

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: P962604

Luminaire Tested: **NAV-SB2C-830-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-830-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13710.4 lumens
Efficiency: N/A
Efficacy: 135.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 100.9
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



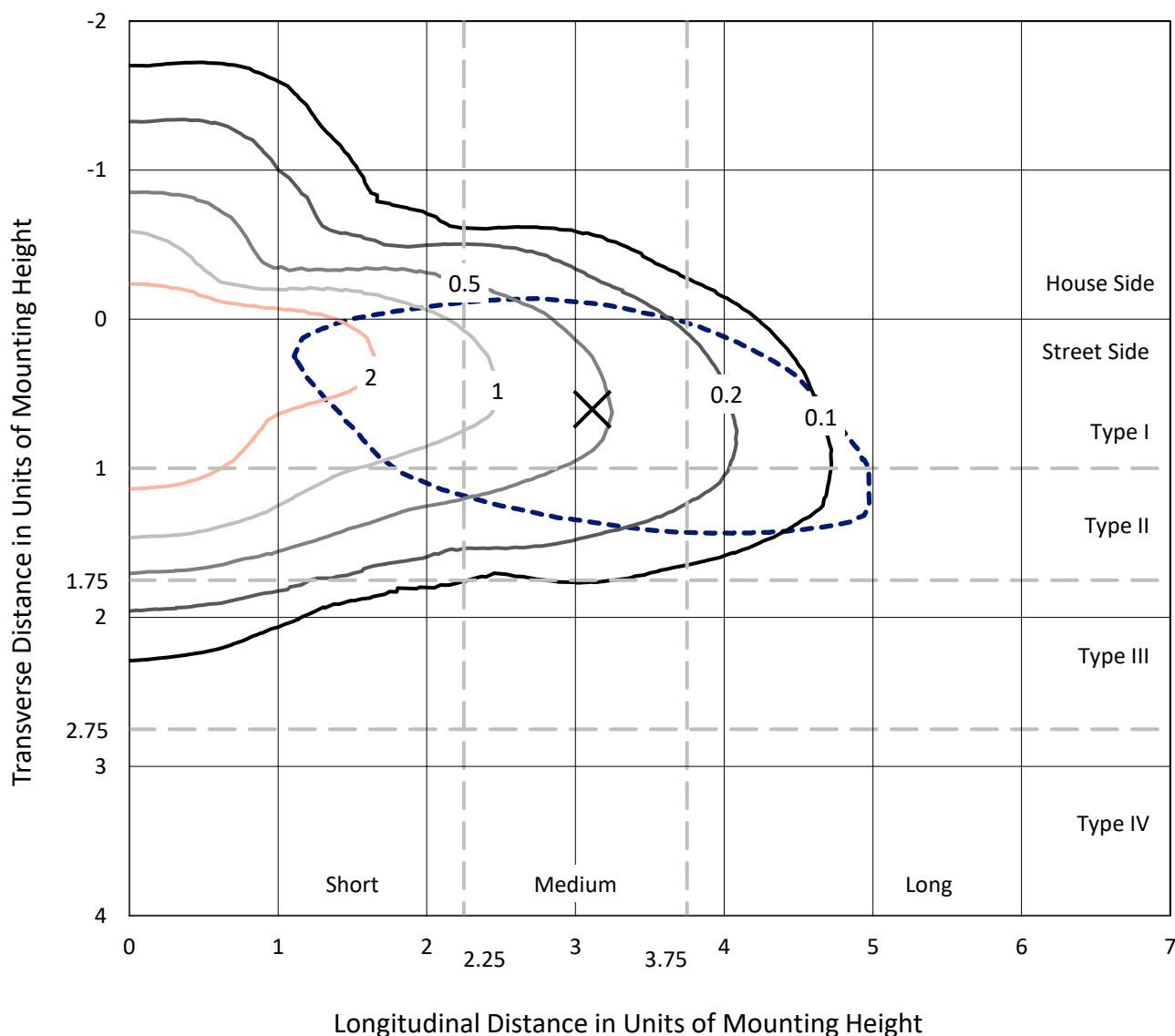
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

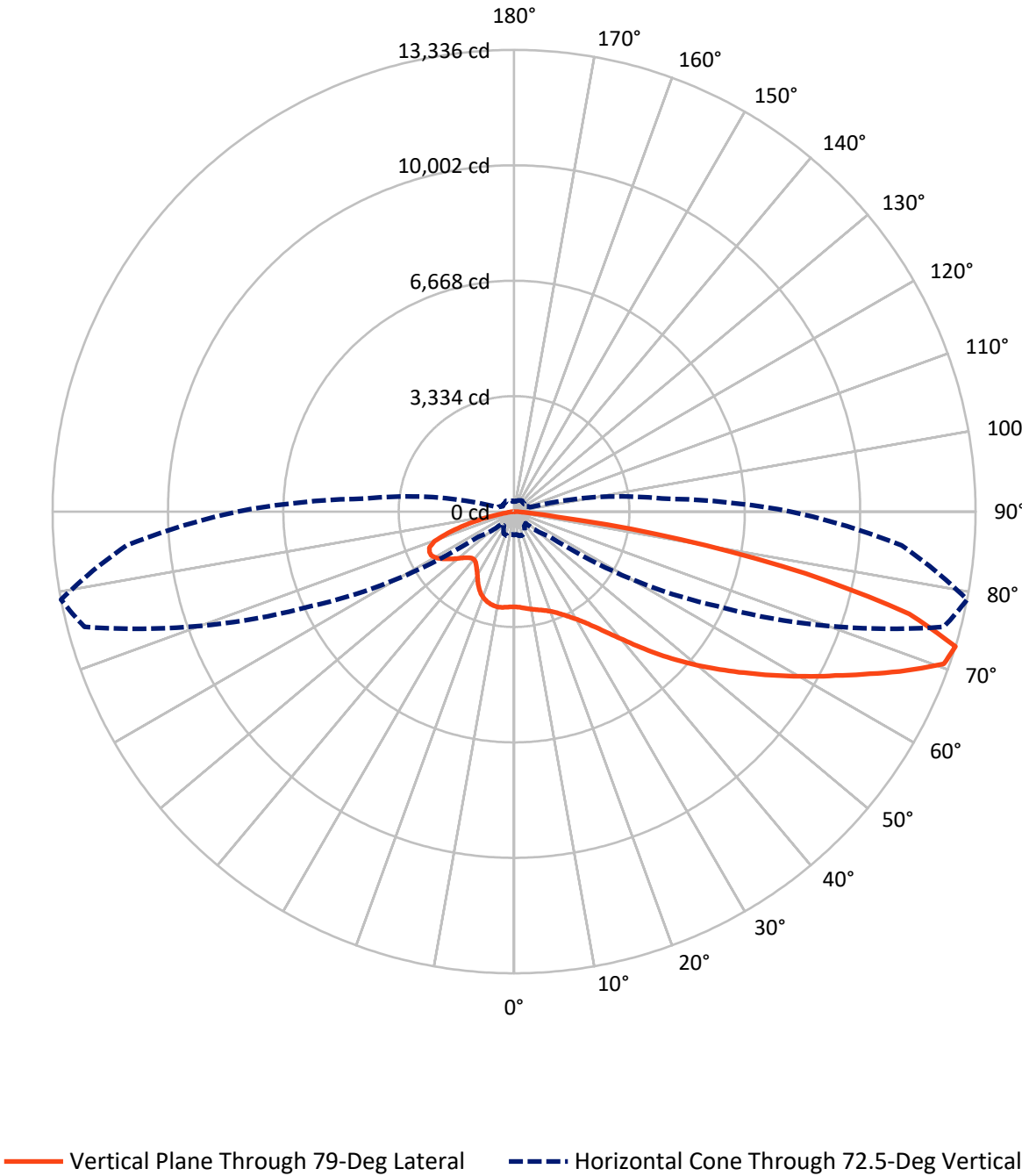
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3017.1	0.0	3017.1
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	10693.4	0.0	10693.4
	% Fixture	78.0	0.0	78.0
Total	Lumens	13710.4	0.0	13710.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.8	1.8
10°-20°	653.2	4.8
20°-30°	1053.9	7.7
30°-40°	1581.8	11.5
40°-50°	2243.9	16.4
50°-60°	2833.7	20.7
60°-70°	2878.0	21.0
70°-80°	1961.5	14.3
80°-90°	254.5	1.9
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°	13710.4	100.0
0°-180°	13710.4	100.0

Coefficient of Utilization



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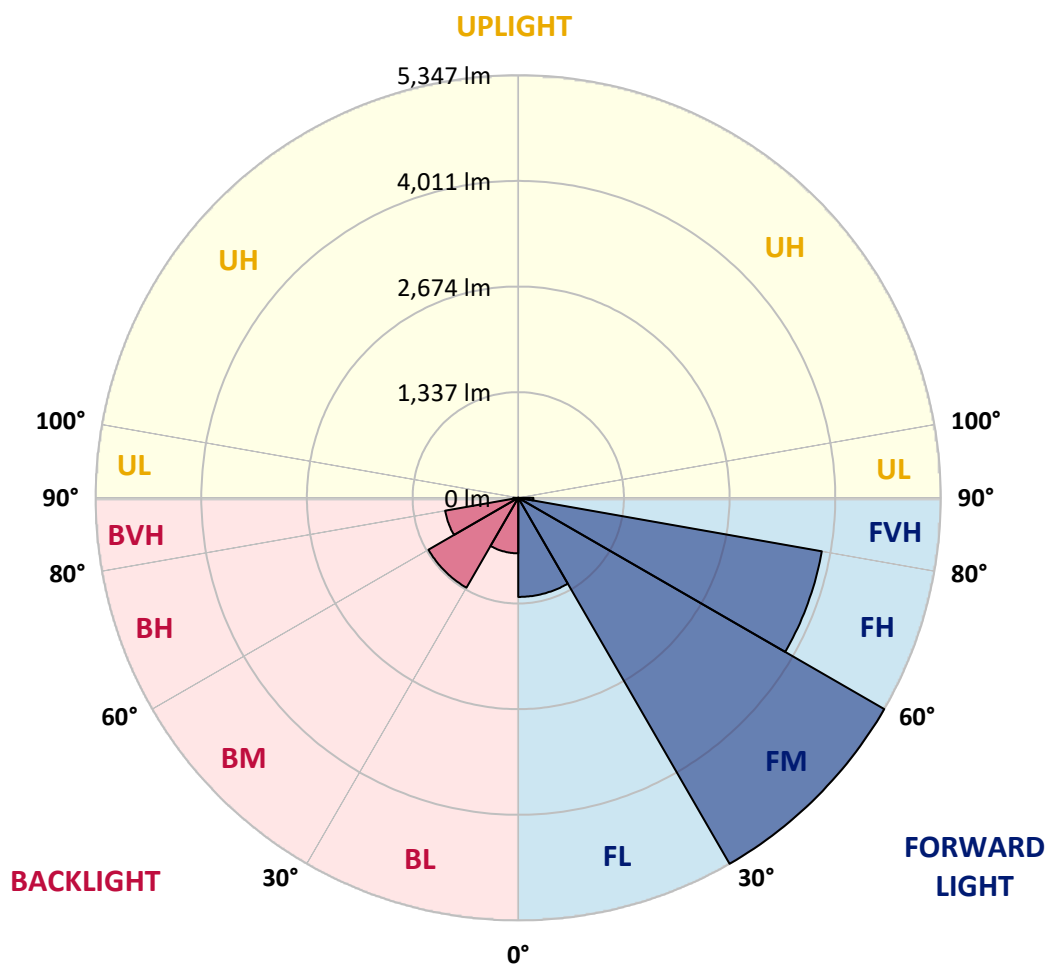
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1254.2	9.1			
FM	(30°-60°)	5347.3	39.0			
FH	(60°-80°)	3900.1	28.4			G2/5000
FVH	(80°-90°)	191.7	1.4			G2/225
BL	(0°-30°)	702.8	5.1	B2/1000		
BM	(30°-60°)	1312.1	9.6	B2/2500		
BH	(60°-80°)	939.4	6.9	B2/1000		G2/1000
