

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: P237358

Luminaire Tested: **ARCH-L-AF72-250-D-U-T4W-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237358  
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-AF72-250-D-U-T4W-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28123 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G5

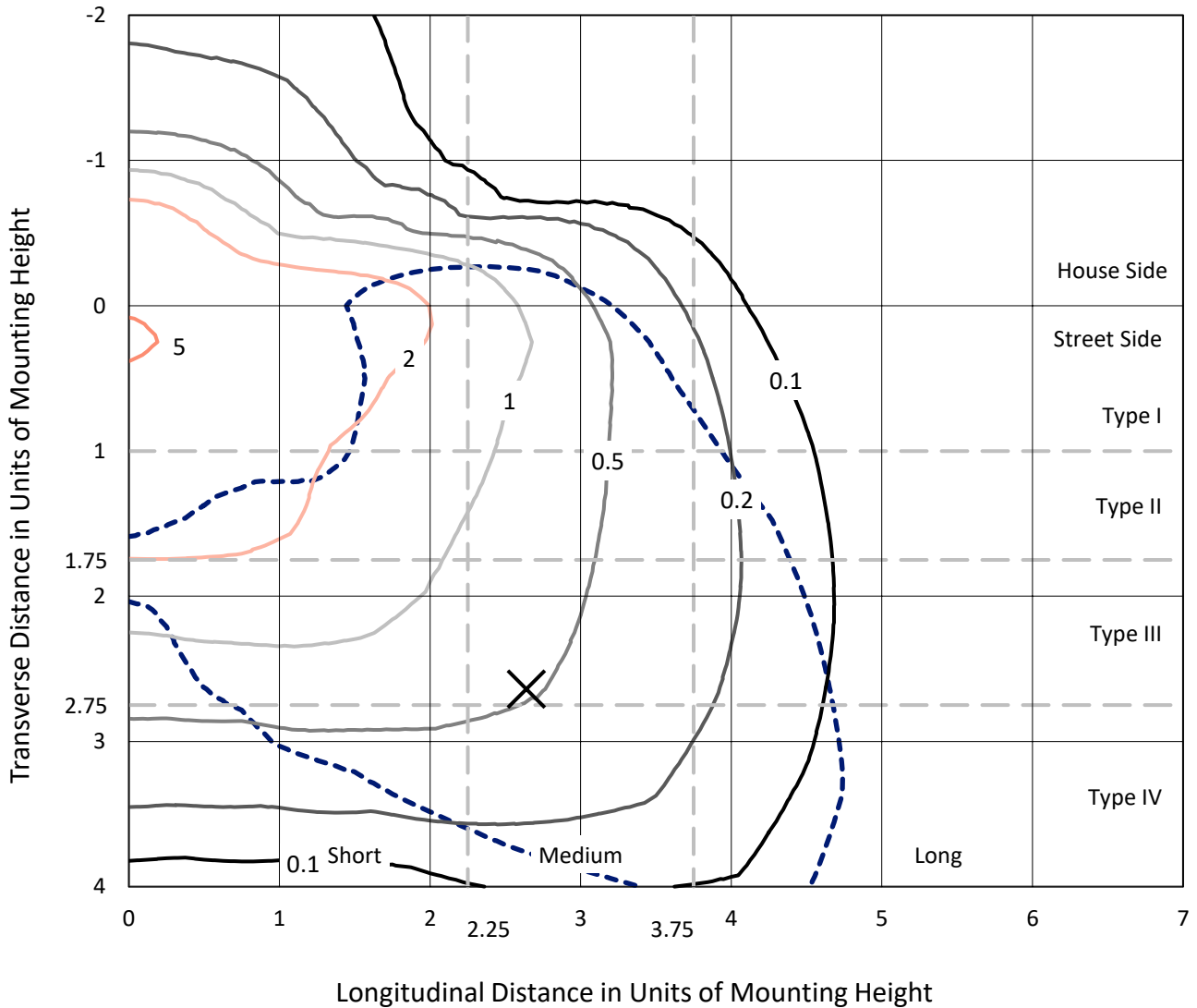
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

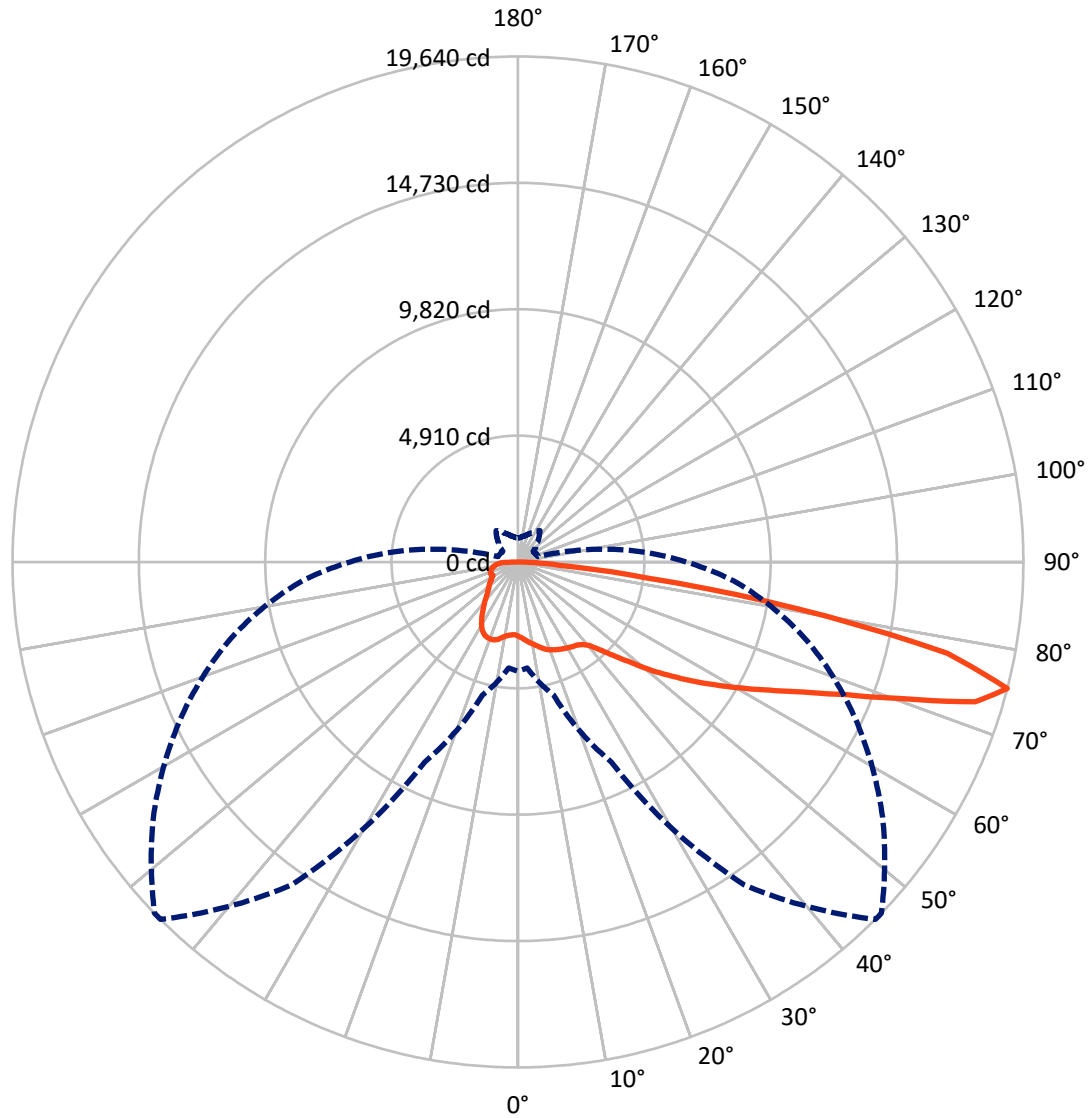
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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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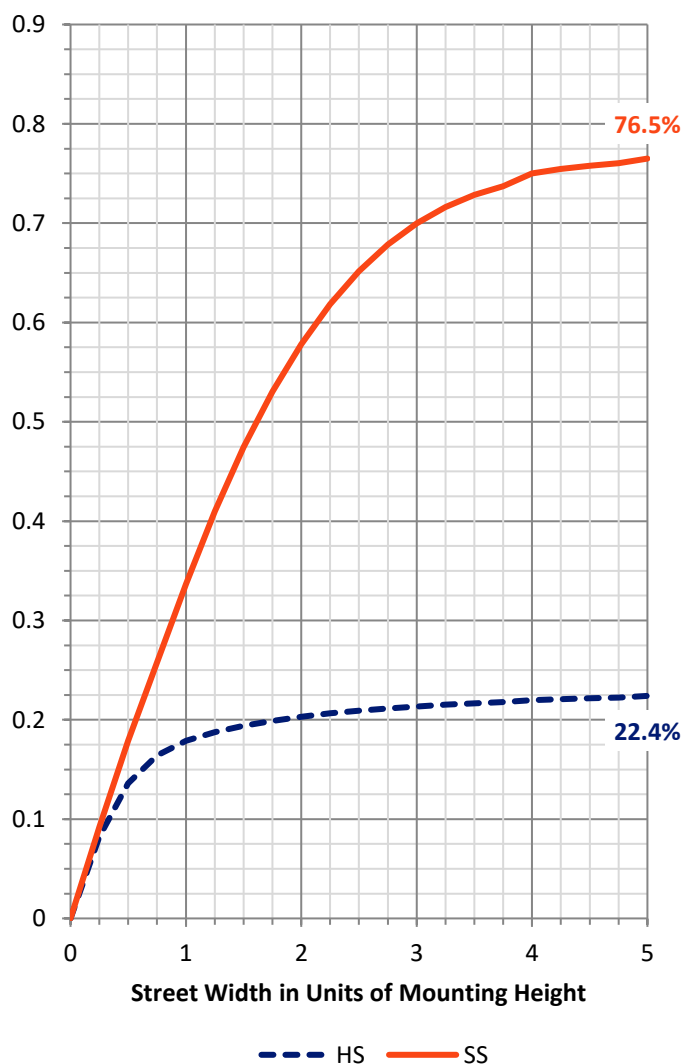
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6514.9	0.0	6514.9
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	21608.1	0.0	21608.1
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	28123.0	0.0	28123.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	285.7	1.0
10°-20°	925.8	3.3
20°-30°	1588.8	5.6
30°-40°	2222.1	7.9
40°-50°	3259.5	11.6
50°-60°	5077.5	18.1
60°-70°	7306.1	26.0
70°-80°	6364.4	22.6
80°-90°	1093.0	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°	28123.0	100.0
0°-180°	28123.0	100.0

