

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: P399681

Luminaire Tested: **ARCH-L-PA3-170-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-170-830-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20693 lumens  
Efficiency: N/A  
Efficacy: 119.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

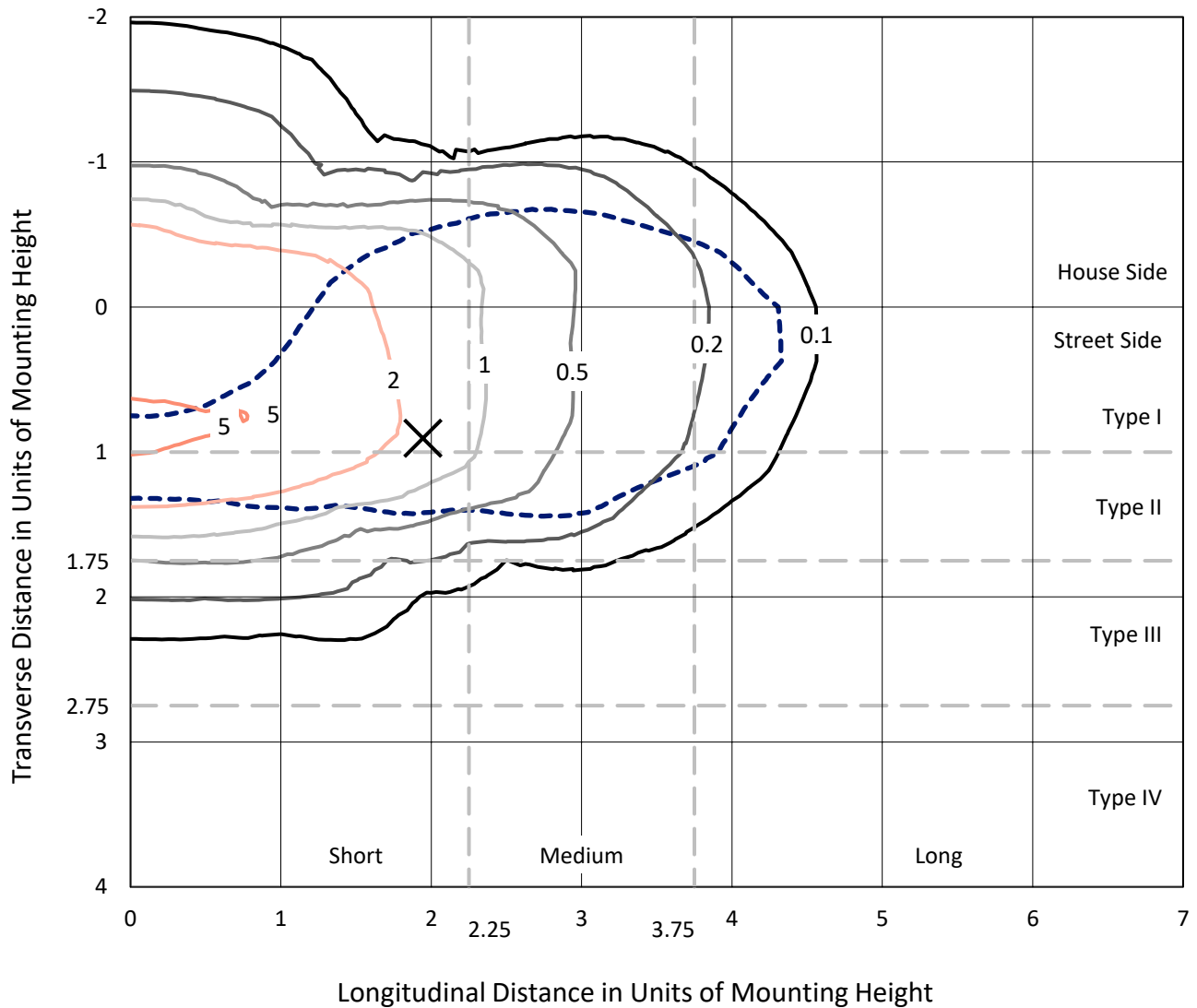
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

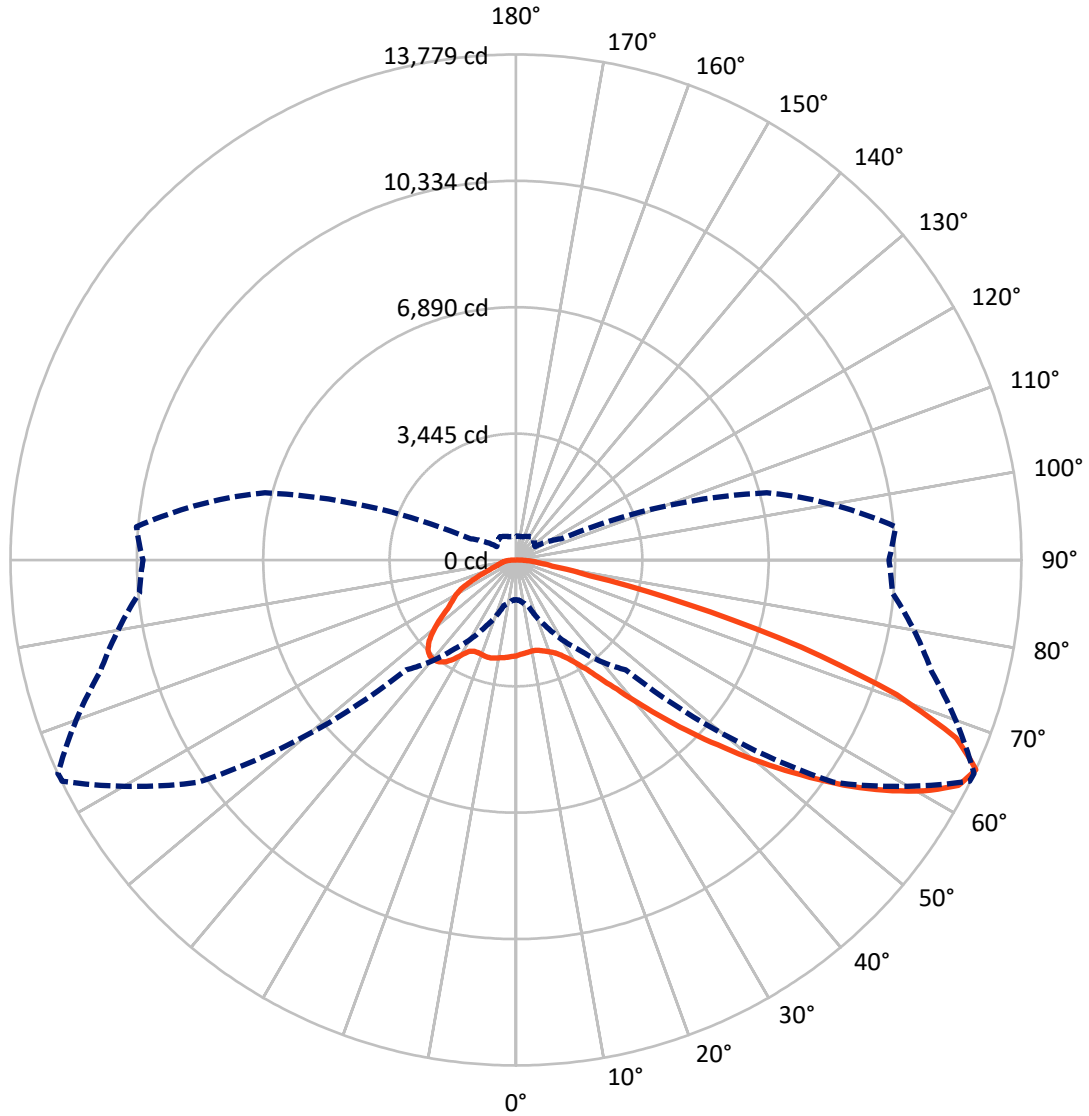
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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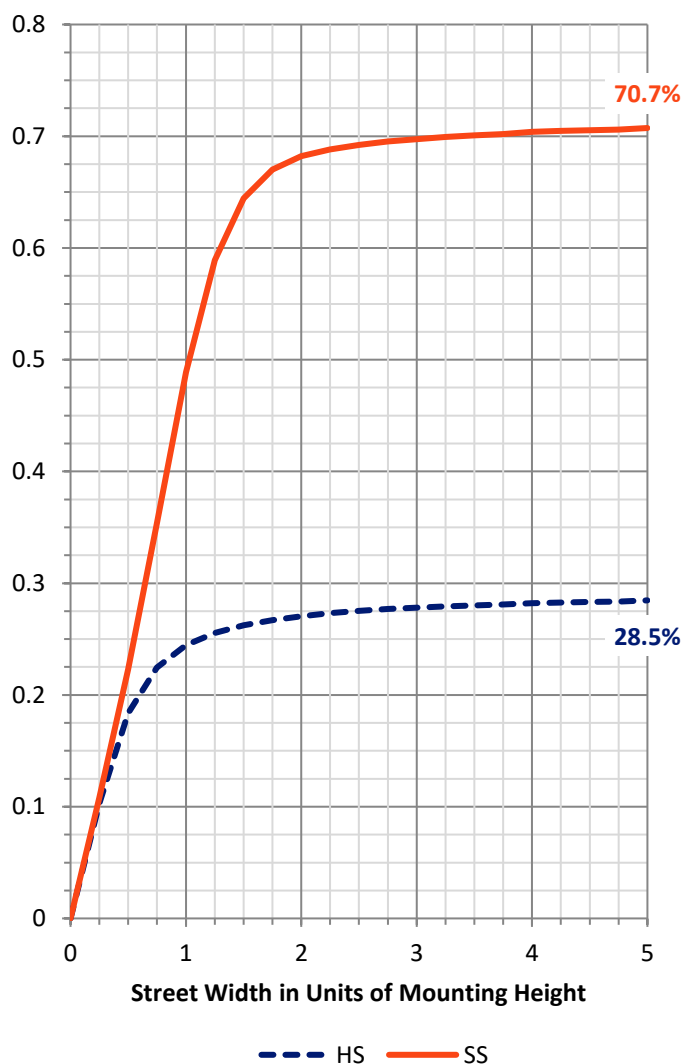
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5982.7	0.0	5982.7
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	14710.4	0.0	14710.4
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	20693.0	0.0	20693.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.1	1.2
10°-20°	743.7	3.6
20°-30°	1321.1	6.4
30°-40°	2235.0	10.8
40°-50°	3890.7	18.8
50°-60°	5028.0	24.3
60°-70°	4399.8	21.3
70°-80°	2393.2	11.6
80°-90°	432.4	2.1
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°	20693.0	100.0
0°-180°	20693.0	100.0

**Coefficient of Utilization**

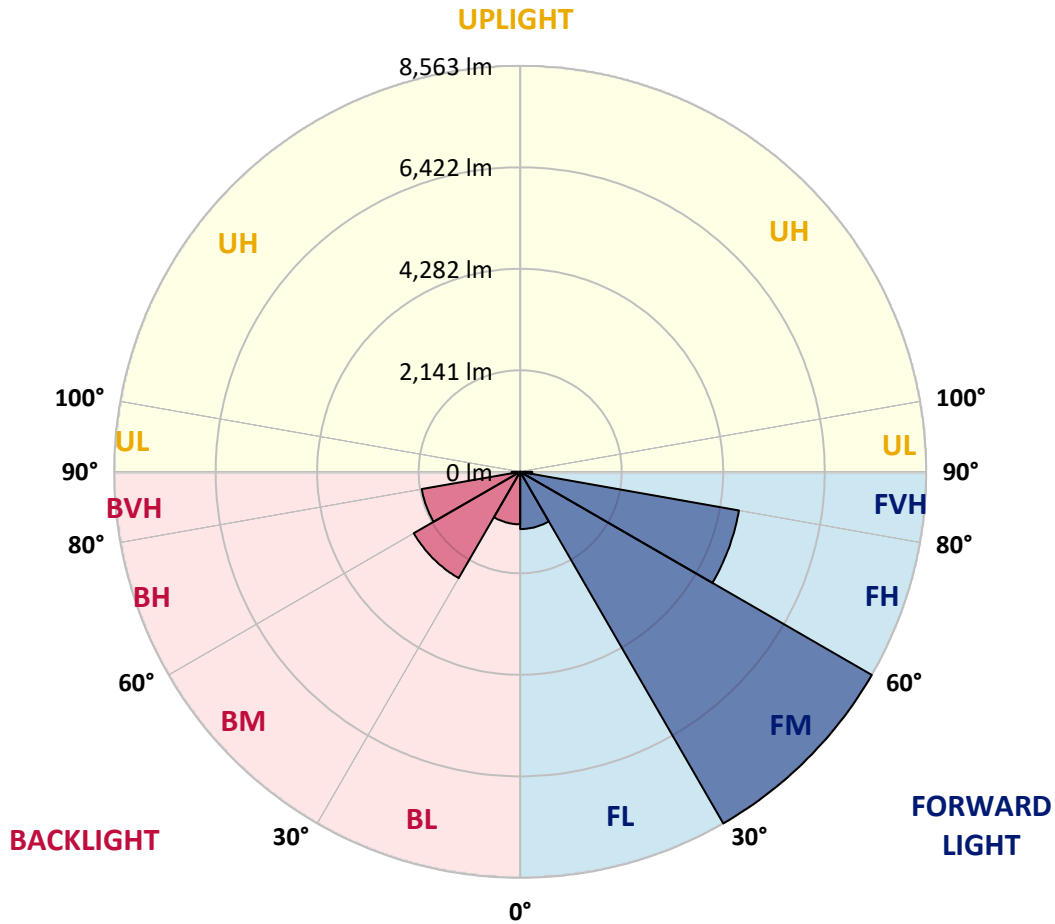


