

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: P237336

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237336  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 27202.3 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G5

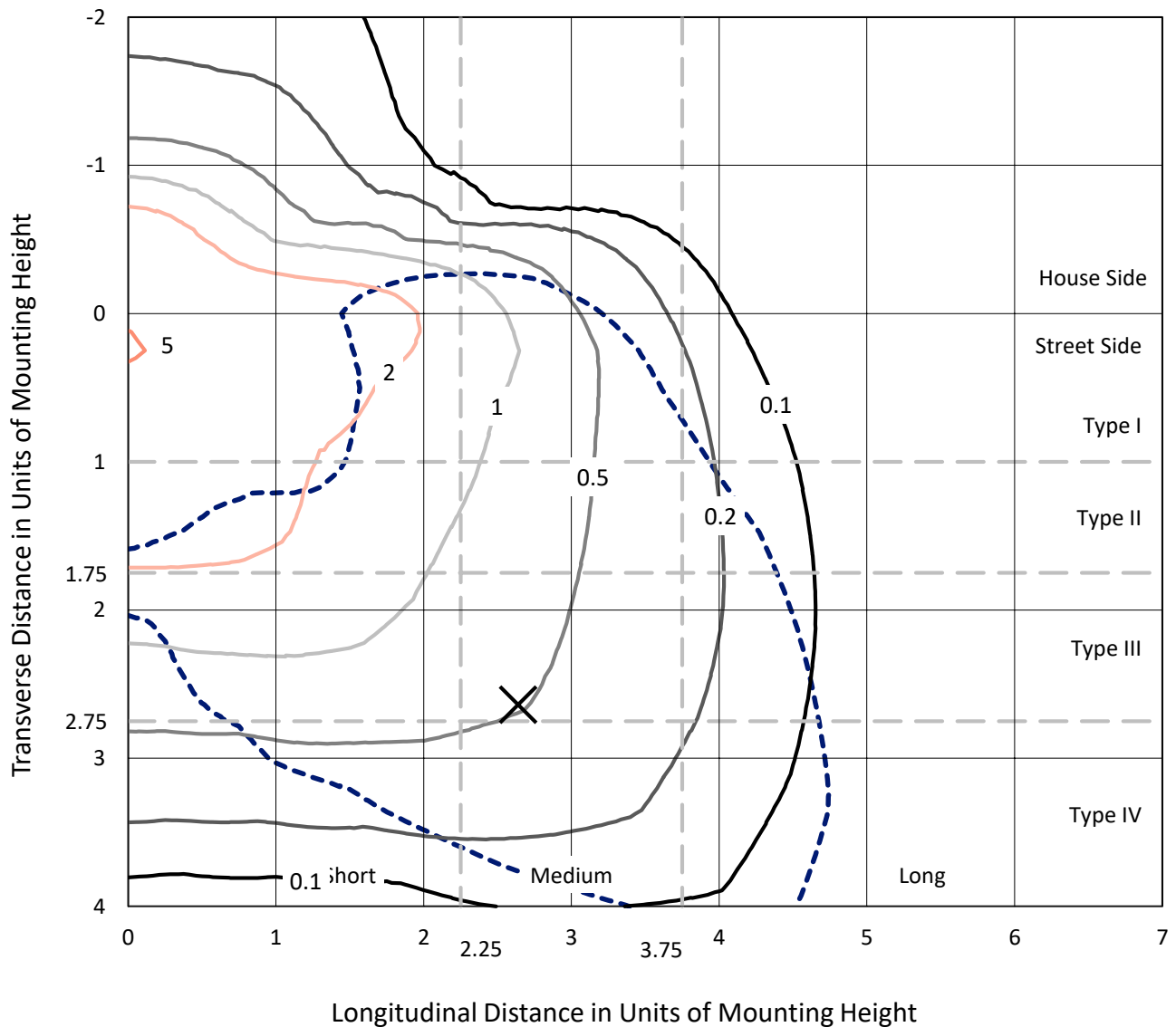
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

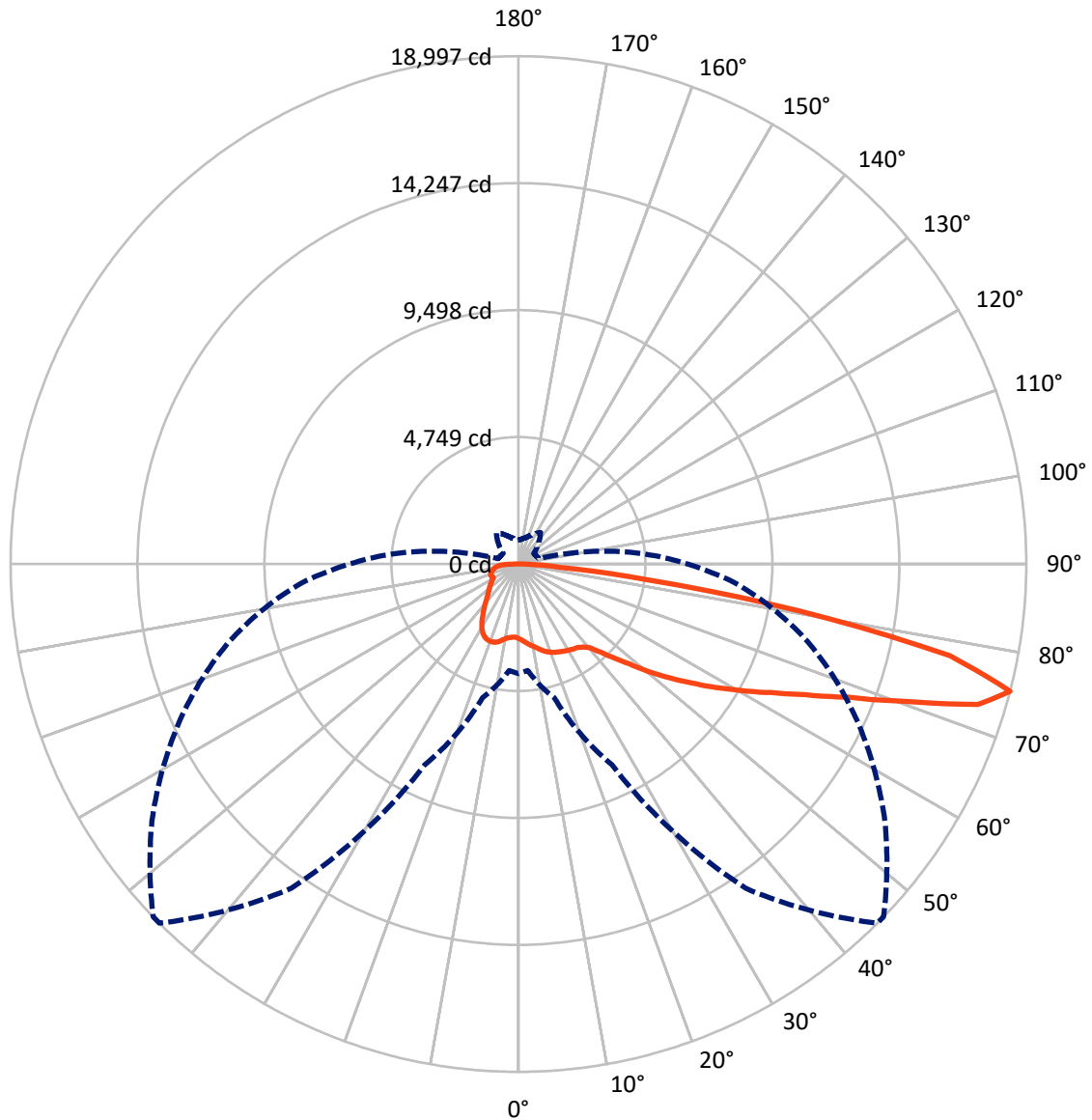


Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Medium - Non-Cutoff

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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	6301.6	0.0	6301.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	20900.7	0.0	20900.7
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	27202.3	0.0	27202.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.4	1.0
10°-20°	895.5	3.3
20°-30°	1536.8	5.6
30°-40°	2149.3	7.9
40°-50°	3152.8	11.6
50°-60°	4911.3	18.1
60°-70°	7066.9	26.0
70°-80°	6156.1	22.6
80°-90°	1057.2	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°	27202.3	100.0
0°-180°	27202.3	100.0

**Coefficient of Utilization**



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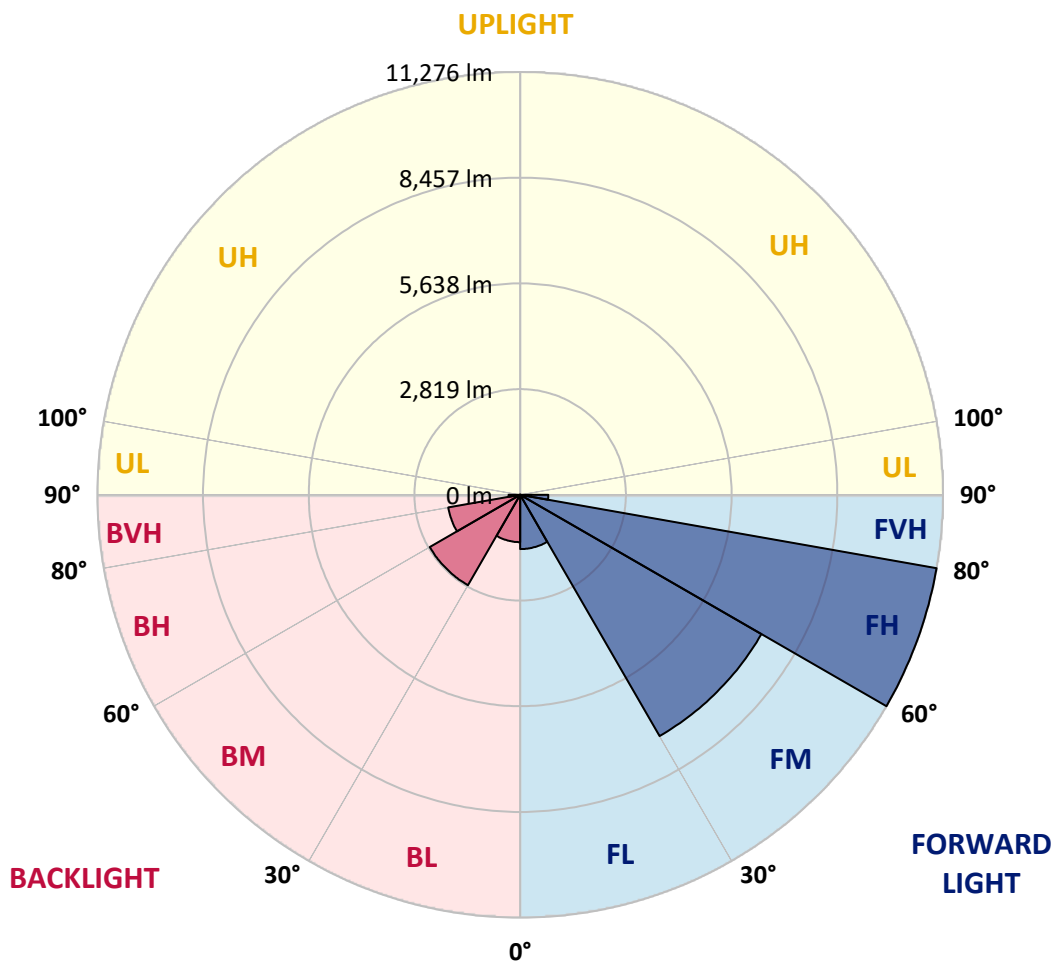
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1446.5	5.3			
FM	(30°-60°)	7428.4	27.3			
FH	(60°-80°)	11275.6	41.5			G4/12000
FVH	(80°-90°)	750.1	2.8			G5
BL	(0°-30°)	1262.1	4.6	B3/2500		
BM	(30°-60°)	2785.0	10.2	B3/5000		
BH	(60°-80°)	1947.4	7.2	B3/2500		G3/2500
