

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: P400108

Luminaire Tested: **ARCH-L-PA3-230-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400108  
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-PA3-230-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23228 lumens  
Efficiency: N/A  
Efficacy: 101.4 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

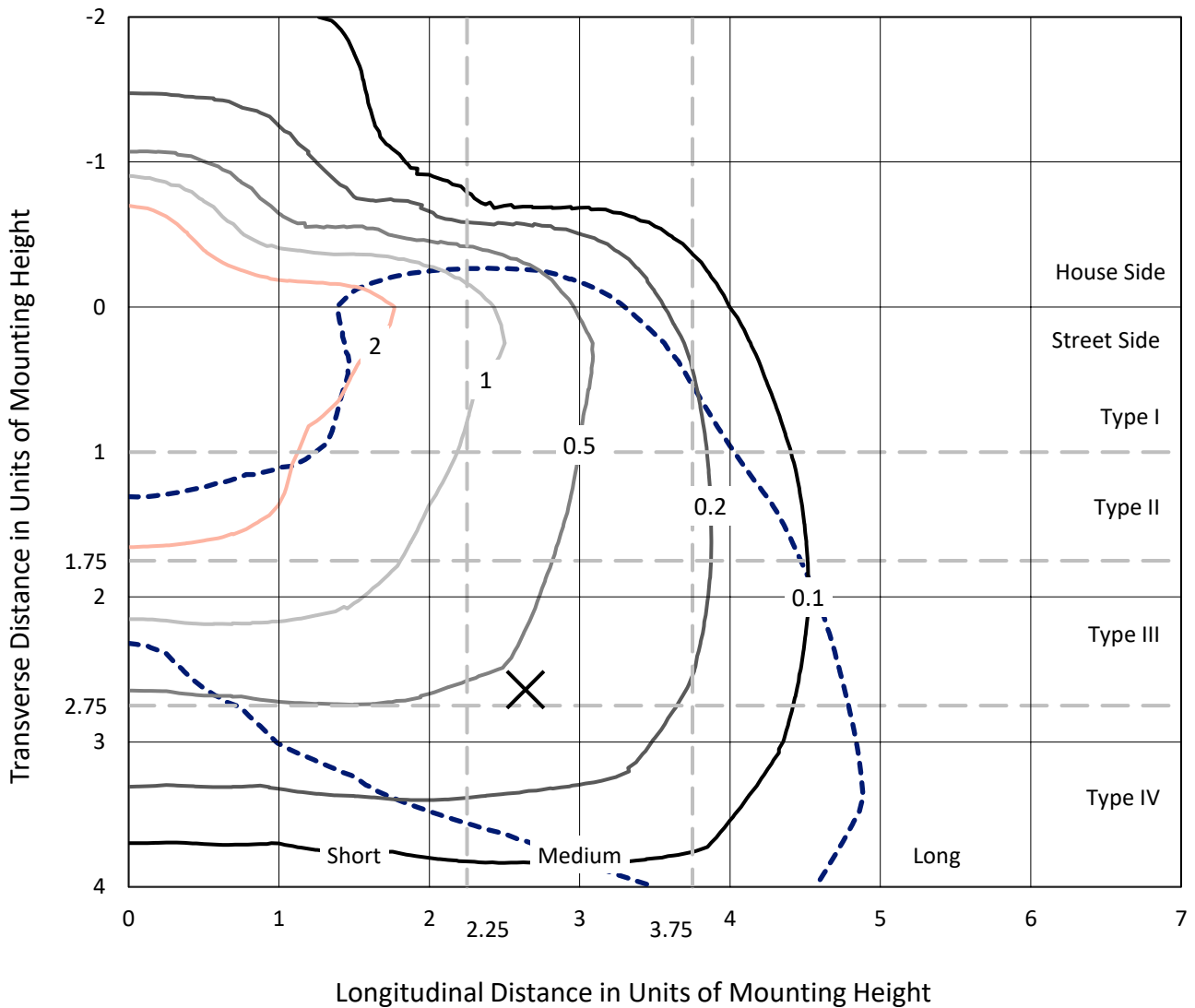
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

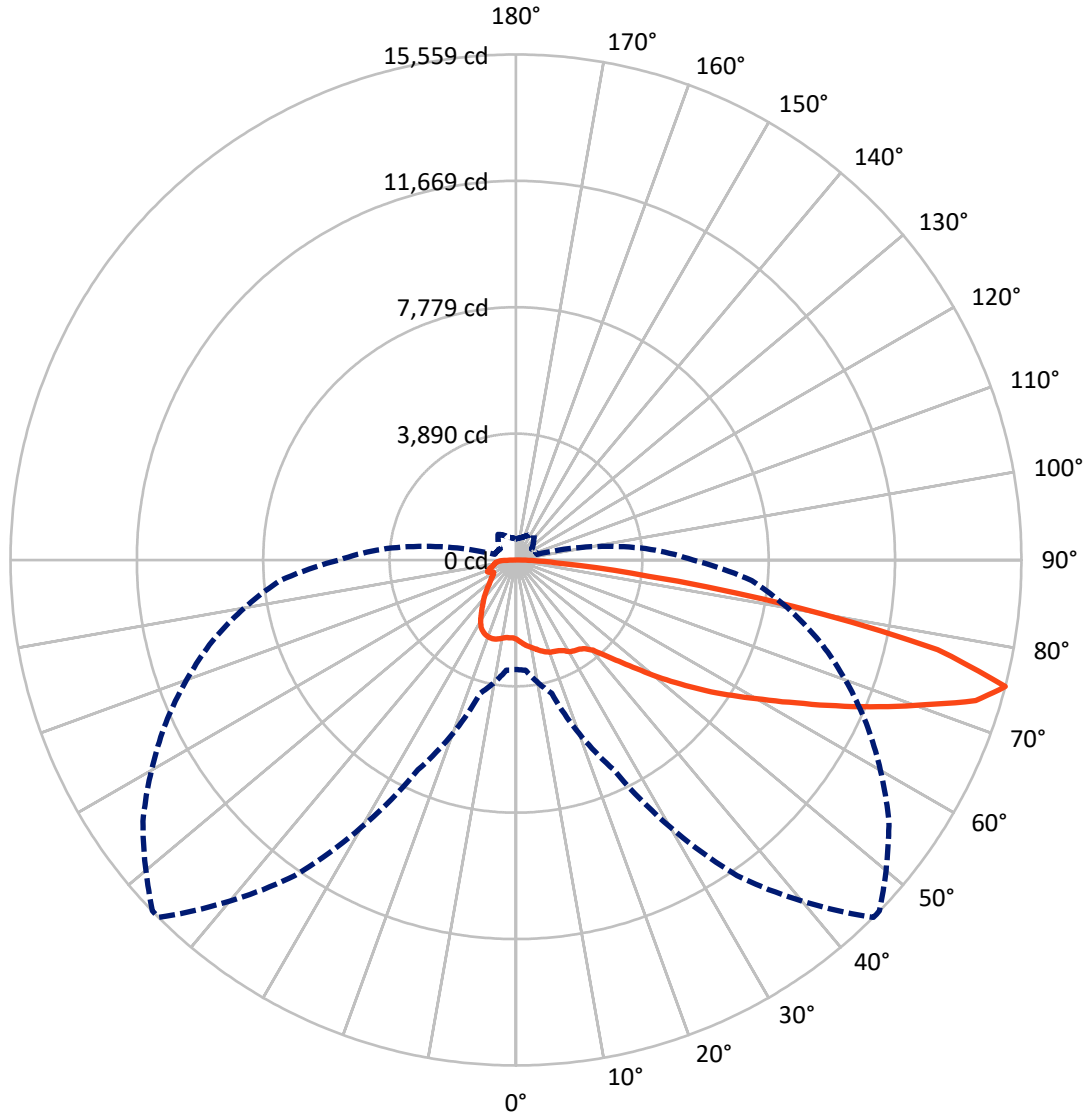
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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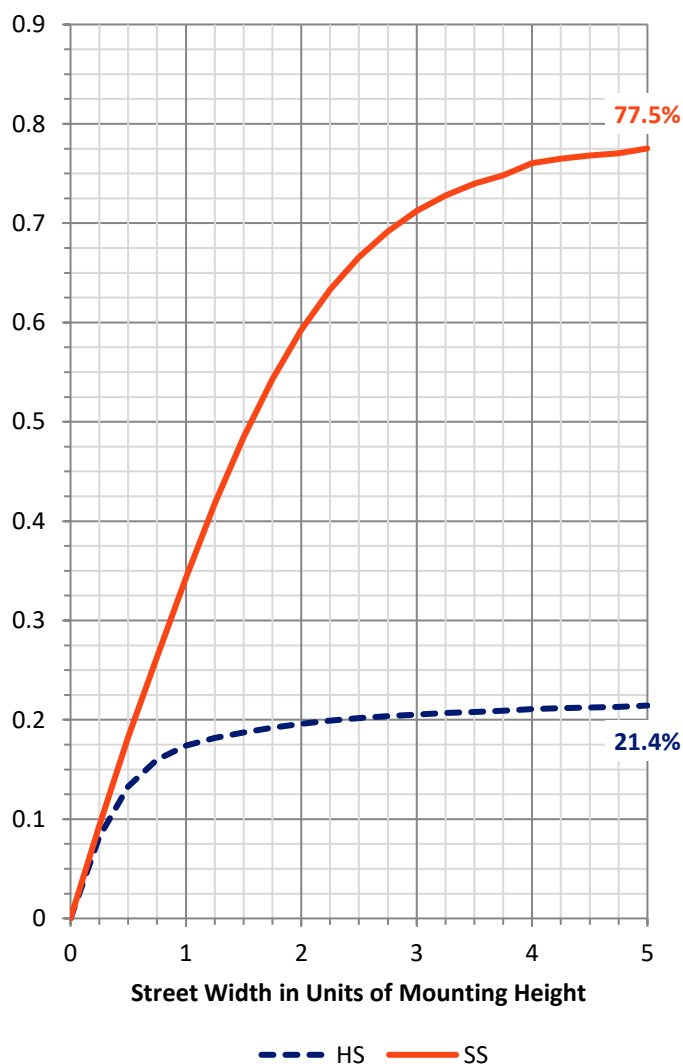
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5133.3	0.0	5133.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	18094.7	0.0	18094.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	23228.0	0.0	23228.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.3	1.0
10°-20°	767.8	3.3
20°-30°	1308.9	5.6
30°-40°	1834.0	7.9
40°-50°	2694.4	11.6
50°-60°	4288.1	18.5
60°-70°	6099.8	26.3
70°-80°	5107.4	22.0
80°-90°	886.4	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°	23228.0	100.0
0°-180°	23228.0	100.0

**Coefficient of Utilization**

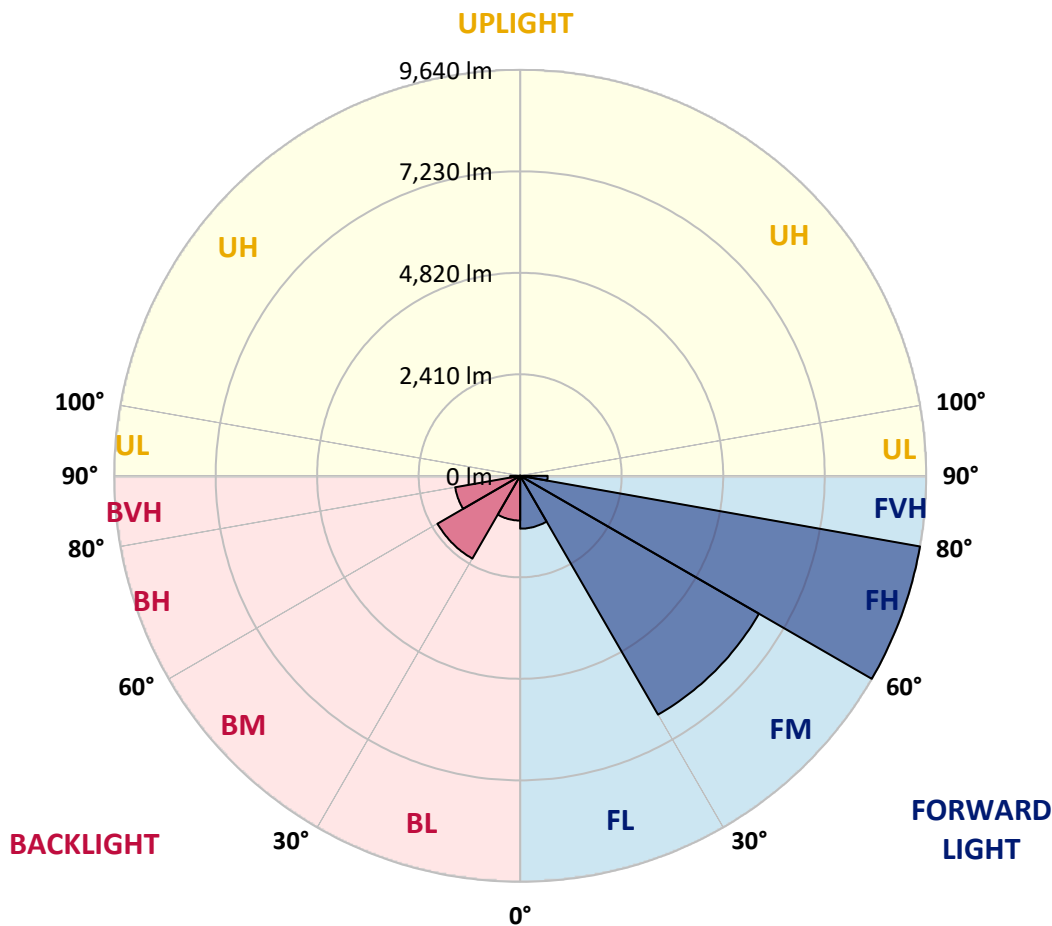


