

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: P883984

Luminaire Tested: **NAV-SB4C-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883984
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-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 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: 26325 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

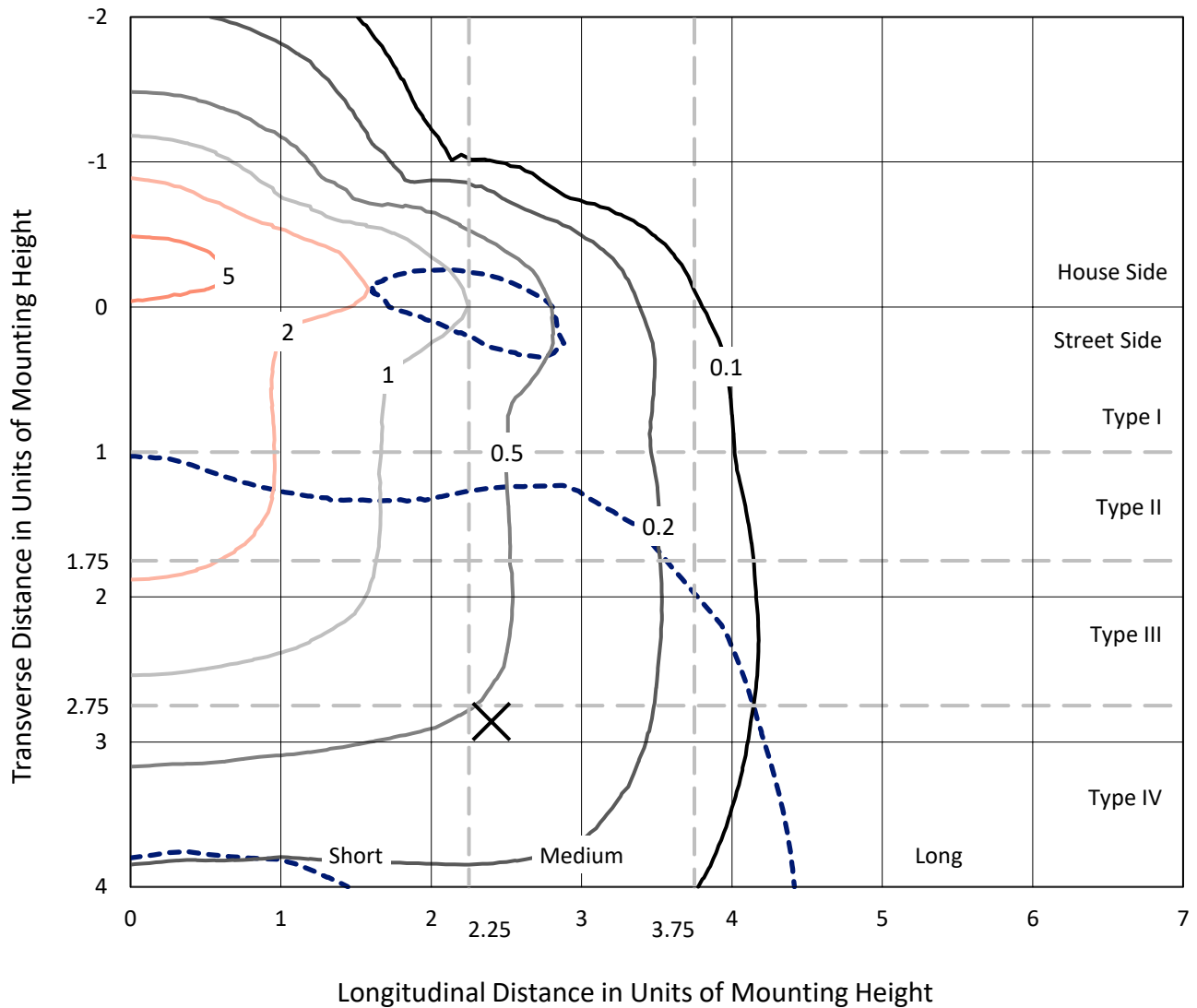
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

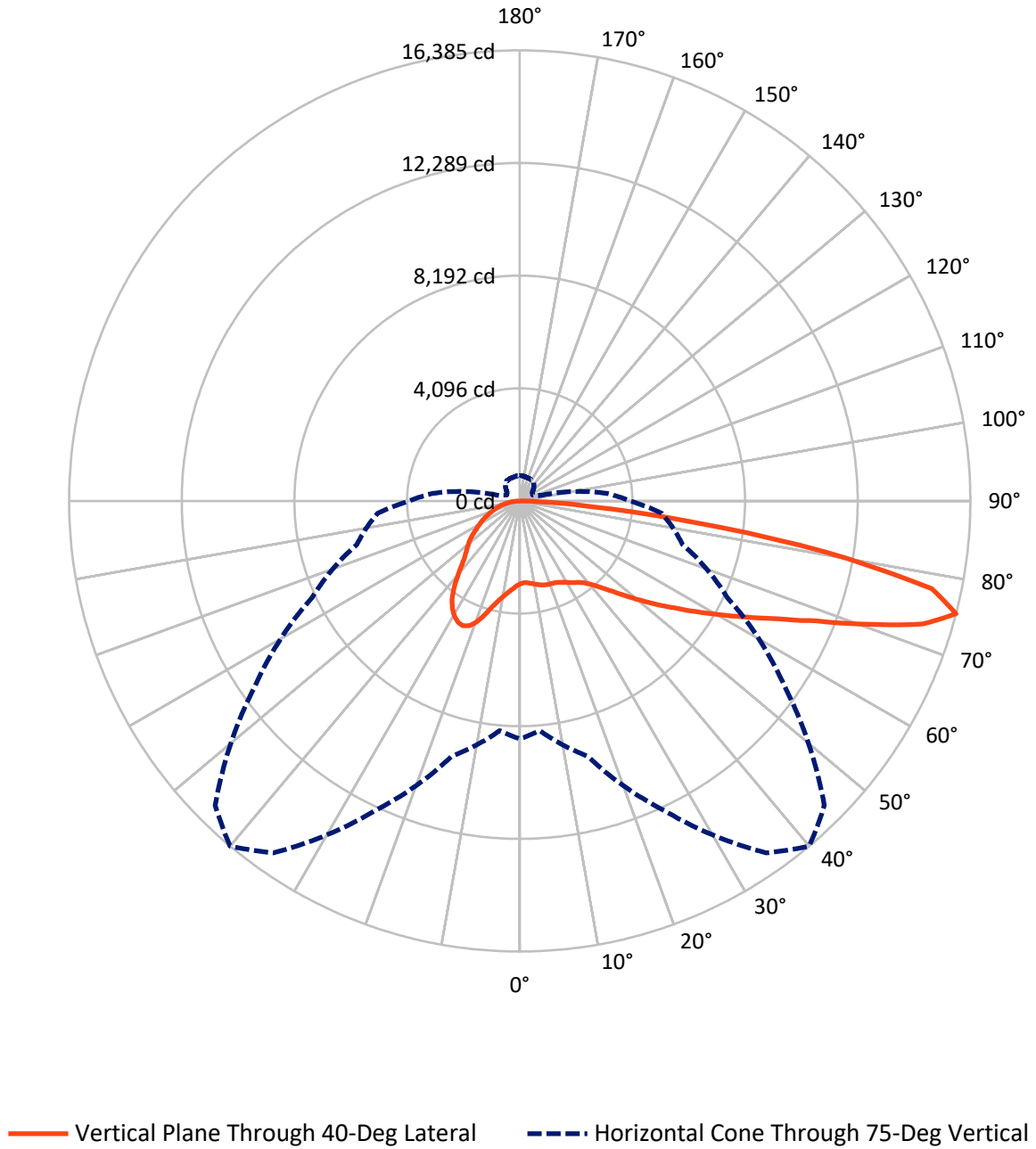
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8156.4	0.0	8156.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	18168.6	0.0	18168.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	26325.0	0.0	26325.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.5	1.1
10°-20°	1008.9	3.8
20°-30°	1842.1	7.0
30°-40°	2612.6	9.9
40°-50°	3527.8	13.4
50°-60°	4745.9	18.0
60°-70°	6023.6	22.9
70°-80°	5466.8	20.8
80°-90°	796.9	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°	26325.0	100.0
0°-180°	26325.0	100.0



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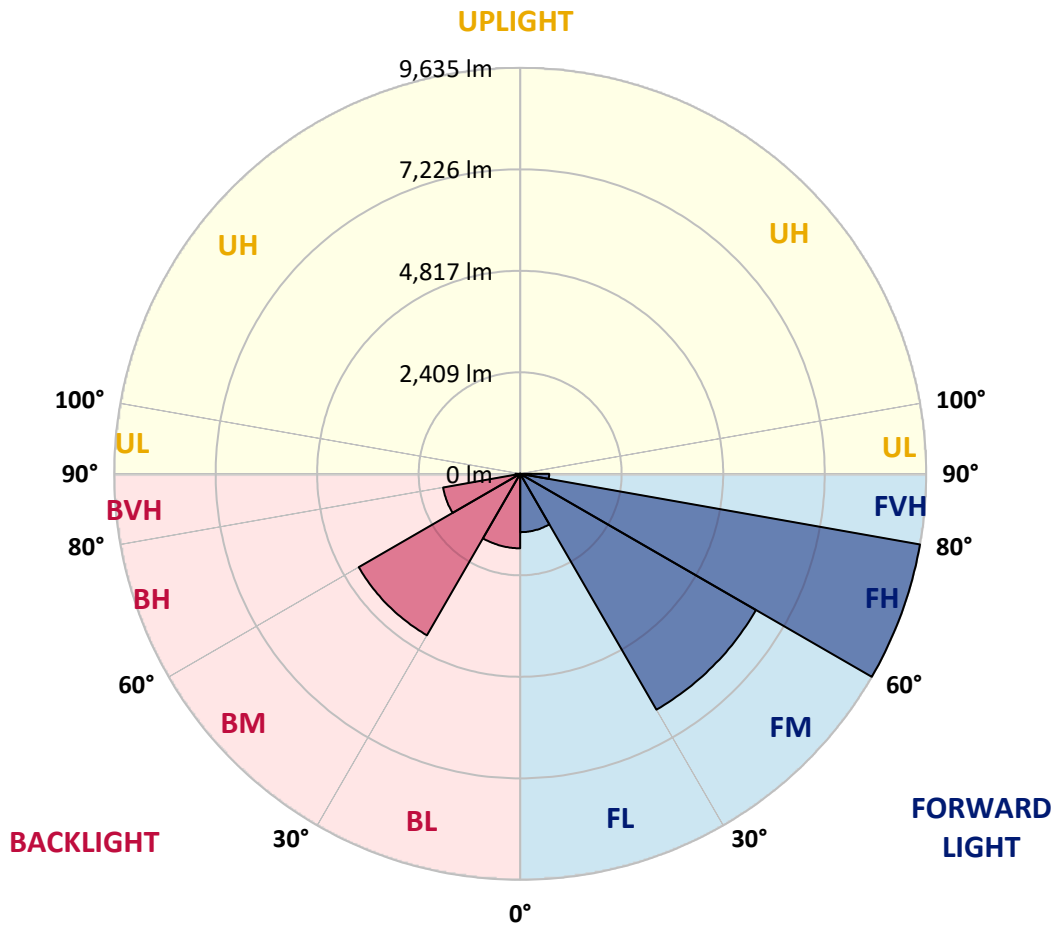
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1384.7	5.3			
FM (30°-60°)	6462.2	24.5			
FH (60°-80°)	9634.6	36.6			G4/12000
FVH (80°-90°)	687.2	2.6			G4/750
BL (0°-30°)	1766.7	6.7	B3/2500		
BM (30°-60°)	4424.1	16.8	B3/5000		
BH (60°-80°)	1855.8	7.0	B3/2500		G3/2500
BVH (80°-90°)	109.7	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°	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3
