

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: STREETWORKS

Report Number: P400252

Luminaire Tested: **ARCH-L-PA3-250-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400252  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-250-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24565 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

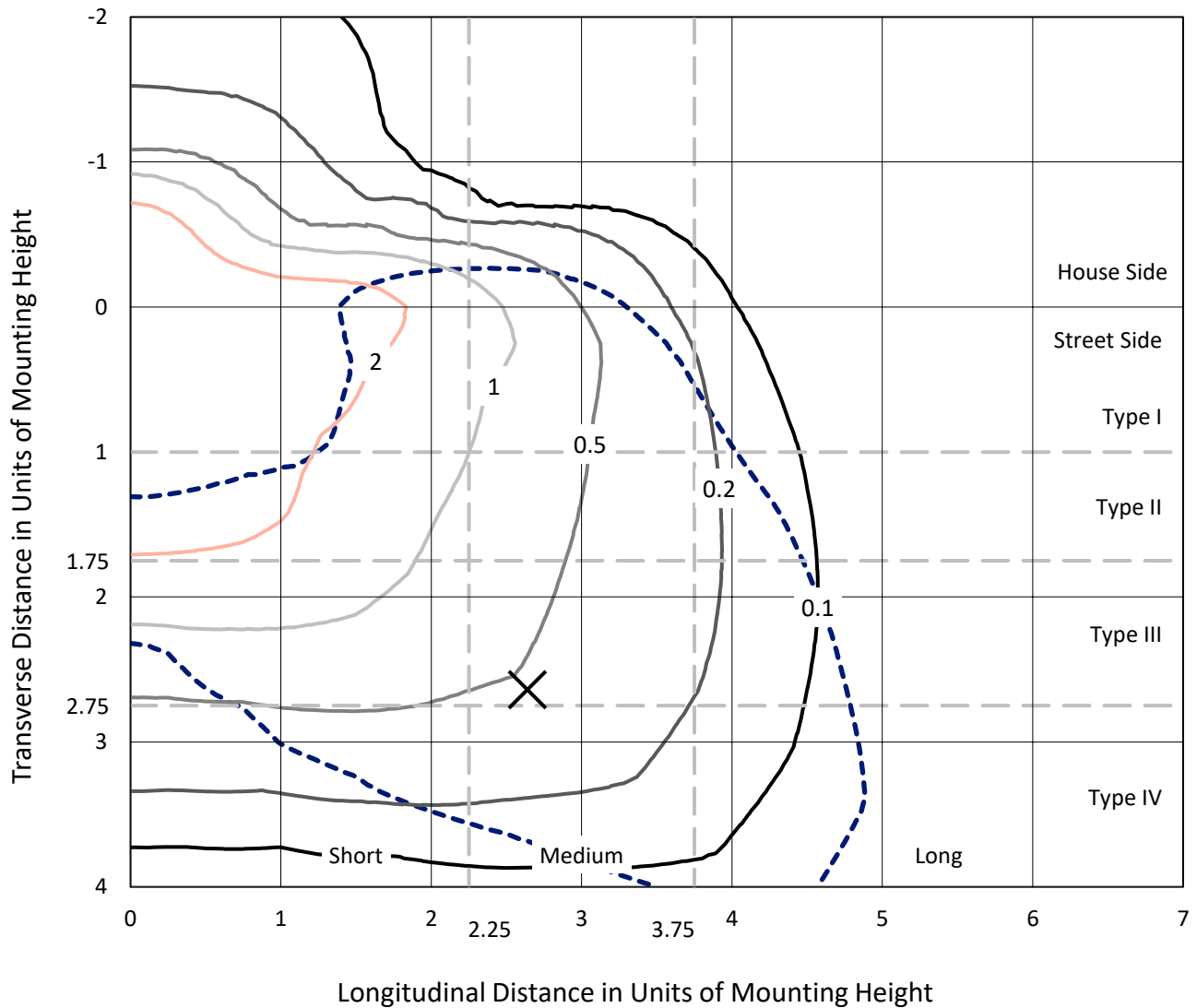
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

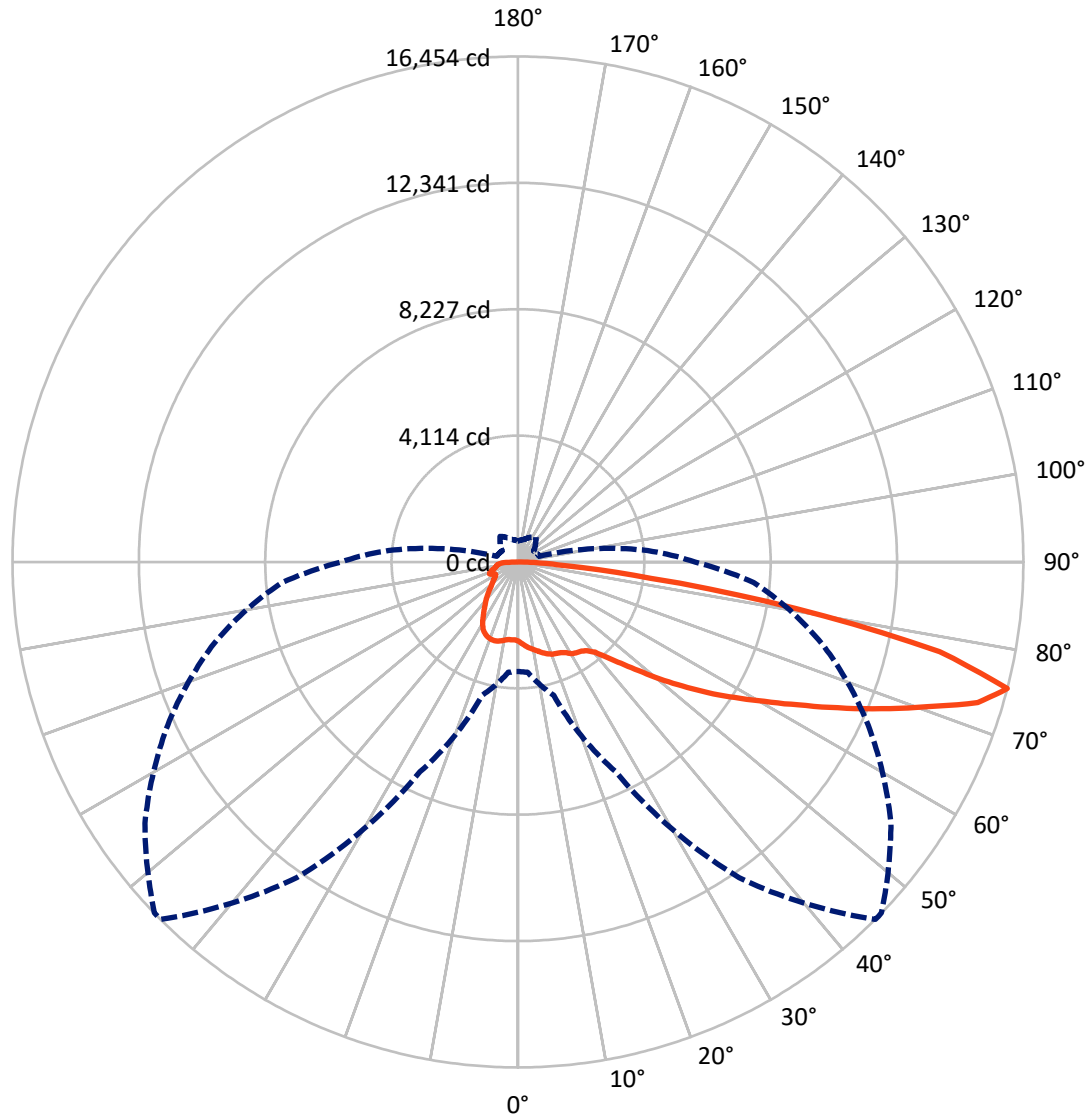
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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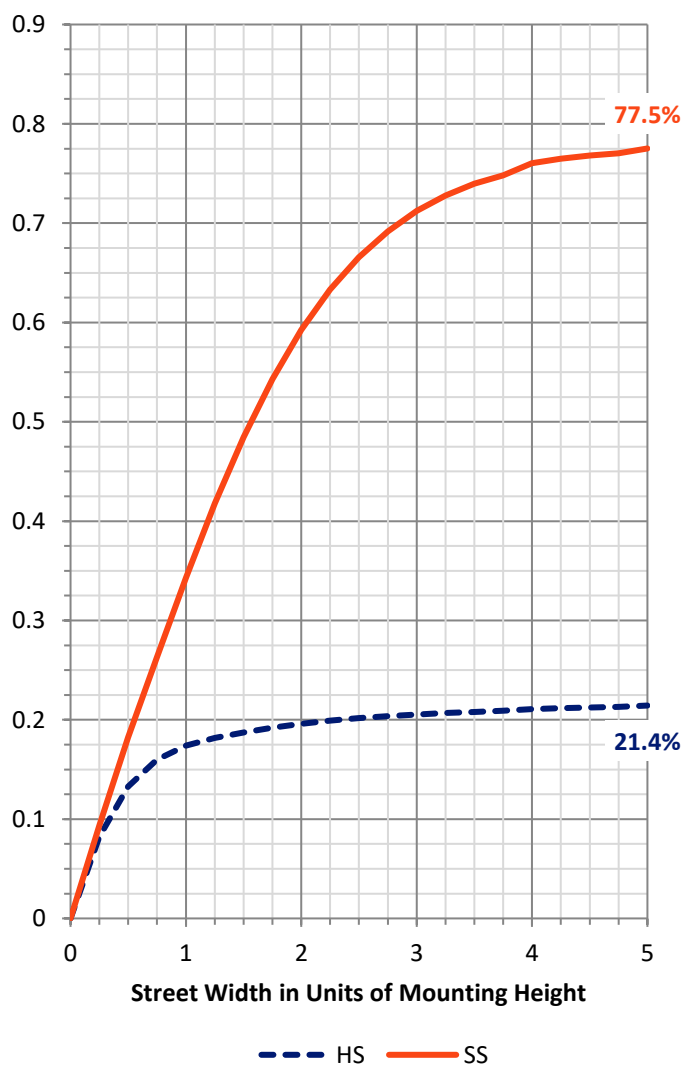
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5428.7	0.0	5428.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	19136.2	0.0	19136.2
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24565.0	0.0	24565.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.2	1.0
10°-20°	812.0	3.3
20°-30°	1384.3	5.6
30°-40°	1939.5	7.9
40°-50°	2849.4	11.6
50°-60°	4534.9	18.5
60°-70°	6450.9	26.3
70°-80°	5401.4	22.0
80°-90°	937.4	3.8
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°	24565.0	100.0
0°-180°	24565.0	100.0

**Coefficient of Utilization**



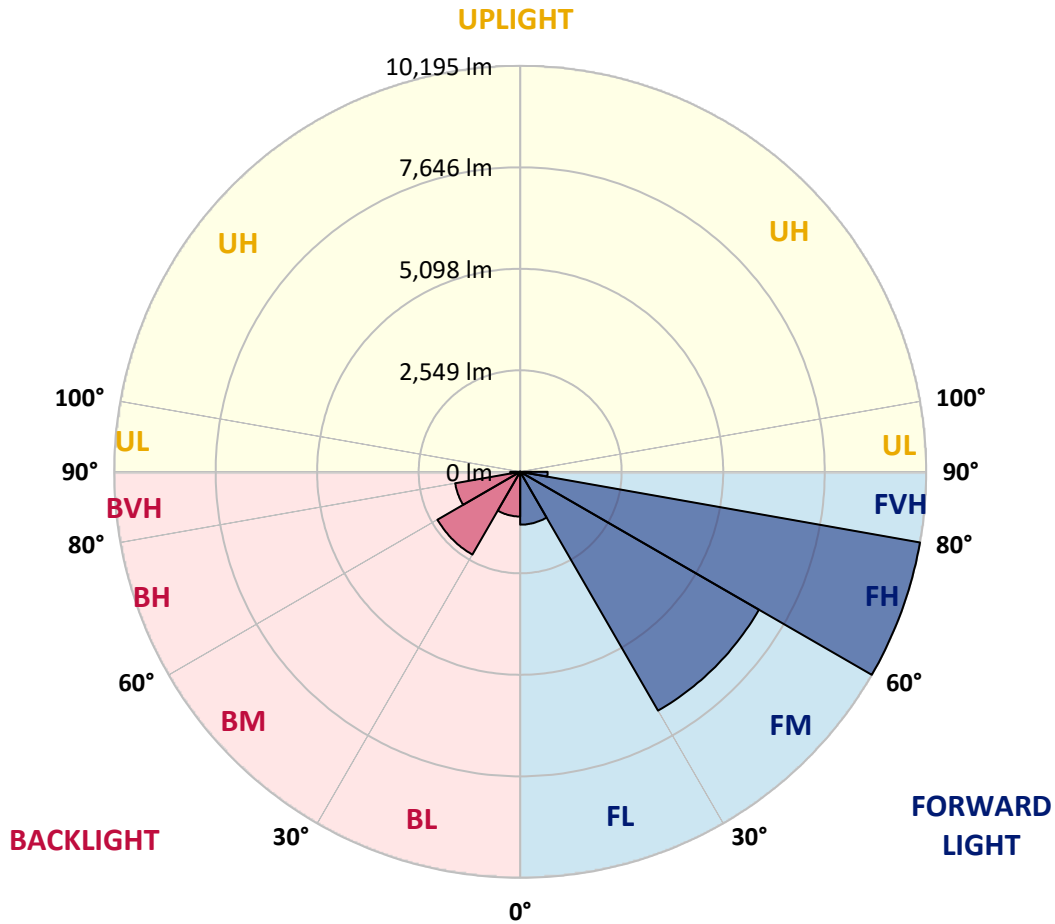