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1255.6	5.4			
FM (30°-60°)	6547.3	28.2			
FH (60°-80°)	9640.2	41.5			G4/12000
FVH (80°-90°)	651.6	2.8			G4/750
BL (0°-30°)	1062.4	4.6	B3/2500		
BM (30°-60°)	2269.2	9.8	B2/2500		
BH (60°-80°)	1567.0	6.7	B3/2500		G3/2500
BVH (80°-90°)	234.7	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°	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4
2.5°	2579.1	2566.7	2560.5	2560.5	2535.7	2520.1	2517.0	2495.3	2476.7	2458.1	2442.6
5°	2728.1	2718.8	2700.2	2684.6	2650.5	2607.0	2600.8	2554.3	2507.7	2464.3	2427.0
7.5°	2864.6	2846.0	2824.3	2793.3	2737.4	2678.4	2669.1	2603.9	2538.8	2473.6	2423.9
10°	2979.5	2960.9	2929.8	2886.4	2815.0	2743.6	2734.3	2666.0	2597.7	2520.1	2448.8
12.5°	3088.1	3072.6	3026.0	2967.1	2883.3	2818.1	2808.8	2749.8	2678.4	2591.5	2498.4
15°	3181.2	3165.7	3116.0	3047.8	2951.5	2901.9	2889.5	2833.6	2762.2	2669.1	2572.9
17.5°	3227.8	3227.8	3175.0	3100.5	3010.5	2973.3	2964.0	2895.7	2830.5	2740.5	2644.3
20°	3243.3	3249.5	3212.3	3122.2	3044.7	3029.1	3019.8	2964.0	2889.5	2802.6	2712.6
22.5°	3252.6	3265.0	3234.0	3131.6	3066.4	3057.1	3050.9	3013.6	2954.6	2870.9	2780.8
25°	3283.6	3283.6	3261.9	3147.1	3094.3	3091.2	3091.2	3069.5	3029.1	2957.8	2867.7