2.5°	2964.2	2981.0	2976.8	2971.2	2971.2	2972.6	2971.2	2981.0	2990.8	3000.5	3015.9
5°	2994.9	3011.7	3003.3	2996.3	2990.8	2989.4	2985.2	2983.8	2989.4	3001.9	3022.9
7.5°	3055.0	3071.7	3059.2	3046.6	3035.4	3029.8	3024.3	3015.9	3011.7	3018.7	3048.0
10°	3122.0	3138.8	3123.4	3101.1	3082.9	3075.9	3070.3	3062.0	3056.4	3060.6	3092.7
12.5°	3189.0	3205.8	3184.8	3154.1	3130.4	3126.2	3119.2	3116.4	3115.0	3113.6	3145.7
15°	3251.8	3265.8	3239.3	3203.0	3177.8	3170.9	3163.9	3168.1	3175.1	3183.4	3219.7
17.5°	3300.7	3314.7	3275.6	3228.1	3204.4	3201.6	3197.4	3211.4	3230.9	3251.8	3296.5
20°	3345.4	3359.4	3309.1	3244.9	3216.9	3216.9	3218.3	3247.7	3275.6	3306.3	3367.7
22.5°	3408.2	3419.4	3358.0	3270.0	3229.5	3232.3	3243.5	3272.8	3307.7	3349.6	3434.8
25°	3501.8	3510.2	3434.8	3317.5	3271.4	3279.8	3289.5	3303.5	3337.0	3385.9	3500.4
27.5°	3652.6	3659.6	3560.4	3401.2	3331.4	3345.4	3359.4	3349.6	3364.9	3406.8	3553.4
30°	3864.8	3869.0	3743.3	3532.5	3433.4	3440.3	3443.1	3402.6	3373.3	3406.8	3591.1
32.5°	4116.1	4114.7	3965.3	3691.7	3549.2	3542.3	3518.5	3438.9	3370.5	3399.9	3624.6
35°	4505.7	4490.3	4297.6	3915.1	3680.5	3637.2	3581.4	3479.4	3384.5	3392.9	3654.0
37.5°	5150.7	5103.3	4836.6	4280.9	3876.0	3765.7	3683.3	3545.1	3415.2	3390.1	3688.9
40°	5878.2	5818.1	5524.9	4782.1	4169.2	3991.9	3859.2	3638.6	3465.5	3402.6	3740.5
42.5°	6741.1	6655.9	6340.3	5372.7	4540.6	4283.7	4084.0	3757.3	3539.5	3443.1	3810.3
