

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: P237316

Luminaire Tested: **ARCH-L-AF72-230-D-U-T4W-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237316  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T4W-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25718.6 lumens  
Efficiency: N/A  
Efficacy: 112.3 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

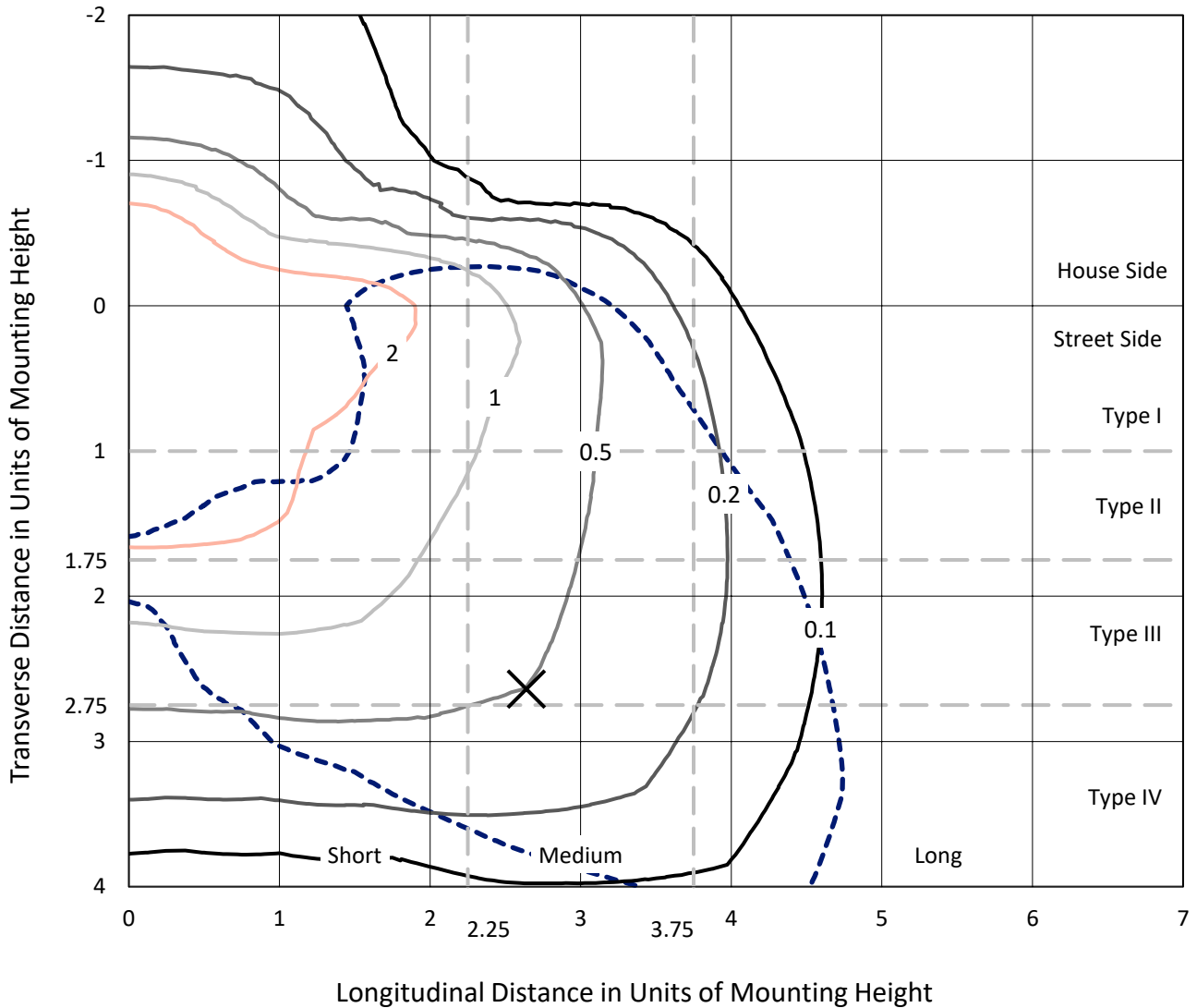
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

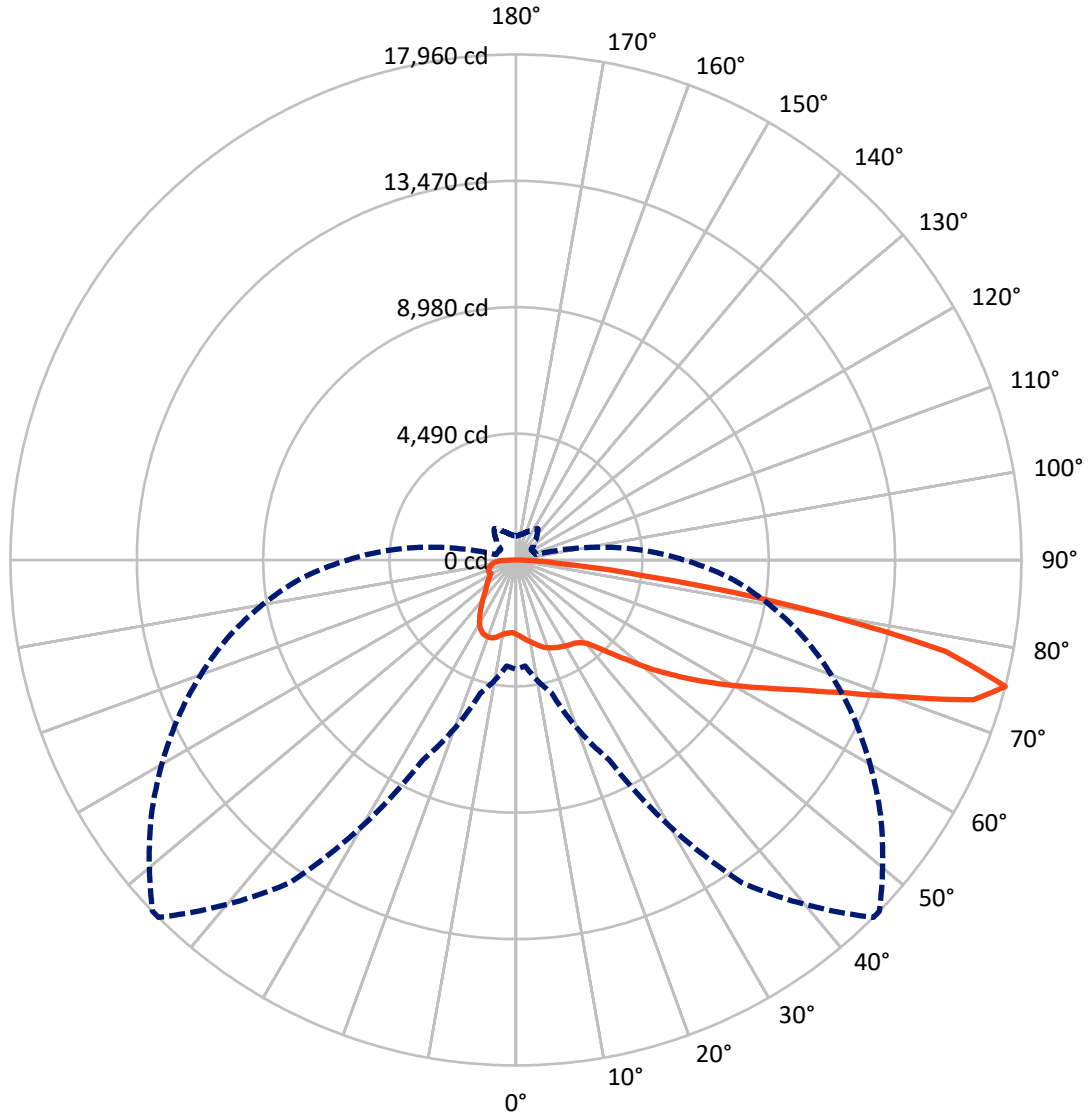
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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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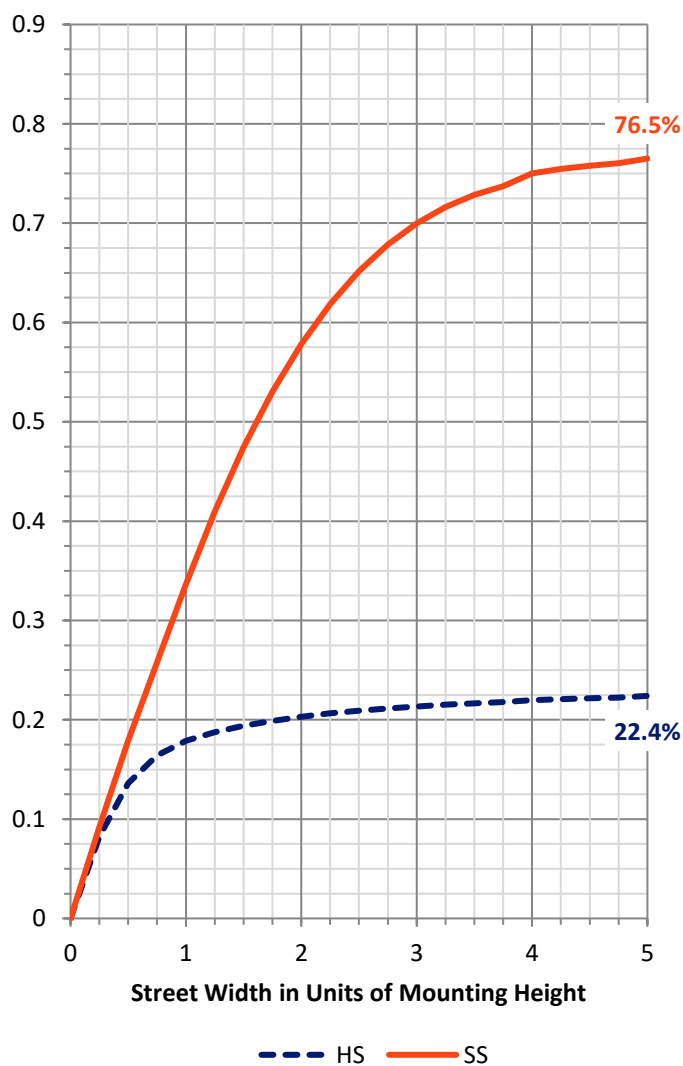
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5957.9	0.0	5957.9
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	19760.6	0.0	19760.6
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	25718.6	0.0	25718.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.3	1.0
10°-20°	846.7	3.3
20°-30°	1452.9	5.6
30°-40°	2032.1	7.9
40°-50°	2980.9	11.6
50°-60°	4643.4	18.1
60°-70°	6681.5	26.0
70°-80°	5820.3	22.6
80°-90°	999.6	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°	25718.6	100.0
0°-180°	25718.6	100.0

