

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: P884264

Luminaire Tested: **NAV-SB5A-730-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884264
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-SB5A-730-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 350mA 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: 22211 lumens
Efficiency: N/A
Efficacy: 156.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

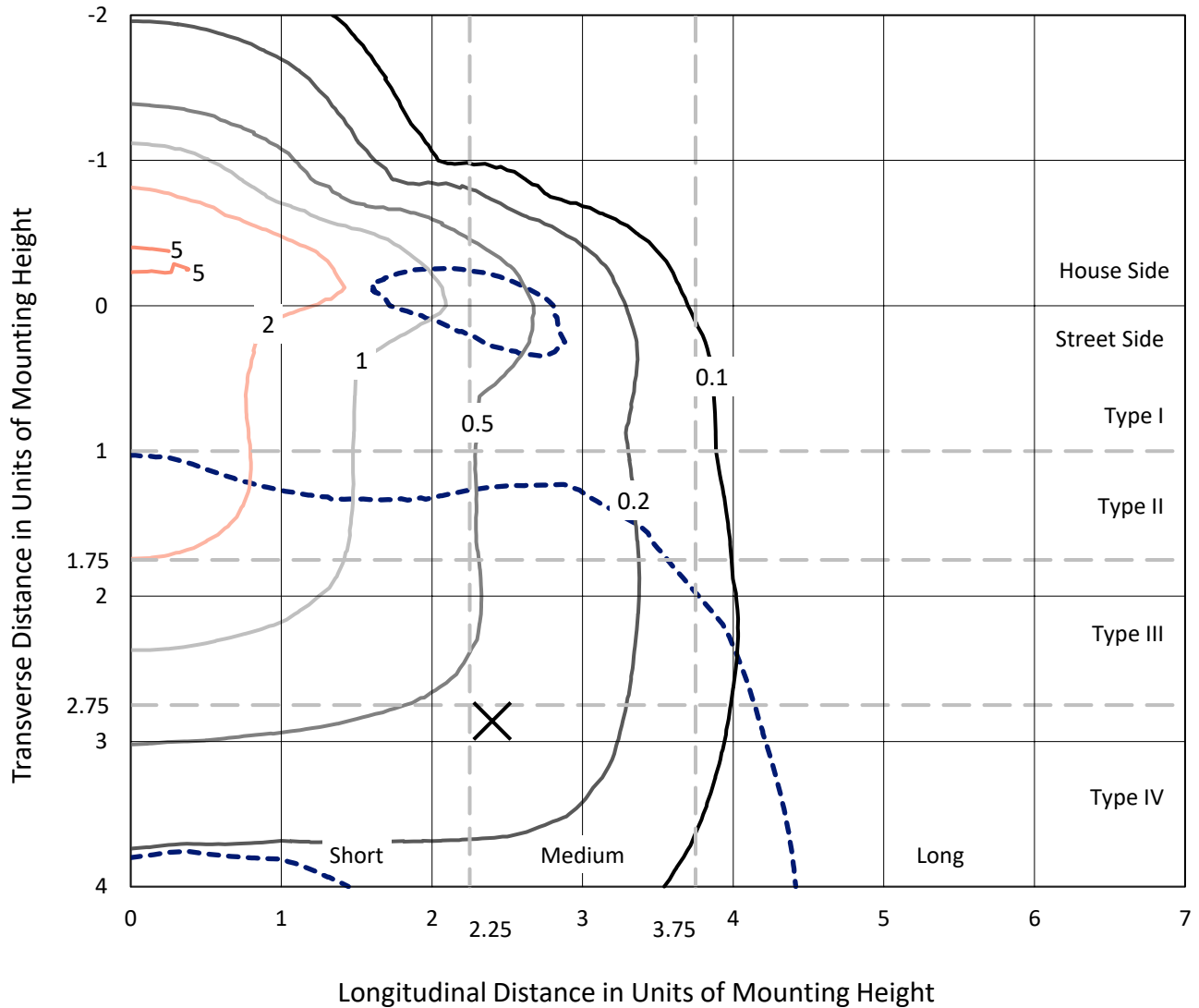
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

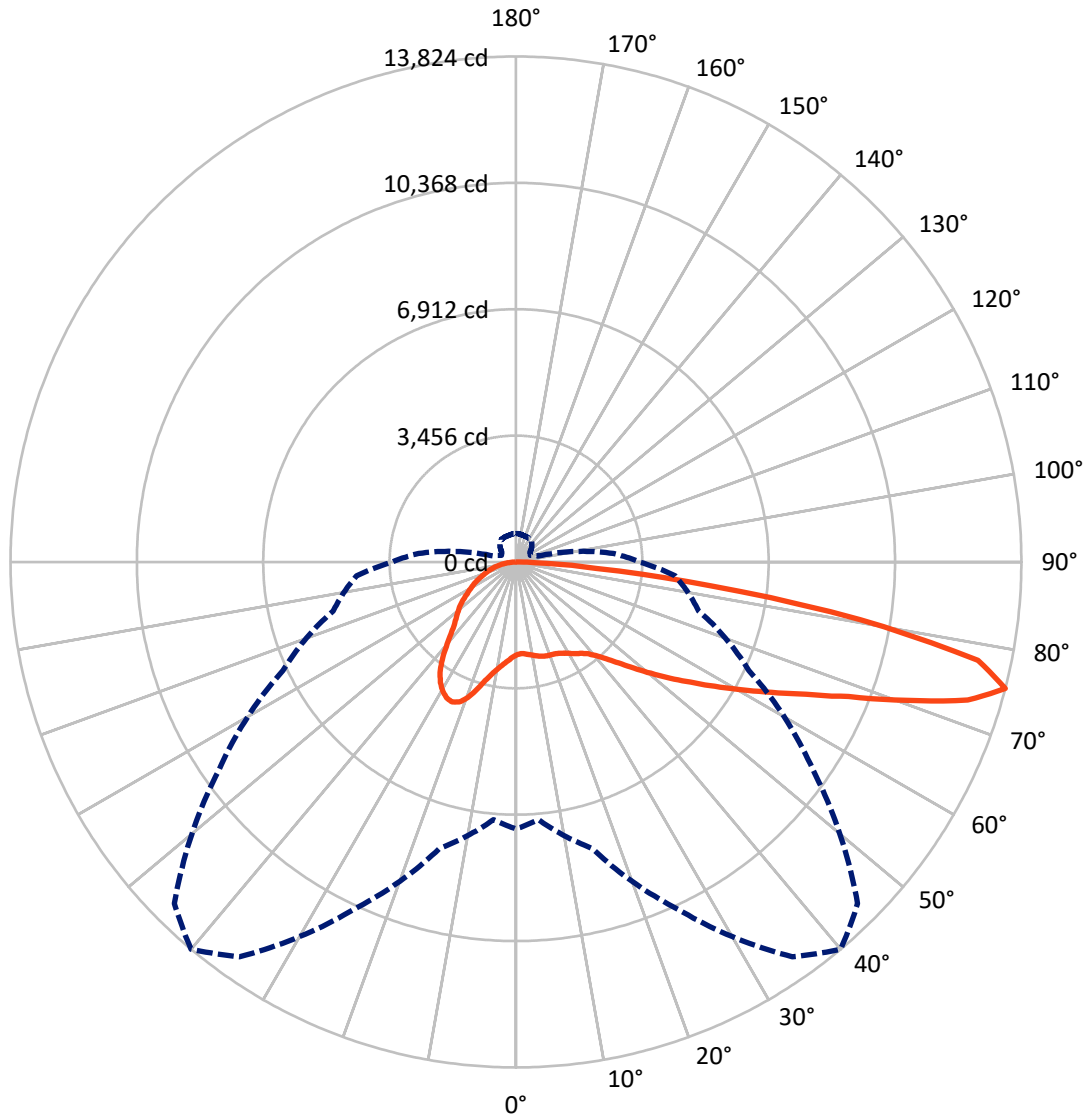
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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	6881.7	0.0	6881.7
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	15329.3	0.0	15329.3
	% Fixture	69.0	0.0	69.0
Total	Lumens	22211.0	0.0	22211.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.5	1.1
10°-20°	851.2	3.8
20°-30°	1554.2	7.0
30°-40°	2204.3	9.9
40°-50°	2976.5	13.4
50°-60°	4004.2	18.0
60°-70°	5082.2	22.9
70°-80°	4612.4	20.8
80°-90°	672.3	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°	22211.0	100.0
0°-180°	22211.0	100.0

Coefficient of Utilization



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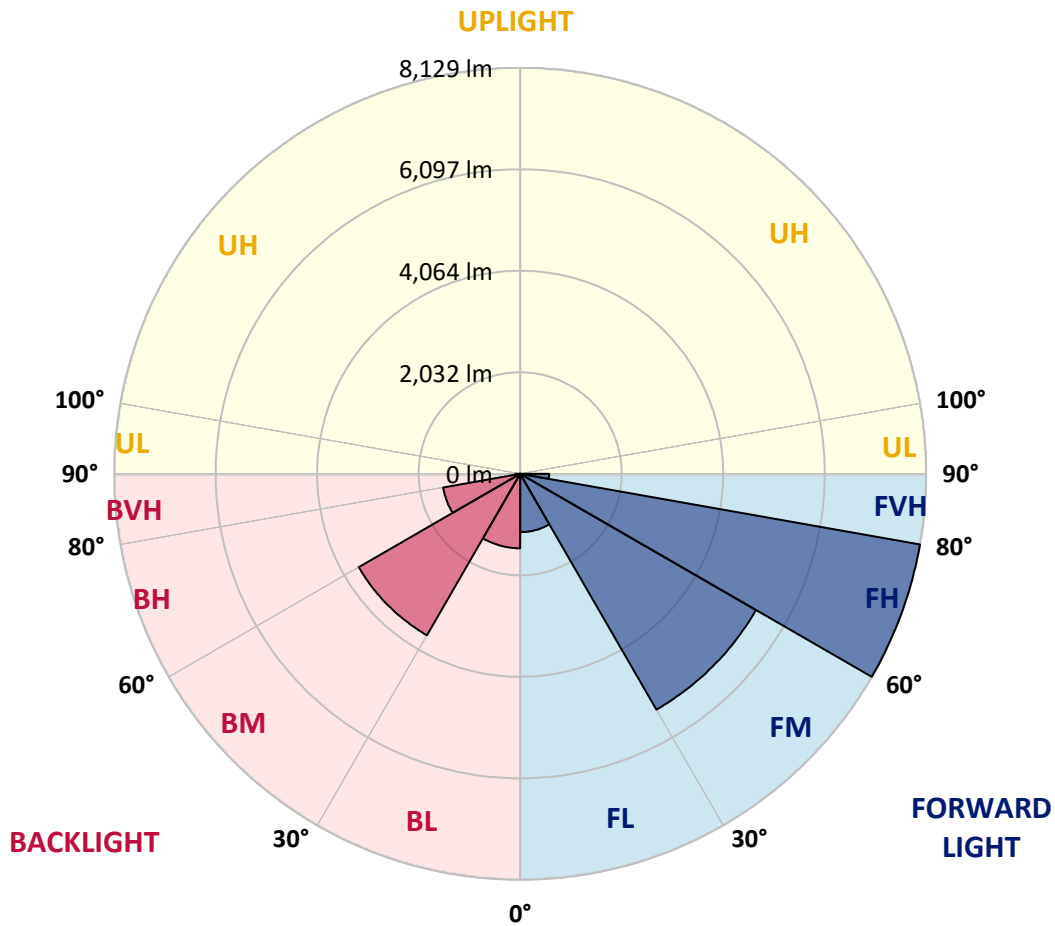
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1168.3	5.3			
FM (30°-60°)	5452.3	24.5			
FH (60°-80°)	8128.9	36.6			G4/12000
FVH (80°-90°)	579.8	2.6			G4/750
BL (0°-30°)	1490.6	6.7	B3/2500		
BM (30°-60°)	3732.7	16.8	B3/5000		
