

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: P399631

Luminaire Tested: **ARCH-L-PA3-170-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399631  
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-PA3-170-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21753 lumens  
Efficiency: N/A  
Efficacy: 125.7 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

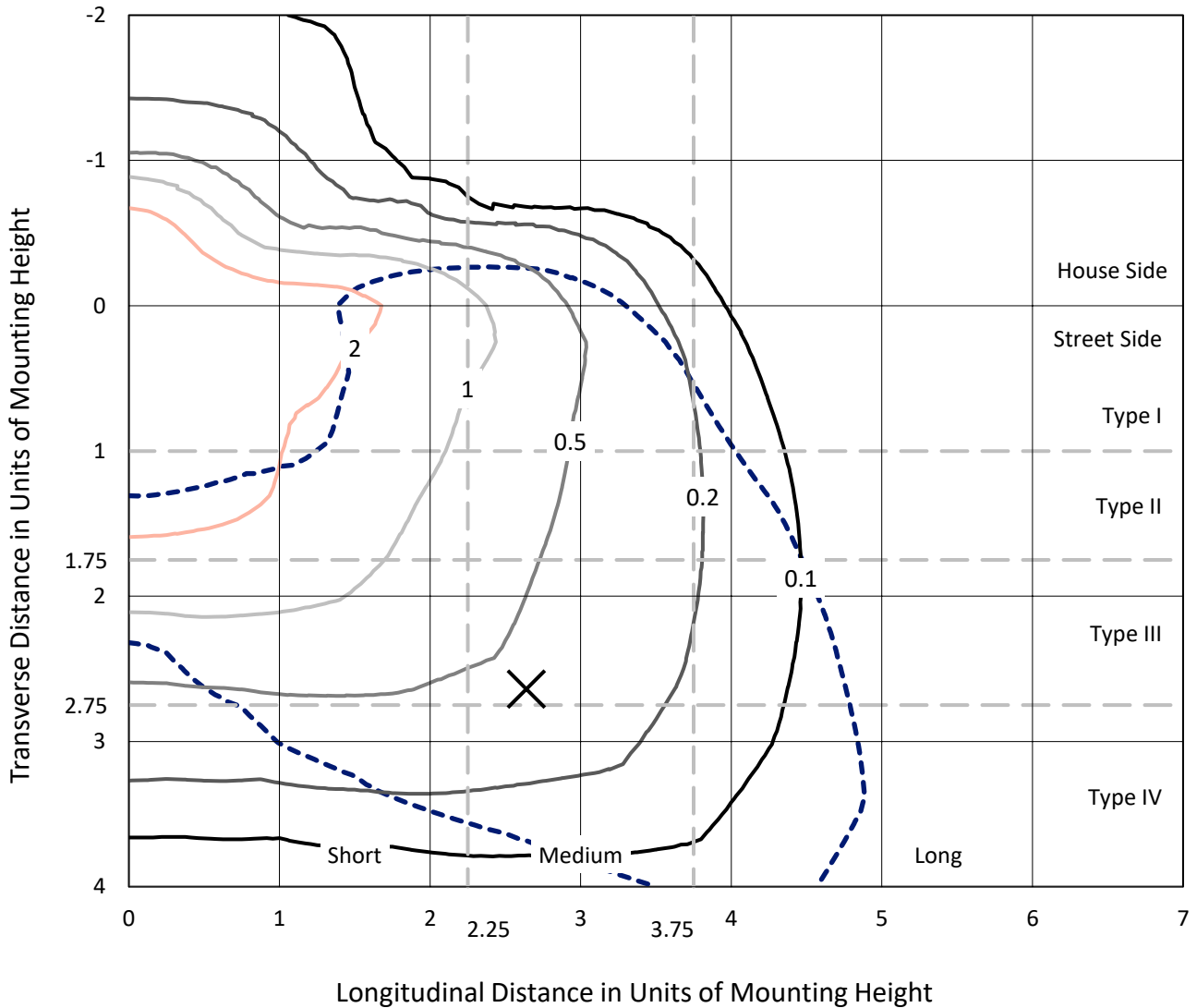
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

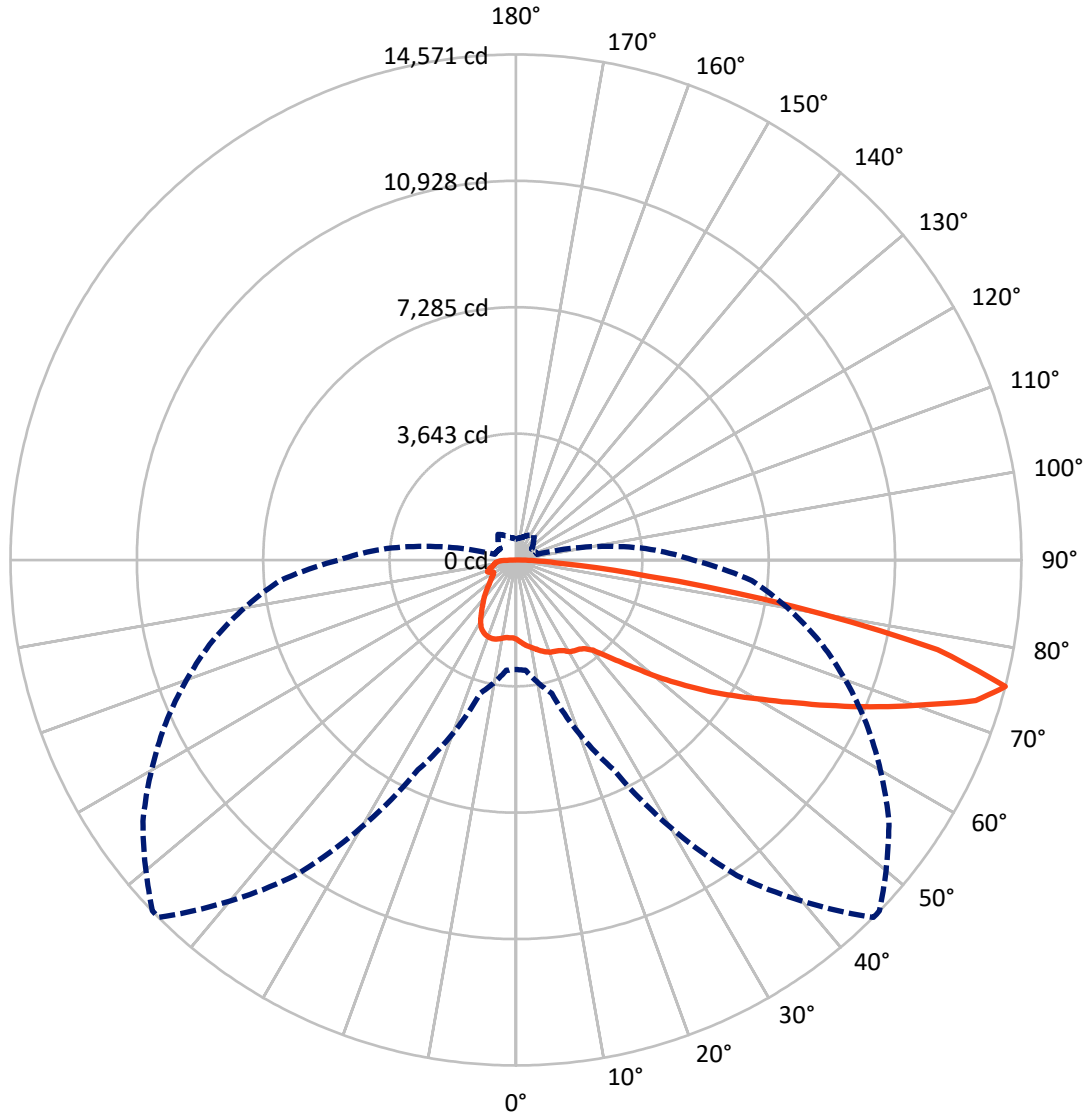
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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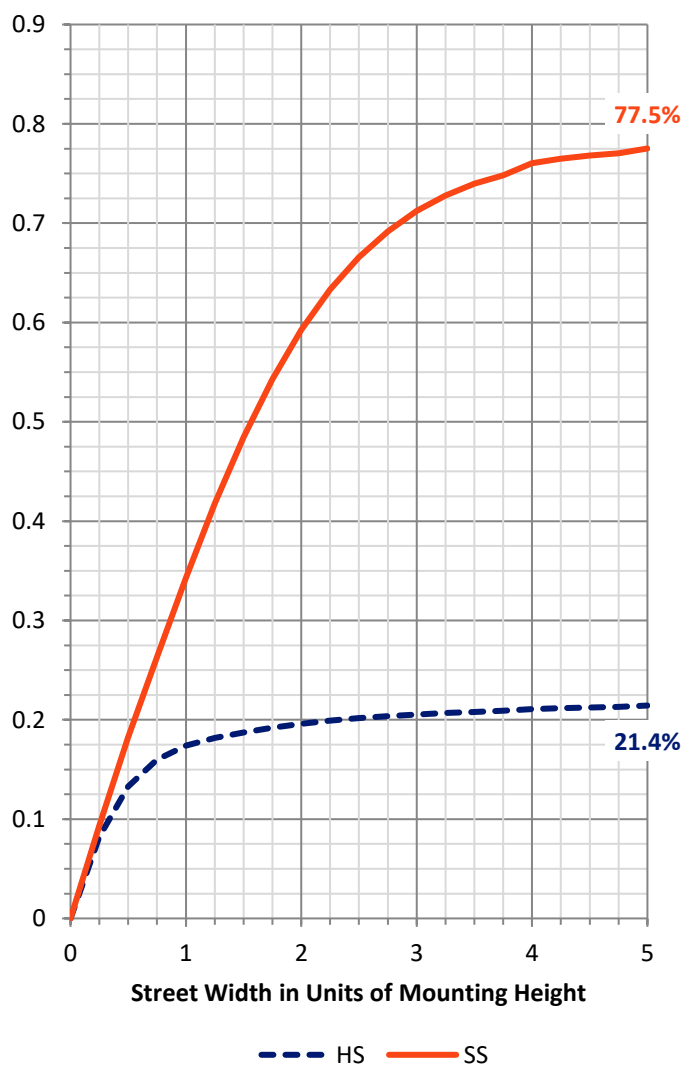
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4807.3	0.0	4807.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	16945.7	0.0	16945.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	21753.0	0.0	21753.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.0	1.0
10°-20°	719.0	3.3
20°-30°	1225.8	5.6
30°-40°	1717.5	7.9
40°-50°	2523.3	11.6
50°-60°	4015.8	18.5
60°-70°	5712.5	26.3
70°-80°	4783.0	22.0
80°-90°	830.1	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°	21753.0	100.0
0°-180°	21753.0	100.0

**Coefficient of Utilization**

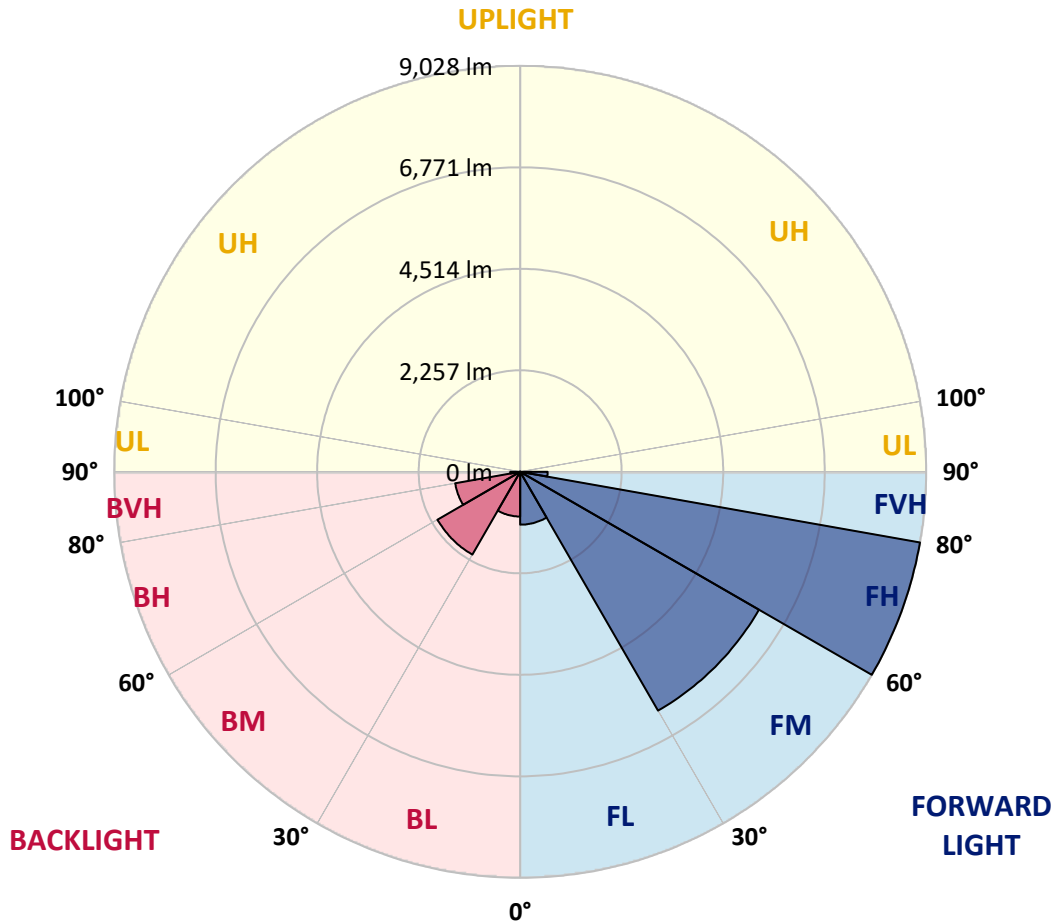