**Coefficient of Utilization**



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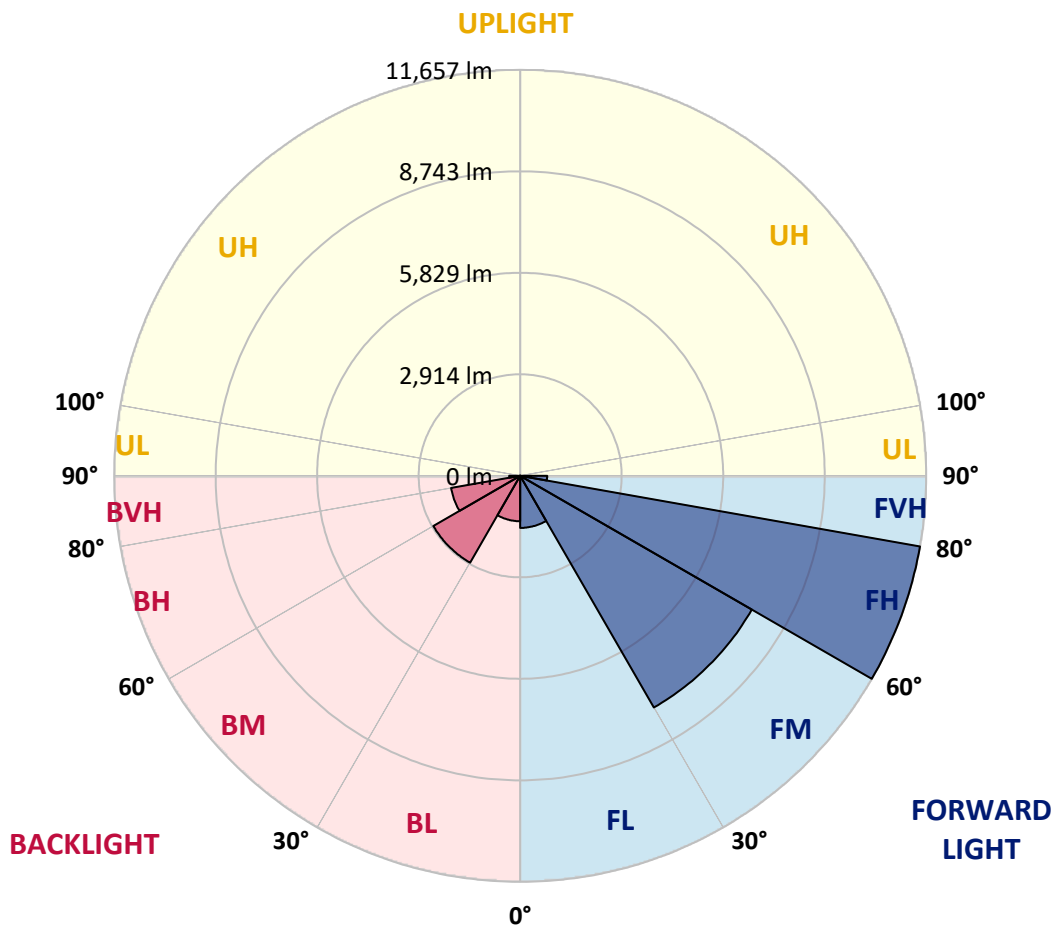
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1495.5	5.3			
FM (30°-60°)	7679.8	27.3			
FH (60°-80°)	11657.2	41.5			G4/12000
FVH (80°-90°)	775.5	2.8			G5
BL (0°-30°)	1304.8	4.6	B3/2500		
BM (30°-60°)	2879.3	10.2	B3/5000		
BH (60°-80°)	2013.3	7.2	B3/2500		G3/2500
BVH (80°-90°)	317.5	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-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	3025.2	3003.4	3003.4	2986.9	2986.9	2959.6	2948.7	2943.2	2915.8	2899.4	2883.0
5°	3200.3	3172.9	3167.5	3129.2	3112.8	3052.6	3047.1	3008.8	2959.6	2910.4	2872.1
7.5°	3358.9	3342.5	3315.2	3276.9	3227.7	3151.1	3145.6	3085.4	3003.4	2937.7	2883.0
10°	3473.8	3462.9	3424.6	3375.4	3320.7	3244.1	3238.6	3172.9	3074.5	2997.9	2921.3
12.5°	3610.6	3594.2	3544.9	3479.3	3419.1	3348.0	3342.5	3287.8	3178.4	3079.9	2981.5
15°	3741.9	3720.0	3659.8	3594.2	3528.5	3468.4	3468.4	3408.2	3293.3	3178.4	3063.5
17.5°	3807.5	3796.6	3736.4	3665.3	3610.6	3566.8	3561.4	3506.7	3391.8	3271.4	3145.6
20°	3829.4	3834.9	3780.2	3703.6	3665.3	3643.4	3637.9	3599.7	3473.8	3358.9	3238.6
22.5°	3823.9	3840.4	3796.6	3714.5	3703.6	3703.6	3703.6	3659.8	3561.4	3446.5	3326.1
25°	3845.8	3867.7	3834.9	3736.4	3736.4	3758.3	3758.3	3736.4	3648.9	3550.4	3430.1
