

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: P237331

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237331
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-AF72-180-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22928.3 lumens
Efficiency: N/A
Efficacy: 126.7 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): 181
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

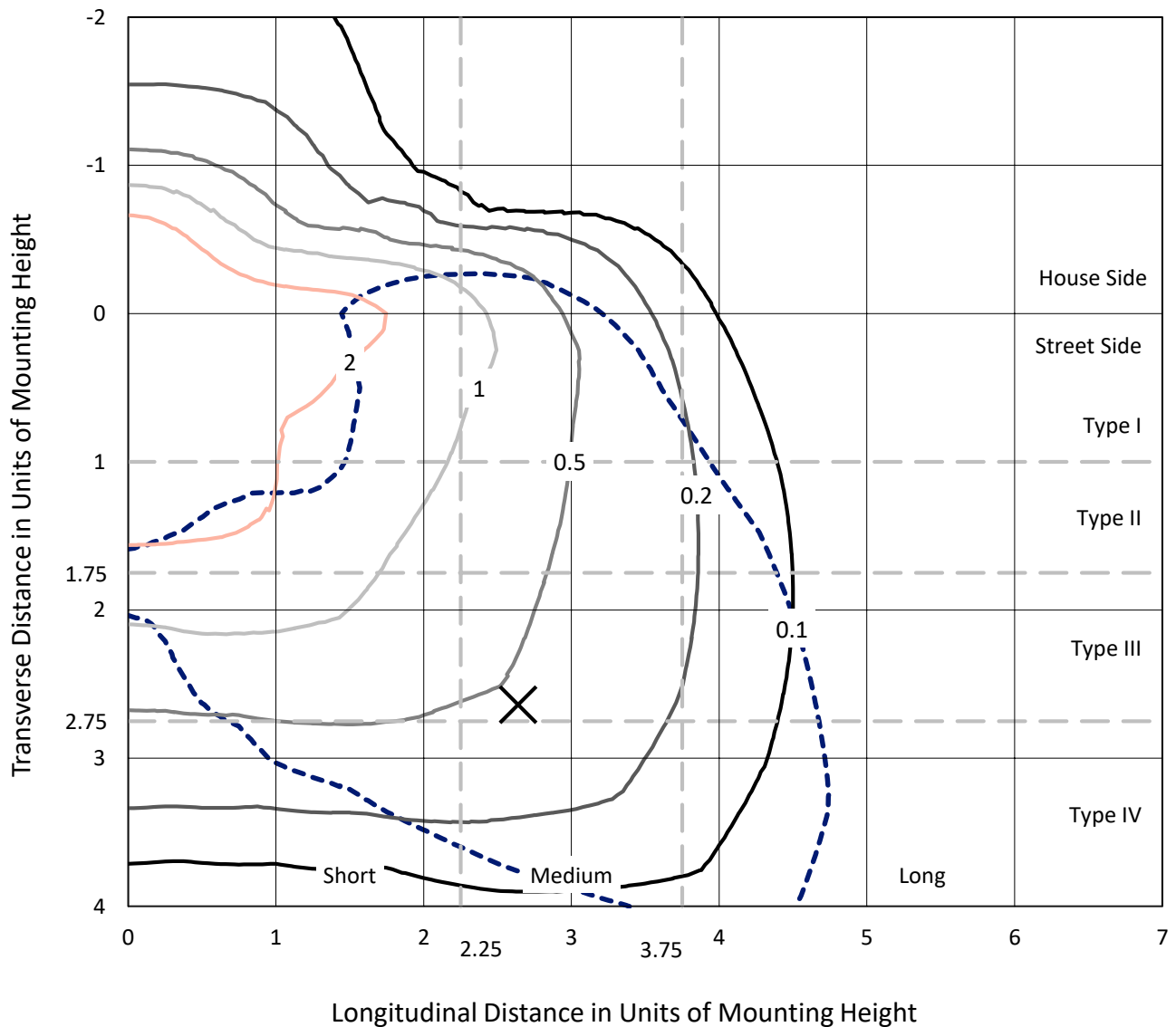


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

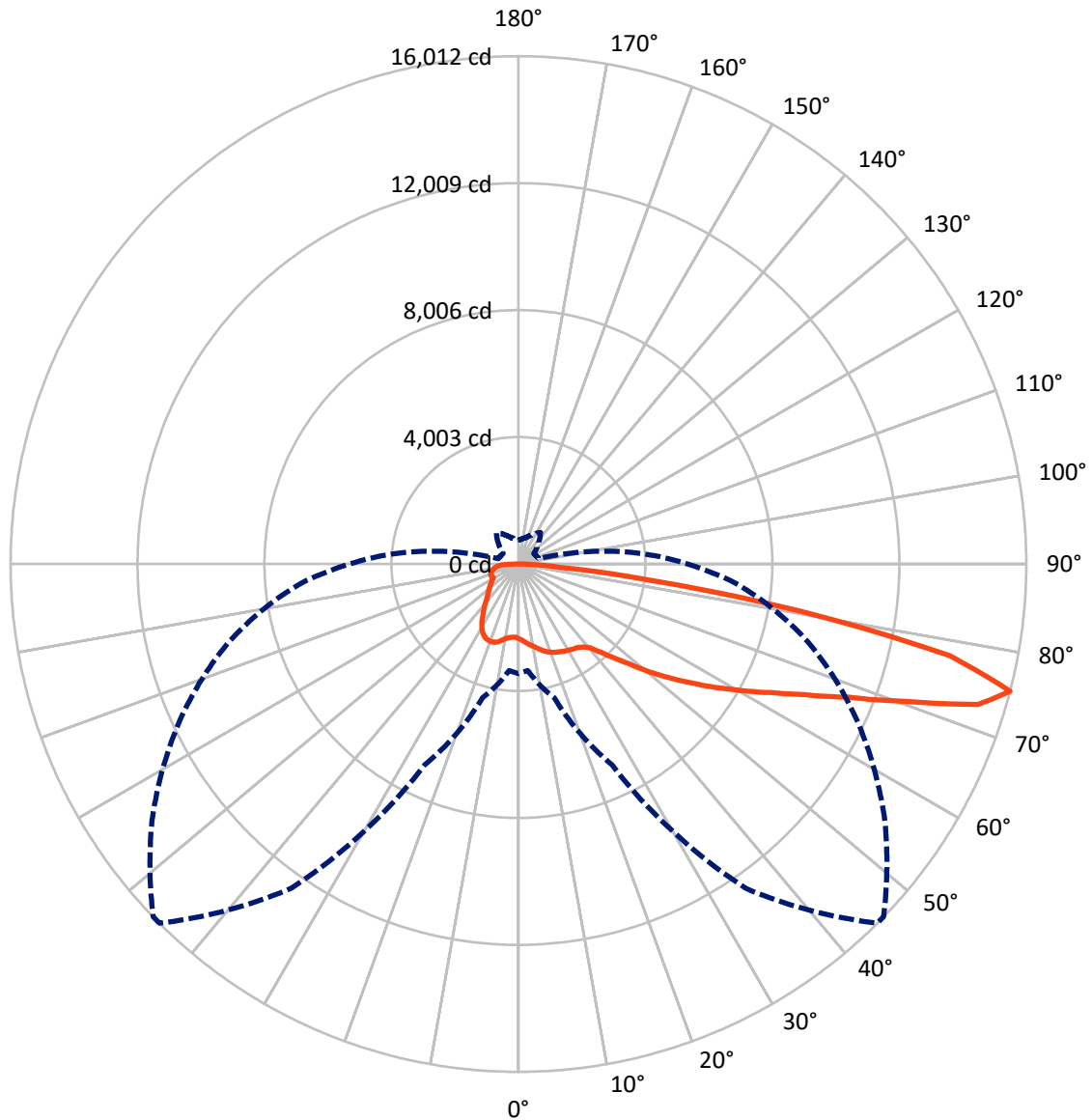


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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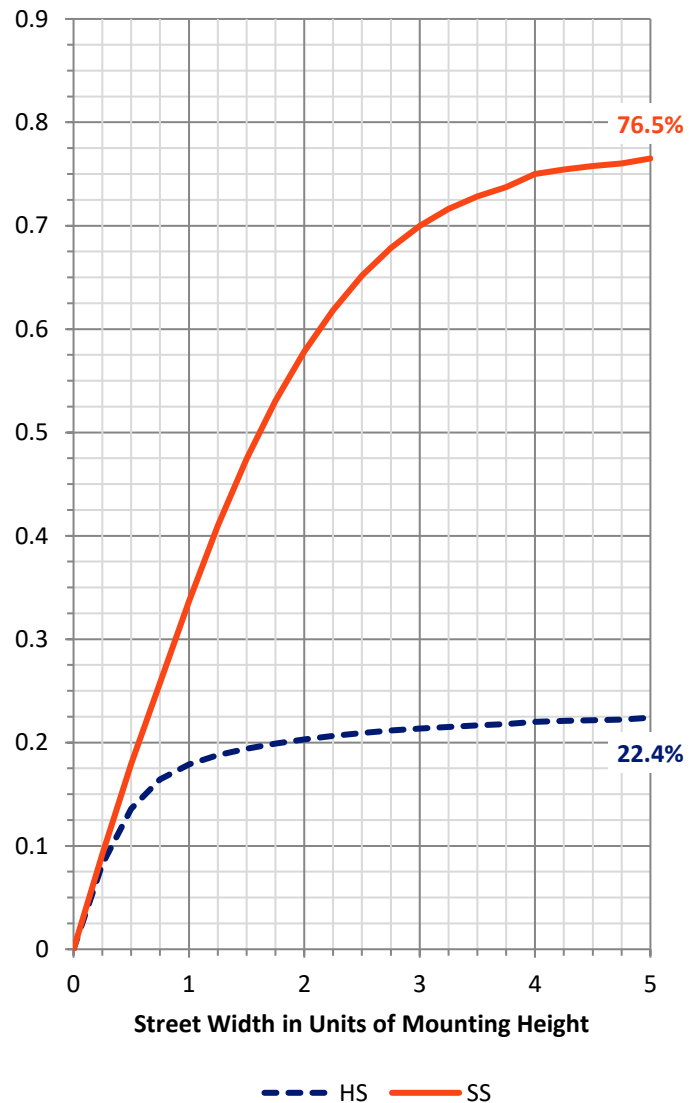
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5311.5	0.0	5311.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	17616.8	0.0	17616.8
	% Fixture	76.8	0.0	76.8
Total	Lumens	22928.3	0.0	22928.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.9	1.0
10°-20°	754.8	3.3
20°-30°	1295.3	5.6
30°-40°	1811.6	7.9
40°-50°	2657.5	11.6
50°-60°	4139.6	18.1
60°-70°	5956.6	26.0
70°-80°	5188.9	22.6
80°-90°	891.1	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°	22928.3	100.0
0°-180°	22928.3	100.0

Coefficient of Utilization