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1207.4	5.8			
FM (30°-60°)	8563.3	41.4			
FH (60°-80°)	4685.2	22.6			G2/5000
FVH (80°-90°)	254.4	1.2			G3/500
BL (0°-30°)	1106.6	5.3	B3/2500		
BM (30°-60°)	2590.4	12.5	B3/5000		
BH (60°-80°)	2107.8	10.2	B3/2500		G3/2500
BVH (80°-90°)	178.0	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8
2.5°	2568.5	2565.7	2560.3	2565.7	2568.5	2573.9	2571.2	2576.6	2573.9	2582.1	2595.7
5°	2503.1	2497.6	2494.9	2508.5	2516.7	2530.3	2535.8	2554.8	2552.1	2565.7	2587.5
7.5°	2429.5	2429.5	2426.8	2443.2	2454.1	2478.6	2497.6	2530.3	2533.0	2557.6	2582.1
10°	2372.3	2375.1	2372.3	2386.0	2402.3	2432.3	2465.0	2511.3	2514.0	2549.4	2573.9
12.5°	2350.6	2350.6	2350.6	2369.6	2391.4	2432.3	2470.4	2519.4	2524.9	2563.0	2584.8
15°	2380.5	2383.2	2377.8	2396.9	2421.4	2470.4	2505.8	2557.6	2563.0	2598.4	2612.0
17.5°	2486.7	2497.6	2484.0	2494.9	2489.5	2527.6	2560.3	2612.0	2614.8	2644.7	2650.2
20°	2696.5	2707.4	2685.6	2672.0	2622.9	2620.2	2633.8	2674.7	2674.7	2693.7	2680.1
22.5°	3020.6	3031.5	2993.4	2941.6	2824.5	2767.3	2737.3	2756.4	2753.7	2761.8	2726.4
25°	3450.9	3448.2	3401.9	3306.6	3118.6	2979.7	2906.2	2876.2	2876.2	2859.9	2816.3
27.5°	3984.8	3943.9	3862.2	3747.8	3486.3	3293.0	3135.0	3058.7	3045.1	2996.1	2914.4
