

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: P968176

Luminaire Tested: **NAV-SB5B-722-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968176
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24038.3 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

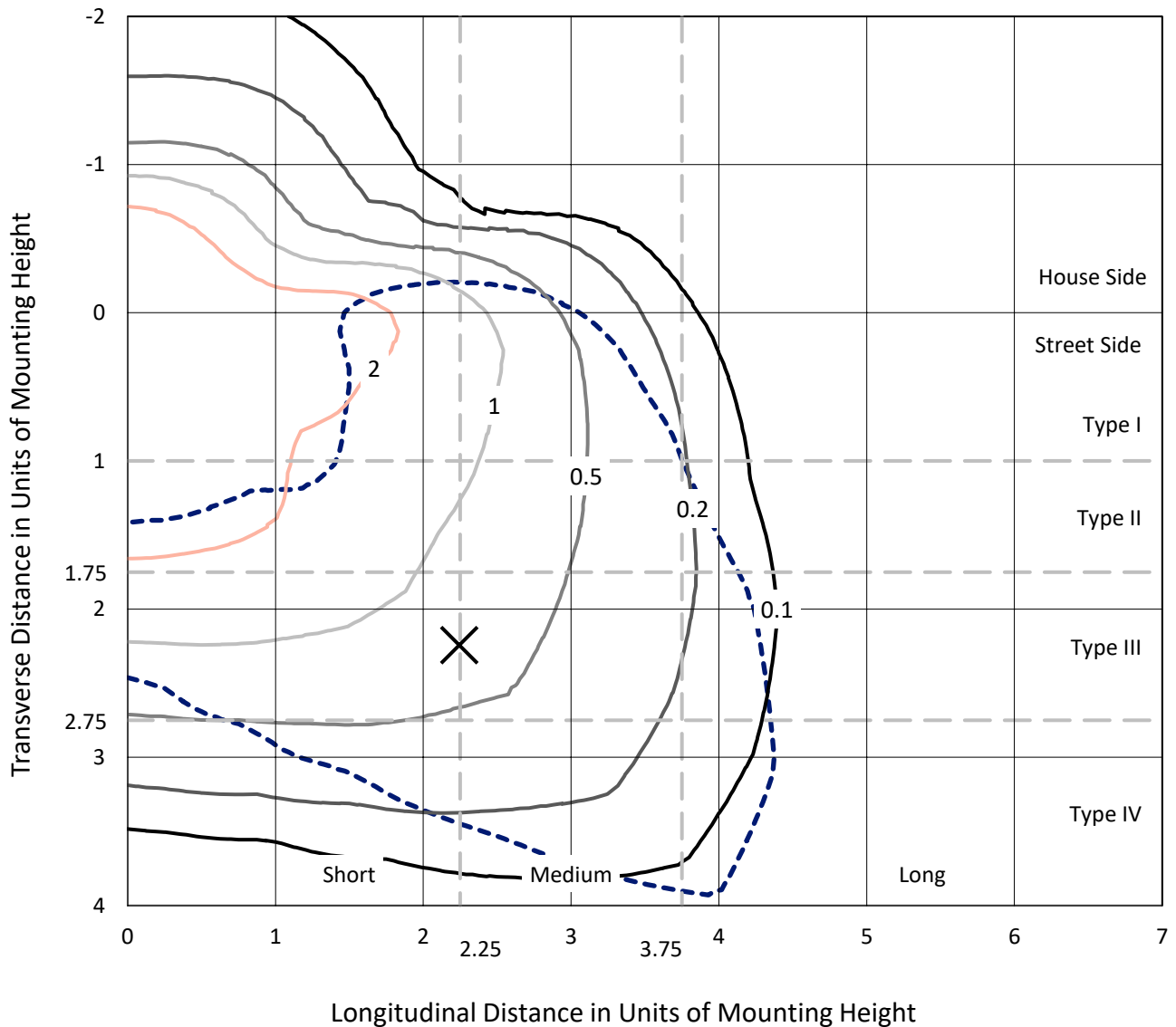
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

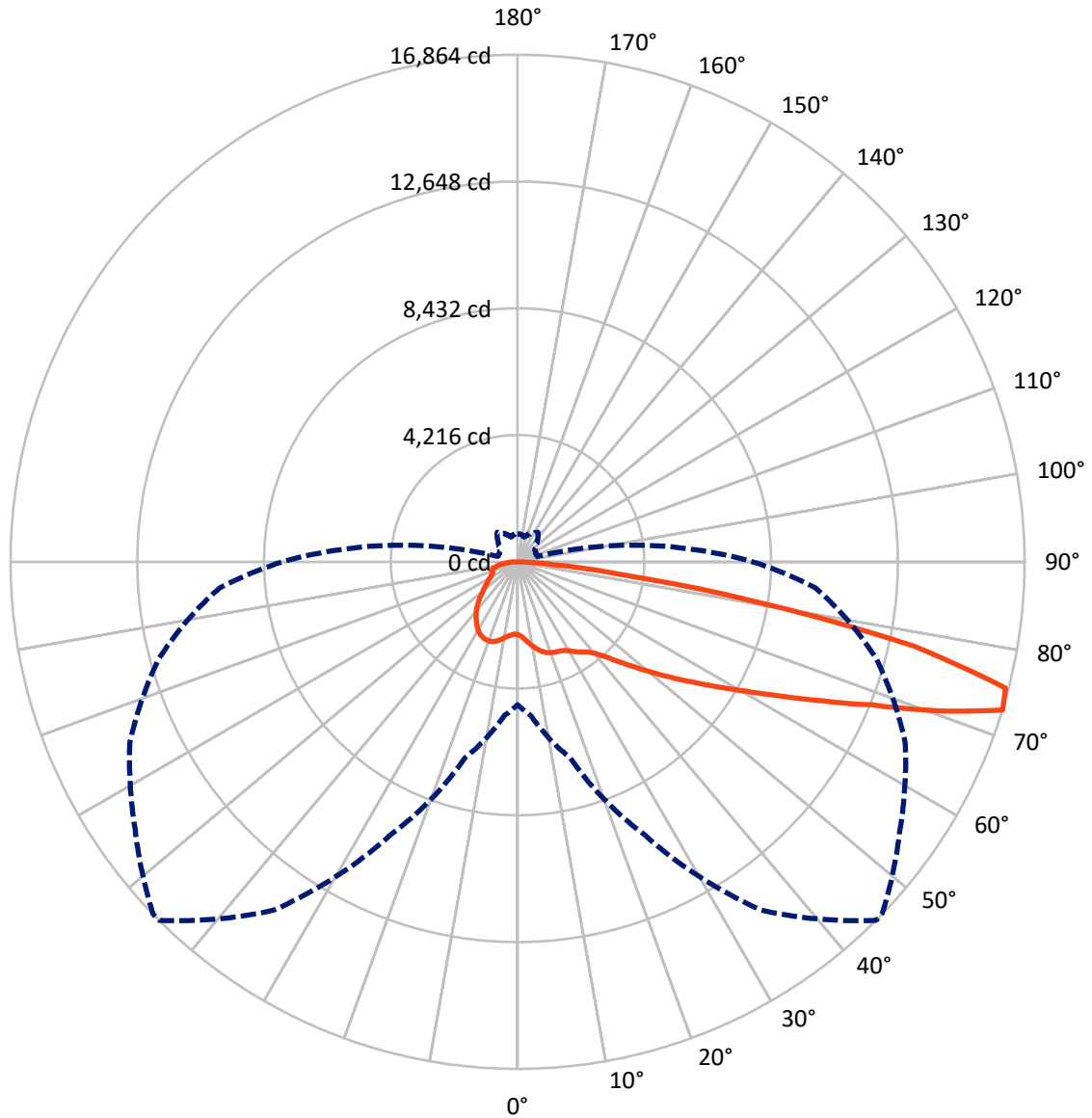
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5434.2	0.0	5434.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	18604.1	0.0	18604.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	24038.3	0.0	24038.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	1.0
10°-20°	822.9	3.4
20°-30°	1431.5	6.0
30°-40°	2052.2	8.5
40°-50°	2889.6	12.0
50°-60°	4425.9	18.4
60°-70°	6411.6	26.7
70°-80°	5120.1	21.3
80°-90°	637.7	2.7
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°	24038.3	100.0
0°-180°	24038.3	100.0

Coefficient of Utilization

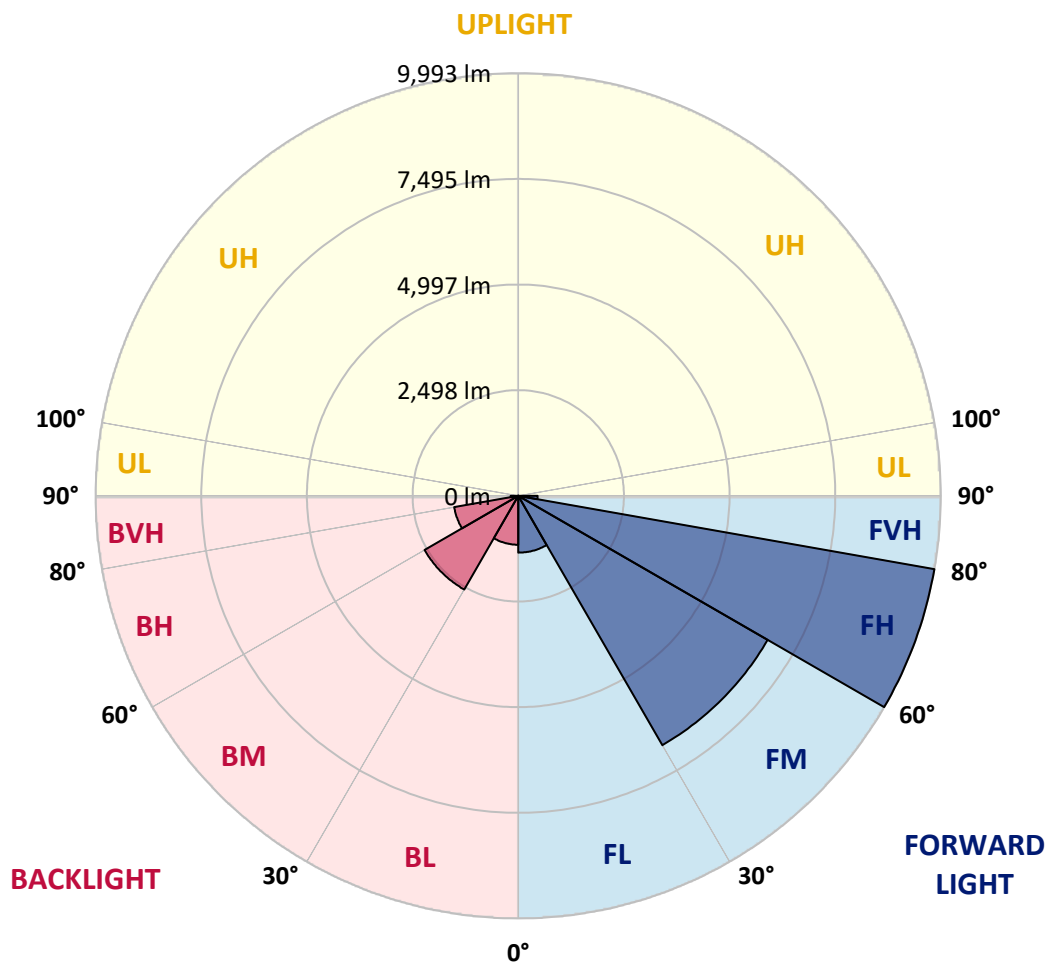


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1344.3	5.6			
FM (30°-60°)	6808.9	28.3			
FH (60°-80°)	9993.4	41.6			G4/12000
FVH (80°-90°)	457.5	1.9			G3/500
BL (0°-30°)	1157.0	4.8	B3/2500		
BM (30°-60°)	2558.8	10.6	B3/5000		
BH (60°-80°)	1538.3	6.4	B3/2500		G3/2500
BVH (80°-90°)	180.2	0.7			G2/225
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0
2.5°	2520.0	2536.5	2521.2	2507.4	2501.0	2484.5	2483.3	2473.1	2466.8	2449.0	2444.0
