

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: P883484

Luminaire Tested: **NAV-SB3D-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883484
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-SB3D-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA 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: 25529 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

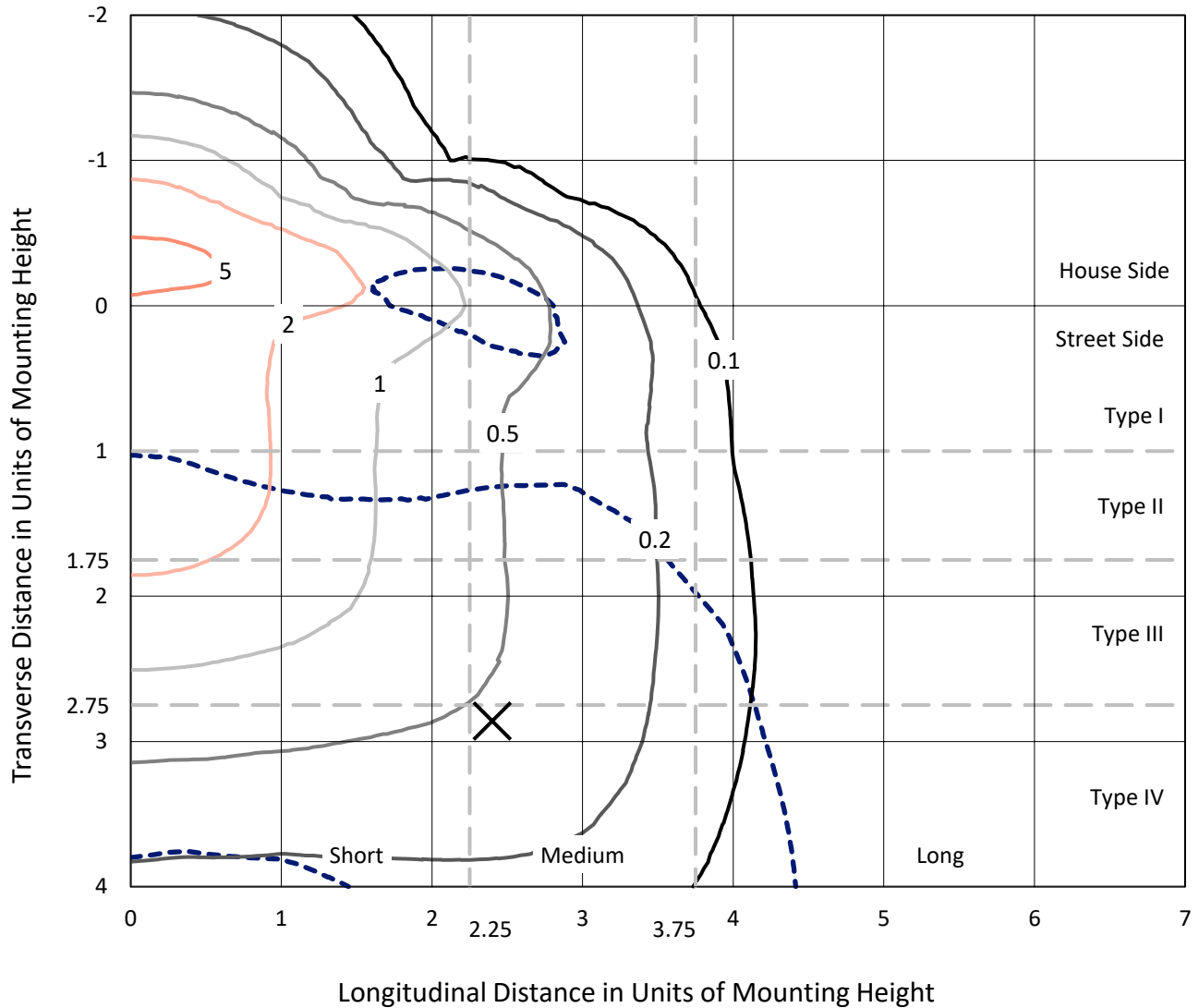
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

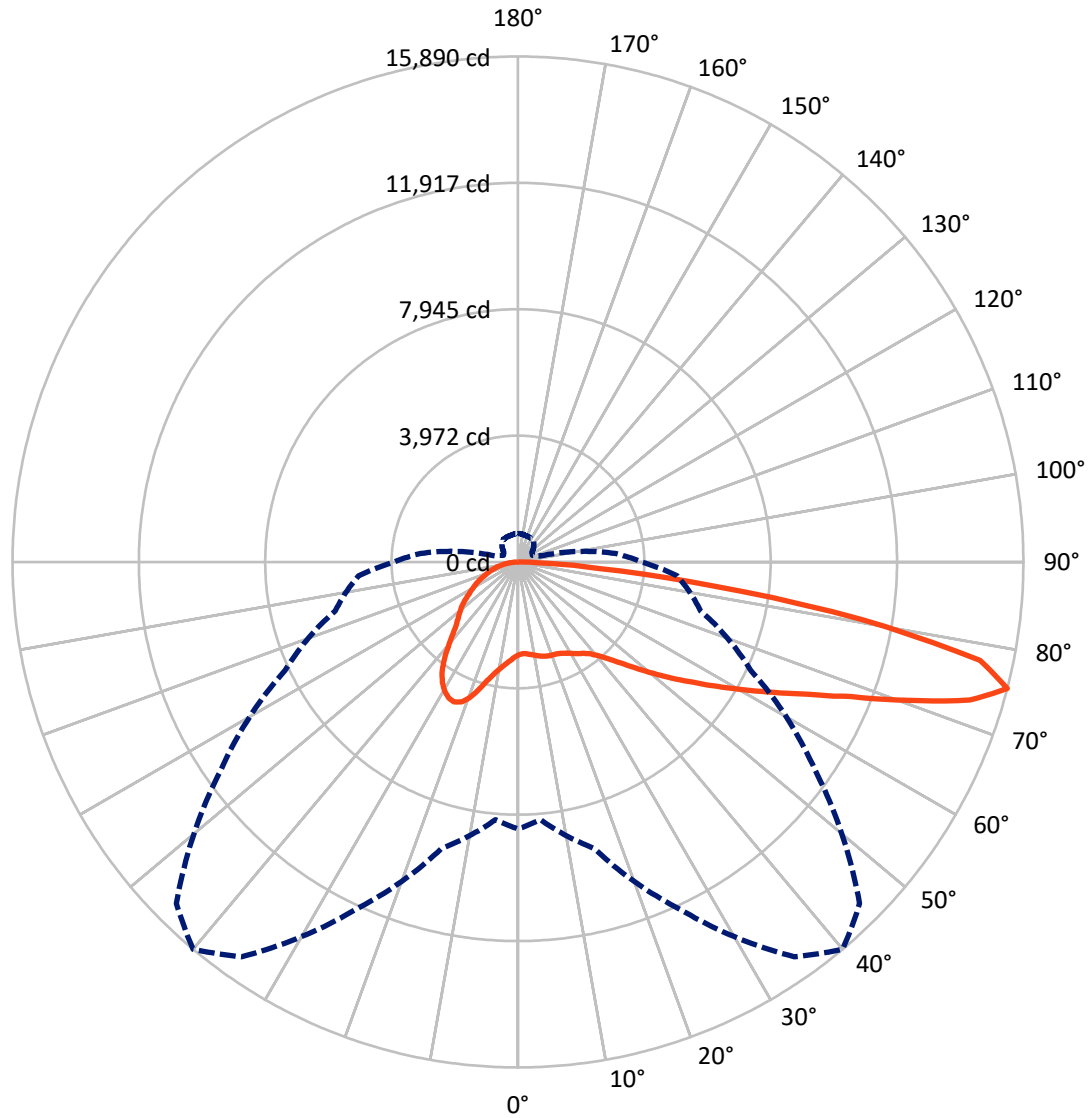
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 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
House Side	Lumens	7909.7	0.0	7909.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	17619.3	0.0	17619.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	25529.0	0.0	25529.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.4	1.1
10°-20°	978.4	3.8
20°-30°	1786.4	7.0
30°-40°	2533.6	9.9
40°-50°	3421.1	13.4
50°-60°	4602.4	18.0
60°-70°	5841.5	22.9
70°-80°	5301.5	20.8
80°-90°	772.8	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°	25529.0	100.0
0°-180°	25529.0	100.0

Coefficient of Utilization



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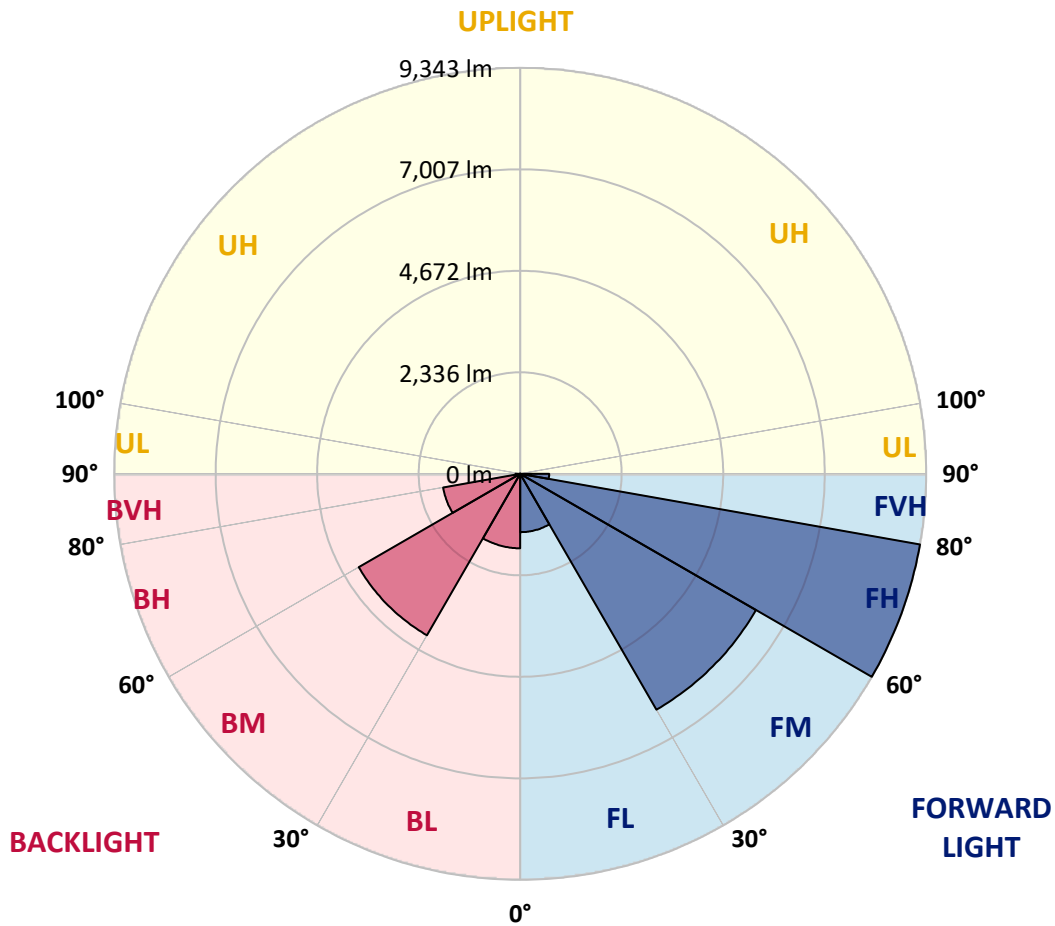
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1342.9	5.3			
FM (30°-60°)	6266.8	24.5			
FH (60°-80°)	9343.2	36.6			G4/12000
FVH (80°-90°)	666.4	2.6			G4/750
BL (0°-30°)	1713.3	6.7	B3/2500		
BM (30°-60°)	4290.3	16.8	B3/5000		
