

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: P265740

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265740  
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-AF72-270-D-U-T4W-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1155mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25698.1 lumens  
Efficiency: N/A  
Efficacy: 94.1 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 - G4

Input Watts (W): 273  
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

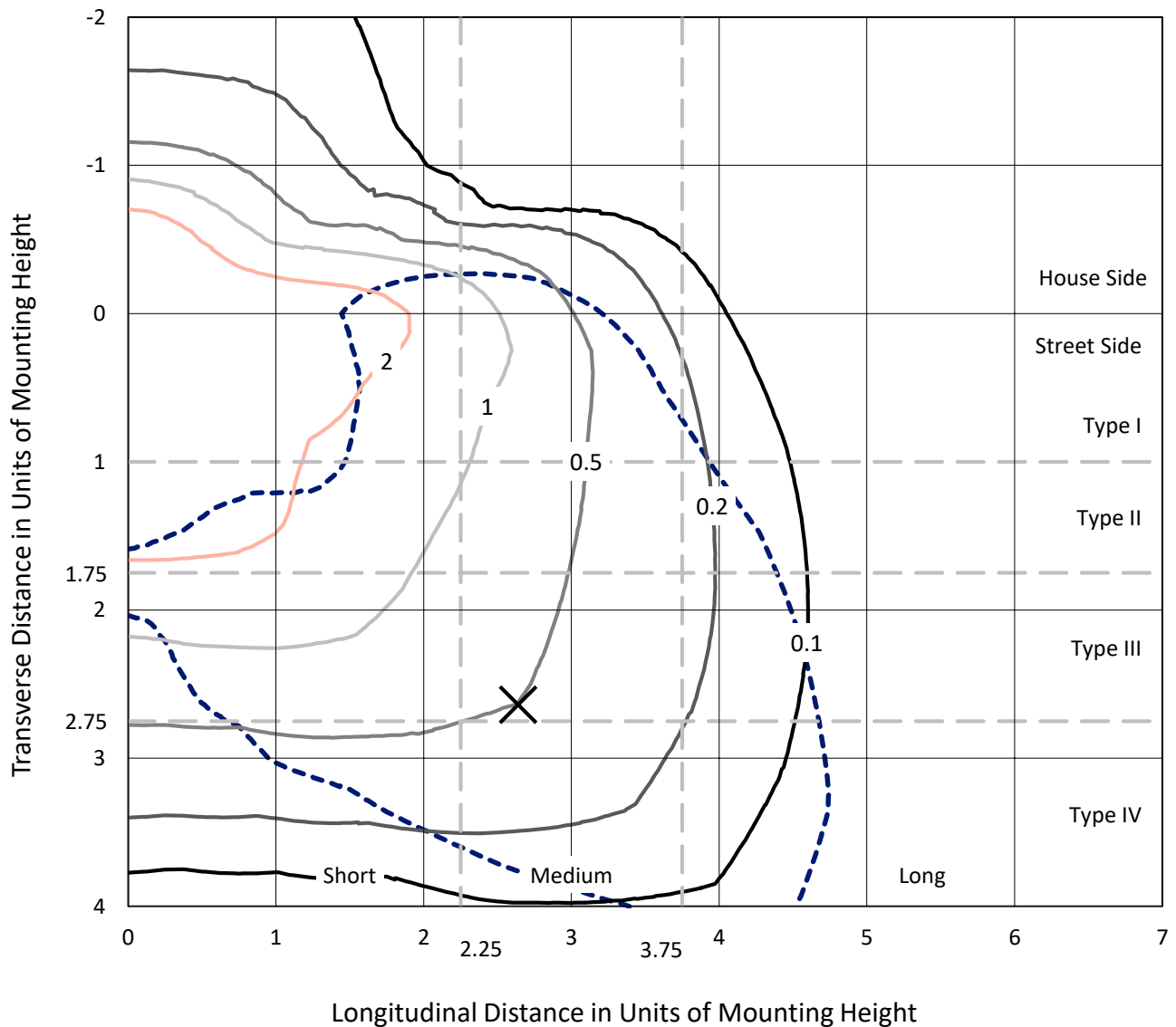


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

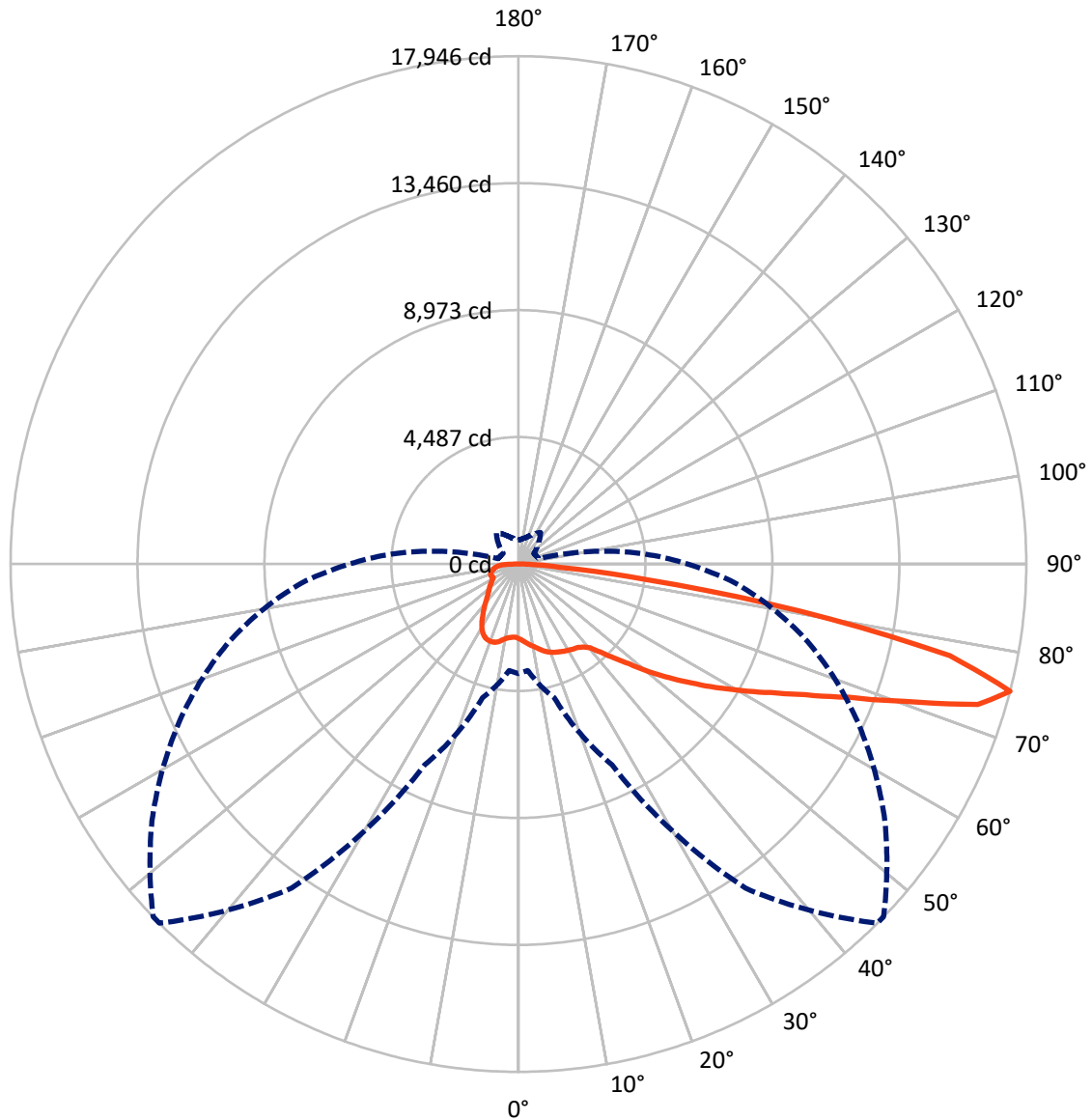


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Medium - Non-Cutoff

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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	5953.2	0.0	5953.2
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	19744.9	0.0	19744.9
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	25698.1	0.0	25698.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.1	1.0
10°-20°	846.0	3.3
20°-30°	1451.8	5.6
30°-40°	2030.5	7.9
40°-50°	2978.5	11.6
50°-60°	4639.7	18.1
60°-70°	6676.2	26.0
70°-80°	5815.7	22.6
80°-90°	998.8	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°	25698.1	100.0
0°-180°	25698.1	100.0