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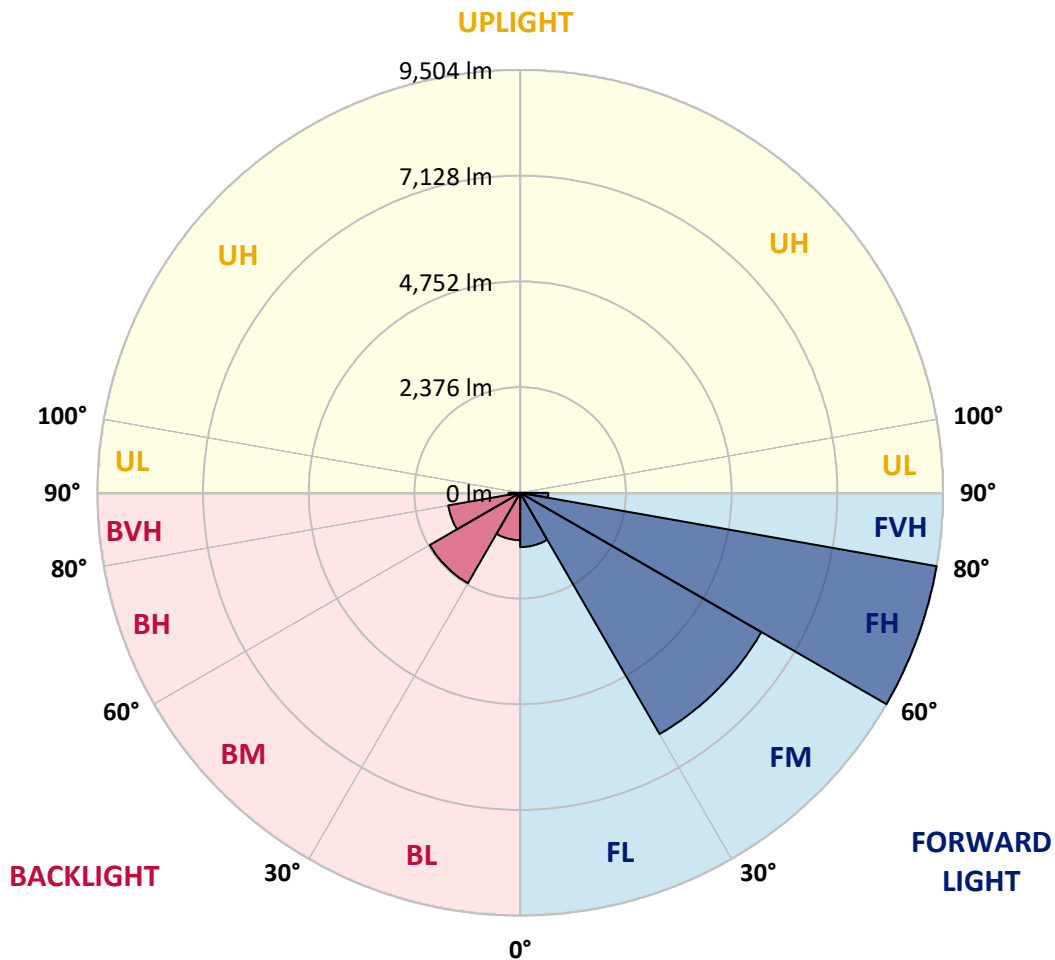
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1219.2	5.3			
FM	(30°-60°)	6261.3	27.3			
FH	(60°-80°)	9504.0	41.5			G4/12000
FVH	(80°-90°)	632.2	2.8			G4/750
BL	(0°-30°)	1063.8	4.6	B3/2500		
BM	(30°-60°)	2347.4	10.2	B2/2500		
BH	(60°-80°)	1641.4	7.2	B3/2500		G3/2500
BVH	(80°-90°)	258.9	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°	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5
2.5°	2466.4	2448.6	2448.6	2435.2	2435.2	2412.9	2404.0	2399.5	2377.2	2363.8	2350.5
5°	2609.1	2586.8	2582.4	2551.2	2537.8	2488.7	2484.3	2453.0	2412.9	2372.8	2341.5
7.5°	2738.5	2725.1	2702.8	2671.6	2631.4	2569.0	2564.5	2515.5	2448.6	2395.1	2350.5
10°	2832.1	2823.2	2792.0	2751.9	2707.3	2644.8	2640.4	2586.8	2506.6	2444.1	2381.7
12.5°	2943.6	2930.3	2890.1	2836.6	2787.5	2729.6	2725.1	2680.5	2591.3	2511.0	2430.7
15°	3050.7	3032.8	2983.8	2930.3	2876.7	2827.7	2827.7	2778.6	2685.0	2591.3	2497.6
17.5°	3104.2	3095.3	3046.2	2988.2	2943.6	2908.0	2903.5	2858.9	2765.2	2667.1	2564.5
20°	3122.0	3126.5	3081.9	3019.5	2988.2	2970.4	2965.9	2934.7	2832.1	2738.5	2640.4
22.5°	3117.6	3131.0	3095.3	3028.4	3019.5	3019.5	3019.5	2983.8	2903.5	2809.8	2711.7
25°	3135.4	3153.3	3126.5	3046.2	3046.2	3064.1	3064.1	3046.2	2974.9	2894.6	2796.5