BH (60°-80°)	1565.8	7.0	B3/2500		G3/2500
BVH (80°-90°)	92.6	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°	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9
2.5°	2501.0	2515.1	2511.6	2506.9	2506.9	2508.1	2506.9	2515.1	2523.4	2531.6	2544.6
5°	2526.9	2541.0	2534.0	2528.1	2523.4	2522.2	2518.7	2517.5	2522.2	2532.8	2550.5
7.5°	2577.6	2591.7	2581.1	2570.5	2561.1	2556.4	2551.6	2544.6	2541.0	2546.9	2571.7
10°	2634.1	2648.2	2635.3	2616.4	2601.1	2595.2	2590.5	2583.4	2578.7	2582.3	2609.4
12.5°	2690.6	2704.8	2687.1	2661.2	2641.2	2637.6	2631.7	2629.4	2628.2	2627.0	2654.1
15°	2743.7	2755.4	2733.1	2702.4	2681.2	2675.3	2669.4	2673.0	2678.9	2685.9	2716.6
17.5°	2784.9	2796.7	2763.7	2723.6	2703.6	2701.2	2697.7	2709.5	2726.0	2743.7	2781.4
20°	2822.6	2834.4	2792.0	2737.8	2714.2	2714.2	2715.4	2740.1	2763.7	2789.6	2841.4
22.5°	2875.6	2885.0	2833.2	2759.0	2724.8	2727.2	2736.6	2761.3	2790.8	2826.1	2898.0
25°	2954.5	2961.6	2898.0	2799.0	2760.2	2767.2	2775.5	2787.2	2815.5	2856.8	2953.4
27.5°	3081.8	3087.6	3004.0	2869.7	2810.8	2822.6	2834.4	2826.1	2839.1	2874.4	2998.1
30°	3260.8	3264.4	3158.3	2980.4	2896.8	2902.7	2905.1	2870.9	2846.1	2874.4	3029.9
32.5°	3472.9	3471.7	3345.6	3114.7	2994.6	2988.7	2968.7	2901.5	2843.8	2868.5	3058.2
35°	3801.5	3788.6	3626.0	3303.2	3105.3	3068.8	3021.7	2935.7	2855.6	2862.6	3082.9
37.5°	4345.8	4305.7	4080.7	3611.9	3270.2	3177.2	3107.7	2991.0	2881.5	2860.3	3112.4
40°	4959.6	4908.9	4661.5	4034.8	3517.6	3368.0	3256.1	3070.0	2923.9	2870.9	3156.0