BH (60°-80°)	1799.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	106.4	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3
2.5°	2874.6	2890.8	2886.8	2881.4	2881.4	2882.7	2881.4	2890.8	2900.3	2909.8	2924.7
5°	2904.4	2920.6	2912.5	2905.7	2900.3	2899.0	2894.9	2893.5	2899.0	2911.2	2931.5
7.5°	2962.6	2978.9	2966.7	2954.5	2943.6	2938.2	2932.8	2924.7	2920.6	2927.4	2955.8
10°	3027.6	3043.8	3029.0	3007.3	2989.7	2982.9	2977.5	2969.4	2964.0	2968.0	2999.2
12.5°	3092.6	3108.8	3088.5	3058.7	3035.7	3031.7	3024.9	3022.2	3020.8	3019.5	3050.6
15°	3153.5	3167.1	3141.3	3106.1	3081.8	3075.0	3068.2	3072.3	3079.0	3087.2	3122.4
17.5°	3200.9	3214.5	3176.5	3130.5	3107.5	3104.8	3100.7	3114.3	3133.2	3153.5	3196.9
20°	3244.2	3257.8	3209.0	3146.8	3119.7	3119.7	3121.0	3149.5	3176.5	3206.3	3265.9
22.5°	3305.2	3316.0	3256.4	3171.1	3131.9	3134.6	3145.4	3173.8	3207.7	3248.3	3330.9
25°	3395.9	3404.0	3330.9	3217.2	3172.5	3180.6	3190.1	3203.6	3236.1	3283.5	3394.5
27.5°	3542.1	3548.9	3452.8	3298.4	3230.7	3244.2	3257.8	3248.3	3263.2	3303.8	3446.0
30°	3747.9	3752.0	3630.1	3425.7	3329.5	3336.3	3339.0	3299.8	3271.3	3303.8	3482.5
32.5°	3991.7	3990.3	3845.4	3580.0	3441.9	3435.2	3412.1	3335.0	3268.6	3297.0	3515.0
35°	4369.4	4354.5	4167.7	3796.7	3569.2	3527.2	3473.1	3374.2	3282.2	3290.3	3543.5
37.5°	4995.0	4949.0	4690.3	4151.4	3758.8	3651.8	3571.9	3437.9	3311.9	3287.6	3577.3
40°	5700.4	5642.2	5357.9	4637.5	4043.1	3871.2	3742.5	3528.6	3360.7	3299.8	3627.4
42.5°	6537.2	6454.6	6148.6	5210.3	4403.3	4154.1	3960.5	3643.7	3432.5	3339.0	3695.1