27.5°	3330.2	3327.1	3299.2	3181.2	3156.4	3165.7	3162.6	3159.5	3131.6	3060.2	2964.0
30°	3407.8	3407.8	3376.7	3249.5	3234.0	3274.3	3277.4	3283.6	3240.2	3128.5	3050.9
32.5°	3525.7	3513.3	3482.3	3317.8	3292.9	3330.2	3336.4	3333.3	3296.0	3190.5	3153.3
35°	3888.8	3860.9	3749.2	3469.9	3345.7	3367.4	3370.5	3386.1	3392.3	3308.5	3289.8
37.5°	4525.1	4487.8	4317.1	3829.9	3513.3	3460.5	3457.4	3497.8	3531.9	3457.4	3457.4
40°	5217.2	5186.2	5086.8	4450.6	3823.7	3649.9	3637.4	3674.7	3718.1	3665.4	3680.9
42.5°	5813.1	5837.9	5847.2	5108.6	4289.2	4003.7	3969.5	3916.8	3985.1	3938.5	4000.6
45°	6260.0	6247.6	6418.3	5782.1	4891.3	4447.5	4400.9	4258.2	4345.1	4342.0	4478.5
47.5°	6734.9	6713.1	6784.5	6415.2	5577.2	4990.6	4919.2	4708.2	4838.5	4928.6	5155.1
50°	7184.9	7191.1	7215.9	6914.9	6322.1	5651.7	5561.7	5279.3	5465.5	5654.8	5974.5
52.5°	7771.5	7728.0	7697.0	7498.4	7157.0	6340.7	6281.7	5959.0	6219.7	6443.1	6868.3
55°	8283.6	8255.6	8237.0	8227.7	7855.3	7101.1	7039.0	6703.8	7079.4	7237.7	7864.6
57.5°	8829.8	8814.3	8913.6	9071.9	8922.9	7873.9	7808.7	7485.9	7904.9	8016.7	8944.6
60°	9230.2	9239.5	9512.6	9916.1	9813.7	8711.9	8634.3	8348.7	8708.8	8808.1	10024.7
62.5°	9233.3	9326.4	9959.5	10682.7	10800.6	9677.1	9587.1	9276.7	9534.3	9534.3	10993.0