BVH	(80°-90°)	62.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2
2.5°	2753.7	2740.6	2748.6	2745.7	2749.4	2753.7	2755.1	2757.4	2764.5	2763.8	2763.1
5°	2747.9	2734.8	2745.7	2742.1	2751.5	2761.7	2770.4	2778.4	2789.9	2795.0	2787.8
7.5°	2735.5	2726.8	2737.8	2748.6	2766.0	2781.2	2793.5	2811.7	2828.4	2831.3	2836.4
10°	2663.8	2657.2	2682.6	2710.9	2758.8	2800.1	2827.0	2848.0	2866.1	2869.0	2876.3
12.5°	2589.0	2581.1	2609.3	2647.8	2725.4	2800.1	2856.7	2884.2	2900.1	2909.6	2920.5
15°	2576.7	2570.2	2586.2	2619.5	2684.1	2780.5	2877.0	2927.7	2941.5	2952.4	2956.7
17.5°	2636.2	2623.9	2630.4	2642.0	2679.8	2762.4	2893.0	2977.0	2998.1	3009.7	3009.7
20°	2774.0	2756.6	2746.4	2723.2	2716.7	2765.2	2891.5	3036.6	3064.0	3078.6	3082.2
22.5°	2957.4	2945.8	2924.1	2865.4	2801.5	2800.8	2919.0	3112.7	3164.2	3177.9	3169.2
25°	3179.3	3162.0	3134.4	3054.6	2932.1	2871.1	2965.4	3209.9	3296.2	3299.8	3274.4
27.5°	3434.7	3408.5	3370.8	3265.6	3100.3	2981.4	3036.6	3321.5	3447.7	3446.3	3394.1
30°	3703.7	3677.6	3637.7	3510.1	3301.9	3130.0	3135.2	3442.0	3627.6	3619.6	3530.4
32.5°	3900.2	3880.6	3872.8	3774.0	3534.0	3305.6	3248.3	3575.4	3849.5	3842.2	3717.5
35°	4051.1	4025.7	4035.1	3985.1	3787.2	3502.1	3386.8	3734.2	4119.3	4118.6	3963.4
37.5°	4200.6	4178.0	4186.0	4152.7	4021.4	3751.6	3555.8	3928.5	4453.6	4469.6	4260.7
40°	4336.9	4312.9	4344.9	4313.6	4203.4	4017.1	3748.0	4148.3	4840.9	4871.3	4620.4
42.5°	4418.8	4399.9	4452.9	4453.6	4361.5	4241.1	3959.0	4390.5	5289.1	5357.3	5062.8