27.5°	3922.4	3938.8	3911.5	3774.7	3780.2	3813.0	3807.5	3813.0	3758.3	3665.3	3544.9
30°	4015.4	4037.3	4004.5	3834.9	3829.4	3862.2	3862.2	3889.6	3851.3	3752.8	3654.4
32.5°	4267.1	4261.6	4157.7	3900.5	3884.1	3917.0	3917.0	3944.3	3922.4	3845.8	3752.8
35°	5016.5	4934.5	4704.7	4113.9	3949.8	3966.2	3966.2	4015.4	4026.4	3966.2	3884.1
37.5°	5782.4	5755.1	5580.0	4682.8	4190.5	4070.1	4064.7	4135.8	4185.0	4135.8	4081.1
40°	6553.8	6531.9	6493.6	5443.2	4693.8	4256.1	4239.7	4299.9	4387.4	4354.6	4321.8
42.5°	7270.4	7259.5	7297.8	6192.7	5333.8	4655.5	4606.2	4535.1	4661.0	4650.0	4650.0
45°	7833.9	7861.3	7883.1	6893.0	6028.6	5169.7	5109.5	4868.8	5038.4	5082.2	5115.0
47.5°	8151.2	8173.1	8249.7	7576.8	6723.4	5766.0	5722.2	5328.4	5552.7	5684.0	5777.0
50°	8605.3	8545.1	8610.7	8244.2	7560.4	6542.8	6422.5	5946.5	6231.0	6460.8	6679.6
52.5°	9042.9	8944.4	8999.1	9015.5	8512.3	7303.3	7177.4	6674.1	7029.7	7390.8	7779.2
55°	9436.8	9431.3	9486.0	9765.0	9431.3	8118.4	7976.1	7478.3	7992.5	8381.0	9037.4
57.5°	9754.1	9808.8	10049.5	10634.8	10492.6	9004.6	8846.0	8413.8	9021.0	9409.4	10498.1
60°	10126.1	10213.6	10613.0	11373.4	11460.9	9934.6	9770.5	9458.7	10076.8	10470.7	12188.5
62.5°	10251.9	10377.7	11198.3	12150.2	12473.0	10952.1	10804.4	10596.6	11187.4	11543.0	13873.4