**Coefficient of Utilization**



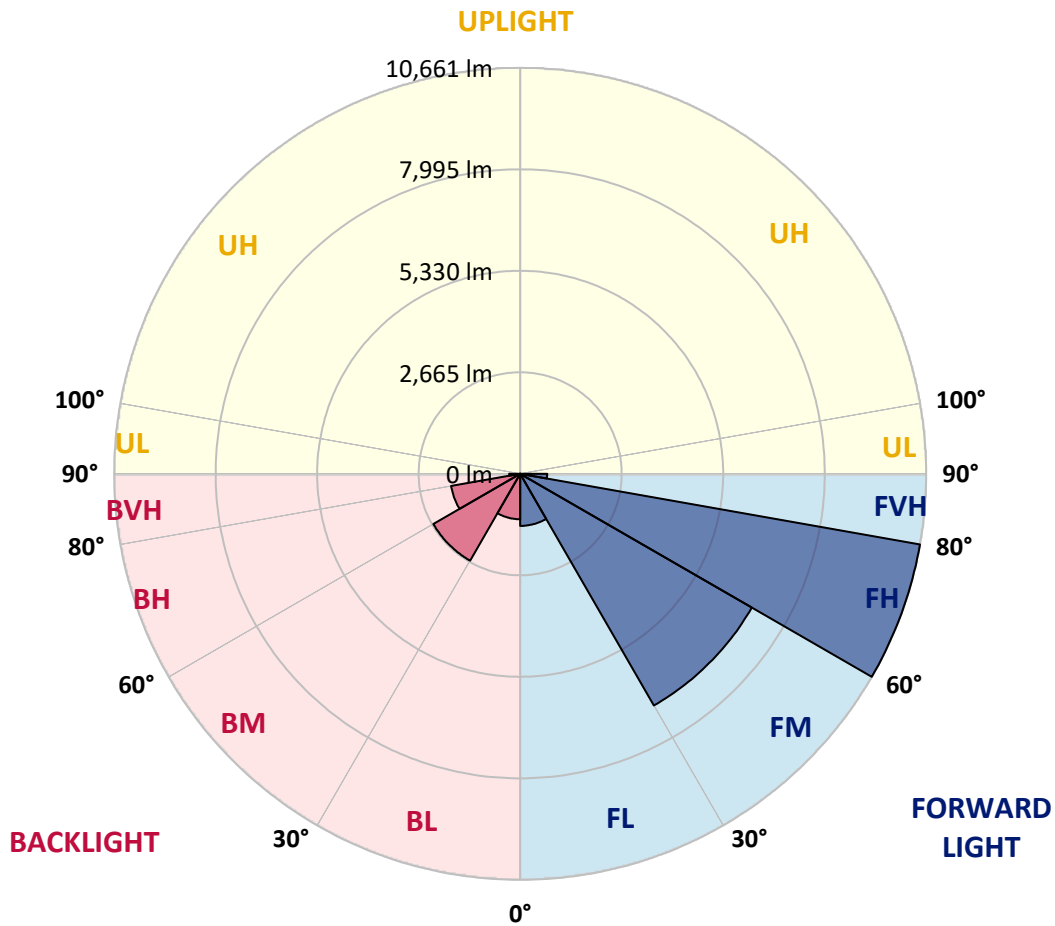
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1367.6	5.3			
FM (30°-60°)	7023.2	27.3			
FH (60°-80°)	10660.6	41.5			G4/12000
FVH (80°-90°)	709.2	2.8			G4/750
BL (0°-30°)	1193.3	4.6	B3/2500		
BM (30°-60°)	2633.1	10.2	B3/5000		
BH (60°-80°)	1841.2	7.2	B3/2500		G3/2500
BVH (80°-90°)	290.4	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°	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5
2.5°	2766.6	2746.6	2746.6	2731.6	2731.6	2706.6	2696.5	2691.5	2666.6	2651.5	2636.5
5°	2926.7	2901.7	2896.7	2861.6	2846.6	2791.6	2786.5	2751.5	2706.6	2661.5	2626.5
7.5°	3071.8	3056.7	3031.7	2996.8	2951.7	2881.6	2876.7	2821.6	2746.6	2686.5	2636.5
10°	3176.8	3166.8	3131.8	3086.8	3036.8	2966.7	2961.7	2901.7	2811.6	2741.6	2671.5
12.5°	3302.0	3286.8	3241.8	3181.8	3126.8	3061.8	3056.7	3006.7	2906.7	2816.6	2726.6
15°	3422.0	3402.0	3346.9	3286.8	3226.9	3171.8	3171.8	3116.8	3011.7	2906.7	2801.6
17.5°	3482.0	3472.0	3417.0	3352.0	3302.0	3261.8	3256.9	3206.9	3101.8	2991.7	2876.7
20°	3502.0	3507.0	3457.0	3386.9	3352.0	3331.9	3327.0	3291.9	3176.8	3071.8	2961.7
22.5°	3497.1	3512.0	3472.0	3397.0	3386.9	3386.9	3386.9	3346.9	3256.9	3151.8	3041.8
25°	3517.0	3537.0	3507.0	3417.0	3417.0	3437.0	3437.0	3417.0	3336.9	3246.8	3136.9