42.5°	5687.6	5615.7	5349.5	4533.1	3831.0	3614.2	3445.8	3170.1	2986.3	2905.1	3214.9
45°	6581.7	6486.3	6109.3	5095.0	4225.6	3937.0	3712.0	3322.1	3081.8	2971.0	3303.2
47.5°	7485.3	7508.8	6972.8	5738.2	4699.2	4335.2	4045.4	3550.6	3220.8	3077.0	3445.8
50°	8445.4	8461.9	7831.6	6451.0	5236.4	4785.2	4420.0	3806.3	3414.0	3227.8	3659.0
52.5°	9194.6	9197.0	8611.5	7196.7	5796.0	5280.0	4824.1	4098.4	3637.8	3428.1	3942.9
55°	9663.5	9657.6	9158.1	7902.3	6439.2	5799.5	5271.7	4430.6	3911.1	3663.7	4299.9
57.5°	10003.9	9986.3	9535.1	8509.0	7124.8	6413.3	5778.3	4807.6	4233.9	3944.1	4769.9
60°	10133.5	10122.9	9790.7	9033.2	7845.8	7091.8	6362.6	5229.3	4600.3	4275.1	5374.2
62.5°	10183.0	10203.0	10041.6	9541.0	8617.4	7843.4	7004.6	5733.5	5012.6	4649.7	6011.5
65°	10357.3	10393.9	10360.9	10205.4	9489.1	8723.4	7856.4	6333.2	5462.6	5051.4	6677.1
67.5°	10702.5	10739.0	10753.2	11000.6	10554.1	9820.2	8919.0	7080.0	5989.2	5468.5	7177.8
70°	10694.3	10683.7	10933.4	11633.2	11887.6	11338.6	10351.5	7998.9	6617.1	5814.8	7241.4
72.5°	9734.2	9649.3	10239.5	11626.1	12997.3	12924.3	12100.8	9184.0	7159.0	5857.2	6283.7
75°	7302.7	7076.5	8119.1	10477.5	13182.3	13824.3	13212.9	9919.1	7030.6	5175.1	4372.9
77.5°	3123.0	2895.6	4124.3	7756.2	11798.1	12923.1	12192.7	8653.9	5612.2	3422.2	2147.6
80°	817.6	816.4	1246.4	3516.5	8023.6	9543.3	8372.3	5588.6	3206.6	1222.8	592.6
82.5°	338.1	329.9	458.3	1367.7	3920.5	5355.4	4370.5	2492.7	1158.0	331.0	196.7
85°	126.1	124.9	222.6	472.4	1383.0	2208.8	1598.6	637.3	288.6	161.4	88.4
