

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: P967661

Luminaire Tested: **NAV-SB5A-727-U-SL4**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967661  
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-SB5A-727-U-SL4  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21354.8 lumens  
Efficiency: N/A  
Efficacy: 150.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

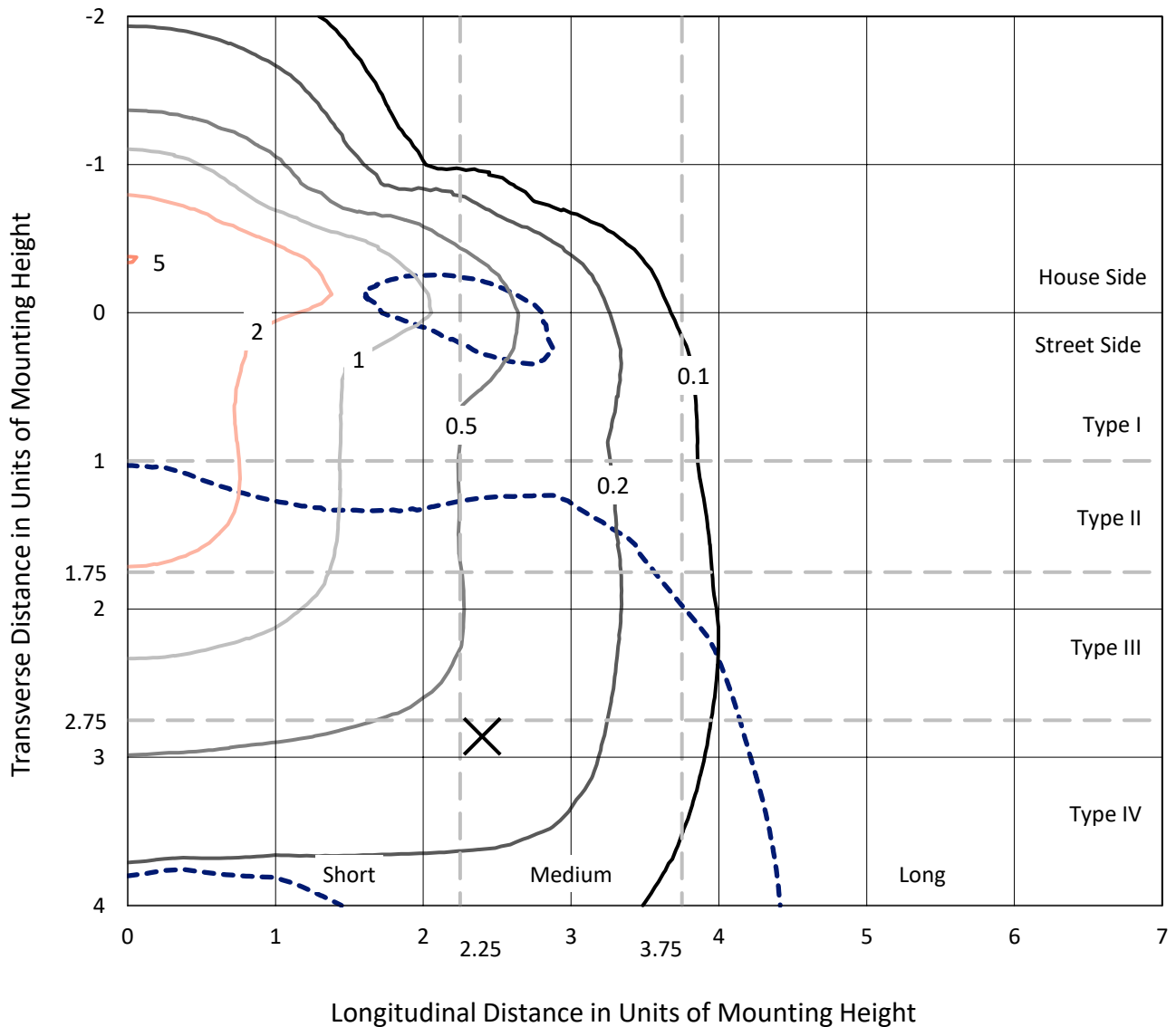
Input Watts (W): 141.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

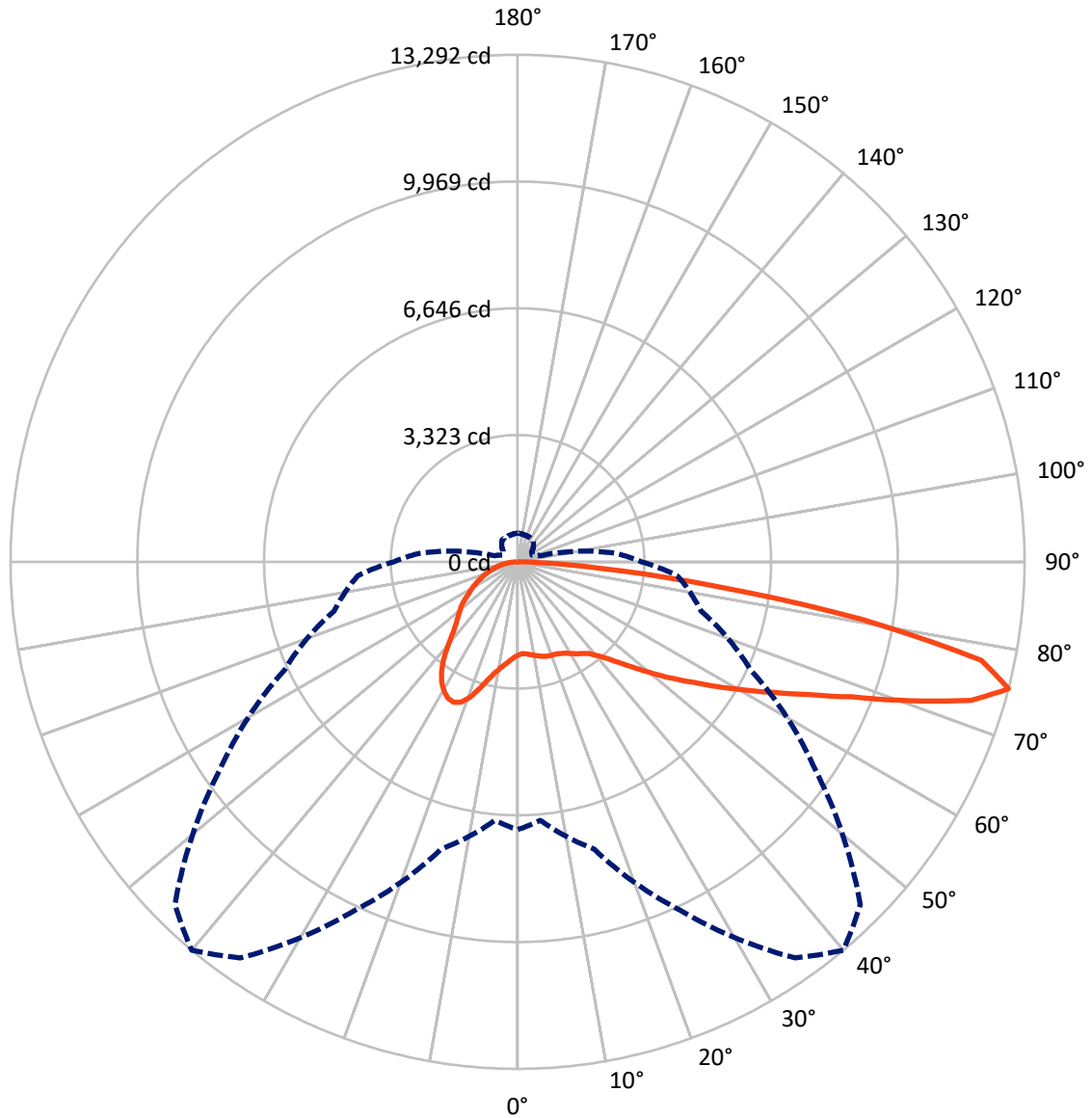
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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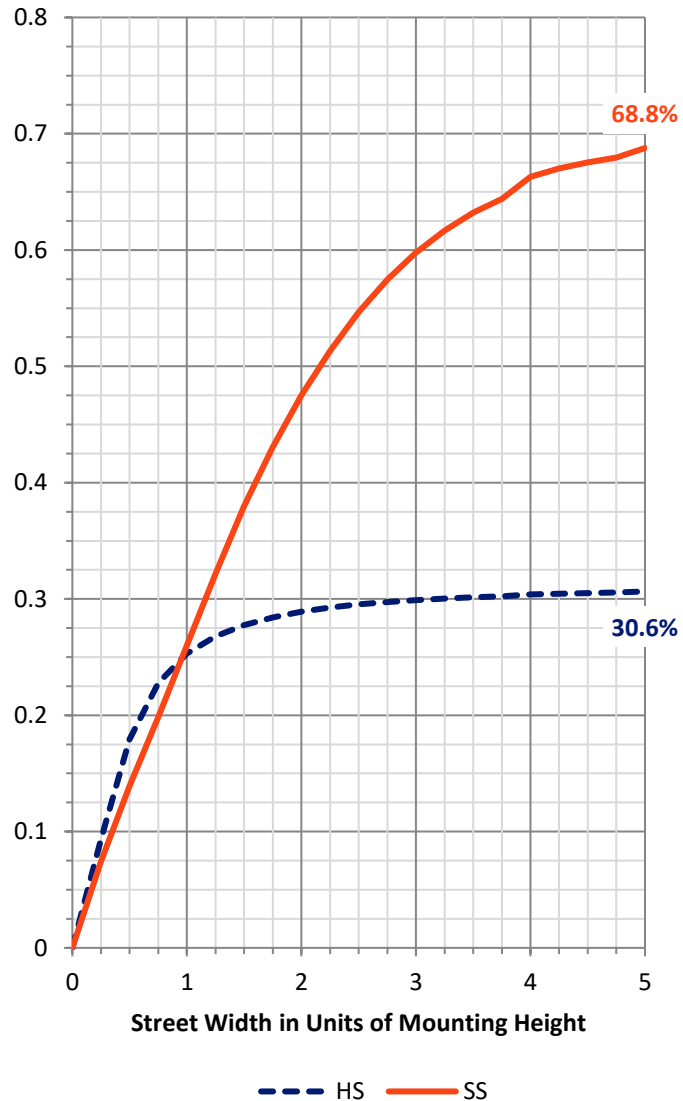
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6616.4	0.0	6616.4
	% Fixture	31.0	0.0	31.0
<b>Street Side</b>	Lumens	14738.4	0.0	14738.4
	% Fixture	69.0	0.0	69.0
<b>Total</b>	Lumens	21354.8	0.0	21354.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.8	1.1
10°-20°	818.4	3.8
20°-30°	1494.3	7.0
30°-40°	2119.4	9.9
40°-50°	2861.8	13.4
50°-60°	3849.8	18.0
60°-70°	4886.3	22.9
70°-80°	4434.6	20.8
80°-90°	646.4	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°	21354.8	100.0
0°-180°	21354.8	100.0

**Coefficient of Utilization**

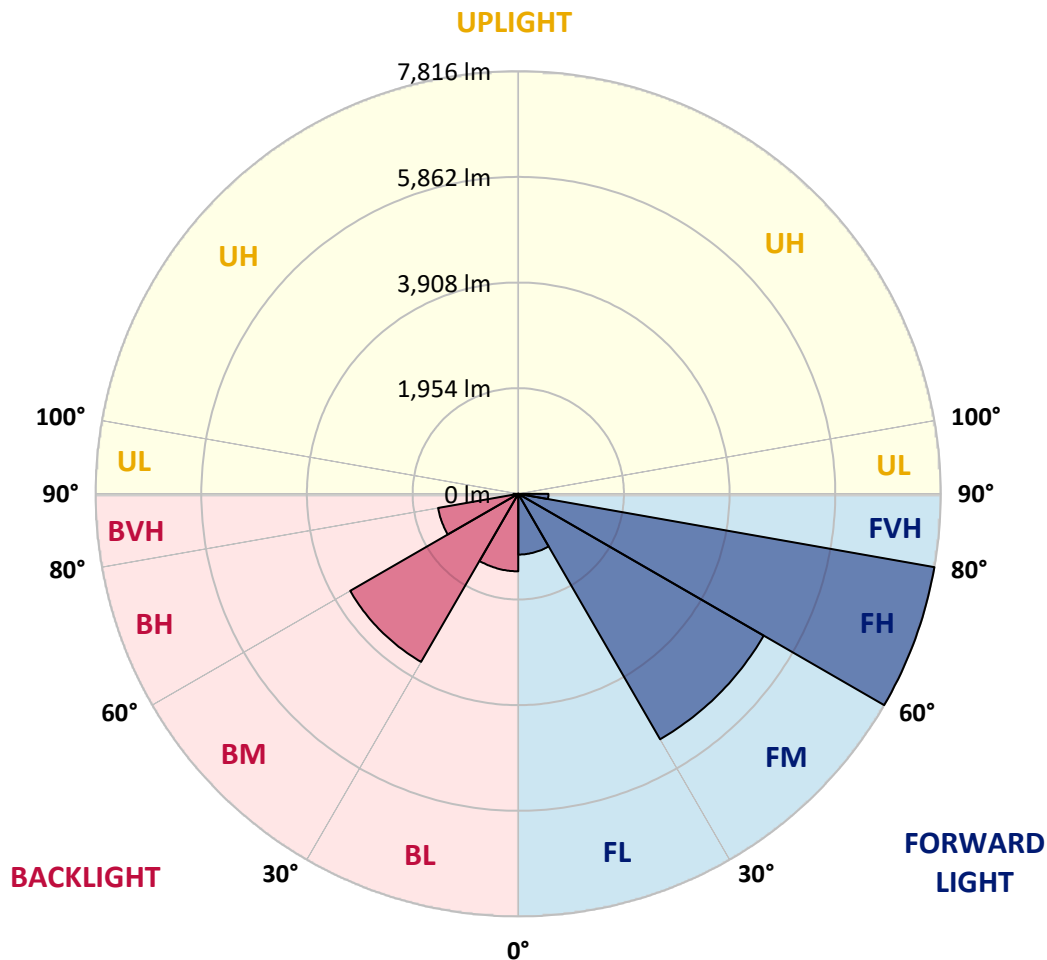


