

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: P237071

Luminaire Tested: **ARCH-L-AF72-180-D-U-T3-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237071  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T3-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21767.7 lumens  
Efficiency: N/A  
Efficacy: 120.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

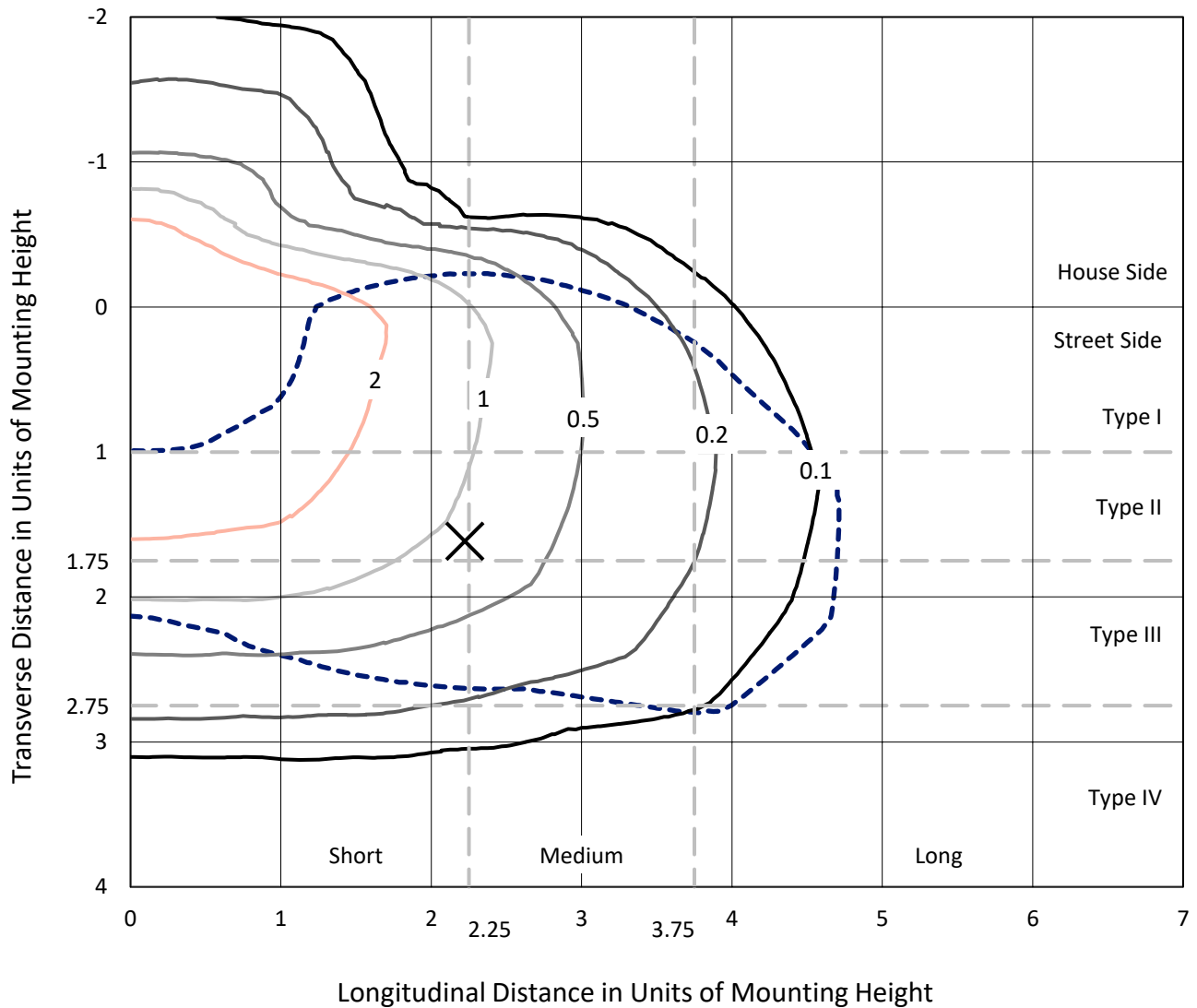
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P237071  
 CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