65°	9414.9	9655.6	11521.1	12549.6	13561.6	12177.6	12051.7	11871.2	12292.4	12527.7	15016.8
67.5°	9185.1	9294.6	10892.0	13124.0	14584.6	13753.1	13627.3	13315.4	13326.4	13227.9	15388.8
70°	8862.4	8982.7	10246.4	13556.1	16050.7	15908.5	15755.3	14836.3	14272.8	13676.5	14655.7
72.5°	7549.4	7511.1	8829.5	12390.9	16756.4	18578.2	18397.6	16472.0	14973.0	13288.1	12369.0
75°	4239.7	4130.3	5355.7	8572.4	15301.3	19639.5	19634.0	17298.0	14480.7	11575.8	8419.3
77.5°	1230.9	1198.1	1767.0	3594.2	10301.1	17062.8	17270.7	15602.2	12084.6	8315.3	4622.7
80°	579.9	590.8	760.4	1187.1	4398.4	11012.3	11608.6	10273.8	7221.2	3834.9	1909.2
82.5°	366.5	372.0	519.7	765.9	1860.0	5000.1	5492.5	4622.7	2861.1	1657.6	842.5
85°	229.8	229.8	344.6	503.3	1110.5	1597.4	1734.2	1575.5	1225.4	902.6	459.5
87.5°	125.8	125.8	207.9	289.9	607.2	514.2	530.6	629.1	765.9	552.5	229.8
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°	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0	2883.0
2.5°	2877.5	2866.6	2850.2	2844.7	2839.2	2833.8	2839.2	2850.2	2839.2	2839.2	2844.7
5°	2861.1	2850.2	2828.3	2828.3	2833.8	2839.2	2866.6	2883.0	2888.5	2888.5	2888.5
7.5°	2861.1	2844.7	2828.3	2833.8	2844.7	2866.6	2910.4	2937.7	2959.6	2965.1	2965.1
10°	2888.5	2866.6	2855.7	2866.6	2899.4	2915.8	2959.6	3003.4	3030.7	3041.7	3041.7