27.5°	3197.9	3211.2	3188.9	3077.4	3081.9	3108.7	3104.2	3108.7	3064.1	2988.2	2890.1
30°	3273.7	3291.5	3264.8	3126.5	3122.0	3148.8	3148.8	3171.1	3139.9	3059.6	2979.3
32.5°	3478.9	3474.5	3389.6	3180.0	3166.6	3193.4	3193.4	3215.7	3197.9	3135.4	3059.6
35°	4090.0	4023.1	3835.8	3354.1	3220.2	3233.5	3233.5	3273.7	3282.6	3233.5	3166.6
37.5°	4714.4	4692.1	4549.4	3817.9	3416.5	3318.4	3313.8	3371.9	3412.0	3371.9	3327.2
40°	5343.3	5325.4	5294.2	4437.9	3826.8	3470.0	3456.6	3505.7	3577.1	3550.3	3523.5
42.5°	5927.5	5918.6	5949.8	5048.9	4348.7	3795.6	3755.5	3697.5	3800.1	3791.2	3791.2
45°	6386.9	6409.2	6427.1	5619.8	4915.1	4214.9	4165.8	3969.6	4107.8	4143.5	4170.3
47.5°	6645.6	6663.4	6725.9	6177.3	5481.5	4701.0	4665.3	4344.2	4527.1	4634.1	4709.9
50°	7015.8	6966.7	7020.2	6721.4	6163.9	5334.3	5236.2	4848.2	5080.1	5267.4	5445.8
52.5°	7372.6	7292.3	7336.9	7350.3	6940.0	5954.3	5851.7	5441.4	5731.3	6025.6	6342.3
55°	7693.7	7689.2	7733.8	7961.3	7689.2	6618.8	6502.9	6097.0	6516.3	6832.9	7368.1
57.5°	7952.4	7997.0	8193.2	8670.5	8554.5	7341.4	7212.0	6859.7	7354.7	7671.4	8559.0
60°	8255.7	8327.0	8652.6	9272.6	9343.9	8099.6	7965.8	7711.5	8215.5	8536.7	9937.1
62.5°	8358.3	8460.8	9129.8	9905.9	10169.1	8929.1	8808.7	8639.2	9120.9	9410.8	11310.9