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1327.9	5.4			
FM (30°-60°)	6924.1	28.2			
FH (60°-80°)	10195.1	41.5			G4/12000
FVH (80°-90°)	689.1	2.8			G4/750
BL (0°-30°)	1123.5	4.6	B3/2500		
BM (30°-60°)	2399.8	9.8	B2/2500		
BH (60°-80°)	1657.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	248.2	1.0			G3/500
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°	45°	46°	55°	65°	75°	85°
0°	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9
2.5°	2727.6	2714.4	2707.9	2707.9	2681.6	2665.2	2661.9	2638.9	2619.2	2599.6	2583.1
5°	2885.1	2875.3	2855.6	2839.2	2803.1	2757.1	2750.5	2701.3	2652.1	2606.1	2566.7
7.5°	3029.5	3009.8	2986.9	2954.0	2895.0	2832.6	2822.8	2753.8	2684.9	2616.0	2563.5
10°	3151.0	3131.3	3098.5	3052.5	2977.0	2901.5	2891.7	2819.5	2747.3	2665.2	2589.7
12.5°	3265.9	3249.4	3200.2	3137.8	3049.2	2980.3	2970.5	2908.1	2832.6	2740.7	2642.2
15°	3364.3	3347.9	3295.4	3223.2	3121.4	3068.9	3055.8	2996.7	2921.2	2822.8	2721.0
17.5°	3413.6	3413.6	3357.8	3279.0	3183.8	3144.4	3134.6	3062.4	2993.4	2898.2	2796.5
20°	3430.0	3436.5	3397.1	3302.0	3219.9	3203.5	3193.6	3134.6	3055.8	2963.9	2868.7
22.5°	3439.8	3452.9	3420.1	3311.8	3242.9	3233.0	3226.5	3187.1	3124.7	3036.1	2940.9
25°	3472.6	3472.6	3449.7	3328.2	3272.4	3269.1	3269.1	3246.2	3203.5	3128.0	3032.8