45°	7564.9	7455.3	7022.0	5856.2	4856.9	4525.1	4266.5	3818.3	3542.1	3414.8	3796.7
47.5°	8603.5	8630.5	8014.5	6595.4	5401.2	4982.8	4649.7	4081.0	3701.9	3536.7	3960.5
50°	9707.0	9726.0	9001.5	7414.6	6018.6	5500.0	5080.3	4374.9	3924.0	3710.0	4205.6
52.5°	10568.2	10570.9	9897.9	8271.7	6661.8	6068.7	5544.7	4710.6	4181.2	3940.2	4531.9
55°	11107.1	11100.3	10526.2	9082.8	7401.1	6665.9	6059.3	5092.5	4495.4	4211.0	4942.2
57.5°	11498.4	11478.1	10959.5	9780.1	8189.1	7371.3	6641.5	5525.8	4866.4	4533.3	5482.4
60°	11647.3	11635.1	11253.3	10382.7	9017.8	8151.2	7313.1	6010.5	5287.5	4913.8	6177.1
62.5°	11704.2	11727.2	11541.7	10966.2	9904.7	9015.1	8051.0	6590.0	5761.4	5344.3	6909.6
65°	11904.6	11946.6	11908.6	11729.9	10906.7	10026.5	9030.0	7279.2	6278.6	5806.1	7674.6
67.5°	12301.3	12343.3	12359.5	12643.9	12130.7	11287.1	10251.3	8137.7	6883.9	6285.4	8250.1
70°	12291.8	12279.6	12566.7	13371.0	13663.5	13032.5	11897.8	9193.8	7605.6	6683.5	8323.2
72.5°	11188.3	11090.8	11769.2	13362.9	14938.9	14855.0	13908.5	10556.0	8228.4	6732.2	7222.4
75°	8393.6	8133.6	9331.9	12042.7	15151.5	15889.5	15186.7	11400.9	8080.8	5948.2	5026.1
77.5°	3589.5	3328.2	4740.4	8914.9	13560.5	14853.6	14014.1	9946.7	6450.6	3933.4	2468.4
80°	939.7	938.3	1432.6	4041.8	9222.3	10968.9	9623.0	6423.5	3685.7	1405.5	681.1
82.5°	388.6	379.1	526.7	1572.0	4506.2	6155.4	5023.4	2865.1	1331.0	380.5	226.1
85°	144.9	143.5	255.9	543.0	1589.6	2538.8	1837.4	732.5	331.7	185.5	101.6
87.5°	40.6	39.3	55.5	188.2	387.3	587.6	314.1	120.5	93.4	73.1	29.8