65°	7675.9	7872.1	9393.0	10231.6	11056.7	9928.2	9825.6	9678.4	10022.0	10213.7	12243.1
67.5°	7488.5	7577.7	8880.1	10699.9	11890.7	11212.8	11110.2	10856.0	10864.9	10784.6	12546.4
70°	7225.4	7323.5	8353.8	11052.2	13086.0	12970.1	12845.2	12095.9	11636.5	11150.4	11948.7
72.5°	6155.0	6123.8	7198.6	10102.2	13661.4	15146.6	14999.4	13429.4	12207.4	10833.7	10084.4
75°	3456.6	3367.3	4366.5	6989.0	12475.0	16011.8	16007.4	14102.9	11806.0	9437.6	6864.1
77.5°	1003.5	976.8	1440.6	2930.3	8398.4	13911.1	14080.6	12720.3	9852.4	6779.4	3768.9
80°	472.8	481.7	619.9	967.8	3586.0	8978.2	9464.4	8376.1	5887.4	3126.5	1556.6
82.5°	298.8	303.3	423.7	624.4	1516.4	4076.6	4478.0	3768.9	2332.6	1351.4	686.8
85°	187.3	187.3	281.0	410.3	905.4	1302.3	1413.8	1284.5	999.1	735.9	374.6
87.5°	102.6	102.6	169.5	236.4	495.1	419.2	432.6	512.9	624.4	450.5	187.3
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°	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5	2350.5
2.5°	2346.0	2337.1	2323.7	2319.2	2314.8	2310.3	2314.8	2323.7	2314.8	2314.8	2319.2
5°	2332.6	2323.7	2305.9	2305.9	2310.3	2314.8	2337.1	2350.5	2354.9	2354.9	2354.9
7.5°	2332.6	2319.2	2305.9	2310.3	2319.2	2337.1	2372.8	2395.1	2412.9	2417.4	2417.4
10°	2354.9	2337.1	2328.2	2337.1	2363.8	2377.2	2412.9	2448.6	2470.9	2479.8	2479.8