27.5°	3521.9	3518.6	3489.1	3364.3	3338.1	3347.9	3344.6	3341.3	3311.8	3236.3	3134.6
30°	3603.9	3603.9	3571.1	3436.5	3420.1	3462.8	3466.1	3472.6	3426.7	3308.5	3226.5
32.5°	3728.7	3715.5	3682.7	3508.7	3482.5	3521.9	3528.4	3525.2	3485.8	3374.2	3334.8
35°	4112.7	4083.1	3965.0	3669.6	3538.3	3561.3	3564.5	3581.0	3587.5	3498.9	3479.2
37.5°	4785.5	4746.2	4565.6	4050.3	3715.5	3659.7	3656.4	3699.1	3735.2	3656.4	3656.4
40°	5517.5	5484.7	5379.6	4706.8	4043.8	3859.9	3846.8	3886.2	3932.2	3876.4	3892.8
42.5°	6147.7	6173.9	6183.8	5402.6	4536.1	4234.1	4198.0	4142.2	4214.4	4165.2	4230.8
45°	6620.3	6607.2	6787.7	6114.9	5172.9	4703.5	4654.3	4503.3	4595.2	4591.9	4736.3
47.5°	7122.5	7099.5	7175.0	6784.4	5898.2	5277.9	5202.4	4979.2	5117.1	5212.2	5451.8
50°	7598.5	7605.0	7631.3	7312.9	6686.0	5977.0	5881.8	5583.1	5780.1	5980.3	6318.4
52.5°	8218.8	8172.8	8140.0	7930.0	7568.9	6705.7	6643.3	6302.0	6577.7	6814.0	7263.7
55°	8760.4	8730.8	8711.1	8701.3	8307.4	7509.8	7444.2	7089.7	7486.9	7654.2	8317.3
57.5°	9338.1	9321.6	9426.7	9594.1	9436.5	8327.1	8258.2	7916.8	8359.9	8478.1	9459.5
60°	9761.5	9771.3	10060.2	10486.8	10378.5	9213.3	9131.3	8829.3	9210.0	9315.1	10601.7
62.5°	9764.7	9863.2	10532.8	11297.6	11422.3	10234.1	10138.9	9810.7	10083.1	10083.1	11625.8
