

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: P968157

Luminaire Tested: **NAV-SB5B-722-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23875.3 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

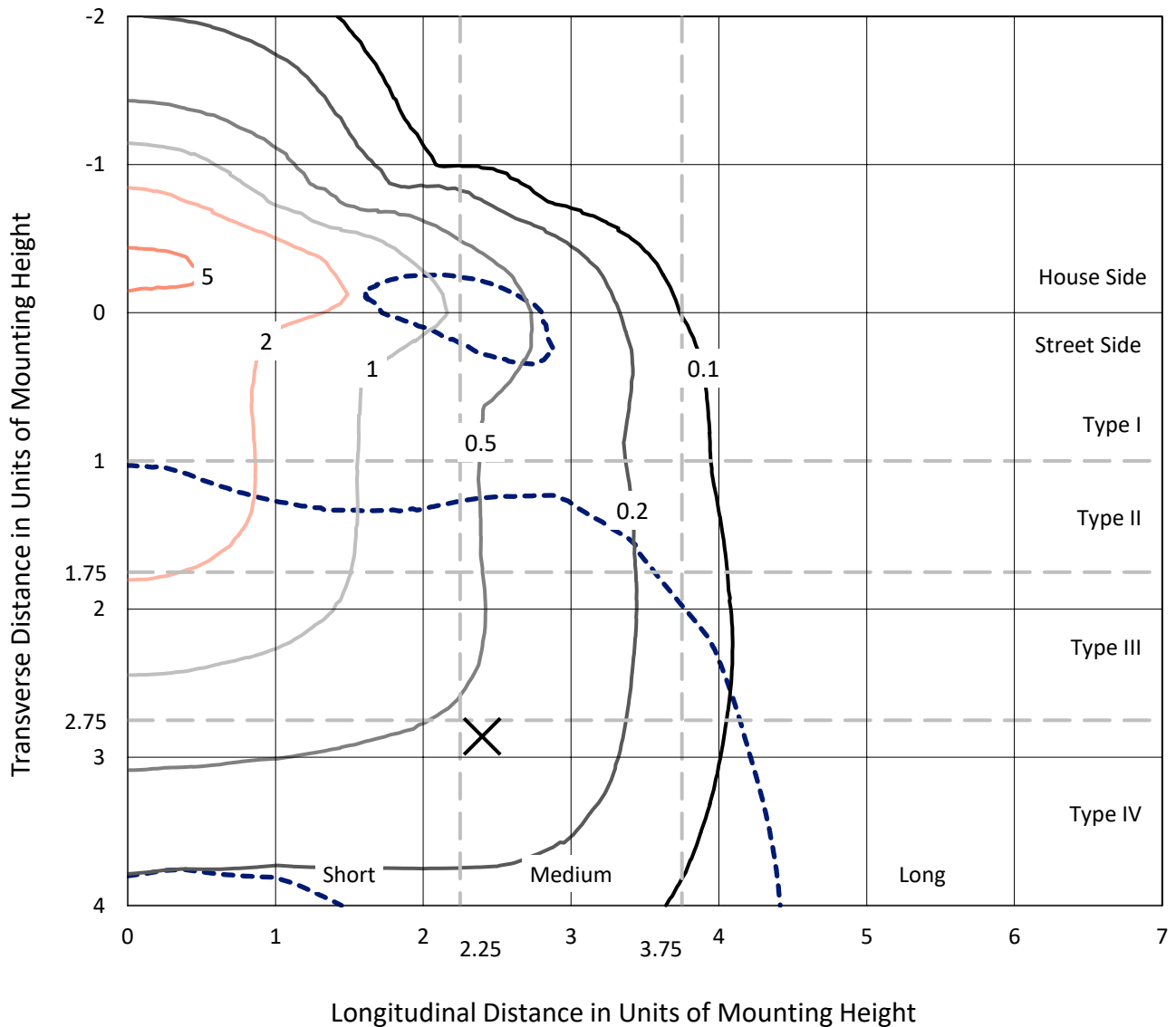
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

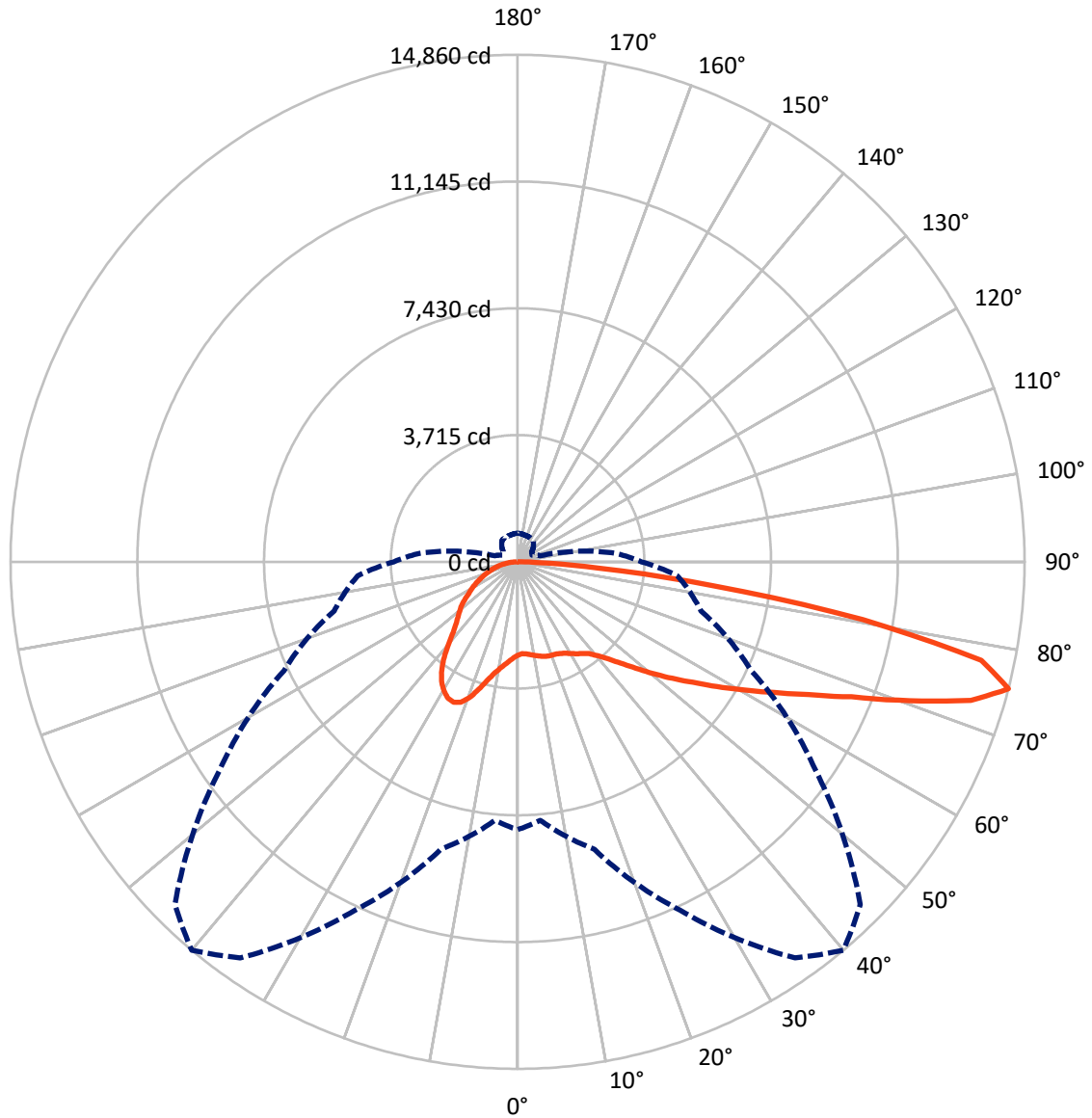
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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	7397.4	0.0	7397.4
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	16478.0	0.0	16478.0
	% Fixture	69.0	0.0	69.0
Total	Lumens	23875.3	0.0	23875.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	1.1
10°-20°	915.0	3.8
20°-30°	1670.7	7.0
30°-40°	2369.5	9.9
40°-50°	3199.5	13.4
50°-60°	4304.2	18.0
60°-70°	5463.1	22.9
70°-80°	4958.1	20.8
80°-90°	722.7	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°	23875.3	100.0
0°-180°	23875.3	100.0

Coefficient of Utilization

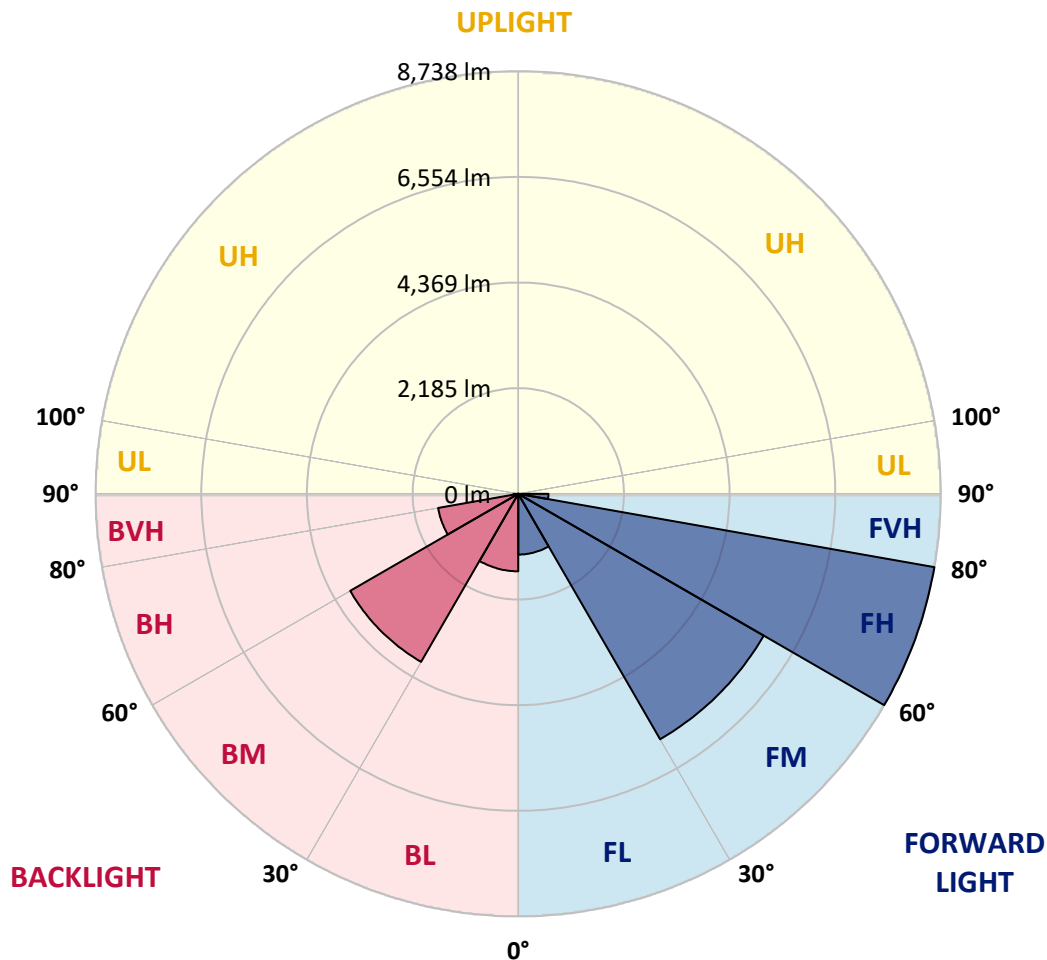


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1255.9	5.3			
FM (30°-60°)	5860.9	24.5			
FH (60°-80°)	8738.0	36.6			G4/12000
FVH (80°-90°)	623.2	2.6			G4/750
BL (0°-30°)	1602.3	6.7	B3/2500		
BM (30°-60°)	4012.4	16.8	B3/5000		
BH (60°-80°)	1683.1	7.0	B3/2500		G3/2500
BVH (80°-90°)	99.5	0.4			G1/100
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°	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2
2.5°	2688.4	2703.5	2699.7	2694.7	2694.7	2696.0	2694.7	2703.5	2712.5	2721.3	2735.2