### Iso-Footcandle Lines of Horizontal Illumination

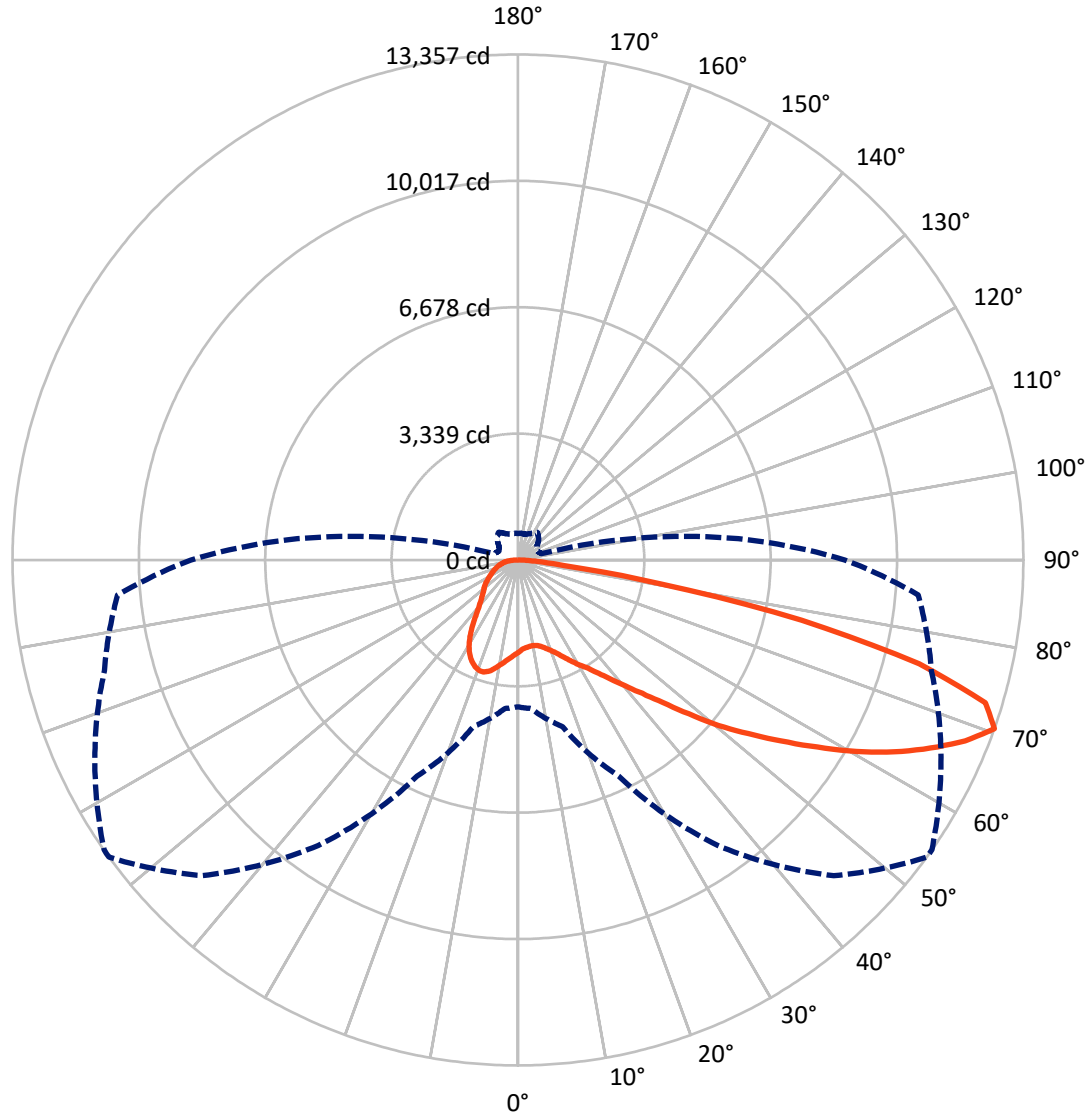
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Short - N/A

REPORT NUMBER: P237071  
CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P237071  
 CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