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1123.3	5.3			
FM (30°-60°)	5242.1	24.5			
FH (60°-80°)	7815.5	36.6			G4/12000
FVH (80°-90°)	557.4	2.6			G4/750
BL (0°-30°)	1433.2	6.7	B3/2500		
BM (30°-60°)	3588.8	16.8	B3/5000		
BH (60°-80°)	1505.4	7.0	B3/2500		G3/2500
BVH (80°-90°)	89.0	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°	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0
2.5°	2404.5	2418.2	2414.8	2410.3	2410.3	2411.4	2410.3	2418.2	2426.1	2434.1	2446.5
5°	2429.5	2443.1	2436.3	2430.6	2426.1	2424.9	2421.6	2420.4	2424.9	2435.2	2452.1
7.5°	2478.2	2491.8	2481.6	2471.4	2462.4	2457.8	2453.2	2446.5	2443.1	2448.7	2472.5
10°	2532.6	2546.2	2533.7	2515.6	2500.9	2495.2	2490.6	2483.9	2479.4	2482.8	2508.8
12.5°	2586.9	2600.5	2583.5	2558.6	2539.3	2536.0	2530.3	2528.1	2526.9	2525.8	2551.8
15°	2637.9	2649.2	2627.7	2598.3	2577.9	2572.2	2566.5	2570.0	2575.6	2582.4	2611.8
17.5°	2677.5	2688.9	2657.1	2618.7	2599.4	2597.1	2593.8	2605.0	2620.9	2637.9	2674.1
20°	2713.8	2725.1	2684.4	2632.2	2609.5	2609.5	2610.7	2634.5	2657.1	2682.1	2731.9
22.5°	2764.7	2773.9	2723.9	2652.6	2619.8	2622.1	2631.1	2654.9	2683.2	2717.2	2786.3
25°	2840.7	2847.4	2786.3	2691.1	2653.7	2660.6	2668.5	2679.8	2707.0	2746.6	2839.6