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1175.9	5.4			
FM (30°-60°)	6131.5	28.2			
FH (60°-80°)	9028.0	41.5			G4/12000
FVH (80°-90°)	610.3	2.8			G4/750
BL (0°-30°)	994.9	4.6	B2/1000		
BM (30°-60°)	2125.1	9.8	B2/2500		
BH (60°-80°)	1467.5	6.7	B3/2500		G3/2500
BVH (80°-90°)	219.8	1.0			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5
2.5°	2415.3	2403.7	2397.9	2397.9	2374.6	2360.1	2357.2	2336.9	2319.4	2302.0	2287.4
5°	2554.8	2546.1	2528.7	2514.2	2482.2	2441.5	2435.7	2392.1	2348.5	2307.8	2272.9
7.5°	2682.7	2665.3	2645.0	2615.9	2563.6	2508.3	2499.6	2438.6	2377.6	2316.5	2270.0
10°	2790.3	2772.8	2743.8	2703.1	2636.2	2569.4	2560.7	2496.7	2432.8	2360.1	2293.3
12.5°	2892.0	2877.5	2833.9	2778.7	2700.2	2639.1	2630.4	2575.2	2508.3	2427.0	2339.8
15°	2979.2	2964.7	2918.2	2854.2	2764.1	2717.6	2706.0	2653.7	2586.8	2499.6	2409.5
17.5°	3022.8	3022.8	2973.4	2903.6	2819.3	2784.5	2775.7	2711.8	2650.8	2566.5	2476.4
20°	3037.3	3043.1	3008.3	2924.0	2851.3	2836.8	2828.1	2775.7	2706.0	2624.6	2540.3
22.5°	3046.1	3057.7	3028.6	2932.7	2871.7	2862.9	2857.1	2822.3	2767.0	2688.6	2604.3
25°	3075.1	3075.1	3054.8	2947.2	2897.8	2894.9	2894.9	2874.6	2836.8	2769.9	2685.6