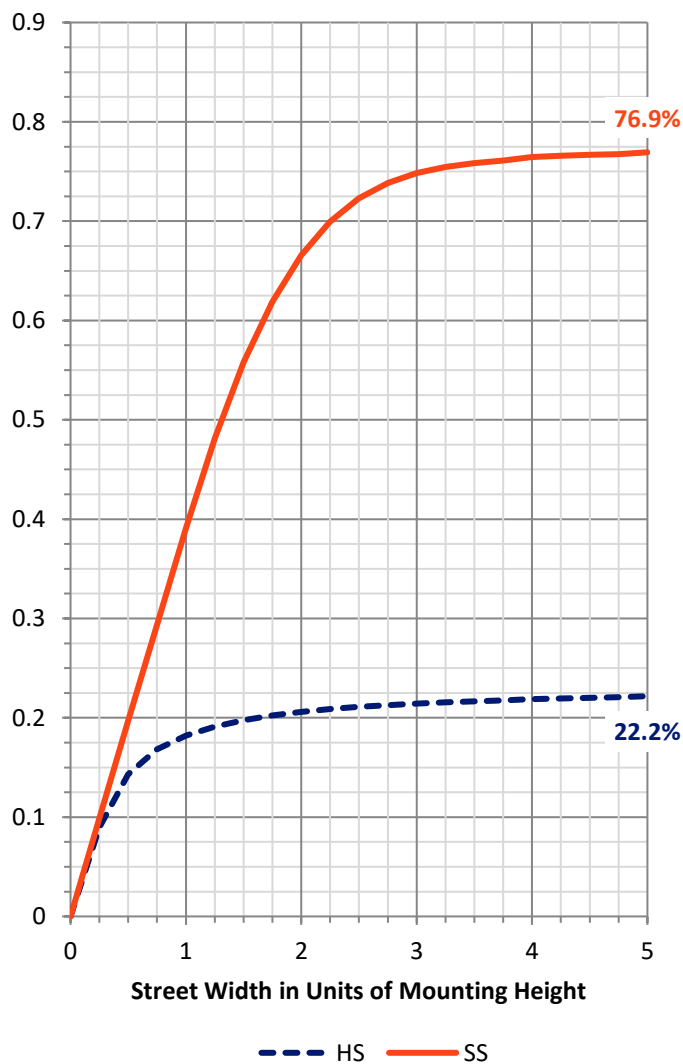
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4936.8	0.0	4936.8
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	16830.9	0.0	16830.9
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	21767.7	0.0	21767.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.0	1.1
10°-20°	763.7	3.5
20°-30°	1326.8	6.1
30°-40°	1938.9	8.9
40°-50°	3043.0	14.0
50°-60°	4679.5	21.5
60°-70°	5717.2	26.3
70°-80°	3544.7	16.3
80°-90°	514.9	2.4
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°	21767.7	100.0
0°-180°	21767.7	100.0