65°	8832.6	8944.2	10447.5	11497.8	12479.2	11448.6	11356.6	10841.3	10943.1	10805.2	12587.5
67.5°	7903.7	8035.0	9449.6	11514.2	13221.0	12748.3	12640.0	11872.0	11698.0	11350.1	13260.4
70°	7286.6	7378.5	8560.2	11300.8	13667.4	14107.2	14025.1	12850.1	12292.1	11806.3	13119.2
72.5°	6134.6	6101.7	7230.8	10286.6	13916.8	15649.9	15580.9	13913.5	12807.4	11589.7	11189.3
75°	3561.3	3600.6	4486.9	7536.1	12544.8	16454.0	16447.4	14822.7	12580.9	10237.4	7710.0
77.5°	1027.3	1056.9	1473.7	3311.8	7933.2	14035.0	14484.6	13555.8	10634.5	7296.5	3997.8
80°	449.7	472.6	640.0	1102.8	3416.8	9167.4	9561.2	9167.4	6413.6	3347.9	1568.9
82.5°	265.9	282.3	416.8	682.7	1637.9	4362.1	4893.9	4273.5	2767.0	1421.2	649.9
85°	151.0	157.5	239.6	433.3	1030.6	1526.3	1713.3	1605.0	1349.0	807.4	341.4
87.5°	68.9	72.2	118.2	203.5	577.7	515.3	535.0	709.0	781.2	492.3	170.7
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°	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9	2579.9
2.5°	2576.6	2566.7	2547.0	2540.5	2530.6	2533.9	2537.2	2537.2	2540.5	2530.6	2530.6
5°	2550.3	2533.9	2514.2	2514.2	2514.2	2540.5	2563.5	2576.6	2583.1	2583.1	2576.6
7.5°	2540.5	2520.8	2497.8	2504.4	2510.9	2543.8	2586.4	2629.1	2642.2	2642.2	2635.7
10°	2560.2	2540.5	2524.1	2533.9	2550.3	2576.6	2609.4	2648.8	2681.6	2684.9	2681.6