BVH	(80°-90°)	307.1	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-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7
2.5°	2926.2	2905.1	2905.1	2889.1	2889.1	2862.7	2852.1	2846.9	2820.4	2804.5	2788.7
5°	3095.6	3069.1	3063.7	3026.7	3010.9	2952.6	2947.3	2910.3	2862.7	2815.1	2778.0
7.5°	3249.0	3233.1	3206.6	3169.6	3121.9	3047.9	3042.7	2984.5	2905.1	2841.6	2788.7
10°	3360.1	3349.6	3312.5	3264.8	3212.0	3137.9	3132.6	3069.1	2973.8	2899.8	2825.7
12.5°	3492.4	3476.5	3428.9	3365.4	3307.2	3238.4	3233.1	3180.1	3074.4	2979.1	2883.9
15°	3619.4	3598.2	3540.0	3476.5	3413.0	3354.8	3354.8	3296.6	3185.5	3074.4	2963.3
17.5°	3682.9	3672.3	3614.1	3545.3	3492.4	3450.1	3444.8	3391.9	3280.7	3164.3	3042.7
20°	3704.0	3709.3	3656.4	3582.4	3545.3	3524.2	3518.8	3481.8	3360.1	3249.0	3132.6
22.5°	3698.8	3714.6	3672.3	3592.9	3582.4	3582.4	3582.4	3540.0	3444.8	3333.7	3217.3
25°	3720.0	3741.1	3709.3	3614.1	3614.1	3635.3	3635.3	3614.1	3529.4	3434.1	3317.7
27.5°	3794.0	3809.9	3783.4	3651.1	3656.4	3688.1	3682.9	3688.1	3635.3	3545.3	3428.9
30°	3883.9	3905.1	3873.4	3709.3	3704.0	3735.8	3735.8	3762.2	3725.2	3629.9	3534.7
32.5°	4127.4	4122.1	4021.5	3772.8	3757.0	3788.7	3788.7	3815.2	3794.0	3720.0	3629.9
35°	4852.3	4773.0	4550.7	3979.2	3820.5	3836.4	3836.4	3883.9	3894.6	3836.4	3757.0
37.5°	5593.1	5566.7	5397.3	4529.5	4053.3	3936.9	3931.6	4000.4	4048.0	4000.4	3947.5
40°	6339.2	6318.1	6281.0	5265.0	4540.1	4116.8	4100.9	4159.1	4243.8	4212.0	4180.3
42.5°	7032.4	7021.8	7058.9	5990.0	5159.3	4503.0	4455.5	4386.6	4508.3	4497.8	4497.8