45°	7800.8	7687.7	7240.9	6038.7	5008.3	4666.2	4399.6	3937.4	3652.6	3521.3	3915.1
47.5°	8871.7	8899.6	8264.4	6801.1	5569.6	5138.2	4794.7	4208.3	3817.3	3647.0	4084.0
50°	10009.7	10029.2	9282.2	7645.8	6206.3	5671.5	5238.7	4511.3	4046.3	3825.7	4336.7
52.5°	10897.7	10900.5	10206.5	8529.6	6869.5	6258.0	5717.6	4857.5	4311.6	4063.1	4673.2
55°	11453.4	11446.4	10854.4	9366.0	7631.9	6873.7	6248.2	5251.3	4635.5	4342.3	5096.3
57.5°	11856.9	11835.9	11301.2	10085.1	8444.5	7601.1	6848.6	5698.1	5018.1	4674.6	5653.4
60°	12010.5	11997.9	11604.2	10706.4	9299.0	8405.4	7541.1	6197.9	5452.3	5067.0	6369.7
62.5°	12069.1	12092.9	11901.6	11308.2	10213.5	9296.2	8302.1	6795.5	5941.0	5511.0	7125.0
65°	12275.8	12319.0	12280.0	12095.6	11246.7	10339.2	9311.5	7506.2	6474.4	5987.1	7913.9
67.5°	12684.9	12728.1	12744.9	13038.1	12508.9	11639.1	10571.0	8391.4	7098.5	6481.4	8507.3
70°	12675.1	12662.5	12958.5	13787.9	14089.5	13438.8	12268.8	9480.5	7842.7	6891.9	8582.7
72.5°	11537.2	11436.6	12136.1	13779.5	15404.7	15318.2	14342.2	10885.1	8485.0	6942.1	7447.6
75°	8655.3	8387.2	9622.9	12418.2	15624.0	16384.9	15660.3	11756.4	8332.8	6133.7	5182.9
77.5°	3701.4	3432.0	4888.2	9192.9	13983.4	15316.8	14451.1	10256.8	6651.7	4056.1	2545.4
80°	969.0	967.6	1477.2	4167.8	9509.8	11311.0	9923.1	6623.8	3800.6	1449.3	702.3
82.5°	400.7	390.9	543.1	1621.0	4646.7	6347.3	5180.1	2954.4	1372.5	392.3	233.2
85°	149.4	148.0	263.9	559.9	1639.2	2618.0	1894.7	755.4	342.1	191.3	104.7
87.5°	41.9	40.5	57.2	194.1	399.3	606.0	323.9	124.3	96.3	75.4	30.7
