

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: P237351

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237351  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-180-D-U-T4W-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22414 lumens  
Efficiency: N/A  
Efficacy: 123.8 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

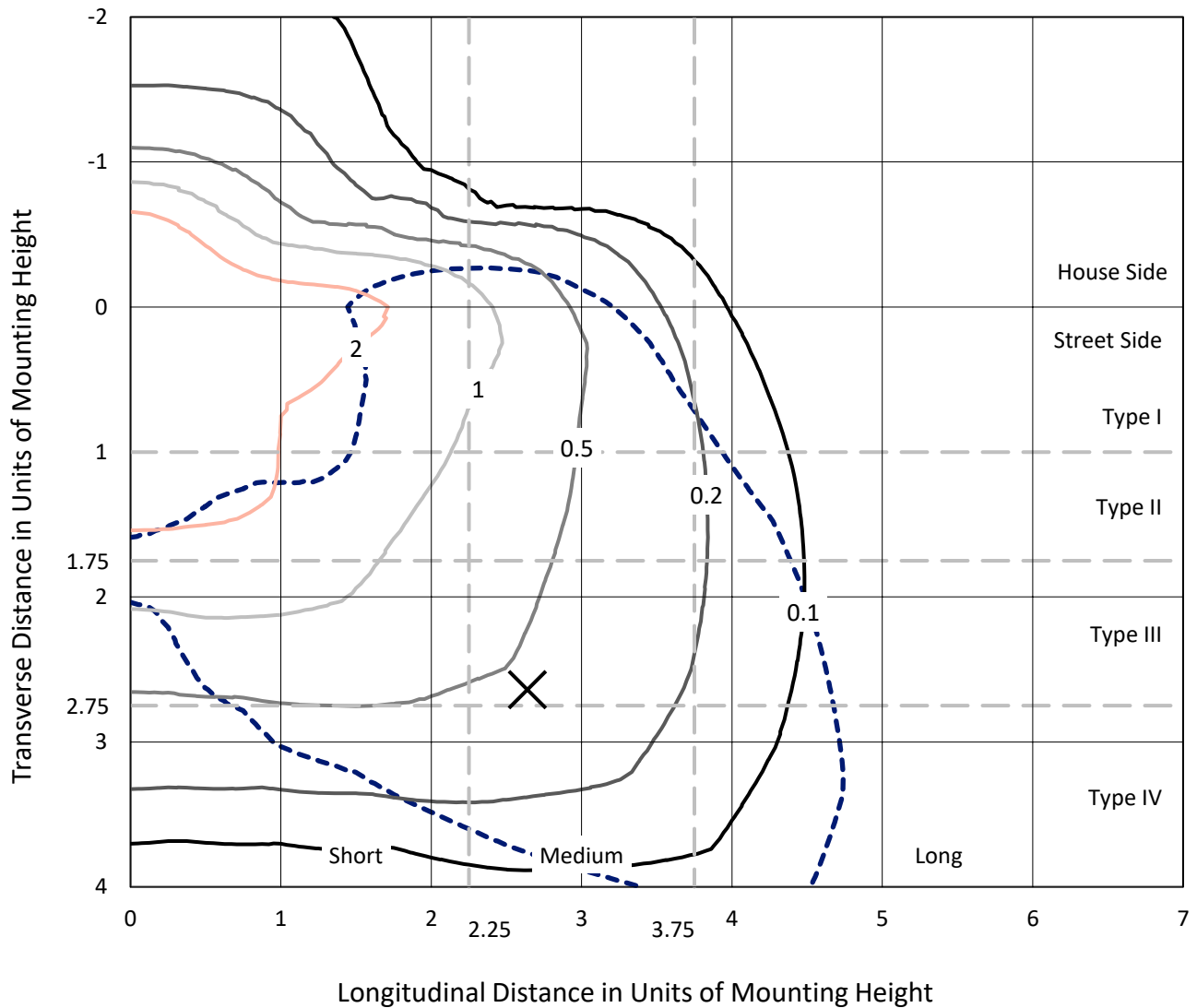
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

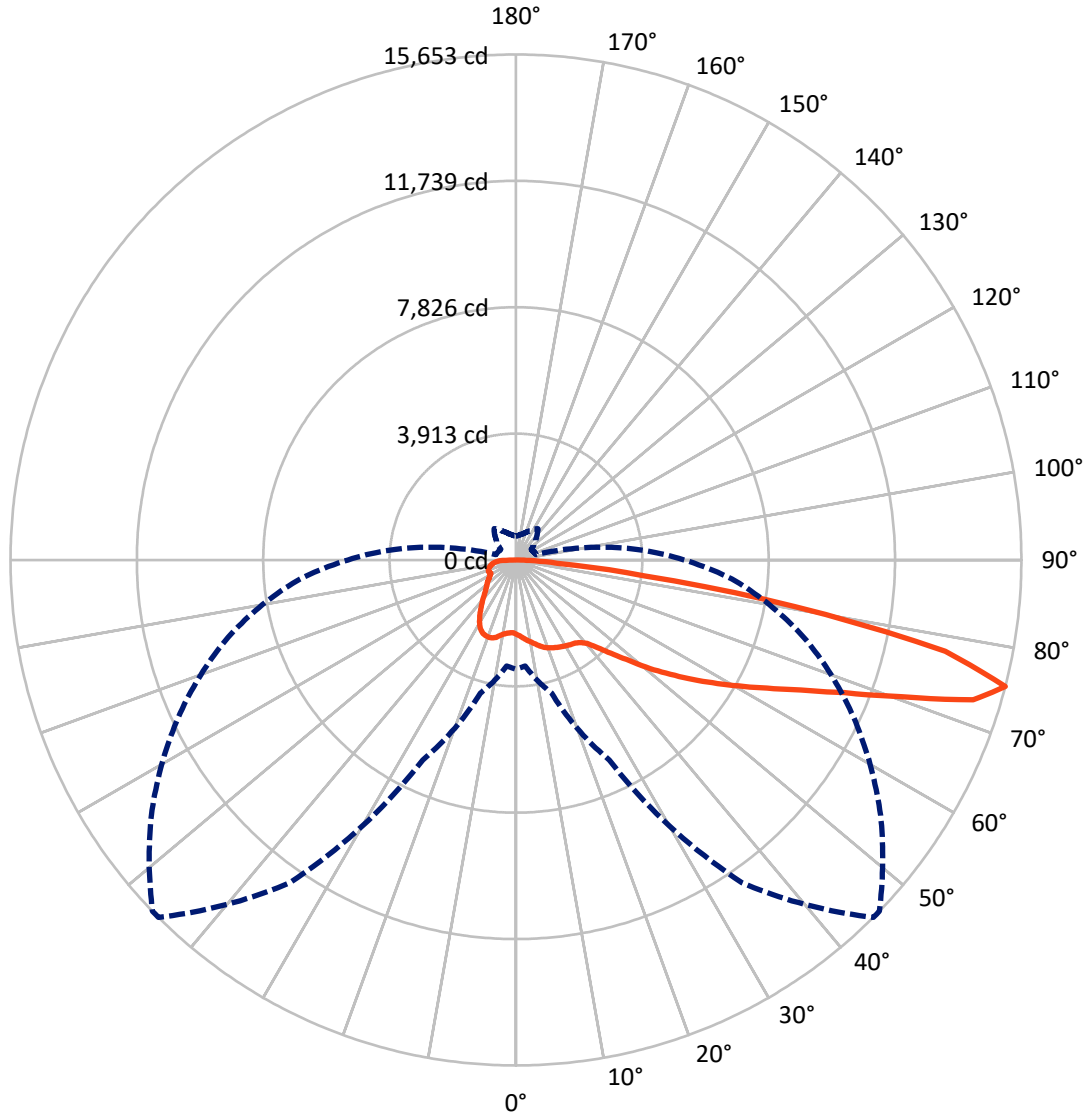
× Max cd  
 - - - 1/2 Max cd



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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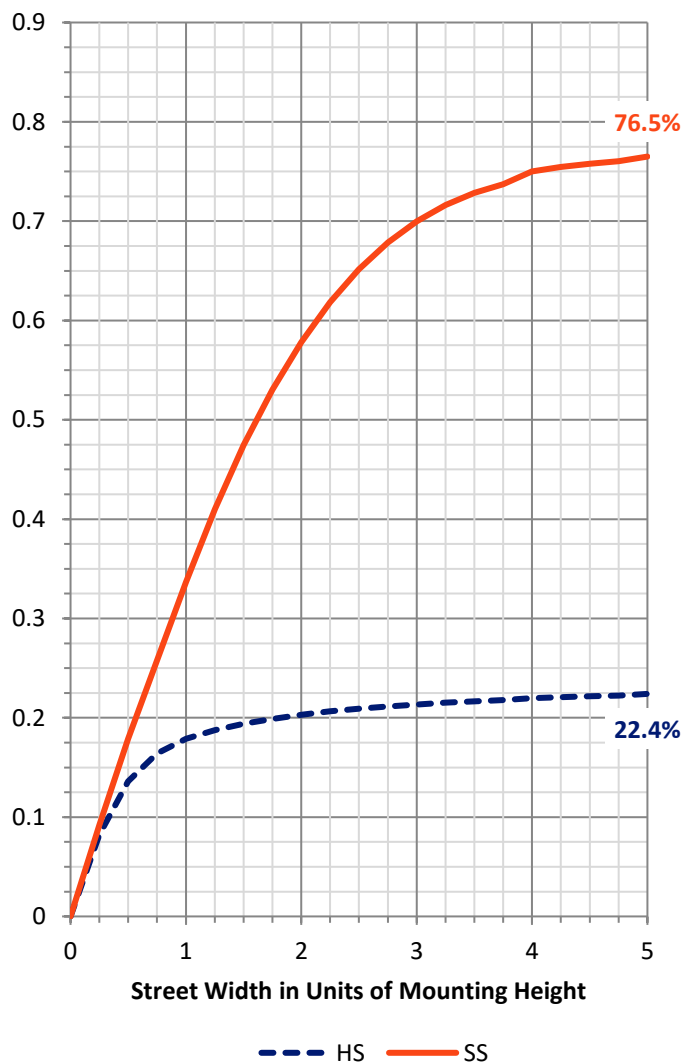
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5192.4	0.0	5192.4
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	17221.6	0.0	17221.6
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	22414.0	0.0	22414.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.7	1.0
10°-20°	737.9	3.3
20°-30°	1266.3	5.6
30°-40°	1771.0	7.9
40°-50°	2597.8	11.6
50°-60°	4046.8	18.1
60°-70°	5823.0	26.0
70°-80°	5072.4	22.6
80°-90°	871.1	3.9
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°	22414.0	100.0
0°-180°	22414.0	100.0

**Coefficient of Utilization**



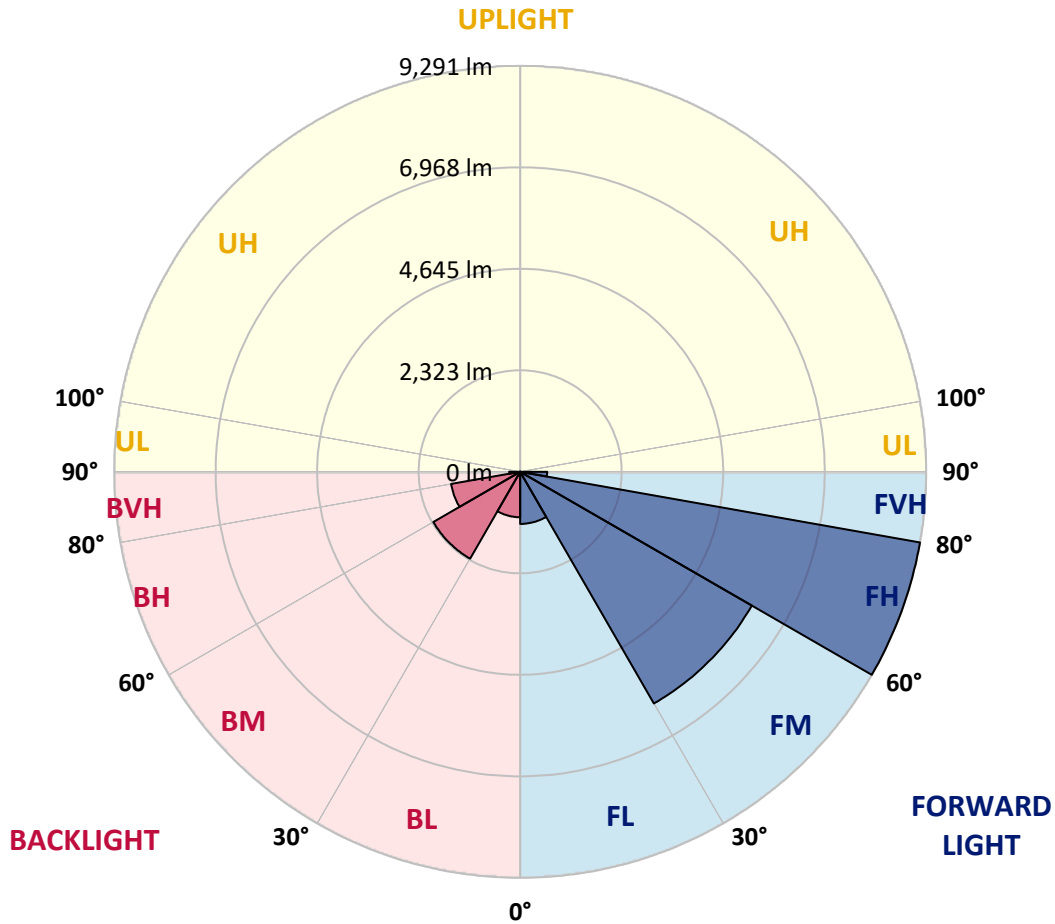