**Coefficient of Utilization**

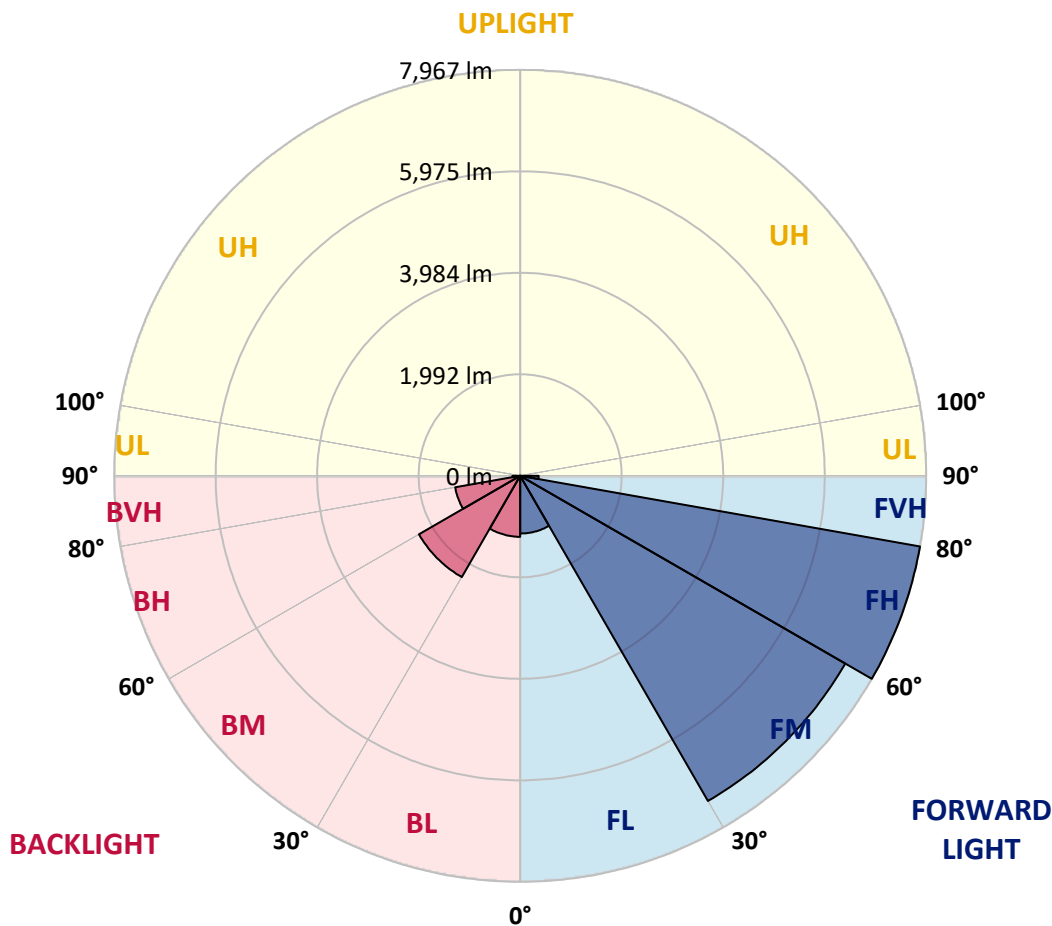


REPORT NUMBER: P237071  
 CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1132.6	5.2			
FM (30°-60°)	7367.4	33.8			
FH (60°-80°)	7967.3	36.6			G4/12000
FVH (80°-90°)	363.6	1.7			G3/500
BL (0°-30°)	1196.9	5.5	B3/2500		
BM (30°-60°)	2294.1	10.5	B2/2500		
BH (60°-80°)	1294.6	5.9	B3/2500		G3/2500
BVH (80°-90°)	151.3	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 III Short