12.5°	2606.1	2583.1	2566.7	2586.4	2606.1	2622.5	2638.9	2655.4	2698.0	2704.6	2704.6
15°	2681.6	2658.6	2638.9	2655.4	2661.9	2661.9	2661.9	2661.9	2704.6	2711.2	2711.2
17.5°	2757.1	2737.4	2717.7	2721.0	2701.3	2675.0	2665.2	2661.9	2684.9	2704.6	2707.9
20°	2829.3	2812.9	2793.2	2760.4	2711.2	2661.9	2645.5	2645.5	2658.6	2688.2	2688.2
22.5°	2908.1	2888.4	2855.6	2780.1	2698.0	2629.1	2612.7	2622.5	2638.9	2678.3	2675.0
25°	2996.7	2970.5	2914.7	2773.5	2655.4	2573.3	2576.6	2606.1	2635.7	2678.3	2678.3
27.5°	3095.2	3059.1	2947.5	2721.0	2560.2	2481.4	2510.9	2579.9	2622.5	2668.5	2675.0
30°	3203.5	3170.7	2973.7	2629.1	2405.9	2333.7	2405.9	2517.5	2583.1	2625.8	2635.7
32.5°	3334.8	3308.5	2996.7	2510.9	2205.7	2143.3	2248.4	2386.2	2491.2	2540.5	2550.3
35°	3498.9	3472.6	3026.3	2376.4	2018.6	1952.9	2048.1	2189.3	2327.1	2389.5	2409.2
37.5°	3712.2	3672.9	3052.5	2231.9	1861.0	1785.6	1831.5	1959.5	2084.2	2169.6	2192.6
40°	3984.7	3922.3	3075.5	2067.8	1723.2	1637.9	1654.3	1716.6	1788.8	1864.3	1893.9
42.5°	4368.7	4244.0	3078.8	1893.9	1582.1	1503.3	1496.7	1516.4	1516.4	1516.4	1526.3
45°	4903.7	4667.4	3085.3	1729.8	1437.6	1355.6	1335.9	1329.3	1280.1	1184.9	1178.3
47.5°	5579.9	5222.1	3114.9	1591.9	1286.6	1214.4	1188.2	1161.9	1070.0	971.6	951.9