27.5°	2963.0	2968.6	2888.2	2759.1	2702.4	2713.8	2725.1	2717.2	2729.7	2763.6	2882.5
30°	3135.2	3138.5	3036.6	2865.6	2785.1	2790.8	2793.0	2760.2	2736.4	2763.6	2913.2
32.5°	3339.0	3337.9	3216.7	2994.6	2879.1	2873.5	2854.2	2789.6	2734.2	2758.0	2940.3
35°	3655.0	3642.5	3486.2	3175.9	2985.6	2950.5	2905.2	2822.5	2745.5	2752.3	2964.1
37.5°	4178.3	4139.8	3923.4	3472.7	3144.2	3054.7	2987.9	2875.7	2770.4	2750.1	2992.4
40°	4768.4	4719.7	4481.8	3879.2	3382.1	3238.2	3130.6	2951.6	2811.2	2760.2	3034.3
42.5°	5468.4	5399.3	5143.2	4358.4	3683.3	3475.0	3312.9	3047.9	2871.2	2793.0	3091.0
45°	6328.0	6236.3	5873.9	4898.7	4062.8	3785.2	3568.9	3194.0	2963.0	2856.5	3175.9
47.5°	7196.7	7219.4	6704.0	5517.1	4518.1	4168.1	3889.5	3413.8	3096.6	2958.5	3312.9
50°	8119.8	8135.7	7529.8	6202.3	5034.6	4600.7	4249.6	3659.6	3282.4	3103.4	3518.0
52.5°	8840.2	8842.5	8279.5	6919.3	5572.5	5076.4	4638.1	3940.4	3497.6	3296.0	3791.0
55°	9291.0	9285.3	8805.1	7597.7	6191.0	5576.0	5068.5	4259.8	3760.3	3522.5	4134.1
57.5°	9618.3	9601.3	9167.5	8181.0	6850.2	6166.1	5555.6	4622.2	4070.7	3792.1	4586.1
60°	9742.9	9732.7	9413.3	8685.0	7543.3	6818.4	6117.3	5027.7	4423.0	4110.4	5167.0
62.5°	9790.5	9809.8	9654.6	9173.2	8285.2	7541.0	6734.7	5512.6	4819.3	4470.5	5779.9