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°	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3
2.5°	2928.8	2935.5	2947.7	2957.2	2969.4	2982.9	3001.9	3014.1	3026.2	3034.4	3029.0
5°	2940.9	2955.8	2987.0	3018.1	3054.7	3088.5	3127.8	3156.2	3179.2	3186.0	3188.7
7.5°	2968.0	2992.4	3045.2	3098.0	3156.2	3211.7	3268.6	3317.4	3356.6	3371.5	3372.9
10°	3015.4	3047.9	3122.4	3196.9	3274.0	3359.3	3432.5	3502.9	3558.4	3581.4	3582.7
12.5°	3075.0	3115.6	3213.1	3316.0	3423.0	3540.8	3635.6	3722.2	3791.3	3822.4	3822.4
15°	3152.2	3205.0	3329.5	3467.7	3624.7	3788.6	3909.1	4005.2	4082.4	4120.3	4117.6
17.5°	3236.1	3306.5	3463.6	3672.1	3896.9	4112.2	4253.0	4323.4	4403.3	4439.8	4438.5
20°	3317.4	3404.0	3628.8	3932.1	4231.3	4460.2	4573.9	4592.8	4598.3	4602.3	4613.2
22.5°	3401.3	3517.8	3835.9	4259.8	4580.7	4739.1	4755.3	4674.1	4560.4	4507.5	4522.4
25°	3493.4	3647.7	4106.8	4621.3	4881.3	4900.2	4775.6	4578.0	4362.7	4263.8	4278.7
27.5°	3582.7	3798.0	4431.7	4966.6	5097.9	4931.4	4663.3	4383.0	4123.0	4018.7	4030.9
30°	3672.1	3970.0	4790.5	5268.5	5196.7	4854.2	4485.9	4173.1	3911.8	3802.1	3814.3
32.5°	3762.8	4170.4	5203.5	5486.5	5179.1	4690.3	4265.2	3937.5	3707.3	3592.2	3607.1
35°	3865.7	4416.8	5594.8	5605.7	5061.3	4449.3	3974.1	3655.9	3455.5	3363.4	3383.7
37.5°	3999.8	4729.6	5940.1	5635.4	4855.5	4095.9	3612.5	3322.8	3157.6	3115.6	3145.4
40°	4166.3	5106.0	6204.1	5588.1	4550.9	3666.7	3217.2	2985.6	2892.2	2901.7	2934.2
42.5°	4383.0	5527.1	6389.6	5466.2	4127.1	3223.9	2870.5	2767.6	2812.3	2850.2	2885.4