30°	4554.0	4524.1	4407.0	4240.8	3938.5	3690.6	3429.1	3276.6	3268.4	3162.2	3039.7
32.5°	5224.1	5175.0	5044.3	4845.5	4483.2	4134.6	3807.7	3576.2	3562.6	3393.7	3224.9
35°	6084.8	6043.9	5790.6	5591.8	5126.0	4668.4	4281.7	3973.9	3963.0	3756.0	3540.8
37.5°	7117.0	7010.8	6765.7	6392.5	5902.3	5360.3	4870.0	4483.2	4469.6	4240.8	3968.4
40°	8037.7	7942.3	7724.4	7381.2	6855.6	6253.6	5589.0	5120.6	5107.0	4829.1	4485.9
42.5°	8718.6	8653.2	8511.6	8312.8	7936.9	7571.9	6506.9	5891.4	5866.9	5507.3	5079.7
45°	9113.5	9061.8	8980.1	9029.1	9023.6	8955.6	7601.9	6809.3	6730.3	6264.5	5741.6
47.5°	9018.2	8971.9	9004.6	9385.9	9911.6	10306.5	8876.6	7748.9	7642.7	7035.3	6447.0
50°	8329.1	8348.2	8519.8	9249.7	10429.1	11306.1	10290.2	8819.4	8677.7	7811.6	7117.0
52.5°	7073.5	7119.8	7536.5	8557.9	10371.9	11954.4	11567.6	9925.2	9737.3	8568.8	7727.2
55°	5619.0	5736.1	6275.4	7348.6	9625.6	12000.7	12531.8	11036.5	10829.5	9279.7	8258.3
57.5°	4156.4	4330.7	4954.4	5940.4	8195.6	11268.0	13013.9	12098.7	11848.1	9985.1	8819.4
60°	2636.5	2742.8	3461.8	4624.9	6272.7	9475.8	12951.2	13003.0	12785.1	10687.8	9405.0
62.5°	1683.3	1735.0	2097.3	3298.4	4385.2	7016.3	12267.6	13686.6	13539.6	11327.9	9960.6