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°	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3	3010.3
2.5°	3020.1	3027.1	3039.6	3049.4	3062.0	3075.9	3095.5	3108.0	3120.6	3129.0	3123.4
5°	3032.6	3048.0	3080.1	3112.2	3149.9	3184.8	3225.3	3254.6	3278.4	3285.4	3288.2
7.5°	3060.6	3085.7	3140.1	3194.6	3254.6	3311.9	3370.5	3420.8	3461.3	3476.6	3478.0
10°	3109.4	3142.9	3219.7	3296.5	3376.1	3464.1	3539.5	3612.1	3669.3	3693.1	3694.5
12.5°	3170.9	3212.8	3313.3	3419.4	3529.7	3651.2	3748.9	3838.3	3909.5	3941.6	3941.6
15°	3250.5	3304.9	3433.4	3575.8	3737.7	3906.7	4031.0	4130.1	4209.7	4248.8	4246.0
17.5°	3337.0	3409.6	3571.6	3786.6	4018.4	4240.4	4385.6	4458.2	4540.6	4578.3	4576.9
20°	3420.8	3510.2	3741.9	4054.7	4363.3	4599.2	4716.5	4736.1	4741.6	4745.8	4757.0
22.5°	3507.4	3627.4	3955.6	4392.6	4723.5	4886.8	4903.6	4819.8	4702.5	4648.1	4663.4
25°	3602.3	3761.5	4234.8	4765.4	5033.5	5053.0	4924.5	4720.7	4498.7	4396.8	4412.1
27.5°	3694.5	3916.5	4569.9	5121.4	5256.9	5085.1	4808.7	4519.6	4251.6	4144.0	4156.6
30°	3786.6	4093.8	4939.9	5432.8	5358.8	5005.5	4625.8	4303.2	4033.7	3920.6	3933.2
32.5°	3880.2	4300.4	5365.8	5657.6	5340.6	4836.6	4398.2	4060.3	3822.9	3704.2	3719.6
35°	3986.3	4554.5	5769.3	5780.4	5219.2	4588.1	4098.0	3769.9	3563.2	3468.3	3489.2
37.5°	4124.5	4877.1	6125.3	5811.2	5006.9	4223.6	3725.2	3426.4	3256.0	3212.8	3243.5
40°	4296.2	5265.2	6397.6	5762.3	4692.8	3781.0	3317.5	3078.7	2982.4	2992.1	3025.7
42.5°	4519.6	5699.5	6588.9	5636.6	4255.7	3324.5	2960.0	2853.9	2900.0	2939.1	2975.4
