

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: P883254

Luminaire Tested: **NAV-SB3C-735-U-SL4**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883254  
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-SB3C-735-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

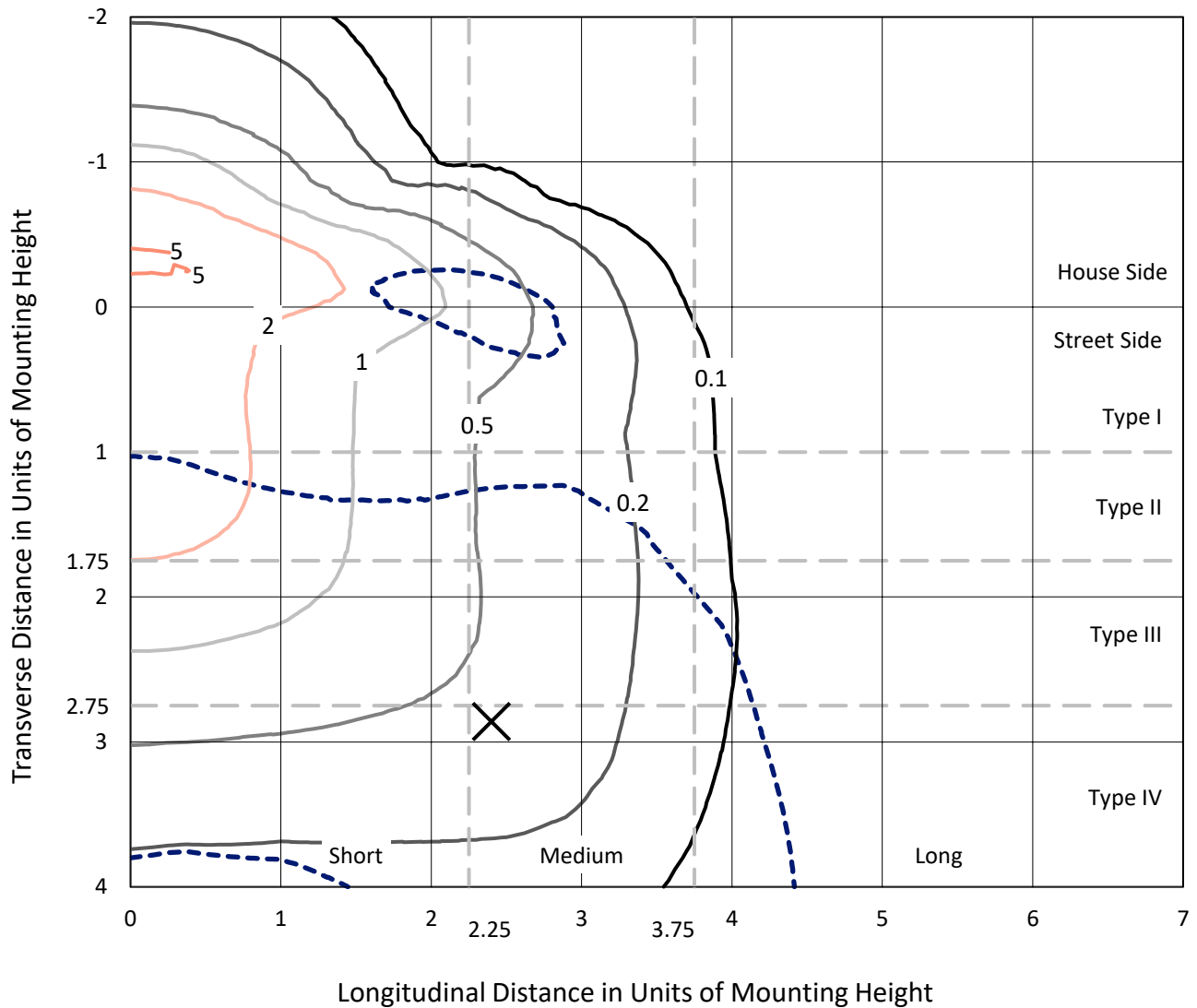
Lumens per Lamp: N/A  
Luminaire Lumens: 22267 lumens  
Efficiency: N/A  
Efficacy: 149.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
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

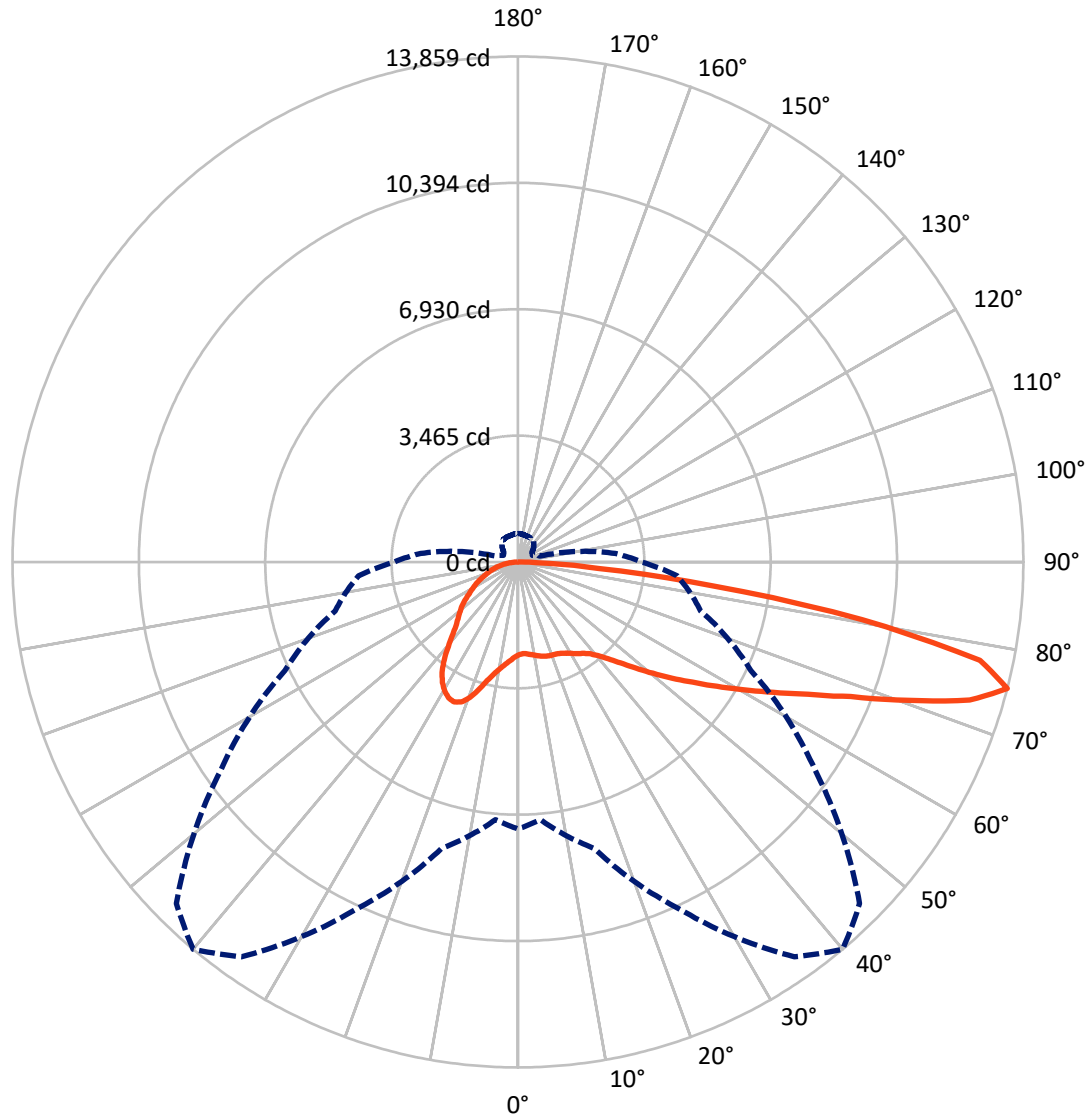
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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
<b>House Side</b>	Lumens	6899.1	0.0	6899.1
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	15367.9	0.0	15367.9
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	22267.0	0.0	22267.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.2	1.1
10°-20°	853.4	3.8
20°-30°	1558.1	7.0
30°-40°	2209.9	9.9
40°-50°	2984.0	13.4
50°-60°	4014.3	18.0
60°-70°	5095.0	22.9
70°-80°	4624.1	20.8
80°-90°	674.0	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°	22267.0	100.0
0°-180°	22267.0	100.0

**Coefficient of Utilization**



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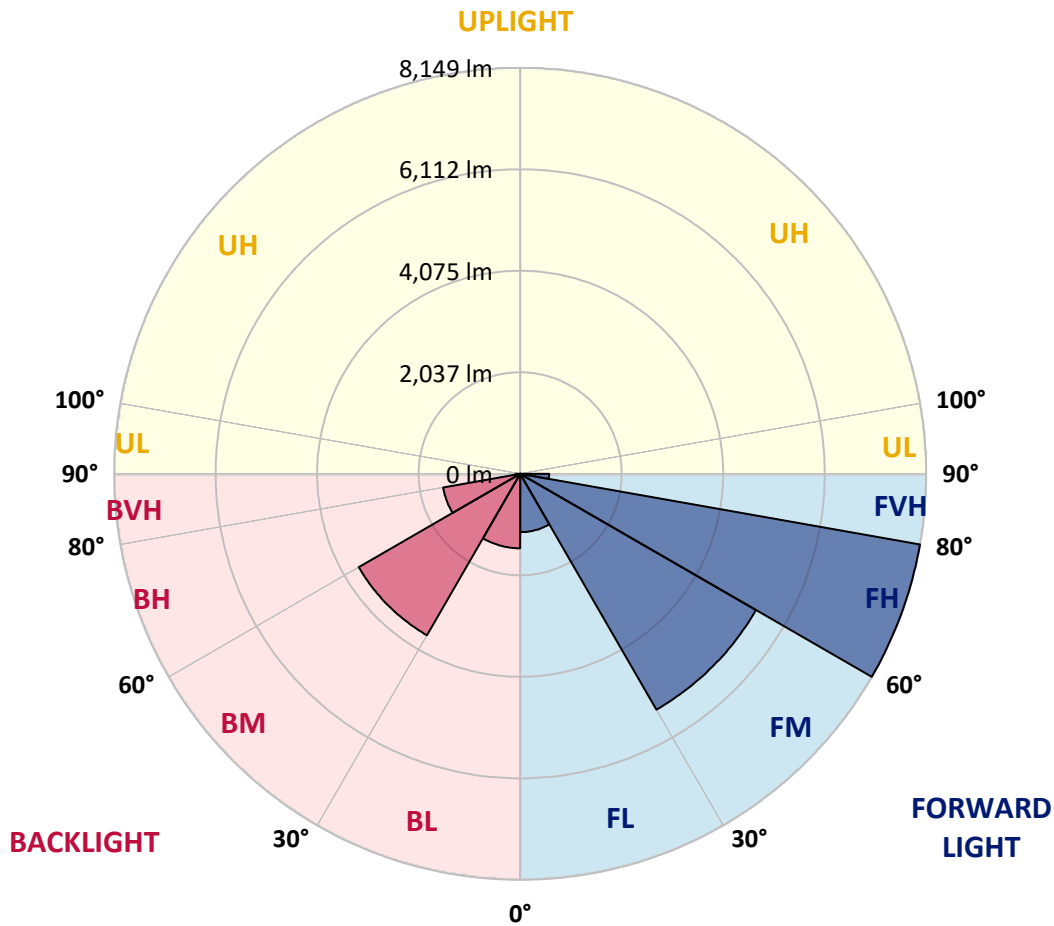
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1171.3	5.3			
FM (30°-60°)	5466.1	24.5			
FH (60°-80°)	8149.4	36.6			G4/12000
FVH (80°-90°)	581.2	2.6			G4/750
BL (0°-30°)	1494.4	6.7	B3/2500		