65°	1081.3	1103.1	1288.3	2029.2	2985.2	4235.4	10565.3	13760.2	13779.2	11728.3	10303.8
67.5°	879.8	890.7	958.7	1252.9	2110.9	2339.7	7359.5	12714.3	12945.8	11624.8	10186.7
70°	800.8	814.4	885.2	999.6	1634.2	1615.2	3562.6	10638.8	11017.4	11028.3	9666.4
72.5°	675.5	694.5	789.9	945.1	1263.8	1274.7	1508.9	7577.4	8135.7	9857.1	8884.7
75°	563.8	574.7	656.4	833.5	1070.4	1018.7	1059.5	4017.5	4823.7	7904.2	8054.0
77.5°	457.6	468.5	528.4	664.6	950.6	792.6	833.5	1664.2	2056.4	5365.7	6583.2
80°	326.8	337.7	405.8	517.5	719.1	713.6	618.3	917.9	996.9	2900.7	4276.2
82.5°	234.2	242.4	307.8	370.4	498.4	716.3	465.8	623.7	653.7	1285.6	1724.1
85°	158.0	158.0	212.4	245.1	321.4	452.1	375.9	422.2	441.2	610.1	465.8
87.5°	68.1	68.1	114.4	125.3	168.9	209.7	280.5	212.4	217.9	329.6	190.7
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°	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8	2614.8
2.5°	2603.9	2606.6	2612.0	2628.4	2639.3	2655.6	2663.8	2674.7	2674.7	2669.2	2672.0
5°	2598.4	2606.6	2625.7	2655.6	2674.7	2704.6	2726.4	2742.8	2748.2	2742.8	2745.5
7.5°	2595.7	2609.3	2642.0	2685.6	2712.8	2750.9	2780.9	2800.0	2813.6	2808.1	2810.9
10°	2587.5	2609.3	2650.2	2704.6	2745.5	2783.6	2810.9	2819.0	2827.2	2821.8	2819.0