5°	2696.0	2717.5	2692.2	2664.3	2639.0	2598.5	2593.5	2564.2	2531.3	2493.4	2471.9
7.5°	2894.8	2913.8	2884.7	2842.8	2798.6	2731.4	2730.2	2677.0	2625.0	2560.4	2523.8
10°	3068.2	3093.7	3054.4	2997.4	2941.6	2865.7	2856.8	2796.0	2730.2	2646.7	2590.9
12.5°	3221.5	3239.2	3201.3	3131.6	3067.0	2991.1	2979.7	2912.5	2839.0	2744.1	2673.2
15°	3343.0	3365.9	3315.3	3240.5	3172.2	3097.4	3087.3	3026.5	2953.0	2853.0	2761.9
17.5°	3422.9	3441.8	3389.9	3306.3	3240.5	3178.4	3170.8	3120.2	3055.6	2954.4	2856.8
20°	3453.2	3473.5	3419.1	3334.2	3273.4	3225.3	3221.5	3184.8	3140.5	3048.0	2949.2
22.5°	3483.7	3502.6	3431.7	3343.0	3289.8	3259.5	3258.3	3234.2	3216.4	3140.5	3044.2
25°	3606.5	3611.5	3516.6	3388.6	3312.7	3286.0	3284.8	3283.6	3291.2	3231.6	3146.7
27.5°	3712.9	3711.5	3630.6	3510.2	3392.4	3336.8	3335.5	3348.2	3372.2	3322.8	3253.1
30°	3868.6	3854.7	3758.5	3633.1	3525.4	3439.3	3431.7	3420.3	3439.3	3400.0	3359.5
32.5°	4199.1	4154.7	3999.0	3776.2	3635.6	3569.8	3559.6	3488.7	3496.3	3472.3	3452.0
35°	4672.7	4614.4	4406.8	4047.1	3772.3	3678.6	3673.6	3583.7	3568.4	3546.9	3554.6
37.5°	5236.2	5164.1	4922.2	4439.7	4007.9	3805.3	3797.7	3716.6	3654.6	3631.8	3674.8
40°	5802.2	5711.1	5511.0	4918.4	4354.8	4016.8	3992.7	3869.9	3799.0	3760.9	3852.2
42.5°	6351.8	6275.9	6104.9	5455.3	4782.9	4325.7	4272.5	4062.4	4009.2	3973.7	4138.3
45°	6838.1	6769.7	6644.4	6028.9	5284.4	4746.2	4694.2	4351.0	4334.6	4334.6	4572.6