65°	9958.1	9993.2	9961.5	9812.0	9123.3	8387.2	7553.5	6089.0	5252.0	4856.8	6419.8
67.5°	10290.0	10325.0	10338.7	10576.6	10147.3	9441.6	8575.2	6807.1	5758.3	5257.6	6901.1
70°	10282.1	10271.8	10512.0	11184.7	11429.4	10901.6	9952.4	7690.6	6362.0	5590.7	6962.3
72.5°	9359.0	9277.4	9844.8	11177.9	12496.3	12426.1	11634.4	8830.0	6883.0	5631.5	6041.5
75°	7021.1	6803.7	7806.1	10073.6	12674.1	13291.5	12703.6	9536.8	6759.6	4975.7	4204.3
77.5°	3002.6	2784.0	3965.3	7457.3	11343.3	12424.9	11722.7	8320.3	5395.9	3290.2	2064.8
80°	786.1	784.9	1198.3	3380.9	7714.4	9175.5	8049.6	5373.3	3083.0	1175.7	569.7
82.5°	325.0	317.1	440.5	1315.0	3769.4	5149.0	4202.1	2396.7	1113.4	318.3	189.1
85°	121.2	120.0	214.0	454.2	1329.7	2123.7	1537.0	612.7	277.5	155.2	85.0
87.5°	34.0	32.8	46.4	157.4	323.9	491.6	262.8	100.8	78.1	61.2	24.9
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°	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0	2442.0
2.5°	2449.9	2455.6	2465.7	2473.6	2483.9	2495.2	2511.0	2521.2	2531.4	2538.2	2533.7
5°	2460.1	2472.5	2498.5	2524.7	2555.2	2583.5	2616.4	2640.2	2659.5	2665.1	2667.4
7.5°	2482.8	2503.2	2547.3	2591.5	2640.2	2686.6	2734.2	2775.0	2807.8	2820.3	2821.4
10°	2522.4	2549.6	2611.8	2674.1	2738.7	2810.0	2871.2	2930.2	2976.6	2995.8	2996.9