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1191.9	5.3			
FM (30°-60°)	6120.8	27.3			
FH (60°-80°)	9290.8	41.5			G4/12000
FVH (80°-90°)	618.1	2.8			G4/750
BL (0°-30°)	1040.0	4.6	B3/2500		
BM (30°-60°)	2294.8	10.2	B2/2500		
BH (60°-80°)	1604.6	7.2	B3/2500		G3/2500
BVH (80°-90°)	253.1	1.1			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°	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8
2.5°	2411.1	2393.7	2393.7	2380.6	2380.6	2358.8	2350.1	2345.7	2323.9	2310.8	2297.8
5°	2550.6	2528.8	2524.5	2494.0	2480.9	2432.9	2428.6	2398.0	2358.8	2319.6	2289.0
7.5°	2677.1	2664.0	2642.2	2611.7	2572.4	2511.4	2507.0	2459.1	2393.7	2341.4	2297.8
10°	2768.6	2759.9	2729.4	2690.2	2646.6	2585.5	2581.2	2528.8	2450.4	2389.3	2328.3
12.5°	2877.6	2864.6	2825.3	2773.0	2725.0	2668.4	2664.0	2620.4	2533.2	2454.7	2376.2
15°	2982.3	2964.8	2916.9	2864.6	2812.2	2764.3	2764.3	2716.3	2624.8	2533.2	2441.6
17.5°	3034.6	3025.9	2977.9	2921.2	2877.6	2842.8	2838.4	2794.8	2703.2	2607.3	2507.0
20°	3052.0	3056.4	3012.8	2951.8	2921.2	2903.8	2899.4	2868.9	2768.6	2677.1	2581.2
22.5°	3047.7	3060.8	3025.9	2960.5	2951.8	2951.8	2951.8	2916.9	2838.4	2746.8	2650.9
25°	3065.1	3082.6	3056.4	2977.9	2977.9	2995.4	2995.4	2977.9	2908.2	2829.7	2733.8