**Coefficient of Utilization**



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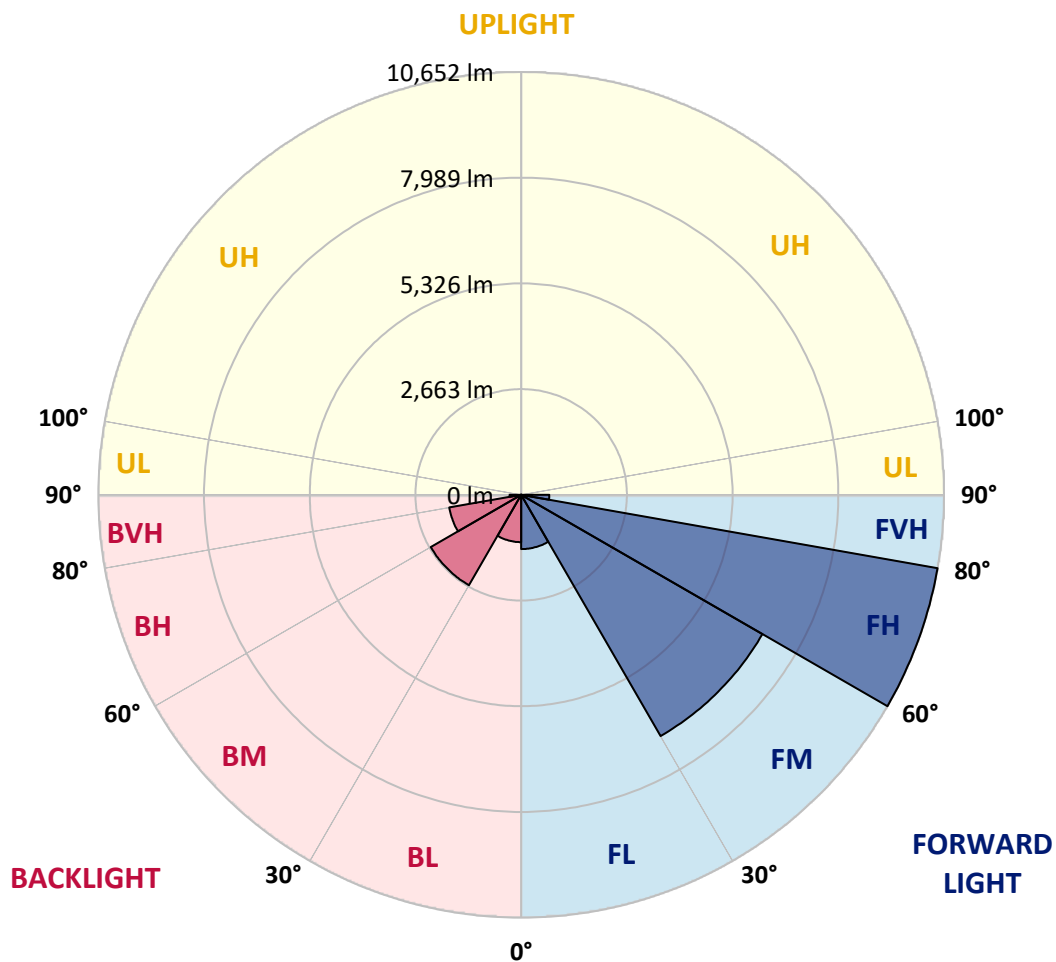
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1366.5	5.3			
FM	(30°-60°)	7017.7	27.3			
FH	(60°-80°)	10652.1	41.5			G4/12000
FVH	(80°-90°)	708.6	2.8			G4/750
BL	(0°-30°)	1192.3	4.6	B3/2500		
BM	(30°-60°)	2631.0	10.2	B3/5000		
BH	(60°-80°)	1839.7	7.2	B3/2500		G3/2500
BVH	(80°-90°)	290.2	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°	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4
2.5°	2764.4	2744.4	2744.4	2729.4	2729.4	2704.3	2694.3	2689.4	2664.5	2649.5	2634.4
5°	2924.3	2899.4	2894.3	2859.3	2844.4	2789.3	2784.3	2749.4	2704.3	2659.4	2624.4
7.5°	3069.2	3054.3	3029.4	2994.3	2949.3	2879.3	2874.3	2819.4	2744.4	2684.4	2634.4
10°	3174.3	3164.3	3129.3	3084.3	3034.4	2964.3	2959.3	2899.4	2809.4	2739.4	2669.5
12.5°	3299.2	3284.3	3239.3	3179.3	3124.3	3059.4	3054.3	3004.3	2904.4	2814.4	2724.4
15°	3419.3	3399.2	3344.3	3284.3	3224.2	3169.3	3169.3	3114.3	3009.3	2904.4	2799.4
17.5°	3479.2	3469.3	3414.3	3349.3	3299.2	3259.3	3254.3	3204.3	3099.3	2989.3	2874.3
20°	3499.3	3504.2	3454.3	3384.3	3349.3	3329.3	3324.3	3289.2	3174.3	3069.2	2959.3
22.5°	3494.2	3509.1	3469.3	3394.2	3384.3	3384.3	3384.3	3344.3	3254.3	3149.3	3039.3
25°	3514.2	3534.2	3504.2	3414.3	3414.3	3434.2	3434.2	3414.3	3334.2	3244.3	3134.4
27.5°	3584.1	3599.1	3574.3	3449.2	3454.3	3484.3	3479.2	3484.3	3434.2	3349.3	3239.3
30°	3669.1	3689.2	3659.2	3504.2	3499.3	3529.3	3529.3	3554.2	3519.2	3429.3	3339.3
32.5°	3899.2	3894.2	3799.2	3564.2	3549.3	3579.1	3579.1	3604.2	3584.1	3514.2	3429.3
35°	4584.1	4509.0	4299.1	3759.1	3609.2	3624.2	3624.2	3669.1	3679.2	3624.2	3549.3
37.5°	5283.8	5258.9	5098.9	4279.0	3829.1	3719.3	3714.2	3779.2	3824.2	3779.2	3729.1
40°	5988.7	5968.7	5933.8	4973.9	4289.0	3889.1	3874.1	3929.1	4009.1	3979.1	3949.0
42.5°	6643.5	6633.5	6668.6	5658.8	4873.9	4254.1	4209.1	4144.2	4259.0	4249.1	4249.1
45°	7158.5	7183.4	7203.4	6298.6	5508.8	4723.9	4669.0	4449.0	4604.1	4644.0	4674.1
47.5°	7448.3	7468.4	7538.3	6923.4	6143.7	5268.9	5228.9	4869.0	5073.8	5193.9	5278.8
50°	7863.3	7808.2	7868.3	7533.4	6908.4	5978.7	5868.6	5433.8	5693.7	5903.8	6103.7