REPORT NUMBER: P237071

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4
2.5°	2339.7	2331.7	2331.7	2343.7	2347.7	2359.7	2359.7	2363.6	2375.7	2395.5	2419.4
5°	2268.0	2264.0	2268.0	2283.9	2291.9	2315.8	2323.7	2327.8	2351.7	2383.6	2419.4
7.5°	2196.2	2192.2	2200.2	2224.1	2248.0	2283.9	2303.8	2307.8	2343.7	2387.6	2435.4
10°	2172.3	2168.4	2180.3	2200.2	2224.1	2264.0	2295.9	2299.8	2351.7	2403.4	2471.2
12.5°	2204.2	2200.2	2212.2	2232.0	2255.9	2283.9	2319.8	2323.7	2391.5	2459.3	2531.0
15°	2283.9	2283.9	2287.9	2299.8	2323.7	2347.7	2379.5	2383.6	2455.3	2535.1	2606.7
17.5°	2407.4	2399.5	2399.5	2395.5	2411.5	2423.4	2463.2	2467.3	2543.0	2614.7	2686.4
20°	2559.0	2554.9	2538.9	2519.1	2515.0	2523.1	2562.9	2566.9	2642.7	2702.4	2770.2
22.5°	2742.3	2746.2	2710.4	2666.6	2646.6	2658.6	2694.5	2698.4	2754.2	2806.1	2865.9
25°	2985.4	2973.5	2921.6	2857.9	2818.1	2818.1	2853.9	2853.9	2905.8	2937.6	2977.5
27.5°	3216.6	3192.7	3144.8	3053.1	2989.5	3001.4	3037.2	3037.2	3085.1	3097.1	3116.9
30°	3467.7	3443.8	3384.0	3268.4	3184.7	3176.7	3220.6	3216.6	3280.4	3276.3	3260.4
32.5°	3774.6	3762.7	3663.0	3515.5	3404.0	3376.0	3415.9	3420.0	3459.7	3447.7	3396.0
35°	4205.1	4201.1	4109.5	3850.4	3702.9	3651.0	3674.9	3674.9	3702.9	3671.0	3583.2
37.5°	4747.2	4755.2	4675.4	4292.8	4085.5	3997.8	4001.8	3997.8	4005.8	3969.9	3878.2
40°	5289.2	5309.2	5305.2	4842.8	4579.8	4428.3	4372.5	4364.6	4384.5	4368.5	4280.8
42.5°	6002.7	6050.6	5939.0	5520.5	5225.5	4970.4	4818.9	4799.0	4842.8	4862.8	4779.1
45°	6744.1	6728.1	6552.9	6249.8	5982.8	5656.0	5369.0	5337.1	5369.0	5428.8	5341.0
47.5°	7130.7	7118.8	7075.0	6923.4	6883.6	6508.9	6074.5	6046.5	5986.8	6070.5	5966.8
50°	7768.5	7780.5	7601.0	7585.1	7752.5	7545.2	6871.7	6807.8	6700.3	6768.1	6680.3
52.5°	8230.8	8179.0	8067.3	8206.9	8729.0	8617.5	7621.0	7593.1	7493.4	7477.4	7437.6
55°	8418.2	8418.2	8438.1	8761.0	9506.3	9358.8	8434.2	8462.0	8326.5	8214.8	8266.7
57.5°	8473.9	8497.8	8669.2	9203.4	10419.1	9936.8	9331.0	9370.8	9175.5	8952.2	9115.7
60°	8199.0	8270.7	8681.2	9454.5	10933.2	10550.6	10275.7	10287.6	10004.6	9677.7	9964.7
62.5°	7493.4	7581.2	8314.5	9558.1	10849.6	11180.4	11168.4	11196.4	10809.7	10403.1	10761.8
65°	6628.5	6716.1	7497.5	9267.2	10785.7	11630.7	11985.5	12061.2	11563.0	11016.9	11260.0
67.5°	5357.0	5472.6	6214.0	8286.7	10474.9	12001.5	12750.8	12830.6	12144.9	11335.8	11216.2
70°	3882.2	3938.0	4559.8	6297.7	9207.4	11798.2	13356.6	13352.7	12336.3	11311.9	10618.4
72.5°	1869.4	1913.2	2451.3	3910.2	6584.6	10012.5	12918.3	12993.9	12073.2	10965.1	9251.2
75°	769.3	813.1	992.5	1650.2	3455.8	6616.5	10949.2	11128.6	10965.1	9841.1	7238.3
77.5°	478.3	494.3	582.0	853.0	1578.4	3089.1	7664.9	7907.9	8689.2	7884.0	4779.1
80°	358.7	370.7	434.5	597.8	996.5	1140.0	3806.5	4113.4	5265.3	4524.0	2164.3
82.5°	299.0	302.9	346.8	434.5	677.6	653.7	1219.7	1359.1	2455.3	1725.9	745.3
85°	279.0	287.1	311.0	311.0	430.5	410.6	506.2	530.1	713.5	589.9	259.1
87.5°	143.4	135.5	275.0	243.1	223.2	199.3	215.2	231.2	267.0	283.0	115.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P237071