BM (30°-60°)	3742.1	16.8	B3/5000		
BH (60°-80°)	1569.7	7.0	B3/2500		G3/2500
BVH (80°-90°)	92.8	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°	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3
2.5°	2507.3	2521.5	2517.9	2513.2	2513.2	2514.4	2513.2	2521.5	2529.7	2538.0	2551.0
5°	2533.3	2547.4	2540.4	2534.5	2529.7	2528.5	2525.0	2523.8	2528.5	2539.2	2556.9
7.5°	2584.1	2598.2	2587.6	2577.0	2567.5	2562.8	2558.1	2551.0	2547.4	2553.3	2578.1
10°	2640.7	2654.9	2641.9	2623.0	2607.7	2601.8	2597.0	2590.0	2585.2	2588.8	2615.9
12.5°	2697.4	2711.6	2693.9	2667.9	2647.8	2644.3	2638.4	2636.0	2634.8	2633.7	2660.8
15°	2750.6	2762.4	2739.9	2709.2	2688.0	2682.1	2676.2	2679.7	2685.6	2692.7	2723.4
17.5°	2791.9	2803.7	2770.7	2730.5	2710.4	2708.1	2704.5	2716.3	2732.9	2750.6	2788.4
20°	2829.7	2841.5	2799.0	2744.7	2721.1	2721.1	2722.2	2747.0	2770.7	2796.6	2848.6
22.5°	2882.8	2892.3	2840.3	2765.9	2731.7	2734.0	2743.5	2768.3	2797.8	2833.2	2905.3
25°	2962.0	2969.1	2905.3	2806.1	2767.1	2774.2	2782.5	2794.3	2822.6	2864.0	2960.8
27.5°	3089.5	3095.4	3011.6	2876.9	2817.9	2829.7	2841.5	2833.2	2846.2	2881.7	3005.7
30°	3269.0	3272.6	3166.3	2988.0	2904.1	2910.0	2912.4	2878.1	2853.3	2881.7	3037.6
32.5°	3481.6	3480.4	3354.1	3122.6	3002.1	2996.2	2976.1	2908.8	2851.0	2875.8	3065.9
35°	3811.1	3798.1	3635.2	3311.6	3113.1	3076.5	3029.3	2943.1	2862.8	2869.9	3090.7
37.5°	4356.8	4316.6	4091.0	3621.0	3278.5	3185.2	3115.5	2998.6	2888.8	2867.5	3120.2
40°	4972.1	4921.3	4673.3	4045.0	3526.5	3376.5	3264.3	3077.7	2931.3	2878.1	3163.9
