

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: P265749

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265749  
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-AF72-280-D-U-T4W-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26079.9 lumens  
Efficiency: N/A  
Efficacy: 93.5 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): 279  
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

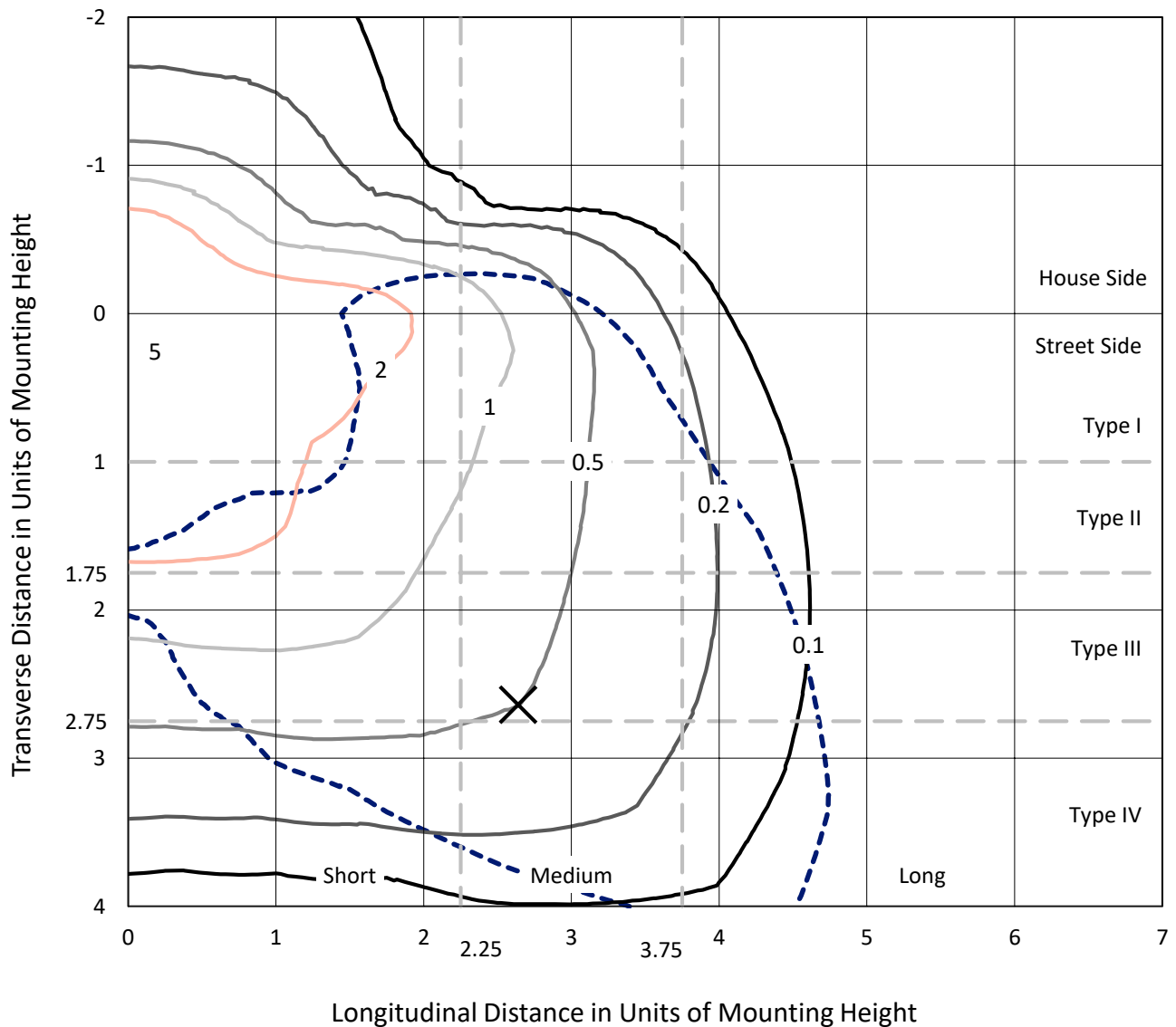


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

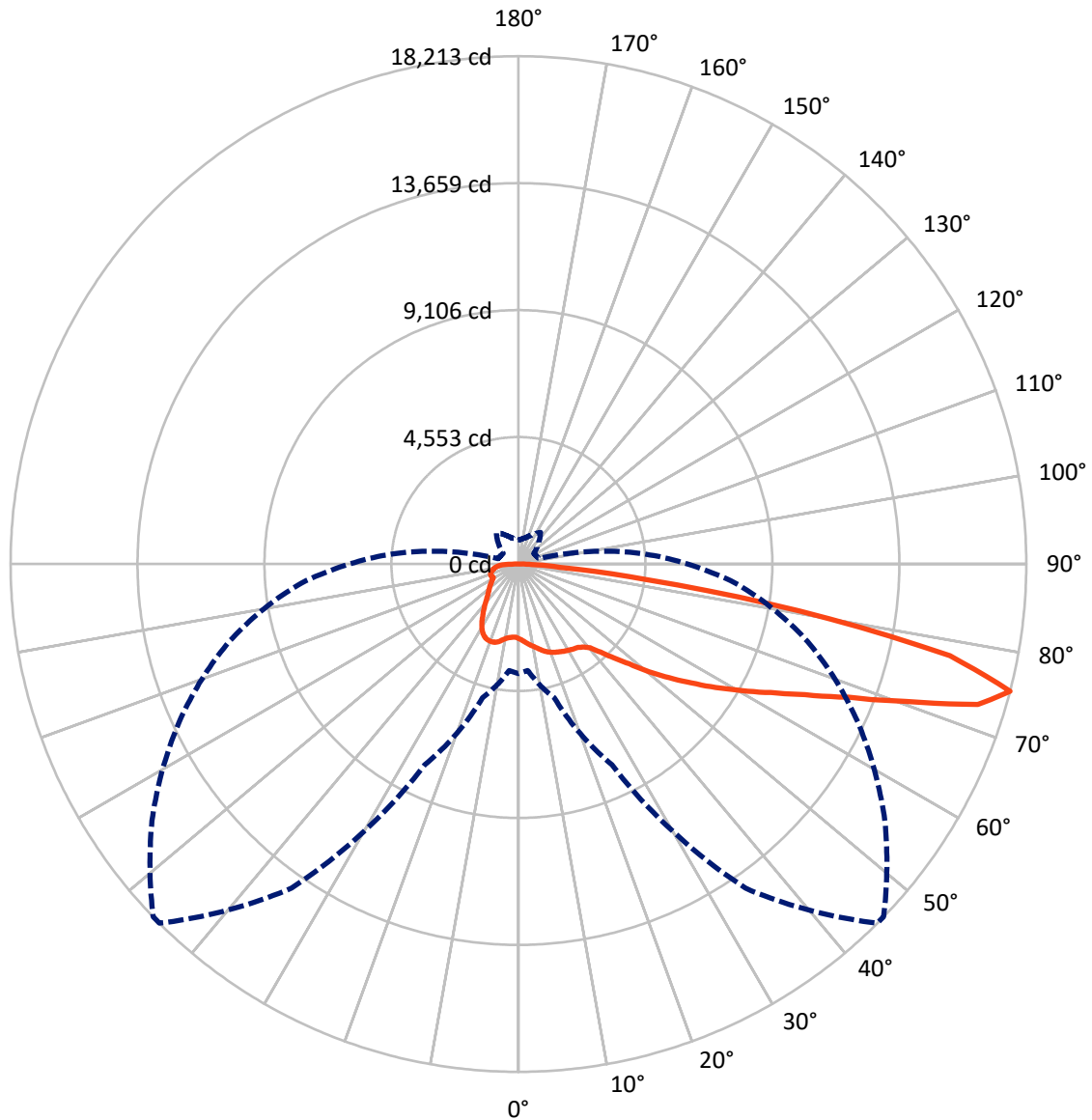


Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - Medium - Non-Cutoff

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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	6041.6	0.0	6041.6
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	20038.3	0.0	20038.3
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	26079.9	0.0	26079.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	265.0	1.0
10°-20°	858.6	3.3
20°-30°	1473.3	5.6
30°-40°	2060.6	7.9
40°-50°	3022.7	11.6
50°-60°	4708.6	18.1
60°-70°	6775.4	26.0
70°-80°	5902.1	22.6
80°-90°	1013.6	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°	26079.9	100.0
0°-180°	26079.9	100.0