45°	4447.1	4440.6	4520.4	4537.1	4501.5	4370.9	4149.0	4654.5	5772.1	5894.0	5566.9
47.5°	4416.6	4404.3	4514.5	4576.2	4604.5	4431.9	4306.4	4940.2	6265.2	6443.7	6116.6
50°	4262.9	4239.0	4402.9	4532.7	4633.5	4471.8	4465.2	5270.2	6825.8	7020.9	6669.2
52.5°	3986.5	3968.4	4154.8	4380.3	4569.7	4491.3	4643.7	5630.6	7358.2	7610.5	7235.6
55°	3633.4	3609.4	3814.6	4109.1	4410.8	4484.8	4822.0	6033.9	7986.2	8242.2	7820.9
57.5°	3073.5	3025.6	3285.2	3633.4	4152.0	4476.8	5007.6	6435.0	8624.3	8931.1	8445.3
60°	2256.9	2185.8	2504.2	2916.8	3645.7	4399.2	5237.5	6884.6	9390.2	9666.6	9127.0
62.5°	1314.2	1272.7	1480.9	1866.0	2747.9	3942.4	5366.7	7407.5	10143.0	10433.1	9797.1
65°	1020.4	1008.8	1026.9	1056.7	1529.5	2951.7	4968.5	7917.3	11100.3	11303.4	10495.5
67.5°	933.4	924.7	932.6	876.8	776.0	1644.1	3930.8	8046.4	12125.7	12249.1	11106.8
70°	829.6	819.5	845.6	797.8	610.6	747.7	2539.7	7577.9	12941.6	13173.0	11571.7
72.5°	675.9	664.3	725.2	703.5	514.1	480.1	1275.7	6464.7	12856.1	13336.2	11238.8
75°	519.3	512.7	585.3	603.4	419.2	377.8	612.1	4805.3	11313.5	11797.2	9686.1
77.5°	403.2	398.1	435.1	501.1	337.9	292.9	376.4	3048.1	8525.7	8610.6	6675.0
80°	302.4	287.9	322.0	388.0	263.2	213.9	255.3	1777.6	5389.1	4885.2	2905.3
82.5°	189.3	182.0	210.3	258.9	185.6	147.2	166.0	982.0	2159.7	1272.0	560.6
85°	108.0	105.2	114.6	147.9	100.8	84.9	95.0	433.7	394.5	271.2	169.0
87.5°	43.6	42.0	52.2	66.0	37.0	31.2	33.3	104.4	87.0	80.5	55.9