42.5°	5701.9	5629.9	5363.0	4544.5	3840.6	3623.3	3454.5	3178.1	2993.9	2912.4	3223.0
45°	6598.3	6502.7	6124.7	5107.9	4236.3	3946.9	3721.4	3330.5	3089.5	2978.5	3311.6
47.5°	7504.1	7527.8	6990.4	5752.7	4711.1	4346.1	4055.6	3559.6	3228.9	3084.8	3454.5
50°	8466.7	8483.2	7851.4	6467.2	5249.6	4797.3	4431.2	3815.8	3422.6	3236.0	3668.2
52.5°	9217.8	9220.2	8633.2	7214.8	5810.6	5293.3	4836.2	4108.7	3647.0	3436.7	3952.8
55°	9687.8	9681.9	9181.2	7922.2	6455.4	5814.1	5285.0	4441.8	3921.0	3672.9	4310.7
57.5°	10029.2	10011.4	9559.1	8530.4	7142.8	6429.4	5792.9	4819.7	4244.6	3954.0	4781.9
60°	10159.1	10148.4	9815.4	9056.0	7865.5	7109.7	6378.6	5242.5	4611.9	4285.9	5387.8
62.5°	10208.7	10228.7	10066.9	9565.0	8639.1	7863.2	7022.3	5748.0	5025.2	4661.5	6026.7
65°	10383.5	10420.1	10387.0	10231.1	9513.0	8745.4	7876.2	6349.1	5476.4	5064.2	6694.0
67.5°	10729.5	10766.1	10780.3	11028.3	10580.7	9844.9	8941.4	7097.9	6004.3	5482.3	7195.9
70°	10721.2	10710.6	10961.0	11662.5	11917.6	11367.2	10377.5	8019.1	6633.7	5829.5	7259.7
72.5°	9758.7	9673.7	10265.4	11655.4	13030.1	12956.9	12131.4	9207.2	7177.0	5872.0	6299.5
75°	7321.1	7094.3	8139.5	10503.9	13215.5	13859.2	13246.2	9944.1	7048.3	5188.2	4383.9
77.5°	3130.9	2902.9	4134.7	7775.8	11827.8	12955.7	12223.5	8675.7	5626.3	3430.8	2153.0
80°	819.6	818.4	1249.5	3525.3	8043.9	9567.4	8393.4	5602.7	3214.7	1225.9	594.0
82.5°	339.0	330.7	459.4	1371.2	3930.4	5368.9	4381.6	2499.0	1160.9	331.9	197.2
85°	126.4	125.2	223.2	473.6	1386.5	2214.4	1602.6	638.9	289.3	161.8	88.6