12.5°	2937.7	2915.8	2915.8	2937.7	2981.5	3003.4	3041.7	3074.5	3107.3	3123.7	3123.7
15°	3019.8	2992.4	2997.9	3036.2	3085.4	3107.3	3134.7	3145.6	3172.9	3194.8	3194.8
17.5°	3096.4	3069.0	3079.9	3123.7	3156.5	3167.5	3183.9	3178.4	3189.4	3205.8	3211.2
20°	3183.9	3156.5	3162.0	3189.4	3194.8	3183.9	3183.9	3167.5	3162.0	3189.4	3200.3
22.5°	3271.4	3244.1	3238.6	3222.2	3194.8	3167.5	3151.1	3134.7	3123.7	3151.1	3162.0
25°	3375.4	3337.1	3309.7	3238.6	3167.5	3118.2	3096.4	3085.4	3079.9	3107.3	3118.2
27.5°	3490.2	3451.9	3369.9	3216.7	3101.8	3019.8	3003.4	3003.4	3014.3	3030.7	3041.7
30°	3599.7	3561.4	3413.7	3167.5	2986.9	2866.6	2850.2	2866.6	2893.9	2910.4	2926.8
32.5°	3709.1	3670.8	3441.0	3090.9	2817.4	2664.2	2653.2	2680.6	2724.4	2735.3	2746.2
35°	3856.8	3818.5	3473.8	2981.5	2604.0	2439.9	2428.9	2445.4	2483.7	2500.1	2516.5
37.5°	4064.7	4042.8	3523.1	2861.1	2407.1	2226.5	2193.7	2182.8	2204.7	2199.2	2221.1
40°	4338.2	4354.6	3610.6	2702.5	2215.6	2029.6	1958.5	1925.7	1903.8	1860.0	1881.9
42.5°	4737.5	4748.5	3709.1	2521.9	2051.5	1843.6	1750.6	1690.4	1646.7	1575.5	1586.5
45°	5322.9	5229.9	3823.9	2330.5	1903.8	1695.9	1586.5	1515.4	1455.2	1395.0	1400.5
47.5°	6099.7	5815.2	3949.8	2171.8	1756.1	1575.5	1477.1	1395.0	1323.9	1274.6	1280.1