45°	4664.6	5964.5	6504.7	5259.0	3647.7	2848.9	2666.1	2690.4	2724.3	2728.4	2755.4
47.5°	5024.8	6407.2	6580.6	4946.2	3158.9	2584.8	2536.1	2541.5	2534.7	2506.3	2528.0
50°	5474.3	6837.8	6648.3	4531.9	2743.3	2419.6	2354.6	2335.7	2242.3	2150.2	2162.4
52.5°	5986.1	7233.2	6676.7	4017.4	2419.6	2281.5	2175.9	2056.8	1882.1	1853.7	1863.1
55°	6554.8	7598.8	6603.6	3385.1	2147.5	2104.2	1944.4	1800.9	1781.9	1757.5	1761.6
57.5°	7234.5	7992.8	6454.6	2679.6	1868.6	1897.0	1741.3	1757.5	1723.7	1685.8	1679.0
60°	7977.9	8400.4	6193.3	2036.5	1580.1	1638.4	1688.5	1687.1	1677.6	1646.5	1635.7
62.5°	8646.8	8668.5	5678.8	1559.8	1326.9	1438.0	1574.7	1573.4	1565.3	1547.6	1540.9
65°	9044.9	8627.8	4820.3	1228.1	1118.4	1272.8	1420.4	1431.2	1432.6	1431.2	1431.2
67.5°	8974.5	8152.6	3642.3	977.6	946.5	1104.9	1267.4	1282.3	1293.1	1295.8	1298.5
70°	8178.3	7108.6	2375.0	779.9	793.5	957.3	1122.5	1137.4	1146.9	1157.7	1163.1
72.5°	6374.7	5226.5	1359.4	631.0	659.4	830.0	979.0	996.6	1002.0	1022.3	1030.4
75°	3884.7	3073.6	733.9	496.9	541.6	709.5	836.8	857.1	866.6	890.9	893.7
77.5°	1846.9	1331.0	418.4	387.3	436.0	579.5	706.8	729.8	704.1	717.6	706.8
80°	624.2	494.2	264.0	295.2	333.1	452.2	566.0	589.0	534.8	532.1	526.7
82.5°	218.0	200.4	167.9	196.3	215.3	323.6	427.9	457.7	398.1	396.7	377.8
85°	85.3	81.2	93.4	107.0	128.6	199.0	281.6	296.5	245.1	197.7	195.0
87.5°	17.6	19.0	23.0	24.4	39.3	69.1	101.6	124.6	98.8	83.9	77.2
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)