27.5°	3126.2	3139.2	3117.4	3008.4	3012.8	3039.0	3034.6	3039.0	2995.4	2921.2	2825.3
30°	3200.3	3217.7	3191.6	3056.4	3052.0	3078.2	3078.2	3100.0	3069.5	2991.0	2912.5
32.5°	3400.8	3396.5	3313.6	3108.7	3095.6	3121.8	3121.8	3143.6	3126.2	3065.1	2991.0
35°	3998.2	3932.8	3749.7	3278.8	3148.0	3161.0	3161.0	3200.3	3209.0	3161.0	3095.6
37.5°	4608.6	4586.8	4447.3	3732.2	3339.8	3243.9	3239.5	3296.2	3335.4	3296.2	3252.6
40°	5223.4	5205.9	5175.4	4338.3	3740.9	3392.1	3379.0	3427.0	3496.8	3470.6	3444.4
42.5°	5794.5	5785.8	5816.3	4935.6	4251.1	3710.4	3671.2	3614.5	3714.8	3706.1	3706.1
45°	6243.6	6265.4	6282.9	5493.7	4804.8	4120.3	4072.3	3880.5	4015.6	4050.5	4076.7
47.5°	6496.5	6513.9	6575.0	6038.7	5358.5	4595.5	4560.6	4246.7	4425.5	4530.1	4604.2
50°	6858.4	6810.4	6862.7	6570.6	6025.6	5214.6	5118.7	4739.4	4966.1	5149.2	5323.6
52.5°	7207.2	7128.7	7172.3	7185.4	6784.3	5820.7	5720.4	5319.3	5602.7	5890.4	6200.0
55°	7521.1	7516.7	7560.3	7782.7	7516.7	6470.3	6357.0	5960.2	6370.1	6679.6	7202.8
57.5°	7774.0	7817.6	8009.4	8476.0	8362.6	7176.7	7050.2	6705.8	7189.7	7499.3	8367.0
60°	8070.5	8140.2	8458.5	9064.6	9134.3	7917.9	7787.1	7538.5	8031.2	8345.2	9714.2
62.5°	8170.8	8271.0	8925.0	9683.7	9940.9	8728.8	8611.1	8445.4	8916.3	9199.7	11057.1