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°	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2	2752.2
2.5°	2760.2	2760.2	2750.1	2734.1	2715.9	2704.4	2685.5	2680.5	2660.9	2655.1	2664.5
5°	2793.5	2787.8	2756.6	2711.6	2649.9	2593.5	2531.0	2491.9	2436.7	2417.2	2431.7
7.5°	2835.7	2819.7	2766.0	2667.4	2538.3	2411.4	2279.4	2179.4	2083.6	2049.5	2053.8
10°	2874.1	2851.5	2760.2	2587.6	2364.3	2144.5	1934.2	1787.0	1675.3	1629.5	1639.7
12.5°	2912.5	2871.1	2721.8	2454.9	2116.9	1818.9	1594.8	1480.2	1411.3	1356.2	1374.3
15°	2948.7	2890.7	2662.3	2277.2	1845.7	1543.2	1377.9	1286.6	1231.4	1195.1	1201.7
17.5°	2990.8	2907.4	2573.1	2051.6	1587.5	1352.6	1217.7	1162.6	1151.7	1147.3	1150.3
20°	3049.6	2922.7	2455.6	1799.3	1397.5	1200.3	1130.7	1125.6	1124.8	1122.7	1129.9
22.5°	3112.7	2940.8	2300.4	1570.1	1235.7	1105.3	1093.0	1082.8	1076.2	1075.5	1083.5
25°	3187.3	2946.6	2106.1	1382.3	1098.0	1060.3	1045.8	1030.5	1026.2	1026.2	1030.5
27.5°	3259.9	2927.0	1879.7	1219.1	1020.4	1019.0	1000.1	995.0	994.2	996.5	1002.2
30°	3332.4	2890.0	1655.0	1068.3	975.4	975.4	968.9	972.5	975.4	982.7	987.8
32.5°	3430.4	2850.8	1467.1	956.5	936.2	929.1	935.5	942.8	945.7	955.1	963.1
35°	3573.9	2823.3	1317.7	895.6	895.6	886.2	889.8	888.4	881.9	877.5	887.6
37.5°	3763.9	2821.8	1194.4	867.4	861.6	860.1	860.8	851.4	826.0	795.6	796.3
40°	3992.4	2861.0	1099.4	847.8	843.5	852.2	847.8	822.4	752.8	699.9	698.4