45°	7577.4	7603.9	7625.1	6667.3	5831.2	5000.5	4942.3	4709.5	4873.4	4915.8	4947.6
47.5°	7884.3	7905.5	7979.6	7328.7	6503.3	5577.2	5534.9	5153.9	5370.9	5497.8	5587.9
50°	8323.5	8265.3	8328.9	7974.3	7312.9	6328.7	6212.2	5751.8	6027.0	6249.3	6461.0
52.5°	8746.8	8651.6	8704.5	8720.3	8233.6	7064.2	6942.5	6455.6	6799.6	7148.8	7524.5
55°	9127.9	9122.6	9175.5	9445.3	9122.6	7852.6	7715.0	7233.5	7730.8	8106.6	8741.5
57.5°	9434.8	9487.7	9720.5	10286.7	10149.1	8709.8	8556.4	8138.3	8725.7	9101.4	10154.4
60°	9794.5	9879.2	10265.5	11001.0	11085.7	9609.4	9450.6	9149.0	9747.0	10127.9	11789.5
62.5°	9916.3	10038.0	10831.7	11752.5	12064.6	10593.6	10450.7	10249.7	10821.1	11165.1	13419.3
65°	9106.7	9339.5	11143.9	12138.7	13117.6	11778.9	11657.1	11482.5	11890.0	12117.6	14525.2
67.5°	8884.4	8990.3	10535.4	12694.3	14107.1	13302.9	13181.1	12879.6	12890.1	12794.9	14885.0
70°	8572.2	8688.6	9911.0	13112.4	15525.2	15387.7	15239.5	14350.6	13805.5	13228.8	14176.0
72.5°	7302.2	7265.2	8540.5	11985.3	16207.8	17970.0	17795.4	15932.8	14482.8	12853.1	11964.1
75°	4100.9	3995.1	5180.4	8291.8	14800.4	18996.5	18991.2	16731.7	14006.7	11196.8	8143.6
77.5°	1190.6	1158.8	1709.1	3476.5	9964.0	16504.2	16705.3	15091.4	11689.0	8043.1	4471.3
80°	560.9	571.5	735.5	1148.3	4254.4	10651.8	11228.5	9937.5	6984.8	3709.3	1846.7
82.5°	354.6	359.8	502.7	740.8	1799.1	4836.4	5312.7	4471.3	2767.5	1603.4	814.9
85°	222.3	222.3	333.4	486.8	1074.2	1545.2	1677.4	1524.0	1185.3	873.1	444.5
87.5°	121.7	121.7	201.1	280.5	587.4	497.4	513.3	608.6	740.8	534.5	222.3