47.5°	7233.2	7218.0	7085.0	6614.0	5875.7	5224.8	5134.9	4752.5	4796.8	4865.2	5189.4
50°	7671.3	7629.6	7487.7	7190.2	6571.0	5773.1	5699.7	5245.1	5411.0	5598.3	6080.8
52.5°	8074.0	8096.8	7938.5	7790.4	7356.0	6384.7	6255.6	5826.3	6184.6	6494.9	7125.6
55°	8488.1	8489.4	8445.1	8424.8	8179.1	7061.0	6919.2	6525.4	7095.2	7480.1	8343.8
57.5°	8876.9	8879.4	8945.3	9123.8	9134.0	7841.0	7680.2	7383.9	8106.9	8499.5	9599.9
60°	9223.9	9241.6	9421.4	9839.3	9973.6	8735.0	8583.1	8398.2	9152.9	9548.0	10920.8
62.5°	9340.3	9404.9	9805.0	10399.0	10803.0	9831.7	9682.3	9572.1	10252.0	10619.3	12025.0
65°	9142.8	9291.0	10064.7	10861.2	11656.4	11134.7	10986.6	10866.2	11394.3	11740.0	12931.6
67.5°	8657.8	8849.0	10049.5	11346.2	12692.3	12702.4	12564.3	12282.0	12618.9	12751.8	13226.7
70°	7380.1	7666.3	9164.3	11527.3	13881.4	14846.3	14713.4	13986.4	13840.9	13197.6	12395.9
72.5°	4755.0	5140.0	6748.2	10036.8	14146.0	16863.5	16855.9	15525.1	14227.1	12331.4	9941.9
75°	1734.8	1970.4	3135.4	6300.0	11874.2	16761.0	16810.3	15261.6	12987.4	9525.2	6193.6
77.5°	631.9	691.4	1023.2	2421.2	7302.8	13448.3	13550.8	12201.0	9244.1	4780.4	2454.2
80°	331.8	364.7	524.3	939.6	3129.0	7986.7	8147.5	7251.0	4344.8	1439.8	735.7
82.5°	183.6	198.8	293.8	510.3	1409.4	3415.3	3511.5	2864.4	1528.5	610.4	303.9
85°	98.8	105.1	138.1	278.6	688.9	1184.0	1210.6	856.1	609.1	358.3	146.9
87.5°	29.1	35.5	45.6	88.7	269.7	265.9	272.2	169.6	240.6	181.1	48.1
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°	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0	2425.0