12.5°	2395.1	2377.2	2377.2	2395.1	2430.7	2448.6	2479.8	2506.6	2533.3	2546.7	2546.7
15°	2462.0	2439.7	2444.1	2475.3	2515.5	2533.3	2555.6	2564.5	2586.8	2604.7	2604.7
17.5°	2524.4	2502.1	2511.0	2546.7	2573.5	2582.4	2595.8	2591.3	2600.2	2613.6	2618.1
20°	2595.8	2573.5	2577.9	2600.2	2604.7	2595.8	2595.8	2582.4	2577.9	2600.2	2609.1
22.5°	2667.1	2644.8	2640.4	2627.0	2604.7	2582.4	2569.0	2555.6	2546.7	2569.0	2577.9
25°	2751.9	2720.6	2698.3	2640.4	2582.4	2542.2	2524.4	2515.5	2511.0	2533.3	2542.2
27.5°	2845.5	2814.3	2747.4	2622.5	2528.9	2462.0	2448.6	2448.6	2457.5	2470.9	2479.8
30°	2934.7	2903.5	2783.1	2582.4	2435.2	2337.1	2323.7	2337.1	2359.4	2372.8	2386.1
32.5°	3023.9	2992.7	2805.4	2519.9	2296.9	2172.1	2163.1	2185.4	2221.1	2230.0	2239.0
35°	3144.3	3113.1	2832.1	2430.7	2123.0	1989.2	1980.3	1993.6	2024.9	2038.2	2051.6
37.5°	3313.8	3296.0	2872.3	2332.6	1962.4	1815.2	1788.5	1779.6	1797.4	1792.9	1810.8
40°	3536.9	3550.3	2943.6	2203.3	1806.3	1654.7	1596.7	1569.9	1552.1	1516.4	1534.3
42.5°	3862.5	3871.4	3023.9	2056.1	1672.5	1503.0	1427.2	1378.2	1342.5	1284.5	1293.4
45°	4339.7	4263.9	3117.6	1900.0	1552.1	1382.6	1293.4	1235.4	1186.4	1137.3	1141.8
47.5°	4973.1	4741.1	3220.2	1770.6	1431.7	1284.5	1204.2	1137.3	1079.3	1039.2	1043.7