12.5°	2598.4	2622.9	2666.5	2731.9	2778.2	2808.1	2816.3	2802.7	2783.6	2772.7	2770.0
15°	2620.2	2644.7	2688.3	2756.4	2797.2	2808.1	2789.1	2745.5	2701.9	2677.4	2674.7
17.5°	2650.2	2666.5	2701.9	2761.8	2794.5	2780.9	2742.8	2691.0	2658.3	2639.3	2642.0
20°	2669.2	2669.2	2696.5	2742.8	2770.0	2759.1	2712.8	2655.6	2603.9	2579.4	2571.2
22.5°	2696.5	2682.9	2685.6	2726.4	2764.6	2748.2	2650.2	2549.4	2475.9	2448.6	2445.9
25°	2770.0	2731.9	2707.4	2731.9	2821.8	2688.3	2492.2	2375.1	2307.0	2282.5	2285.2
27.5°	2859.9	2808.1	2756.4	2797.2	2868.1	2552.1	2290.6	2157.2	2116.3	2097.3	2105.4
30°	2949.8	2881.7	2813.6	2960.7	2835.4	2339.7	2031.9	1901.1	1865.7	1852.1	1863.0
32.5°	3115.9	3004.3	2922.5	3178.6	2734.6	2097.3	1751.3	1631.5	1598.8	1582.5	1577.0
35°	3393.7	3252.1	3170.4	3369.2	2593.0	1827.6	1495.3	1410.9	1375.5	1340.1	1334.6
37.5°	3794.1	3622.5	3549.0	3478.2	2394.1	1560.7	1299.2	1242.0	1190.3	1135.8	1133.1
40°	4273.5	4050.2	3995.7	3527.2	2119.0	1310.1	1163.0	1108.5	1043.2	991.4	994.2
42.5°	4826.4	4540.4	4423.3	3513.6	1778.6	1176.6	1065.0	1005.0	947.9	901.5	898.8
45°	5417.5	5093.3	4823.7	3418.3	1440.8	1084.0	1005.0	934.2	877.0	825.3	819.8
47.5°	6071.1	5708.9	5194.1	3233.0	1190.3	1018.7	969.6	868.9	817.1	784.4	784.4