27.5°	3587.1	3602.1	3577.0	3451.9	3457.0	3487.0	3482.0	3487.0	3437.0	3352.0	3241.8
30°	3672.1	3692.1	3662.2	3507.0	3502.0	3532.1	3532.1	3557.1	3522.0	3432.0	3341.9
32.5°	3902.2	3897.3	3802.2	3567.1	3552.0	3582.1	3582.1	3607.0	3587.1	3517.0	3432.0
35°	4587.7	4512.6	4302.5	3762.2	3612.1	3627.1	3627.1	3672.1	3682.1	3627.1	3552.0
37.5°	5288.0	5263.0	5103.0	4282.4	3832.2	3722.1	3717.1	3782.2	3827.3	3782.2	3732.2
40°	5993.4	5973.4	5938.5	4977.9	4292.5	3892.3	3877.2	3932.2	4012.3	3982.3	3952.2
42.5°	6648.9	6638.8	6673.9	5663.2	4877.8	4257.4	4212.4	4147.4	4262.4	4252.5	4252.5
45°	7164.1	7189.2	7209.2	6303.6	5513.2	4727.7	4672.7	4452.6	4607.7	4647.7	4677.7
47.5°	7454.3	7474.3	7544.4	6929.0	6148.6	5273.1	5233.0	4872.9	5078.0	5198.0	5283.0
50°	7869.5	7814.4	7874.6	7539.3	6913.9	5983.5	5873.3	5438.2	5698.3	5908.4	6108.4
52.5°	8269.8	8179.7	8229.7	8244.7	7784.5	6678.8	6563.7	6103.6	6428.7	6758.9	7114.1
55°	8630.0	8624.9	8674.9	8930.1	8624.9	7424.2	7294.1	6839.0	7309.2	7664.4	8264.7
57.5°	8920.2	8970.1	9190.3	9725.6	9595.4	8234.8	8089.7	7694.5	8249.7	8604.9	9600.5
60°	9260.3	9340.3	9705.6	10400.9	10481.0	9085.2	8935.1	8649.9	9215.3	9575.5	11146.4
62.5°	9375.4	9490.5	10240.9	11111.3	11406.5	10015.8	9880.7	9690.5	10230.9	10556.1	12687.3