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T3-7030

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4	2435.4
2.5°	2427.4	2439.3	2459.3	2479.2	2503.1	2531.0	2547.0	2566.9	2582.9	2574.9	2570.9
5°	2439.3	2459.3	2503.1	2543.0	2590.9	2646.6	2682.6	2722.3	2754.2	2762.2	2750.3
7.5°	2459.3	2495.2	2554.9	2626.7	2690.5	2762.2	2818.1	2873.8	2913.7	2921.6	2921.6
10°	2507.1	2547.0	2626.7	2722.3	2798.1	2873.8	2937.6	2981.4	3017.3	3033.2	3033.2
12.5°	2574.9	2622.7	2718.4	2833.9	2917.7	2989.5	3025.3	3045.2	3061.1	3077.1	3081.1
15°	2654.6	2706.5	2821.9	2945.5	3033.2	3069.1	3069.1	3065.2	3065.2	3073.1	3081.1
17.5°	2734.3	2790.2	2909.7	3041.2	3097.1	3077.1	3049.2	3037.2	3029.2	3025.3	3037.2
20°	2818.1	2873.8	2993.3	3116.9	3101.0	3017.3	2977.5	2949.6	2925.6	2913.7	2929.6
22.5°	2909.7	2961.5	3085.1	3168.7	3049.2	2921.6	2845.8	2802.1	2762.2	2738.2	2754.2
25°	3017.3	3069.1	3188.7	3184.7	2957.5	2778.1	2658.6	2586.8	2543.0	2519.1	2519.1
27.5°	3144.8	3188.7	3304.3	3144.8	2830.0	2586.8	2411.5	2343.7	2331.7	2311.8	2311.8
30°	3276.3	3312.3	3411.9	3053.1	2654.6	2335.8	2144.4	2112.5	2116.5	2096.5	2100.5
32.5°	3411.9	3447.7	3475.6	2917.7	2427.4	2052.8	1925.1	1901.2	1897.3	1881.3	1865.4
35°	3603.3	3655.0	3483.6	2734.3	2152.4	1817.5	1725.9	1701.9	1678.0	1622.3	1622.3
37.5°	3894.2	3950.0	3463.7	2507.1	1869.4	1634.2	1550.5	1518.6	1478.8	1423.0	1403.0
40°	4292.8	4292.8	3420.0	2252.1	1642.1	1486.7	1407.0	1367.2	1323.3	1267.5	1255.5
42.5°	4763.1	4651.5	3352.1	1992.9	1474.8	1387.0	1315.4	1271.4	1219.7	1155.9	1147.9
45°	5313.2	5010.2	3256.5	1761.8	1351.2	1327.3	1283.5	1207.8	1120.0	1052.2	1040.3
47.5°	5847.2	5333.1	3164.8	1598.4	1247.6	1303.4	1267.5	1140.0	1020.4	924.8	912.8
50°	6433.1	5620.1	3057.2	1462.8	1167.9	1287.4	1247.6	1040.3	908.8	841.0	833.1
52.5°	7019.2	5911.0	2941.6	1319.3	1100.1	1255.5	1199.7	968.6	904.7	813.1	801.2
55°	7636.9	6249.8	2806.1	1159.9	1020.4	1191.8	1136.0	964.5	932.7	813.1	785.2
57.5°	8238.8	6624.5	2586.8	1004.4	932.7	1096.1	1112.0	940.6	872.9	805.1	773.2
60°	8904.4	7023.0	2224.1	872.9	856.9	1016.4	1080.1	888.9	805.1	781.2	765.3
62.5°	9438.6	7381.9	1737.9	781.2	793.2	952.6	1040.3	856.9	777.3	757.2	753.4
65°	9669.8	7389.9	1247.6	701.6	729.5	892.8	1000.5	829.1	753.4	745.3	741.4
67.5°	9426.6	6983.2	877.0	625.7	661.7	837.0	948.6	801.2	729.5	733.3	725.5
70°	8641.5	6126.2	641.7	554.1	597.8	777.3	892.8	765.3	701.6	709.5	697.5
72.5°	7230.3	4775.0	514.2	494.3	546.1	713.5	837.0	725.5	657.6	661.7	637.7
75°	5341.0	3164.8	430.5	442.4	486.3	653.7	765.3	673.6	609.8	594.0	578.0
77.5°	3176.7	1626.3	354.8	386.7	434.5	582.0	685.6	609.8	558.0	530.1	518.2
80°	1311.3	657.6	290.9	326.8	378.7	518.2	605.9	534.1	498.2	470.4	454.4
82.5°	522.1	322.9	231.2	267.0	318.8	450.3	530.1	470.4	434.5	414.5	370.7
85°	199.3	159.4	155.4	187.4	239.2	346.8	438.4	394.7	366.7	314.8	302.9
87.5°	79.8	71.8	71.8	91.7	135.5	219.2	314.8	275.0	287.1	227.2	231.2
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)