87.5°	35.4	34.2	48.4	164.2	337.8	512.6	274.0	105.1	81.5	63.8	26.0
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°	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3	2546.3
2.5°	2554.5	2560.4	2571.1	2579.3	2590.0	2601.8	2618.3	2628.9	2639.6	2646.6	2641.9
5°	2565.2	2578.1	2605.3	2632.5	2664.4	2693.9	2728.1	2752.9	2773.0	2778.9	2781.3
7.5°	2588.8	2610.0	2656.1	2702.2	2752.9	2801.4	2851.0	2893.5	2927.7	2940.7	2941.9
10°	2630.1	2658.5	2723.4	2788.4	2855.7	2930.1	2993.9	3055.3	3103.7	3123.8	3125.0
12.5°	2682.1	2717.5	2802.5	2892.3	2985.6	3088.3	3171.0	3246.6	3306.8	3334.0	3334.0
15°	2749.4	2795.5	2904.1	3024.6	3161.6	3304.5	3409.6	3493.4	3560.8	3593.8	3591.5
17.5°	2822.6	2884.0	3021.0	3202.9	3399.0	3586.7	3709.6	3771.0	3840.6	3872.5	3871.4
20°	2893.5	2969.1	3165.1	3429.7	3690.7	3890.3	3989.5	4006.0	4010.7	4014.3	4023.7
22.5°	2966.7	3068.3	3345.8	3715.5	3995.4	4133.5	4147.7	4076.9	3977.6	3931.6	3944.6
25°	3047.0	3181.6	3582.0	4030.8	4257.5	4274.1	4165.4	3993.0	3805.2	3719.0	3732.0
27.5°	3125.0	3312.7	3865.5	4332.0	4446.5	4301.2	4067.4	3822.9	3596.2	3505.2	3515.9
30°	3202.9	3462.7	4178.4	4595.3	4532.7	4233.9	3912.7	3639.9	3411.9	3316.3	3326.9
32.5°	3282.0	3637.5	4538.6	4785.5	4517.4	4091.0	3720.2	3434.4	3233.6	3133.2	3146.2
35°	3371.8	3852.5	4879.9	4889.4	4414.6	3880.8	3466.3	3188.7	3013.9	2933.6	2951.3
37.5°	3488.7	4125.3	5181.1	4915.4	4235.1	3572.6	3150.9	2898.2	2754.1	2717.5	2743.5
40°	3634.0	4453.6	5411.4	4874.0	3969.4	3198.2	2806.1	2604.1	2522.6	2530.9	2559.3