27.5°	3118.7	3115.8	3089.7	2979.2	2956.0	2964.7	2961.8	2958.9	2932.7	2865.8	2775.7
30°	3191.4	3191.4	3162.3	3043.1	3028.6	3066.4	3069.3	3075.1	3034.4	2929.8	2857.1
32.5°	3301.8	3290.2	3261.1	3107.1	3083.8	3118.7	3124.5	3121.6	3086.7	2987.9	2953.0
35°	3641.9	3615.7	3511.1	3249.5	3133.3	3153.6	3156.5	3171.0	3176.8	3098.4	3080.9
37.5°	4237.7	4202.9	4043.0	3586.7	3290.2	3240.8	3237.9	3275.7	3307.6	3237.9	3237.9
40°	4885.9	4856.8	4763.8	4168.0	3580.9	3418.1	3406.5	3441.3	3482.0	3432.6	3447.2
42.5°	5444.0	5467.2	5475.9	4784.2	4016.8	3749.4	3717.5	3668.1	3732.0	3688.4	3746.5
45°	5862.5	5850.9	6010.7	5414.9	4580.7	4165.1	4121.5	3987.8	4069.2	4066.3	4194.1
47.5°	6307.2	6286.8	6353.7	6007.8	5223.1	4673.7	4606.9	4409.2	4531.3	4615.6	4827.8
50°	6728.6	6734.5	6757.7	6475.8	5920.6	5292.8	5208.5	4944.0	5118.4	5295.7	5595.1
52.5°	7278.0	7237.3	7208.2	7022.2	6702.5	5938.1	5882.8	5580.6	5824.7	6034.0	6432.2
55°	7757.6	7731.4	7714.0	7705.2	7356.5	6650.2	6592.0	6278.1	6629.8	6778.1	7365.2
57.5°	8269.1	8254.6	8347.6	8495.8	8356.3	7373.9	7312.9	7010.6	7403.0	7507.6	8376.7
60°	8644.1	8652.8	8908.5	9286.4	9190.5	8158.7	8086.0	7818.6	8155.8	8248.8	9388.1
62.5°	8647.0	8734.2	9327.1	10004.3	10114.8	9062.6	8978.3	8687.7	8928.9	8928.9	10295.0