50°	6730.3	6297.2	5534.6	2952.5	1043.2	969.6	917.9	833.5	792.6	765.4	765.4
52.5°	7294.1	6910.0	5815.1	2617.5	950.6	928.8	882.5	817.1	773.5	749.0	746.3
55°	7841.6	7479.3	6065.7	2285.2	874.3	874.3	874.3	803.5	754.5	732.7	730.0
57.5°	8386.3	8078.5	6327.2	2067.3	806.2	828.0	858.0	787.2	738.1	719.1	716.3
60°	9001.9	8797.6	6629.5	1914.8	746.3	779.0	836.2	768.1	710.9	694.5	691.8
62.5°	9655.5	9655.5	6904.6	1699.6	691.8	738.1	803.5	743.6	686.4	672.8	670.0
65°	10167.6	10388.2	7081.6	1378.2	637.3	697.3	765.4	710.9	653.7	651.0	645.5
67.5°	10227.5	10573.4	6970.0	1040.5	588.3	653.7	727.2	675.5	621.0	621.0	612.8
70°	9797.2	10148.5	6621.3	779.0	552.9	610.1	678.2	631.9	580.1	585.6	572.0
72.5°	9078.1	9165.3	5755.2	615.6	512.1	563.8	618.3	582.9	536.6	536.6	517.5
75°	8130.3	7645.4	4180.9	514.8	463.0	509.3	558.4	528.4	487.5	473.9	463.0
77.5°	6471.5	5540.0	2429.5	444.0	422.2	457.6	490.3	468.5	433.1	403.1	403.1
80°	3943.9	3246.7	1073.1	384.0	373.1	400.4	422.2	397.7	367.7	337.7	329.6
82.5°	1500.8	1252.9	520.2	329.6	326.8	343.2	359.5	335.0	313.2	299.6	258.8
85°	411.3	378.6	356.8	275.1	269.6	266.9	286.0	275.1	245.1	201.6	179.8
87.5°	155.3	177.0	193.4	168.9	179.8	166.1	190.7	174.3	155.3	100.8	89.9
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)