**Coefficient of Utilization**



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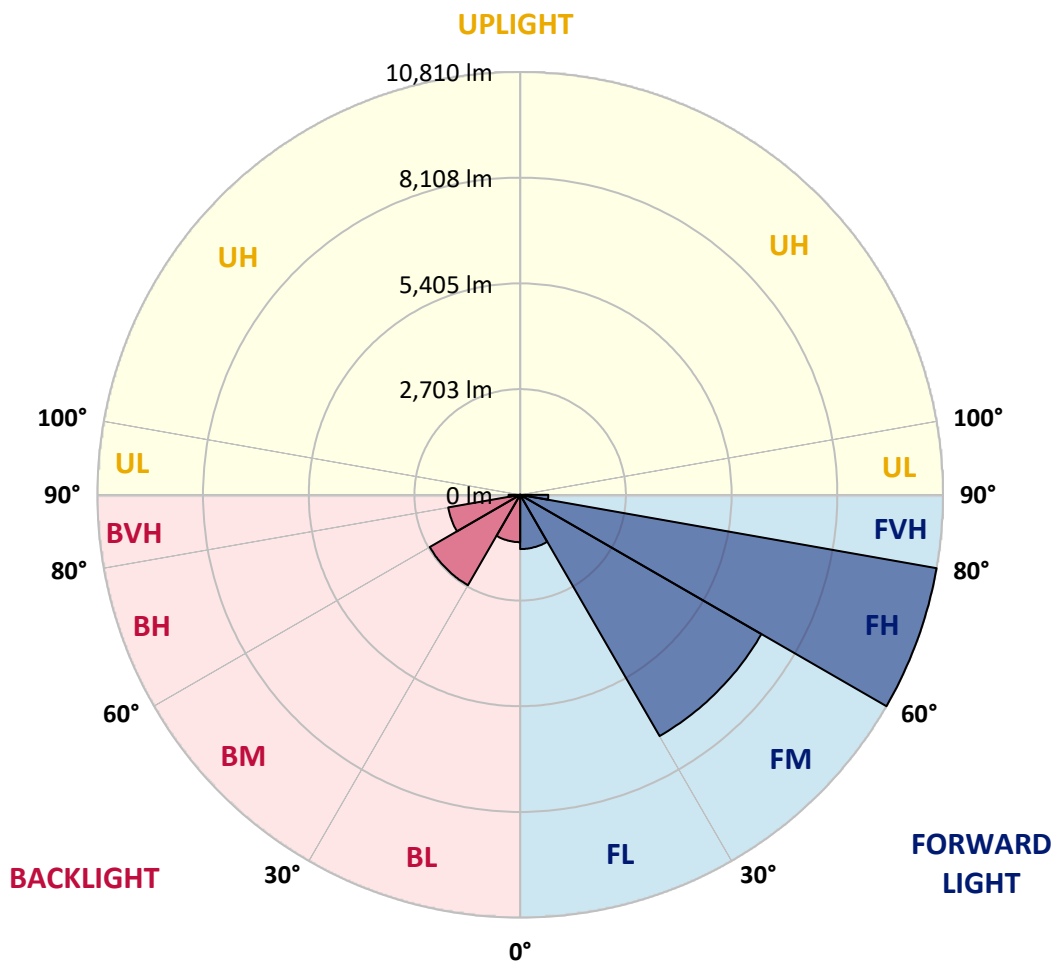
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1386.8	5.3			
FM	(30°-60°)	7121.9	27.3			
FH	(60°-80°)	10810.4	41.5			G4/12000
FVH	(80°-90°)	719.2	2.8			G4/750
BL	(0°-30°)	1210.1	4.6	B3/2500		
BM	(30°-60°)	2670.1	10.2	B3/5000		
BH	(60°-80°)	1867.1	7.2	B3/2500		G3/2500
BVH	(80°-90°)	294.5	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-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5
2.5°	2805.4	2785.1	2785.1	2770.0	2770.0	2744.6	2734.4	2729.4	2704.0	2688.7	2673.5
5°	2967.8	2942.5	2937.4	2901.9	2886.7	2830.7	2825.8	2790.2	2744.6	2699.0	2663.5
7.5°	3115.0	3099.7	3074.3	3038.8	2993.2	2922.1	2917.1	2861.3	2785.1	2724.3	2673.5
10°	3221.4	3211.4	3175.8	3130.1	3079.4	3008.5	3003.4	2942.5	2851.1	2780.2	2709.1
12.5°	3348.3	3333.2	3287.3	3226.5	3170.7	3104.8	3099.7	3048.9	2947.5	2856.3	2764.9
15°	3470.1	3449.8	3393.9	3333.2	3272.2	3216.4	3216.4	3160.5	3054.1	2947.5	2841.0
17.5°	3531.0	3520.7	3465.0	3399.0	3348.3	3307.6	3302.6	3252.0	3145.3	3033.8	2917.1
20°	3551.2	3556.3	3505.5	3434.5	3399.0	3378.7	3373.7	3338.1	3221.4	3115.0	3003.4
22.5°	3546.1	3561.4	3520.7	3444.7	3434.5	3434.5	3434.5	3393.9	3302.6	3196.1	3084.5
25°	3566.5	3586.8	3556.3	3465.0	3465.0	3485.2	3485.2	3465.0	3383.8	3292.5	3180.9
27.5°	3637.4	3652.7	3627.4	3500.4	3505.5	3536.0	3531.0	3536.0	3485.2	3399.0	3287.3
30°	3723.7	3744.0	3713.6	3556.3	3551.2	3581.6	3581.6	3607.1	3571.5	3480.3	3388.9
32.5°	3957.0	3952.1	3855.6	3617.1	3601.9	3632.3	3632.3	3657.8	3637.4	3566.5	3480.3
35°	4652.1	4576.0	4362.9	3815.0	3662.7	3678.0	3678.0	3723.7	3733.8	3678.0	3601.9
37.5°	5362.3	5337.0	5174.6	4342.6	3886.1	3774.5	3769.4	3835.4	3880.9	3835.4	3784.6
40°	6077.7	6057.5	6021.9	5047.8	4352.7	3947.0	3931.7	3987.5	4068.8	4038.2	4007.8
42.5°	6742.3	6732.1	6767.7	5742.9	4946.3	4317.3	4271.6	4205.7	4322.4	4312.3	4312.3
45°	7264.9	7290.1	7310.4	6392.2	5590.6	4794.2	4738.3	4515.2	4672.4	4713.0	4743.4
47.5°	7559.1	7579.3	7650.3	7026.4	6235.0	5347.2	5306.6	4941.2	5149.3	5271.1	5357.3
50°	7980.2	7924.3	7985.2	7645.3	7011.1	6067.5	5955.9	5514.5	5778.3	5991.4	6194.4