2.5°	2436.4	2432.6	2418.7	2412.3	2404.8	2403.4	2409.8	2411.1	2412.3	2413.6	2418.7
5°	2459.2	2446.6	2433.9	2426.3	2428.8	2430.1	2442.7	2451.6	2458.0	2463.0	2465.5
7.5°	2503.5	2493.4	2471.9	2470.6	2474.4	2485.8	2502.2	2522.5	2533.9	2542.7	2545.3
10°	2569.4	2550.4	2525.0	2528.9	2536.5	2552.9	2587.1	2603.5	2622.6	2639.0	2635.2
12.5°	2636.5	2620.0	2590.9	2593.5	2606.1	2635.2	2668.2	2688.4	2701.1	2713.7	2718.8
15°	2723.8	2694.7	2663.1	2663.1	2685.8	2717.5	2732.8	2749.2	2756.7	2770.7	2775.8
17.5°	2813.7	2775.8	2734.0	2731.4	2759.3	2774.5	2783.4	2785.8	2788.4	2803.6	2808.7
20°	2903.6	2861.9	2802.4	2797.3	2803.6	2801.1	2799.8	2797.3	2801.1	2820.1	2827.7
22.5°	2992.3	2944.2	2861.9	2839.0	2821.3	2797.3	2796.0	2794.8	2797.3	2816.3	2829.0
25°	3096.1	3037.9	2927.7	2859.3	2799.8	2766.9	2770.7	2772.0	2774.5	2789.7	2809.9
27.5°	3208.9	3144.3	2988.5	2853.0	2745.4	2722.6	2716.2	2720.0	2729.0	2752.9	2777.0
30°	3321.5	3245.6	3044.2	2827.7	2677.0	2645.3	2625.0	2633.9	2661.8	2685.8	2712.5
32.5°	3424.1	3348.2	3088.5	2772.0	2589.7	2540.3	2513.6	2525.0	2552.9	2561.8	2593.5
35°	3544.4	3458.4	3107.5	2683.3	2494.6	2418.7	2383.2	2366.7	2380.7	2371.8	2399.6
37.5°	3678.6	3588.7	3105.0	2566.8	2383.2	2295.8	2246.5	2184.4	2155.3	2124.9	2143.9
40°	3877.5	3748.3	3074.6	2426.3	2245.2	2165.4	2076.8	1971.7	1905.8	1846.3	1850.1
42.5°	4148.5	3969.9	3018.9	2271.8	2089.5	2014.7	1894.4	1771.6	1667.8	1569.0	1560.2