65°	7821.5	7920.3	9251.5	10181.6	11050.7	10138.0	10056.6	9600.3	9690.4	9568.3	11146.6
67.5°	6999.0	7115.2	8367.9	10196.1	11707.5	11289.0	11193.1	10513.0	10358.9	10050.8	11742.4
70°	6452.5	6533.9	7580.3	10007.2	12102.8	12492.3	12419.6	11379.1	10885.0	10454.8	11617.4
72.5°	5432.3	5403.3	6403.1	9109.1	12323.7	13858.4	13797.3	12320.8	11341.3	10263.0	9908.4
75°	3153.6	3188.5	3973.2	6673.4	11108.8	14570.5	14564.7	13125.9	11140.8	9065.5	6827.5
77.5°	909.7	935.9	1305.0	2932.7	7025.1	12428.4	12826.6	12004.0	9417.2	6461.2	3540.2
80°	398.2	418.5	566.8	976.6	3025.7	8118.0	8466.8	8118.0	5679.4	2964.7	1389.3
82.5°	235.4	250.0	369.1	604.6	1450.4	3862.8	4333.7	3784.3	2450.2	1258.5	575.5
85°	133.7	139.5	212.2	383.7	912.7	1351.5	1517.2	1421.3	1194.6	715.0	302.3
87.5°	61.0	63.9	104.6	180.2	511.6	456.3	473.8	627.8	691.8	436.0	151.1
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°	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5	2284.5
2.5°	2281.6	2272.9	2255.5	2249.7	2240.9	2243.8	2246.8	2246.8	2249.7	2240.9	2240.9
5°	2258.4	2243.8	2226.4	2226.4	2226.4	2249.7	2270.0	2281.6	2287.4	2287.4	2281.6
7.5°	2249.7	2232.2	2211.9	2217.7	2223.5	2252.6	2290.4	2328.1	2339.8	2339.8	2334.0
10°	2267.1	2249.7	2235.1	2243.8	2258.4	2281.6	2310.7	2345.6	2374.6	2377.6	2374.6