50°	7057.1	6542.8	4075.6	2024.1	1608.4	1482.5	1395.0	1307.5	1236.4	1187.1	1181.6
52.5°	8320.8	7418.1	4157.7	1860.0	1460.7	1400.5	1323.9	1241.8	1154.3	1094.1	1088.6
55°	9633.7	8435.7	4228.8	1663.1	1318.4	1307.5	1269.2	1176.2	1072.2	995.6	984.7
57.5°	11078.0	9524.3	4283.5	1471.6	1209.0	1230.9	1219.9	1110.5	995.6	924.5	919.1
60°	12390.9	10651.3	4108.4	1302.0	1110.5	1154.3	1165.2	1072.2	1012.1	1028.5	1033.9
62.5°	13714.8	11521.1	3441.0	1176.2	1044.9	1105.1	1198.1	1192.6	1165.2	1192.6	1198.1
65°	14190.7	11701.6	2439.9	1072.2	979.2	1126.9	1302.0	1291.1	1165.2	1116.0	1105.1
67.5°	13922.7	11165.5	1641.2	990.2	930.0	1154.3	1411.4	1291.1	1121.5	1055.8	1033.9
70°	12648.0	9847.1	1203.5	908.1	886.2	1148.8	1471.6	1285.6	1099.6	1028.5	1001.1
72.5°	10087.8	7598.7	968.3	831.5	820.6	1121.5	1504.4	1274.6	1077.7	1001.1	968.3
75°	6531.9	4726.6	815.1	754.9	722.1	1077.7	1488.0	1241.8	1050.4	951.9	930.0
77.5°	3030.7	2035.1	694.8	667.4	629.1	1012.1	1438.8	1176.2	990.2	897.2	869.8
80°	1411.4	962.8	585.4	579.9	563.5	957.4	1373.1	1099.6	919.1	842.5	798.7
82.5°	754.9	579.9	475.9	475.9	492.4	891.7	1291.1	1006.6	826.1	787.8	672.9
85°	399.4	333.7	344.6	372.0	421.2	787.8	1181.6	908.1	722.1	601.8	585.4
87.5°	202.4	213.4	213.4	251.6	322.8	640.1	973.8	749.5	612.7	492.4	481.4
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)