

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: P400036

Luminaire Tested: **ARCH-L-PA3-220-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400036  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-220-827-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22660 lumens  
Efficiency: N/A  
Efficacy: 102.1 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

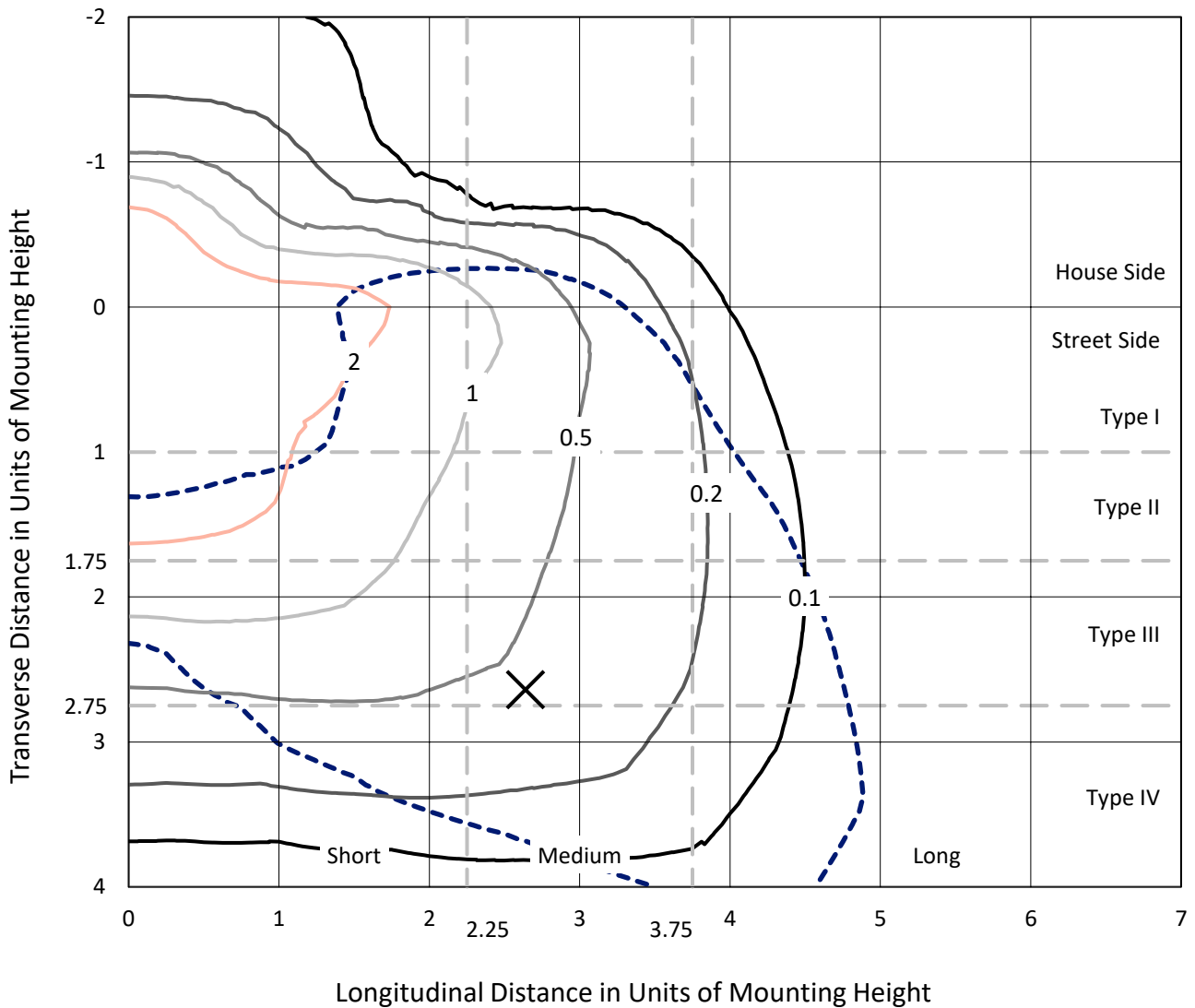
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