65°	7503.7	7695.5	9182.3	10002.0	10808.6	9705.5	9605.2	9461.3	9797.1	9984.5	11968.4
67.5°	7320.5	7407.7	8680.9	10459.8	11623.9	10961.2	10860.9	10612.4	10621.1	10542.6	12264.9
70°	7063.3	7159.2	8166.4	10804.2	12792.4	12679.1	12557.0	11824.5	11375.4	10900.2	11680.6
72.5°	6016.9	5986.4	7037.1	9875.5	13354.9	14806.8	14662.9	13128.1	11933.5	10590.6	9858.1
75°	3379.0	3291.8	4268.5	6832.2	12195.1	15652.6	15648.3	13786.5	11541.1	9225.9	6710.1
77.5°	981.0	954.9	1408.3	2864.6	8210.0	13599.0	13764.7	12434.9	9631.4	6627.3	3684.3
80°	462.2	470.9	606.0	946.1	3505.5	8776.8	9252.1	8188.2	5755.3	3056.4	1521.7
82.5°	292.1	296.5	414.2	610.4	1482.4	3985.1	4377.5	3684.3	2280.3	1321.1	671.4
85°	183.1	183.1	274.7	401.1	885.1	1273.1	1382.1	1255.7	976.7	719.4	366.2
87.5°	100.3	100.3	165.7	231.1	484.0	409.8	422.9	501.4	610.4	440.4	183.1
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°	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8	2297.8
2.5°	2293.4	2284.7	2271.6	2267.2	2262.9	2258.5	2262.9	2271.6	2262.9	2262.9	2267.2
5°	2280.3	2271.6	2254.2	2254.2	2258.5	2262.9	2284.7	2297.8	2302.1	2302.1	2302.1
7.5°	2280.3	2267.2	2254.2	2258.5	2267.2	2284.7	2319.6	2341.4	2358.8	2363.2	2363.2
10°	2302.1	2284.7	2276.0	2284.7	2310.8	2323.9	2358.8	2393.7	2415.5	2424.2	2424.2