87.5°	35.3	34.2	48.3	163.7	336.9	511.3	273.3	104.8	81.3	63.6	25.9
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°	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9	2539.9
2.5°	2548.1	2554.0	2564.6	2572.8	2583.4	2595.2	2611.7	2622.3	2632.9	2640.0	2635.3
5°	2558.7	2571.7	2598.8	2625.9	2657.7	2687.1	2721.3	2746.0	2766.0	2771.9	2774.3
7.5°	2582.3	2603.5	2649.4	2695.4	2746.0	2794.3	2843.8	2886.2	2920.4	2933.3	2934.5
10°	2623.5	2651.8	2716.6	2781.4	2848.5	2922.7	2986.3	3047.6	3095.9	3115.9	3117.1
12.5°	2675.3	2710.7	2795.5	2885.0	2978.1	3080.6	3163.0	3238.4	3298.5	3325.6	3325.6
15°	2742.5	2788.4	2896.8	3017.0	3153.6	3296.2	3401.0	3484.6	3551.8	3584.8	3582.4
17.5°	2815.5	2876.8	3013.4	3194.8	3390.4	3577.7	3700.2	3761.5	3831.0	3862.8	3861.6
20°	2886.2	2961.6	3157.2	3421.0	3681.4	3880.5	3979.4	3995.9	4000.6	4004.2	4013.6
22.5°	2959.2	3060.6	3337.4	3706.1	3985.3	4123.1	4137.3	4066.6	3967.6	3921.7	3934.7
25°	3039.3	3173.6	3573.0	4020.7	4246.8	4263.3	4155.0	3983.0	3795.6	3709.7	3722.6
27.5°	3117.1	3304.4	3855.7	4321.1	4435.3	4290.4	4057.2	3813.3	3587.1	3496.4	3507.0
30°	3194.8	3454.0	4167.9	4583.8	4521.3	4223.3	3902.9	3630.7	3403.4	3307.9	3318.5
32.5°	3273.8	3628.4	4527.2	4773.4	4506.0	4080.7	3710.8	3425.7	3225.5	3125.3	3138.3
35°	3363.3	3842.8	4867.7	4877.1	4403.5	3871.0	3457.6	3180.7	3006.4	2926.3	2943.9
37.5°	3479.9	4114.9	5168.1	4903.0	4224.5	3563.6	3143.0	2890.9	2747.2	2710.7	2736.6
40°	3624.8	4442.4	5397.8	4861.8	3959.4	3190.1	2799.0	2597.6	2516.3	2524.5	2552.8