45°	4810.1	6150.4	6707.5	5423.0	3761.5	2937.7	2749.2	2774.3	2809.2	2813.4	2841.4
47.5°	5181.5	6607.0	6785.7	5100.5	3257.4	2665.4	2615.2	2620.7	2613.8	2584.4	2606.8
50°	5645.0	7051.0	6855.6	4673.2	2828.8	2495.1	2428.1	2408.5	2312.2	2217.2	2229.8
52.5°	6172.8	7458.7	6884.9	4142.7	2495.1	2352.7	2243.8	2120.9	1940.8	1911.5	1921.2
55°	6759.2	7835.7	6809.5	3490.6	2214.4	2169.8	2005.0	1857.0	1837.5	1812.3	1816.5
57.5°	7460.1	8242.0	6655.9	2763.2	1926.8	1956.1	1795.6	1812.3	1777.4	1738.3	1731.3
60°	8226.7	8662.3	6386.4	2099.9	1629.4	1689.5	1741.1	1739.7	1729.9	1697.8	1686.7
62.5°	8916.4	8938.7	5855.8	1608.5	1368.3	1482.8	1623.8	1622.4	1614.1	1595.9	1588.9
65°	9326.9	8896.9	4970.6	1266.4	1153.3	1312.5	1464.7	1475.8	1477.2	1475.8	1475.8
67.5°	9254.3	8406.8	3755.9	1008.1	976.0	1139.3	1306.9	1322.2	1333.4	1336.2	1339.0
70°	8433.3	7330.3	2449.0	804.2	818.2	987.1	1157.5	1172.8	1182.6	1193.8	1199.4
72.5°	6573.5	5389.5	1401.8	650.6	680.0	855.9	1009.5	1027.6	1033.2	1054.2	1062.5
75°	4005.8	3169.5	756.8	512.4	558.5	731.6	862.9	883.8	893.6	918.7	921.5
77.5°	1904.5	1372.5	431.4	399.3	449.6	597.6	728.8	752.6	726.0	740.0	728.8
80°	643.7	509.6	272.3	304.4	343.5	466.3	583.6	607.4	551.5	548.7	543.1
82.5°	224.8	206.6	173.1	202.5	222.0	333.7	441.2	471.9	410.5	409.1	389.6
85°	88.0	83.8	96.3	110.3	132.6	205.2	290.4	305.8	252.7	203.9	201.1
87.5°	18.2	19.5	23.7	25.1	40.5	71.2	104.7	128.5	101.9	86.6	79.6
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)