12.5°	2341.4	2323.9	2323.9	2341.4	2376.2	2393.7	2424.2	2450.4	2476.5	2489.6	2489.6
15°	2406.8	2385.0	2389.3	2419.8	2459.1	2476.5	2498.3	2507.0	2528.8	2546.3	2546.3
17.5°	2467.8	2446.0	2454.7	2489.6	2515.8	2524.5	2537.6	2533.2	2541.9	2555.0	2559.4
20°	2537.6	2515.8	2520.1	2541.9	2546.3	2537.6	2537.6	2524.5	2520.1	2541.9	2550.6
22.5°	2607.3	2585.5	2581.2	2568.1	2546.3	2524.5	2511.4	2498.3	2489.6	2511.4	2520.1
25°	2690.2	2659.6	2637.8	2581.2	2524.5	2485.2	2467.8	2459.1	2454.7	2476.5	2485.2
27.5°	2781.7	2751.2	2685.8	2563.7	2472.2	2406.8	2393.7	2393.7	2402.4	2415.5	2424.2
30°	2868.9	2838.4	2720.7	2524.5	2380.6	2284.7	2271.6	2284.7	2306.5	2319.6	2332.6
32.5°	2956.1	2925.6	2742.5	2463.4	2245.4	2123.4	2114.6	2136.4	2171.3	2180.0	2188.8
35°	3073.8	3043.3	2768.6	2376.2	2075.4	1944.6	1935.9	1948.9	1979.5	1992.5	2005.6
37.5°	3239.5	3222.1	2807.9	2280.3	1918.4	1774.5	1748.4	1739.7	1757.1	1752.7	1770.2
40°	3457.5	3470.6	2877.6	2153.9	1765.8	1617.6	1560.9	1534.7	1517.3	1482.4	1499.9
42.5°	3775.8	3784.5	2956.1	2010.0	1635.0	1469.3	1395.2	1347.3	1312.4	1255.7	1264.4
45°	4242.3	4168.2	3047.7	1857.4	1517.3	1351.6	1264.4	1207.7	1159.8	1111.8	1116.2
47.5°	4861.5	4634.7	3148.0	1730.9	1399.6	1255.7	1177.2	1111.8	1055.1	1015.9	1020.3