5°	2716.2	2731.4	2723.8	2717.5	2712.5	2711.2	2707.3	2706.1	2711.2	2722.6	2741.6
7.5°	2770.7	2785.8	2774.5	2763.1	2752.9	2747.9	2742.8	2735.2	2731.4	2737.8	2764.3
10°	2831.5	2846.6	2832.8	2812.5	2796.0	2789.7	2784.6	2777.0	2772.0	2775.8	2804.9
12.5°	2892.2	2907.4	2888.4	2860.6	2839.0	2835.3	2828.9	2826.4	2825.1	2823.9	2853.0
15°	2949.2	2961.9	2937.9	2905.0	2882.1	2875.8	2869.5	2873.3	2879.6	2887.2	2920.1
17.5°	2993.6	3006.2	2970.8	2927.7	2906.2	2903.6	2899.8	2912.5	2930.3	2949.2	2989.7
20°	3034.1	3046.7	3001.2	2942.9	2917.6	2917.6	2918.9	2945.4	2970.8	2998.6	3054.4
22.5°	3091.1	3101.2	3045.5	2965.7	2928.9	2931.5	2941.6	2968.2	2999.9	3037.9	3115.2
25°	3176.0	3183.5	3115.2	3008.8	2967.0	2974.5	2983.5	2996.1	3026.5	3070.8	3174.6
27.5°	3312.7	3319.1	3229.1	3084.7	3021.4	3034.1	3046.7	3037.9	3051.8	3089.8	3222.8
30°	3505.2	3509.0	3395.0	3203.7	3113.8	3120.2	3122.8	3086.0	3059.4	3089.8	3256.9
32.5°	3733.0	3731.8	3596.3	3348.2	3219.0	3212.7	3191.1	3119.0	3056.9	3083.5	3287.4
35°	4086.4	4072.4	3897.8	3550.7	3338.0	3298.8	3248.1	3155.7	3069.6	3077.2	3313.9
37.5°	4671.4	4628.4	4386.5	3882.5	3515.3	3415.3	3340.6	3215.2	3097.4	3074.6	3345.6
40°	5331.2	5276.7	5010.8	4337.1	3781.2	3620.4	3500.1	3300.0	3143.0	3086.0	3392.4
42.5°	6113.8	6036.5	5750.4	4872.7	4118.0	3885.1	3703.9	3407.6	3210.1	3122.8	3455.8
45°	7074.9	6972.4	6567.1	5476.8	4542.3	4232.0	3990.1	3571.0	3312.7	3193.7	3550.7