65°	8609.9	8830.2	10536.1	11476.6	12402.1	11136.4	11021.3	10856.2	11241.4	11456.6	13732.9
67.5°	8399.9	8500.0	9960.7	12001.9	13337.8	12577.3	12462.1	12177.0	12187.0	12096.9	14073.1
70°	8104.7	8214.7	9370.4	12397.1	14678.4	14548.3	14408.2	13567.9	13052.5	12507.2	13402.8
72.5°	6904.0	6868.9	8074.6	11331.5	15323.8	16989.9	16824.7	15063.7	13692.9	12152.1	11311.5
75°	3877.2	3777.2	4897.8	7839.5	13993.1	17960.4	17955.3	15819.1	13242.7	10586.1	7699.4
77.5°	1125.7	1095.7	1616.0	3286.8	9420.5	15604.0	15794.1	14268.1	11051.3	7604.3	4227.5
80°	530.4	540.3	695.4	1085.6	4022.3	10070.8	10616.0	9395.4	6603.8	3507.0	1746.0
82.5°	335.2	340.3	475.3	700.4	1700.9	4572.6	5022.8	4227.5	2616.5	1515.9	770.5
85°	210.1	210.1	315.2	460.3	1015.6	1460.8	1585.9	1440.8	1120.7	825.5	420.2
87.5°	115.0	115.0	190.1	265.2	555.4	470.3	485.3	575.4	700.4	505.4	210.1
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°	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5	2636.5
2.5°	2631.5	2621.4	2606.5	2601.5	2596.5	2591.5	2596.5	2606.5	2596.5	2596.5	2601.5
5°	2616.5	2606.5	2586.5	2586.5	2591.5	2596.5	2621.4	2636.5	2641.6	2641.6	2641.6
7.5°	2616.5	2601.5	2586.5	2591.5	2601.5	2621.4	2661.5	2686.5	2706.6	2711.6	2711.6
10°	2641.6	2621.4	2611.6	2621.4	2651.5	2666.6	2706.6	2746.6	2771.6	2781.6	2781.6