12.5°	2572.2	2606.2	2687.8	2773.9	2863.3	2961.8	3041.1	3113.6	3171.4	3197.4	3197.4
15°	2636.8	2681.0	2785.1	2900.6	3032.1	3169.1	3270.0	3350.3	3414.9	3446.6	3444.3
17.5°	2707.0	2765.9	2897.3	3071.7	3259.7	3439.8	3557.6	3616.5	3683.3	3713.9	3712.8
20°	2775.0	2847.4	3035.4	3289.1	3539.4	3730.9	3826.0	3841.9	3846.4	3849.8	3858.9
22.5°	2845.2	2942.6	3208.8	3563.3	3831.7	3964.2	3977.8	3909.9	3814.7	3770.6	3783.0
25°	2922.2	3051.3	3435.3	3865.7	4083.2	4099.0	3994.8	3829.4	3649.3	3566.7	3579.1
27.5°	2996.9	3177.0	3707.1	4154.5	4264.4	4125.0	3900.7	3666.3	3448.8	3361.7	3371.8
30°	3071.7	3320.9	4007.2	4407.1	4347.0	4060.5	3752.4	3490.7	3272.2	3180.5	3190.6
32.5°	3147.6	3488.5	4352.7	4589.4	4332.4	3923.4	3567.8	3293.7	3101.1	3004.9	3017.3
35°	3233.7	3694.6	4680.0	4689.1	4233.8	3721.9	3324.3	3058.1	2890.5	2813.4	2830.4
37.5°	3345.8	3956.3	4968.9	4714.0	4061.7	3426.2	3021.9	2779.5	2641.3	2606.2	2631.1
40°	3485.1	4271.2	5189.7	4674.4	3806.7	3067.2	2691.1	2497.4	2419.3	2427.2	2454.5
42.5°	3666.3	4623.4	5344.9	4572.4	3452.3	2696.8	2401.2	2315.1	2352.5	2384.1	2413.7
45°	3902.0	4989.3	5441.2	4399.1	3051.3	2383.0	2230.2	2250.5	2278.9	2282.3	2304.9
47.5°	4203.2	5359.6	5504.6	4137.5	2642.4	2162.2	2121.4	2126.0	2120.3	2096.5	2114.6