45°	4552.4	4259.9	2949.2	2107.2	1921.0	1847.6	1717.1	1579.1	1461.3	1334.7	1319.5
47.5°	5134.9	4649.9	2883.4	1919.7	1743.7	1676.6	1558.8	1430.9	1291.6	1168.8	1154.9
50°	5935.3	5209.7	2822.6	1737.4	1569.0	1518.3	1424.6	1294.2	1153.6	1054.8	1048.5
52.5°	6953.4	5970.7	2797.3	1561.4	1405.6	1386.6	1311.9	1190.3	1057.4	973.7	967.5
55°	8122.2	6881.1	2797.3	1393.0	1262.5	1268.8	1216.9	1104.2	989.0	914.3	906.7
57.5°	9315.0	7803.0	2746.6	1237.2	1140.9	1167.6	1134.6	1035.9	932.0	854.7	842.1
60°	10414.2	8575.5	2541.5	1095.3	1033.3	1075.1	1053.6	968.7	842.1	777.6	767.4
62.5°	11258.8	9011.1	2146.5	982.7	944.6	992.8	981.4	880.1	825.6	799.1	790.2
65°	11681.8	8940.2	1641.1	882.6	869.9	944.6	920.7	916.9	873.7	843.4	833.2
67.5°	11422.2	8329.9	1190.3	809.1	826.9	900.4	992.8	1008.0	928.2	868.7	858.5
70°	10283.7	7225.6	886.4	739.5	772.4	901.6	1132.1	1054.8	910.5	840.8	829.4
72.5°	7823.3	5388.2	687.6	666.0	701.5	907.9	1194.1	1033.3	859.9	929.5	921.9
75°	4473.9	2958.1	552.1	576.2	612.8	848.4	1162.5	977.6	820.6	853.5	853.5
77.5°	1705.7	1137.1	455.9	487.5	492.6	740.8	1111.8	973.7	781.4	762.3	695.3
80°	591.3	444.4	377.4	387.4	381.2	658.5	1066.2	847.2	639.5	572.4	553.4
82.5°	241.9	221.6	298.9	286.2	271.0	511.6	861.1	692.7	523.0	462.2	457.2
85°	105.1	140.5	197.5	173.5	157.0	354.5	690.1	586.3	442.0	381.2	379.9
87.5°	21.5	53.2	83.5	78.5	81.1	236.8	490.1	416.7	312.8	234.3	183.6
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)