47.5°	8046.1	8071.5	7495.3	6168.2	5051.3	4660.1	4348.6	3816.7	3462.1	3307.6	3703.9
50°	9078.2	9096.0	8418.4	6934.3	5628.8	5143.8	4751.2	4091.5	3669.8	3469.7	3933.1
52.5°	9883.6	9886.1	9256.8	7735.9	6230.3	5675.6	5185.6	4405.6	3910.4	3685.0	4238.4
55°	10387.6	10381.2	9844.3	8494.5	6921.7	6234.0	5666.7	4762.6	4204.1	3938.3	4622.0
57.5°	10753.6	10734.5	10249.6	9146.6	7658.7	6893.8	6211.3	5167.8	4551.1	4239.6	5127.4
60°	10892.9	10881.4	10524.4	9710.1	8433.7	7623.2	6839.4	5621.2	4945.0	4595.5	5776.9
62.5°	10946.1	10967.6	10794.1	10255.8	9263.1	8431.1	7529.5	6163.1	5388.2	4998.1	6462.0
65°	11133.4	11172.7	11137.2	10970.1	10200.2	9377.1	8445.1	6807.7	5871.9	5429.9	7177.5
67.5°	11504.5	11543.8	11558.9	11824.8	11344.9	10556.0	9587.2	7610.5	6437.9	5878.3	7715.7
70°	11495.6	11484.2	11752.6	12504.9	12778.4	12188.3	11127.1	8598.3	7112.9	6250.6	7784.1
72.5°	10463.6	10372.4	11006.9	12497.3	13971.3	13892.7	13007.6	9872.2	7695.4	6296.2	6754.5
75°	7849.9	7606.7	8727.5	11262.6	14170.1	14860.2	14203.0	10662.4	7557.3	5562.9	4700.5
77.5°	3357.0	3112.6	4433.3	8337.5	12682.1	13891.5	13106.4	9302.4	6032.7	3678.6	2308.5
80°	878.8	877.6	1339.8	3780.0	8624.9	10258.4	8999.7	6007.4	3446.9	1314.5	636.9
82.5°	363.5	354.5	492.6	1470.2	4214.3	5756.7	4698.0	2679.6	1244.8	355.9	211.5
85°	135.5	134.3	239.3	507.8	1486.7	2374.3	1718.4	685.1	310.3	173.5	95.0
87.5°	38.0	36.7	52.0	176.0	362.1	549.6	293.8	112.7	87.3	68.4	27.9
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°	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2	2730.2