12.5°	2686.5	2666.6	2666.6	2686.5	2726.6	2746.6	2781.6	2811.6	2841.7	2856.7	2856.7
15°	2761.6	2736.6	2741.6	2776.6	2821.6	2841.7	2866.6	2876.7	2901.7	2921.7	2921.7
17.5°	2831.7	2806.7	2816.6	2856.7	2886.6	2896.7	2911.6	2906.7	2916.6	2931.7	2936.7
20°	2911.6	2886.6	2891.6	2916.6	2921.7	2911.6	2911.6	2896.7	2891.6	2916.6	2926.7
22.5°	2991.7	2966.7	2961.7	2946.7	2921.7	2896.7	2881.6	2866.6	2856.7	2881.6	2891.6
25°	3086.8	3051.7	3026.7	2961.7	2896.7	2851.6	2831.7	2821.6	2816.6	2841.7	2851.6
27.5°	3191.8	3156.8	3081.7	2941.7	2836.6	2761.6	2746.6	2746.6	2756.6	2771.6	2781.6
30°	3291.9	3256.9	3121.7	2896.7	2731.6	2621.4	2606.5	2621.4	2646.5	2661.5	2676.6
32.5°	3392.0	3356.9	3146.7	2826.6	2576.5	2436.4	2426.4	2451.4	2491.4	2501.5	2511.5
35°	3527.0	3492.0	3176.8	2726.6	2381.5	2231.3	2221.2	2236.3	2271.3	2286.4	2301.3
37.5°	3717.1	3697.2	3221.8	2616.5	2201.2	2036.1	2006.1	1996.1	2016.2	2011.1	2031.1
40°	3967.3	3982.3	3302.0	2471.5	2026.2	1856.1	1791.0	1761.0	1741.0	1700.9	1721.0
42.5°	4332.4	4342.5	3392.0	2306.4	1876.1	1686.0	1600.8	1545.9	1505.8	1440.8	1450.9
45°	4867.8	4782.8	3497.1	2131.2	1741.0	1550.9	1450.9	1385.9	1330.8	1275.7	1280.7
47.5°	5578.2	5318.0	3612.1	1986.2	1605.9	1440.8	1350.8	1275.7	1210.7	1165.7	1170.7