52.5°	8385.9	8294.6	8345.3	8360.5	7893.9	6772.7	6656.0	6189.3	6519.0	6853.9	7214.1
55°	8751.2	8746.2	8796.9	9055.6	8746.2	7528.5	7396.6	6935.1	7411.9	7772.0	8380.8
57.5°	9045.5	9096.1	9319.5	9862.2	9730.4	8350.5	8203.3	7802.6	8365.6	8725.9	9735.4
60°	9390.4	9471.5	9842.0	10547.1	10628.2	9212.8	9060.7	8771.5	9344.8	9710.0	11303.1
62.5°	9507.1	9623.8	10384.8	11267.5	11566.8	10156.4	10019.5	9826.6	10374.6	10704.5	12865.5
65°	8730.9	8954.1	10684.1	11637.8	12576.5	11293.0	11176.3	11008.8	11399.4	11617.6	13925.9
67.5°	8517.9	8619.3	10100.7	12170.5	13525.2	12754.0	12637.3	12348.1	12358.3	12267.0	14270.8
70°	8218.6	8330.2	9502.0	12571.3	14884.6	14752.8	14610.8	13758.4	13235.8	12682.9	13591.0
72.5°	7001.0	6965.5	8188.1	11490.7	15539.2	17228.6	17061.1	15275.3	13885.3	12322.7	11470.5
75°	3931.7	3830.3	4966.5	7949.7	14189.6	18212.6	18207.7	16041.4	13428.8	10734.8	7807.6
77.5°	1141.4	1111.1	1638.7	3333.2	9552.8	15823.3	16016.1	14468.7	11206.6	7711.2	4286.8
80°	537.7	547.8	705.2	1100.9	4078.8	10212.3	10765.3	9527.5	6696.5	3556.3	1770.5
82.5°	339.9	344.9	481.9	710.2	1724.8	4637.0	5093.5	4286.8	2653.2	1537.2	781.3
85°	213.1	213.1	319.5	466.7	1029.8	1481.3	1608.1	1461.1	1136.4	837.1	426.2
87.5°	116.7	116.7	192.7	269.0	563.1	476.9	492.1	583.4	710.2	512.5	213.1
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°	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5	2673.5
2.5°	2668.4	2658.4	2643.2	2638.1	2633.0	2627.9	2633.0	2643.2	2633.0	2633.0	2638.1
5°	2653.2	2643.2	2622.8	2622.8	2627.9	2633.0	2658.4	2673.5	2678.7	2678.7	2678.7
7.5°	2653.2	2638.1	2622.8	2627.9	2638.1	2658.4	2699.0	2724.3	2744.6	2749.6	2749.6
10°	2678.7	2658.4	2648.3	2658.4	2688.7	2704.0	2744.6	2785.1	2810.5	2820.7	2820.7
12.5°	2724.3	2704.0	2704.0	2724.3	2764.9	2785.1	2820.7	2851.1	2881.6	2896.8	2896.8
15°	2800.3	2775.0	2780.2	2815.6	2861.3	2881.6	2906.9	2917.1	2942.5	2962.7	2962.7
17.5°	2871.4	2846.0	2856.3	2896.8	2927.2	2937.4	2952.5	2947.5	2957.7	2972.9	2977.9
20°	2952.5	2927.2	2932.2	2957.7	2962.7	2952.5	2952.5	2937.4	2932.2	2957.7	2967.8
22.5°	3033.8	3008.5	3003.4	2988.1	2962.7	2937.4	2922.1	2906.9	2896.8	2922.1	2932.2