2.5°	2739.0	2745.4	2756.7	2765.7	2777.0	2789.7	2807.4	2818.9	2830.2	2837.8	2832.8
5°	2750.5	2764.3	2793.5	2822.6	2856.8	2888.4	2925.1	2951.8	2973.3	2979.7	2982.1
7.5°	2775.8	2798.6	2848.0	2897.4	2951.8	3003.7	3056.9	3102.5	3139.2	3153.1	3154.4
10°	2820.1	2850.5	2920.1	2989.7	3062.0	3141.7	3210.1	3276.0	3327.9	3349.4	3350.6
12.5°	2875.8	2913.8	3005.0	3101.2	3201.3	3311.4	3400.0	3481.1	3545.7	3574.8	3574.8
15°	2948.0	2997.4	3113.8	3243.0	3389.9	3543.1	3655.9	3745.8	3817.9	3853.4	3850.8
17.5°	3026.5	3092.3	3239.2	3434.3	3644.5	3845.8	3977.5	4043.3	4118.0	4152.3	4150.9
20°	3102.5	3183.5	3393.8	3677.4	3957.2	4171.2	4277.6	4295.4	4300.4	4304.2	4314.3
22.5°	3181.0	3289.8	3587.5	3983.9	4284.0	4432.1	4447.3	4371.3	4264.9	4215.5	4229.5
25°	3267.1	3411.4	3840.8	4321.9	4565.0	4582.8	4466.3	4281.4	4080.1	3987.7	4001.6
27.5°	3350.6	3552.0	4144.7	4644.9	4767.7	4611.9	4361.2	4099.1	3855.9	3758.5	3769.8
30°	3434.3	3712.9	4480.2	4927.3	4860.1	4539.7	4195.3	3902.8	3658.4	3555.8	3567.2
32.5°	3519.1	3900.2	4866.5	5131.2	4843.6	4386.5	3988.9	3682.4	3467.2	3359.5	3373.5
35°	3615.4	4130.8	5232.4	5242.6	4733.4	4161.1	3716.6	3419.1	3231.6	3145.5	3164.5
37.5°	3740.7	4423.3	5555.3	5270.4	4541.0	3830.6	3378.5	3107.5	2953.0	2913.8	2941.6
40°	3896.4	4775.3	5802.2	5226.1	4256.1	3429.1	3008.8	2792.2	2704.9	2713.7	2744.1
42.5°	4099.1	5169.1	5975.7	5112.1	3859.7	3015.1	2684.6	2588.3	2630.1	2665.6	2698.5