50°	5624.5	5214.6	3248.2	1613.2	1281.9	1181.6	1111.8	1042.1	985.4	946.1	941.8
52.5°	6631.7	5912.2	3313.6	1482.4	1164.1	1116.2	1055.1	989.7	920.0	872.0	867.7
55°	7678.1	6723.2	3370.3	1325.5	1050.8	1042.1	1011.5	937.4	854.6	793.5	784.8
57.5°	8829.1	7590.9	3413.9	1172.9	963.6	981.0	972.3	885.1	793.5	736.9	732.5
60°	9875.5	8489.0	3274.4	1037.7	885.1	920.0	928.7	854.6	806.6	819.7	824.1
62.5°	10930.7	9182.3	2742.5	937.4	832.8	880.7	954.9	950.5	928.7	950.5	954.9
65°	11310.0	9326.2	1944.6	854.6	780.5	898.2	1037.7	1029.0	928.7	889.5	880.7
67.5°	11096.4	8898.9	1308.0	789.2	741.2	920.0	1124.9	1029.0	893.8	841.5	824.1
70°	10080.5	7848.1	959.2	723.8	706.3	915.6	1172.9	1024.6	876.4	819.7	797.9
72.5°	8040.0	6056.1	771.7	662.7	654.0	893.8	1199.0	1015.9	858.9	797.9	771.7
75°	5205.9	3767.1	649.6	601.7	575.5	858.9	1185.9	989.7	837.1	758.7	741.2
77.5°	2415.5	1621.9	553.7	531.9	501.4	806.6	1146.7	937.4	789.2	715.1	693.2
80°	1124.9	767.4	466.5	462.2	449.1	763.0	1094.4	876.4	732.5	671.4	636.6
82.5°	601.7	462.2	379.3	379.3	392.4	710.7	1029.0	802.3	658.4	627.8	536.3
85°	318.3	266.0	274.7	296.5	335.7	627.8	941.8	723.8	575.5	479.6	466.5
87.5°	161.3	170.0	170.0	200.6	257.2	510.1	776.1	597.3	488.3	392.4	383.7
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)