50°	6453.7	5983.5	3727.2	1851.1	1470.8	1355.8	1275.7	1195.8	1130.7	1085.6	1080.6
52.5°	7609.4	6783.9	3802.2	1700.9	1335.8	1280.7	1210.7	1135.6	1055.6	1000.6	995.6
55°	8810.0	7714.5	3867.2	1520.9	1205.6	1195.8	1160.7	1075.6	980.6	910.5	900.6
57.5°	10130.8	8710.0	3917.3	1345.7	1105.6	1125.7	1115.6	1015.6	910.5	845.4	840.5
60°	11331.5	9740.6	3757.2	1190.7	1015.6	1055.6	1065.6	980.6	925.5	940.5	945.5
62.5°	12542.2	10536.1	3146.7	1075.6	955.6	1010.5	1095.7	1090.6	1065.6	1090.6	1095.7
65°	12977.5	10701.2	2231.3	980.6	895.5	1030.7	1190.7	1180.6	1065.6	1020.6	1010.5
67.5°	12732.3	10210.9	1500.9	905.5	850.5	1055.6	1290.8	1180.6	1025.6	965.6	945.5
70°	11566.6	9005.1	1100.7	830.5	810.4	1050.6	1345.7	1175.6	1005.6	940.5	915.5
72.5°	9225.3	6949.0	885.5	760.5	750.4	1025.6	1375.8	1165.7	985.5	915.5	885.5
75°	5973.4	4322.6	745.4	690.4	660.4	985.5	1360.9	1135.6	960.5	870.5	850.5
77.5°	2771.6	1861.1	635.4	610.3	575.4	925.5	1315.8	1075.6	905.5	820.4	795.4
80°	1290.8	880.5	535.3	530.4	515.2	875.5	1255.7	1005.6	840.5	770.5	730.4
82.5°	690.4	530.4	435.3	435.3	450.2	815.5	1180.6	920.5	755.4	720.4	615.3
85°	365.3	305.2	315.2	340.3	385.2	720.4	1080.6	830.5	660.4	550.3	535.3
87.5°	185.0	195.1	195.1	230.1	295.2	585.3	890.5	685.4	560.3	450.2	440.2
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)