52.5°	8263.1	8173.1	8223.3	8238.1	7778.3	6673.6	6558.5	6098.7	6423.6	6753.5	7108.5
55°	8623.1	8618.1	8668.1	8923.0	8618.1	7418.4	7288.4	6833.4	7303.4	7658.3	8258.2
57.5°	8913.1	8963.1	9183.1	9717.9	9587.9	8228.1	8083.2	7688.4	8243.1	8598.0	9592.9
60°	9253.0	9332.9	9697.9	10392.8	10472.7	9078.0	8928.1	8643.1	9207.9	9567.8	11137.5
62.5°	9368.0	9482.9	10232.8	11102.6	11397.5	10007.7	9872.8	9682.9	10222.7	10547.7	12677.2
65°	8603.1	8823.1	10527.6	11467.6	12392.3	11127.6	11012.6	10847.7	11232.5	11447.6	13722.0
67.5°	8393.1	8493.1	9952.9	11992.4	13327.1	12567.3	12452.2	12167.4	12177.3	12087.4	14061.9
70°	8098.2	8208.3	9362.9	12387.3	14666.7	14536.8	14396.9	13557.0	13042.1	12497.3	13392.0
72.5°	6898.4	6863.5	8068.2	11322.5	15311.6	16976.3	16811.3	15051.7	13682.1	12142.3	11302.6
75°	3874.1	3774.1	4894.0	7833.3	13981.8	17946.1	17941.0	15806.5	13232.2	10577.7	7693.4
77.5°	1124.8	1094.8	1614.7	3284.3	9412.9	15591.6	15781.6	14256.9	11042.5	7598.4	4224.1
80°	529.9	539.9	694.8	1084.8	4019.1	10062.9	10607.6	9387.9	6598.6	3504.2	1744.6
82.5°	334.9	339.9	474.9	699.9	1699.7	4569.0	5018.9	4224.1	2614.4	1514.6	769.8
85°	209.9	209.9	314.9	459.9	1014.7	1459.7	1584.7	1439.7	1119.7	824.9	419.9
87.5°	115.0	115.0	189.9	264.9	554.9	470.0	484.8	574.8	699.9	504.8	209.9
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°	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4	2634.4
2.5°	2629.3	2619.4	2604.5	2599.4	2594.5	2589.5	2594.5	2604.5	2594.5	2594.5	2599.4
5°	2614.4	2604.5	2584.5	2584.5	2589.5	2594.5	2619.4	2634.4	2639.4	2639.4	2639.4
7.5°	2614.4	2599.4	2584.5	2589.5	2599.4	2619.4	2659.4	2684.4	2704.3	2709.4	2709.4
10°	2639.4	2619.4	2609.4	2619.4	2649.5	2664.5	2704.3	2744.4	2769.4	2779.4	2779.4
12.5°	2684.4	2664.5	2664.5	2684.4	2724.4	2744.4	2779.4	2809.4	2839.5	2854.4	2854.4
15°	2759.5	2734.4	2739.4	2774.3	2819.4	2839.5	2864.3	2874.3	2899.4	2919.3	2919.3
17.5°	2829.4	2804.4	2814.4	2854.4	2884.4	2894.3	2909.4	2904.4	2914.3	2929.4	2934.4
20°	2909.4	2884.4	2889.4	2914.3	2919.3	2909.4	2909.4	2894.3	2889.4	2914.3	2924.3
22.5°	2989.3	2964.3	2959.3	2944.4	2919.3	2894.3	2879.3	2864.3	2854.4	2879.3	2889.4