65°	8351.9	8457.4	9878.8	10872.0	11800.0	10825.4	10738.5	10251.3	10347.5	10217.1	11902.4
67.5°	7473.5	7597.7	8935.3	10887.5	12501.4	12054.5	11952.1	11225.8	11061.3	10732.3	12538.6
70°	6890.0	6976.9	8094.3	10685.8	12923.5	13339.4	13261.8	12150.7	11623.1	11163.7	12405.2
72.5°	5800.7	5769.6	6837.3	9726.8	13159.4	14798.1	14732.9	13156.3	12110.3	10958.9	10580.3
75°	3367.4	3404.7	4242.7	7125.9	11862.1	15558.5	15552.3	14016.0	11896.2	9680.2	7290.4
77.5°	971.4	999.4	1393.5	3131.6	7501.5	13271.1	13696.3	12818.0	10055.7	6899.4	3780.2
80°	425.2	446.9	605.2	1042.8	3230.9	8668.4	9040.9	8668.4	6064.5	3165.7	1483.5
82.5°	251.4	266.9	394.2	645.6	1548.7	4124.7	4627.5	4040.9	2616.4	1343.9	614.5
85°	142.8	149.0	226.6	409.7	974.5	1443.2	1620.1	1517.7	1275.6	763.5	322.8
87.5°	65.2	68.3	111.7	192.4	546.2	487.3	505.9	670.4	738.7	465.5	161.4
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°	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4	2439.4
2.5°	2436.3	2427.0	2408.4	2402.2	2392.9	2396.0	2399.1	2399.1	2402.2	2392.9	2392.9
5°	2411.5	2396.0	2377.4	2377.4	2377.4	2402.2	2423.9	2436.3	2442.6	2442.6	2436.3
7.5°	2402.2	2383.6	2361.9	2368.1	2374.3	2405.3	2445.7	2486.0	2498.4	2498.4	2492.2
10°	2420.8	2402.2	2386.7	2396.0	2411.5	2436.3	2467.4	2504.6	2535.7	2538.8	2535.7