42.5°	3822.9	4820.9	5573.2	4767.7	3599.7	2812.0	2503.7	2414.0	2453.0	2486.0	2516.7
45°	4068.6	5202.4	5673.6	4587.0	3181.6	2484.8	2325.4	2346.7	2376.2	2379.7	2403.4
47.5°	4382.7	5588.5	5739.7	4314.2	2755.3	2254.6	2212.0	2216.8	2210.9	2186.1	2204.9
50°	4774.8	5964.1	5798.8	3952.8	2392.7	2110.5	2053.8	2037.2	1955.8	1875.4	1886.1
52.5°	5221.3	6309.0	5823.6	3504.1	2110.5	1990.0	1897.9	1794.0	1641.6	1616.8	1625.1
55°	5717.3	6627.8	5759.8	2952.5	1873.1	1835.3	1695.9	1570.7	1554.2	1533.0	1536.5
57.5°	6310.1	6971.5	5629.9	2337.2	1629.8	1654.6	1518.8	1533.0	1503.4	1470.4	1464.5
60°	6958.5	7327.0	5401.9	1776.2	1378.2	1429.0	1472.7	1471.5	1463.3	1436.1	1426.7
62.5°	7541.9	7560.8	4953.2	1360.5	1157.4	1254.2	1373.5	1372.3	1365.2	1349.9	1344.0
65°	7889.2	7525.4	4204.4	1071.2	975.5	1110.2	1238.9	1248.3	1249.5	1248.3	1248.3
67.5°	7827.7	7110.9	3176.9	852.7	825.5	963.7	1105.4	1118.4	1127.9	1130.2	1132.6
70°	7133.3	6200.3	2071.5	680.3	692.1	835.0	979.1	992.0	1000.3	1009.8	1014.5
72.5°	5560.2	4558.7	1185.7	550.4	575.2	724.0	853.9	869.2	873.9	891.7	898.7
75°	3388.3	2680.9	640.1	433.4	472.4	618.9	729.9	747.6	755.8	777.1	779.5
77.5°	1610.9	1160.9	364.9	337.8	380.3	505.5	616.5	636.6	614.1	625.9	616.5
80°	544.4	431.1	230.3	257.5	290.5	394.5	493.7	513.7	466.5	464.1	459.4
82.5°	190.1	174.8	146.4	171.2	187.8	282.3	373.2	399.2	347.2	346.0	329.5
85°	74.4	70.9	81.5	93.3	112.2	173.6	245.7	258.6	213.8	172.4	170.1
87.5°	15.4	16.5	20.1	21.3	34.2	60.2	88.6	108.7	86.2	73.2	67.3
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)