25°	3084.3	3049.3	3024.4	2959.3	2894.3	2849.3	2829.4	2819.4	2814.4	2839.5	2849.3
27.5°	3189.3	3154.3	3079.3	2939.3	2834.4	2759.5	2744.4	2744.4	2754.5	2769.4	2779.4
30°	3289.2	3254.3	3119.4	2894.3	2729.4	2619.4	2604.5	2619.4	2644.4	2659.4	2674.4
32.5°	3389.2	3354.4	3144.2	2824.5	2574.5	2434.4	2424.4	2449.5	2489.5	2499.4	2509.4
35°	3524.2	3489.2	3174.3	2724.4	2379.5	2229.6	2219.5	2234.5	2269.5	2284.5	2299.5
37.5°	3714.2	3694.2	3219.3	2614.4	2199.5	2034.5	2004.6	1994.5	2014.5	2009.6	2029.5
40°	3964.1	3979.1	3299.2	2469.5	2024.6	1854.6	1789.7	1759.6	1739.6	1699.7	1719.6
42.5°	4329.0	4339.1	3389.2	2304.5	1874.7	1684.6	1599.6	1544.6	1504.8	1439.7	1449.7
45°	4864.0	4779.0	3494.2	2129.5	1739.6	1549.7	1449.7	1384.6	1329.8	1274.8	1279.7
47.5°	5573.8	5313.8	3609.2	1984.5	1604.6	1439.7	1349.8	1274.8	1209.7	1164.7	1169.8
50°	6448.7	5978.7	3724.3	1849.6	1469.6	1354.7	1274.8	1194.7	1129.8	1084.8	1079.8
52.5°	7603.3	6778.5	3799.2	1699.7	1334.7	1279.7	1209.7	1134.7	1054.8	999.8	994.9
55°	8803.1	7708.4	3864.1	1519.7	1204.7	1194.7	1159.7	1074.7	979.8	909.9	899.8
57.5°	10122.8	8703.0	3914.2	1344.8	1104.7	1124.8	1114.7	1014.7	909.9	844.9	839.8
60°	11322.5	9732.9	3754.1	1189.7	1014.7	1054.8	1064.9	979.8	924.7	939.7	944.7
62.5°	12532.3	10527.6	3144.2	1074.7	954.8	1009.8	1094.8	1089.7	1064.9	1089.7	1094.8
65°	12967.2	10692.6	2229.6	979.8	894.8	1029.7	1189.7	1179.7	1064.9	1019.8	1009.8
67.5°	12722.2	10202.8	1499.7	904.9	849.7	1054.8	1289.7	1179.7	1024.7	964.8	944.7
70°	11557.5	8998.1	1099.7	829.9	809.8	1049.8	1344.8	1174.8	1004.8	939.7	914.8
72.5°	9218.0	6943.4	884.8	759.8	749.8	1024.7	1374.6	1164.7	984.8	914.8	884.8
75°	5968.7	4319.1	744.9	689.9	659.9	984.8	1359.8	1134.7	959.7	869.7	849.7
77.5°	2769.4	1859.6	634.8	609.9	574.8	924.7	1314.7	1074.7	904.9	819.9	794.8
80°	1289.7	879.8	534.9	529.9	514.9	874.8	1254.8	1004.8	839.8	769.8	729.9
82.5°	689.9	529.9	434.9	434.9	450.0	814.9	1179.7	919.9	754.8	719.8	614.9
85°	364.9	305.0	314.9	339.9	385.0	719.8	1079.8	829.9	659.9	549.9	534.9
87.5°	185.0	194.9	194.9	230.0	295.0	584.8	889.9	684.9	559.9	450.0	439.9
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)