12.5°	2307.8	2287.4	2272.9	2290.4	2307.8	2322.3	2336.9	2351.4	2389.2	2395.0	2395.0
15°	2374.6	2354.3	2336.9	2351.4	2357.2	2357.2	2357.2	2357.2	2395.0	2400.8	2400.8
17.5°	2441.5	2424.1	2406.6	2409.5	2392.1	2368.8	2360.1	2357.2	2377.6	2395.0	2397.9
20°	2505.4	2490.9	2473.5	2444.4	2400.8	2357.2	2342.7	2342.7	2354.3	2380.5	2380.5
22.5°	2575.2	2557.8	2528.7	2461.8	2389.2	2328.1	2313.6	2322.3	2336.9	2371.7	2368.8
25°	2653.7	2630.4	2581.0	2456.0	2351.4	2278.7	2281.6	2307.8	2334.0	2371.7	2371.7
27.5°	2740.9	2708.9	2610.1	2409.5	2267.1	2197.3	2223.5	2284.5	2322.3	2363.0	2368.8
30°	2836.8	2807.7	2633.3	2328.1	2130.5	2066.6	2130.5	2229.3	2287.4	2325.2	2334.0
32.5°	2953.0	2929.8	2653.7	2223.5	1953.2	1898.0	1991.0	2113.1	2206.1	2249.7	2258.4
35°	3098.4	3075.1	2679.8	2104.3	1787.5	1729.4	1813.7	1938.7	2060.7	2116.0	2133.4
37.5°	3287.3	3252.4	2703.1	1976.4	1648.0	1581.2	1621.8	1735.2	1845.7	1921.2	1941.6
40°	3528.5	3473.3	2723.4	1831.1	1525.9	1450.4	1464.9	1520.1	1584.1	1650.9	1677.1
42.5°	3868.6	3758.2	2726.3	1677.1	1401.0	1331.2	1325.4	1342.8	1342.8	1342.8	1351.5
45°	4342.4	4133.1	2732.1	1531.7	1273.1	1200.4	1183.0	1177.1	1133.6	1049.3	1043.4
47.5°	4941.1	4624.3	2758.3	1409.7	1139.4	1075.4	1052.2	1028.9	947.5	860.3	842.9