50°	5753.6	5334.3	3322.7	1650.2	1311.3	1208.7	1137.3	1066.0	1008.0	967.8	963.4
52.5°	6783.9	6047.9	3389.6	1516.4	1190.8	1141.8	1079.3	1012.4	941.1	892.0	887.6
55°	7854.3	6877.5	3447.7	1355.9	1074.9	1066.0	1034.7	958.9	874.2	811.7	802.8
57.5°	9031.7	7765.1	3492.3	1199.8	985.7	1003.5	994.6	905.4	811.7	753.8	749.3
60°	10102.2	8683.8	3349.6	1061.5	905.4	941.1	950.0	874.2	825.1	838.5	843.0
62.5°	11181.6	9393.0	2805.4	958.9	851.9	900.9	976.8	972.3	950.0	972.3	976.8
65°	11569.6	9540.2	1989.2	874.2	798.4	918.8	1061.5	1052.6	950.0	909.9	900.9
67.5°	11351.1	9103.1	1338.0	807.3	758.2	941.1	1150.7	1052.6	914.3	860.8	843.0
70°	10311.9	8028.2	981.2	740.4	722.5	936.6	1199.8	1048.1	896.5	838.5	816.2
72.5°	8224.5	6195.1	789.4	677.9	669.0	914.3	1226.5	1039.2	878.6	816.2	789.4
75°	5325.4	3853.6	664.5	615.5	588.7	878.6	1213.1	1012.4	856.3	776.1	758.2
77.5°	2470.9	1659.1	566.4	544.1	512.9	825.1	1173.0	958.9	807.3	731.5	709.1
80°	1150.7	785.0	477.2	472.8	459.4	780.5	1119.5	896.5	749.3	686.8	651.2
82.5°	615.5	472.8	388.0	388.0	401.4	727.0	1052.6	820.7	673.5	642.2	548.6
85°	325.6	272.1	281.0	303.3	343.4	642.2	963.4	740.4	588.7	490.6	477.2
87.5°	165.0	173.9	173.9	205.2	263.1	521.8	793.9	611.0	499.5	401.4	392.5
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)