42.5°	3813.3	4808.8	5559.2	4755.8	3590.7	2804.9	2497.4	2407.9	2446.8	2479.8	2510.4
45°	4058.4	5189.3	5659.3	4575.5	3173.6	2478.6	2319.6	2340.8	2370.2	2373.8	2397.3
47.5°	4371.7	5574.5	5725.3	4303.4	2748.4	2248.9	2206.5	2211.2	2205.3	2180.6	2199.4
50°	4762.8	5949.1	5784.2	3942.9	2386.7	2105.2	2048.6	2032.1	1950.8	1870.7	1881.3
52.5°	5208.1	6293.1	5808.9	3495.2	2105.2	1985.0	1893.1	1789.4	1637.5	1612.7	1621.0
55°	5702.9	6611.2	5745.3	2945.1	1868.4	1830.7	1691.7	1566.8	1550.3	1529.1	1532.6
57.5°	6294.3	6954.0	5615.7	2331.3	1625.7	1650.4	1515.0	1529.1	1499.6	1466.7	1460.8
60°	6941.0	7308.6	5388.4	1771.8	1374.8	1425.4	1469.0	1467.8	1459.6	1432.5	1423.1
62.5°	7523.0	7541.8	4940.7	1357.1	1154.5	1251.1	1370.1	1368.9	1361.8	1346.5	1340.6
65°	7869.3	7506.5	4193.8	1068.5	973.1	1107.4	1235.8	1245.2	1246.4	1245.2	1245.2
67.5°	7808.1	7093.0	3168.9	850.5	823.5	961.3	1102.6	1115.6	1125.0	1127.4	1129.7
70°	7115.4	6184.7	2066.3	678.6	690.3	832.9	976.6	989.6	997.8	1007.2	1011.9
72.5°	5546.2	4547.2	1182.8	549.0	573.7	722.1	851.7	867.0	871.8	889.4	896.5
75°	3379.8	2674.2	638.5	432.3	471.2	617.3	728.0	745.7	753.9	775.2	777.5
77.5°	1606.8	1158.0	364.0	336.9	379.3	504.2	614.9	635.0	612.6	624.4	614.9
80°	543.1	430.0	229.7	256.8	289.8	393.5	492.4	512.4	465.3	463.0	458.3
82.5°	189.7	174.4	146.1	170.8	187.3	281.6	372.3	398.2	346.3	345.2	328.7
85°	74.2	70.7	81.3	93.1	111.9	173.2	245.0	258.0	213.2	172.0	169.6
87.5°	15.3	16.5	20.0	21.2	34.2	60.1	88.4	108.4	86.0	73.0	67.1
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)