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°	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7	2788.7
2.5°	2783.3	2772.7	2756.9	2751.5	2746.3	2741.0	2746.3	2756.9	2746.3	2746.3	2751.5
5°	2767.5	2756.9	2735.7	2735.7	2741.0	2746.3	2772.7	2788.7	2793.9	2793.9	2793.9
7.5°	2767.5	2751.5	2735.7	2741.0	2751.5	2772.7	2815.1	2841.6	2862.7	2867.9	2867.9
10°	2793.9	2772.7	2762.2	2772.7	2804.5	2820.4	2862.7	2905.1	2931.5	2942.1	2942.1
12.5°	2841.6	2820.4	2820.4	2841.6	2883.9	2905.1	2942.1	2973.8	3005.5	3021.5	3021.5
15°	2920.9	2894.4	2899.8	2936.8	2984.5	3005.5	3032.0	3042.7	3069.1	3090.2	3090.2
17.5°	2995.0	2968.5	2979.1	3021.5	3053.2	3063.7	3079.7	3074.4	3084.9	3100.9	3106.1
20°	3079.7	3053.2	3058.5	3084.9	3090.2	3079.7	3079.7	3063.7	3058.5	3084.9	3095.6
22.5°	3164.3	3137.9	3132.6	3116.7	3090.2	3063.7	3047.9	3032.0	3021.5	3047.9	3058.5
25°	3264.8	3227.8	3201.3	3132.6	3063.7	3016.2	2995.0	2984.5	2979.1	3005.5	3016.2
27.5°	3375.9	3338.9	3259.5	3111.4	3000.3	2920.9	2905.1	2905.1	2915.6	2931.5	2942.1
30°	3481.8	3444.8	3301.9	3063.7	2889.1	2772.7	2756.9	2772.7	2799.2	2815.1	2830.9
32.5°	3587.6	3550.6	3328.4	2989.7	2725.1	2576.9	2566.4	2592.9	2635.1	2645.8	2656.3
35°	3730.5	3693.5	3360.1	2883.9	2518.7	2360.0	2349.4	2365.3	2402.3	2418.3	2434.1
37.5°	3931.6	3910.4	3407.8	2767.5	2328.2	2153.6	2121.9	2111.3	2132.4	2127.2	2148.4
40°	4196.1	4212.0	3492.4	2614.0	2143.1	1963.1	1894.4	1862.6	1841.4	1799.1	1820.2
42.5°	4582.4	4593.0	3587.6	2439.4	1984.3	1783.2	1693.3	1635.1	1592.7	1524.0	1534.5