25°	3130.1	3094.7	3069.2	3003.4	2937.4	2891.7	2871.4	2861.3	2856.3	2881.6	2891.7
27.5°	3236.8	3201.2	3125.1	2983.0	2876.6	2800.3	2785.1	2785.1	2795.3	2810.5	2820.7
30°	3338.1	3302.6	3165.6	2937.4	2770.0	2658.4	2643.2	2658.4	2683.6	2699.0	2714.1
32.5°	3439.6	3404.0	3191.0	2866.3	2612.7	2470.7	2460.5	2485.9	2526.5	2536.5	2546.8
35°	3576.6	3541.1	3221.4	2764.9	2414.9	2262.7	2252.5	2267.7	2303.3	2318.4	2333.6
37.5°	3769.4	3749.0	3267.1	2653.2	2232.2	2064.8	2034.3	2024.2	2044.5	2039.4	2059.8
40°	4023.0	4038.2	3348.3	2506.1	2054.7	1882.2	1816.3	1785.8	1765.4	1724.8	1745.1
42.5°	4393.4	4403.5	3439.6	2338.7	1902.4	1709.7	1623.3	1567.6	1526.9	1461.1	1471.2
45°	4936.1	4849.9	3546.1	2161.1	1765.4	1572.8	1471.2	1405.3	1349.4	1293.6	1298.7
47.5°	5656.5	5392.7	3662.7	2014.1	1628.4	1461.1	1369.7	1293.6	1227.8	1182.1	1187.1
50°	6544.4	6067.5	3779.4	1877.1	1491.5	1374.9	1293.6	1212.5	1146.5	1100.9	1095.8
52.5°	7716.4	6879.2	3855.6	1724.8	1354.6	1298.7	1227.8	1151.5	1070.4	1014.6	1009.5
55°	8933.9	7822.8	3921.6	1542.2	1222.7	1212.5	1177.0	1090.7	994.3	923.3	913.1
57.5°	10273.1	8832.3	3972.2	1364.6	1121.2	1141.4	1131.3	1029.8	923.3	857.3	852.3
60°	11490.7	9877.5	3809.9	1207.4	1029.8	1070.4	1080.7	994.3	938.5	953.8	958.9
62.5°	12718.5	10684.1	3191.0	1090.7	969.0	1024.7	1111.1	1106.0	1080.7	1106.0	1111.1
65°	13159.8	10851.5	2262.7	994.3	908.0	1045.1	1207.4	1197.4	1080.7	1034.9	1024.7
67.5°	12911.2	10354.4	1522.0	918.2	862.5	1070.4	1308.9	1197.4	1040.0	979.2	958.9
70°	11729.2	9131.7	1116.1	842.2	821.9	1065.4	1364.6	1192.2	1019.7	953.8	928.4
72.5°	9354.9	7046.7	897.9	771.1	761.0	1040.0	1395.1	1182.1	999.5	928.4	897.9
75°	6057.5	4383.2	756.0	700.0	669.6	999.5	1379.8	1151.5	974.0	882.8	862.5
77.5°	2810.5	1887.2	644.3	618.9	583.4	938.5	1334.3	1090.7	918.2	832.0	806.7
80°	1308.9	892.8	542.8	537.7	522.5	887.9	1273.3	1019.7	852.3	781.3	740.7
82.5°	700.0	537.7	441.3	441.3	456.6	826.9	1197.4	933.5	766.1	730.5	624.1
85°	370.3	309.5	319.5	344.9	390.7	730.5	1095.8	842.2	669.6	558.0	542.8
87.5°	187.7	197.8	197.8	233.4	299.3	593.6	903.1	695.0	568.2	456.6	446.5
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)