12.5°	2464.3	2442.6	2427.0	2445.7	2464.3	2479.8	2495.3	2510.8	2551.2	2557.4	2557.4
15°	2535.7	2513.9	2495.3	2510.8	2517.0	2517.0	2517.0	2517.0	2557.4	2563.6	2563.6
17.5°	2607.0	2588.4	2569.8	2572.9	2554.3	2529.5	2520.1	2517.0	2538.8	2557.4	2560.5
20°	2675.3	2659.8	2641.2	2610.1	2563.6	2517.0	2501.5	2501.5	2513.9	2541.9	2541.9
22.5°	2749.8	2731.2	2700.2	2628.8	2551.2	2486.0	2470.5	2479.8	2495.3	2532.6	2529.5
25°	2833.6	2808.8	2756.0	2622.6	2510.8	2433.2	2436.3	2464.3	2492.2	2532.6	2532.6
27.5°	2926.7	2892.6	2787.1	2572.9	2420.8	2346.3	2374.3	2439.4	2479.8	2523.2	2529.5
30°	3029.1	2998.1	2811.9	2486.0	2275.0	2206.7	2275.0	2380.5	2442.6	2482.9	2492.2
32.5°	3153.3	3128.5	2833.6	2374.3	2085.6	2026.7	2126.0	2256.3	2355.7	2402.2	2411.5
35°	3308.5	3283.6	2861.5	2247.0	1908.7	1846.7	1936.7	2070.1	2200.5	2259.4	2278.1
37.5°	3510.2	3473.0	2886.4	2110.5	1759.8	1688.4	1731.8	1852.9	1970.8	2051.5	2073.2
40°	3767.8	3708.8	2908.1	1955.3	1629.4	1548.7	1564.2	1623.2	1691.5	1762.9	1790.8
42.5°	4130.9	4013.0	2911.2	1790.8	1495.9	1421.5	1415.3	1433.9	1433.9	1433.9	1443.2
45°	4636.8	4413.4	2917.4	1635.6	1359.4	1281.8	1263.2	1257.0	1210.4	1120.4	1114.2
47.5°	5276.2	4937.9	2945.3	1505.3	1216.6	1148.3	1123.5	1098.7	1011.8	918.7	900.1