45°	5148.6	5058.7	3698.8	2254.2	1841.4	1640.4	1534.5	1465.8	1407.6	1349.4	1354.6
47.5°	5900.1	5624.9	3820.5	2100.7	1698.6	1524.0	1428.8	1349.4	1280.5	1233.0	1238.2
50°	6826.0	6328.7	3942.1	1957.8	1555.7	1434.0	1349.4	1264.7	1195.8	1148.3	1142.9
52.5°	8048.4	7175.3	4021.5	1799.1	1412.8	1354.6	1280.5	1201.1	1116.6	1058.3	1053.0
55°	9318.4	8159.5	4090.4	1608.6	1275.2	1264.7	1227.6	1137.6	1037.2	963.0	952.5
57.5°	10715.3	9212.5	4143.3	1423.4	1169.4	1190.6	1180.0	1074.2	963.0	894.3	888.9
60°	11985.3	10302.5	3974.0	1259.4	1074.2	1116.6	1127.1	1037.2	979.0	994.8	1000.1
62.5°	13265.8	11143.9	3328.4	1137.6	1010.7	1068.9	1158.8	1153.6	1127.1	1153.6	1158.8
65°	13726.2	11318.5	2360.0	1037.2	947.2	1090.1	1259.4	1248.8	1127.1	1079.4	1068.9
67.5°	13466.8	10800.0	1587.4	957.8	899.6	1116.6	1365.2	1248.8	1084.7	1021.2	1000.1
70°	12234.0	9524.7	1164.1	878.4	857.2	1111.2	1423.4	1243.5	1063.6	994.8	968.3
72.5°	9757.5	7349.9	936.6	804.3	793.7	1084.7	1455.1	1233.0	1042.4	968.3	936.6
75°	6318.1	4571.9	788.4	730.2	698.5	1042.4	1439.3	1201.1	1016.0	920.8	899.6
77.5°	2931.5	1968.5	672.0	645.6	608.6	979.0	1391.6	1137.6	957.8	867.8	841.4
80°	1365.2	931.3	566.2	560.9	545.0	926.0	1328.2	1063.6	888.9	814.9	772.5
82.5°	730.2	560.9	460.3	460.3	476.3	862.6	1248.8	973.6	799.0	762.0	650.9
85°	386.3	322.7	333.4	359.8	407.4	762.0	1142.9	878.4	698.5	582.1	566.2
87.5°	195.8	206.3	206.3	243.4	312.2	619.1	941.9	725.0	592.7	476.3	465.6
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)