1	480.3	566.5	448.4	405.3	403.7
85°	236.2	248.9	280.8	231.4	183.5	205.8	352.7	406.9	338.3	298.4	304.8
87.5°	63.8	87.8	129.3	119.7	83.0	87.8	167.5	225.0	194.7	150.0	154.8
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)