45°	4362.5	5578.2	6083.4	4918.4	3411.4	2664.3	2493.4	2516.2	2547.8	2551.6	2577.0
47.5°	4699.3	5992.3	6154.3	4625.8	2954.4	2417.4	2371.8	2376.9	2370.5	2344.0	2364.2
50°	5119.7	6394.9	6217.6	4238.4	2565.6	2262.9	2202.1	2184.4	2097.0	2010.9	2022.3
52.5°	5598.3	6764.7	6244.2	3757.1	2262.9	2133.7	2034.9	1923.5	1760.1	1733.6	1742.5
55°	6130.2	7106.5	6175.8	3165.8	2008.4	1967.9	1818.5	1684.2	1666.4	1643.7	1647.5
57.5°	6765.9	7475.0	6036.5	2506.0	1747.5	1774.1	1628.5	1643.7	1612.0	1576.6	1570.2
60°	7461.1	7856.2	5792.2	1904.6	1477.7	1532.3	1579.1	1577.8	1569.0	1539.9	1529.7
62.5°	8086.7	8106.9	5310.9	1458.8	1241.0	1344.8	1472.7	1471.5	1463.9	1447.4	1441.0
65°	8459.0	8069.0	4508.1	1148.5	1046.0	1190.3	1328.4	1338.4	1339.8	1338.4	1338.4
67.5°	8393.1	7624.5	3406.4	914.3	885.2	1033.3	1185.3	1199.2	1209.3	1211.9	1214.4
70°	7648.6	6648.2	2221.1	729.4	742.1	895.2	1049.8	1063.7	1072.6	1082.7	1087.7
72.5°	5961.8	4888.0	1271.4	590.1	616.7	776.2	915.5	932.0	937.1	956.0	963.7
75°	3633.0	2874.5	686.3	464.7	506.6	663.6	782.6	801.6	810.5	833.2	835.8
77.5°	1727.2	1244.8	391.2	362.1	407.7	542.0	661.0	682.5	658.5	671.2	661.0
80°	583.7	462.2	246.9	276.0	311.5	422.9	529.3	550.8	500.2	497.6	492.6
82.5°	203.9	187.4	157.0	183.6	201.3	302.7	400.2	428.0	372.3	371.0	353.3
85°	79.7	76.0	87.3	100.0	120.3	186.1	263.4	277.4	229.2	184.9	182.3
87.5°	16.5	17.7	21.5	22.8	36.7	64.6	95.0	116.5	92.5	78.5	72.2
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)