50°	6446.4	5865.4	3174.0	1460.6	1158.6	1109.4	1076.6	1014.2	912.5	837.0	817.3
52.5°	7444.2	6630.2	3229.8	1322.8	1063.5	1030.6	991.2	915.8	807.4	761.5	754.9
55°	8589.7	7483.6	3341.3	1201.3	981.4	958.4	922.3	850.1	768.1	735.2	731.9
57.5°	9761.5	8438.7	3498.9	1093.0	902.6	889.5	889.5	827.1	774.6	761.5	761.5
60°	10890.6	9259.3	3377.5	991.2	830.4	837.0	899.3	882.9	843.5	860.0	869.8
62.5°	11766.9	9741.8	2740.7	909.2	777.9	837.0	997.8	997.8	951.9	945.3	945.3
65°	12141.1	9735.2	1926.7	846.8	758.2	919.0	1112.7	1060.2	938.7	892.8	882.9
67.5°	12045.9	9308.5	1329.3	804.2	751.6	1004.4	1165.2	1017.5	879.6	840.3	810.7
70°	11208.9	8405.9	1024.1	764.8	741.8	968.3	1148.8	968.3	833.7	797.6	771.3
72.5°	9042.6	6741.8	850.1	725.4	702.4	896.1	1093.0	922.3	797.6	758.2	731.9
75°	5766.9	4240.7	718.8	672.9	626.9	804.2	1017.5	876.4	758.2	705.7	686.0
77.5°	2773.5	1828.2	626.9	610.5	564.6	745.1	942.0	817.3	705.7	663.0	649.9
80°	1122.5	837.0	544.9	548.1	518.6	709.0	889.5	761.5	653.2	607.2	584.2
82.5°	584.2	485.8	459.5	472.6	472.6	676.1	850.1	715.5	607.2	587.5	512.0
85°	315.1	302.0	354.5	380.7	410.3	610.5	791.0	666.3	554.7	475.9	459.5
87.5°	154.3	196.9	200.2	229.8	285.6	489.1	666.3	558.0	462.8	384.0	377.5
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)