50°	4579.2	5719.8	5561.2	3791.0	2294.7	2024.0	1969.6	1953.8	1875.6	1798.7	1808.8
52.5°	5007.3	6050.5	5585.0	3360.6	2024.0	1908.4	1820.1	1720.5	1574.4	1550.6	1558.5
55°	5483.0	6356.3	5523.8	2831.6	1796.3	1760.1	1626.5	1506.4	1490.6	1470.2	1473.5
57.5°	6051.7	6686.0	5399.3	2241.5	1563.0	1586.8	1456.5	1470.2	1441.9	1410.1	1404.5
60°	6673.5	7026.9	5180.7	1703.4	1321.7	1370.5	1412.3	1411.2	1403.3	1377.3	1368.2
62.5°	7233.0	7251.2	4750.3	1304.8	1110.0	1202.8	1317.2	1316.1	1309.3	1294.6	1288.9
65°	7565.9	7217.1	4032.1	1027.3	935.5	1064.7	1188.2	1197.2	1198.3	1197.2	1197.2
67.5°	7507.1	6819.5	3046.8	817.7	791.7	924.2	1060.2	1072.6	1081.7	1083.9	1086.2
70°	6841.1	5946.3	1986.7	652.4	663.7	800.7	939.0	951.4	959.3	968.4	972.9
72.5°	5332.5	4371.9	1137.1	527.8	551.6	694.3	818.9	833.6	838.1	855.2	861.9
75°	3249.6	2571.1	613.9	415.6	453.0	593.5	700.0	717.0	724.9	745.3	747.5
77.5°	1544.9	1113.4	349.9	323.9	364.7	484.7	591.2	610.5	589.0	600.3	591.2
80°	522.1	413.4	220.9	246.9	278.6	378.3	473.4	492.7	447.4	445.2	440.5
82.5°	182.3	167.6	140.4	164.2	180.1	270.7	357.9	382.8	333.0	331.9	316.0
85°	71.3	68.0	78.1	89.5	107.6	166.5	235.5	248.0	205.0	165.3	163.1
87.5°	14.8	15.9	19.3	20.4	32.8	57.8	85.0	104.2	82.7	70.2	64.6
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)