50°	6095.5	5546.2	3001.2	1381.1	1095.6	1049.0	1018.0	959.0	862.8	791.4	772.8
52.5°	7039.0	6269.3	3054.0	1250.8	1005.6	974.5	937.3	865.9	763.5	720.0	713.8
55°	8122.2	7076.3	3159.5	1135.9	928.0	906.3	872.1	803.8	726.2	695.2	692.1
57.5°	9230.2	7979.4	3308.5	1033.5	853.5	841.1	841.1	782.1	732.5	720.0	720.0
60°	10297.8	8755.3	3193.6	937.3	785.2	791.4	850.4	834.9	797.6	813.1	822.5
62.5°	11126.5	9211.6	2591.5	859.7	735.6	791.4	943.5	943.5	900.1	893.8	893.8
65°	11480.3	9205.3	1821.8	800.7	716.9	869.0	1052.1	1002.5	887.6	844.2	834.9
67.5°	11390.3	8801.9	1257.0	760.4	710.7	949.7	1101.8	962.1	831.8	794.5	766.6
70°	10598.9	7948.4	968.3	723.1	701.4	915.6	1086.3	915.6	788.3	754.2	729.4
72.5°	8550.5	6374.8	803.8	685.9	664.2	847.3	1033.5	872.1	754.2	716.9	692.1
75°	5453.1	4009.9	679.7	636.2	592.8	760.4	962.1	828.7	716.9	667.3	648.7
77.5°	2622.6	1728.7	592.8	577.3	533.8	704.5	890.7	772.8	667.3	626.9	614.5
80°	1061.4	791.4	515.2	518.3	490.4	670.4	841.1	720.0	617.6	574.2	552.4
82.5°	552.4	459.3	434.5	446.9	446.9	639.3	803.8	676.6	574.2	555.5	484.2
85°	297.9	285.5	335.2	360.0	388.0	577.3	748.0	630.0	524.5	450.0	434.5
87.5°	145.9	186.2	189.3	217.3	270.0	462.4	630.0	527.6	437.6	363.1	356.9
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)