42.5°	4299.2	2972.7	1038.5	823.9	836.9	847.8	830.4	742.6	695.5	660.0	658.5
45°	4660.3	3154.0	1007.4	798.5	824.6	837.6	753.5	715.0	677.3	634.6	631.7
47.5°	5069.3	3382.5	1000.1	774.6	797.0	805.0	720.9	703.5	660.7	614.3	610.6
50°	5514.6	3653.0	1019.7	746.3	757.2	729.6	710.0	694.0	649.8	604.1	599.0
52.5°	5975.1	3951.1	1058.8	707.9	717.3	686.7	705.6	691.9	643.3	581.6	577.3
55°	6427.7	4251.3	1096.5	662.9	676.6	648.3	693.3	683.2	613.6	544.0	540.3
57.5°	6887.5	4550.1	1133.5	623.0	637.4	611.4	673.7	660.0	580.2	509.1	507.7
60°	7365.4	4840.2	1151.0	584.6	594.7	577.3	644.0	620.0	542.4	473.6	471.4
62.5°	7812.9	5081.6	1122.7	546.1	552.6	545.4	604.9	573.0	504.7	433.7	433.0
65°	8261.8	5225.2	1035.7	508.4	509.8	506.2	549.7	522.1	460.5	398.8	394.5
67.5°	8668.6	5305.7	897.1	467.8	464.1	462.7	498.3	467.1	417.7	364.1	359.7
70°	8754.9	5101.2	685.3	419.9	419.9	416.3	441.7	409.8	370.6	327.1	325.6
72.5°	7996.3	4291.2	486.7	365.5	371.4	364.1	385.1	358.2	322.8	293.8	285.1
75°	6448.0	3146.7	353.9	309.7	319.8	307.5	327.1	308.2	277.8	277.1	249.5
77.5°	4430.4	1945.8	256.8	255.3	262.5	246.6	269.1	258.9	231.3	219.0	205.2
80°	1890.7	776.0	187.1	197.3	197.3	182.8	208.9	211.8	187.9	182.0	182.0
82.5°	376.4	220.5	131.3	135.6	127.6	123.3	147.9	163.9	226.3	251.6	252.4
85°	113.2	81.2	79.0	74.0	65.3	66.0	87.0	164.6	203.1	116.0	100.0
87.5°	31.2	20.3	21.0	16.7	13.7	18.1	29.7	124.7	68.2	29.0	24.7
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)