50°	5708.4	5194.0	2810.6	1293.4	1026.0	982.4	953.3	898.1	808.0	741.2	723.7
52.5°	6592.0	5871.2	2860.0	1171.3	941.7	912.7	877.8	810.9	715.0	674.3	668.5
55°	7606.4	6626.9	2958.9	1063.8	869.1	848.7	816.7	752.8	680.1	651.1	648.2
57.5°	8644.1	7472.7	3098.4	967.9	799.3	787.7	787.7	732.4	685.9	674.3	674.3
60°	9643.9	8199.4	2990.8	877.8	735.4	741.2	796.4	781.9	747.0	761.5	770.2
62.5°	10419.9	8626.6	2427.0	805.1	688.9	741.2	883.6	883.6	842.9	837.1	837.1
65°	10751.3	8620.8	1706.1	749.9	671.4	813.8	985.3	938.8	831.3	790.6	781.9
67.5°	10667.0	8242.9	1177.1	712.1	665.6	889.4	1031.8	901.0	779.0	744.1	717.9
70°	9925.8	7443.7	906.8	677.2	656.9	857.4	1017.3	857.4	738.3	706.3	683.0
72.5°	8007.5	5970.0	752.8	642.3	622.0	793.5	967.9	816.7	706.3	671.4	648.2
75°	5106.8	3755.3	636.5	595.8	555.1	712.1	901.0	776.0	671.4	624.9	607.5
77.5°	2456.0	1618.9	555.1	540.6	499.9	659.8	834.2	723.7	624.9	587.1	575.5
80°	994.0	741.2	482.5	485.4	459.2	627.8	787.7	674.3	578.4	537.7	517.4
82.5°	517.4	430.2	406.9	418.5	418.5	598.7	752.8	633.6	537.7	520.3	453.4
85°	279.0	267.4	313.9	337.2	363.3	540.6	700.5	590.0	491.2	421.4	406.9
87.5°	136.6	174.4	177.3	203.5	252.9	433.1	590.0	494.1	409.8	340.1	334.3
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)