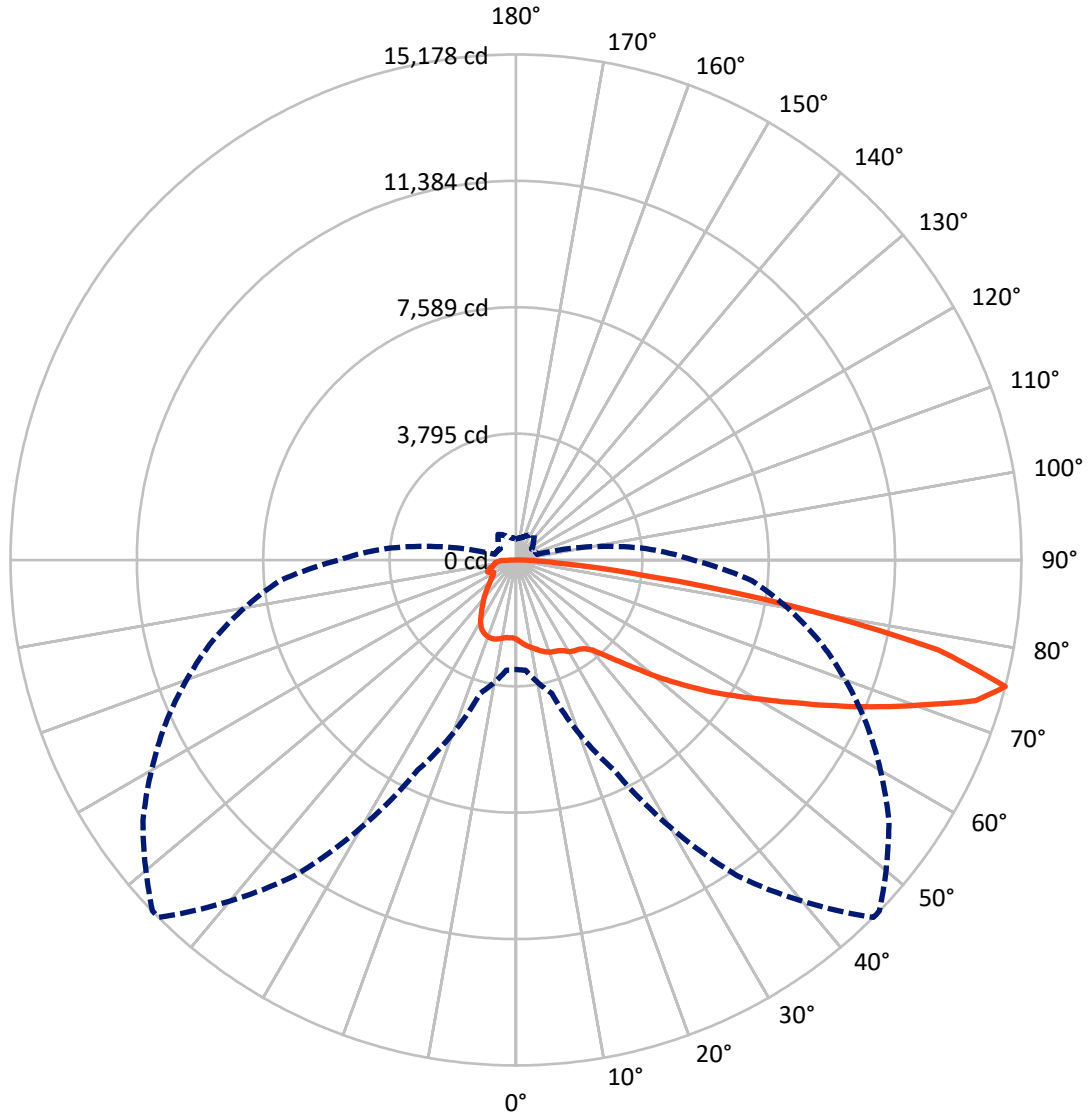
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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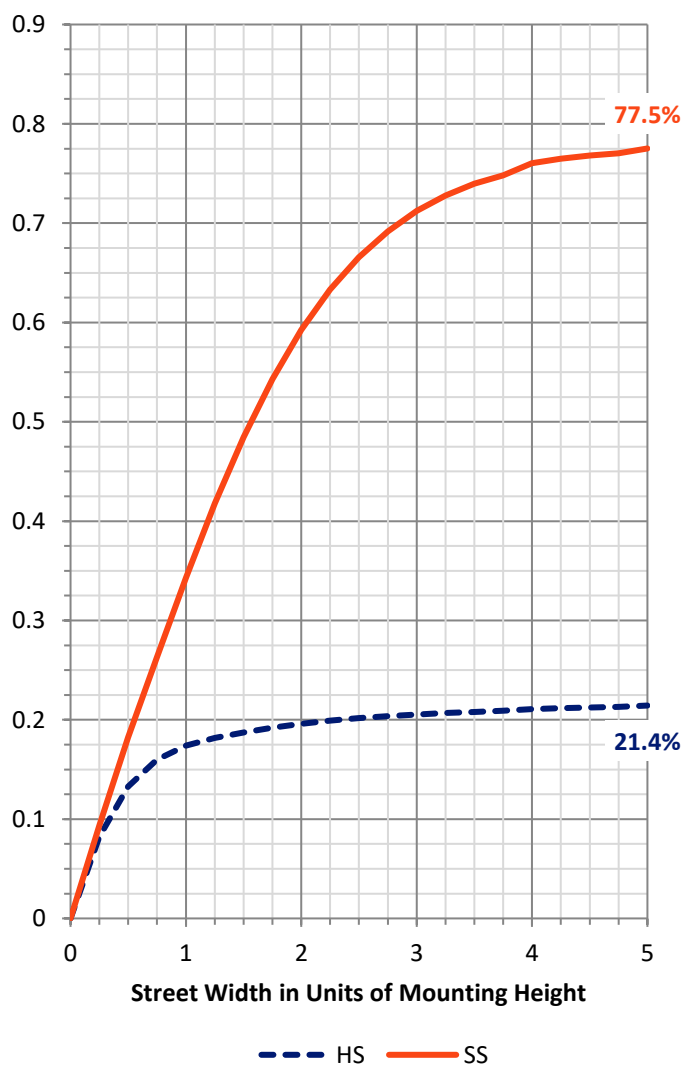
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5007.7	0.0	5007.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	17652.3	0.0	17652.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	22660.0	0.0	22660.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.4	1.0
10°-20°	749.0	3.3
20°-30°	1276.9	5.6
30°-40°	1789.1	7.9
40°-50°	2628.5	11.6
50°-60°	4183.2	18.5
60°-70°	5950.7	26.3
70°-80°	4982.5	22.0
80°-90°	864.7	3.8
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°	22660.0	100.0
0°-180°	22660.0	100.0

**Coefficient of Utilization**

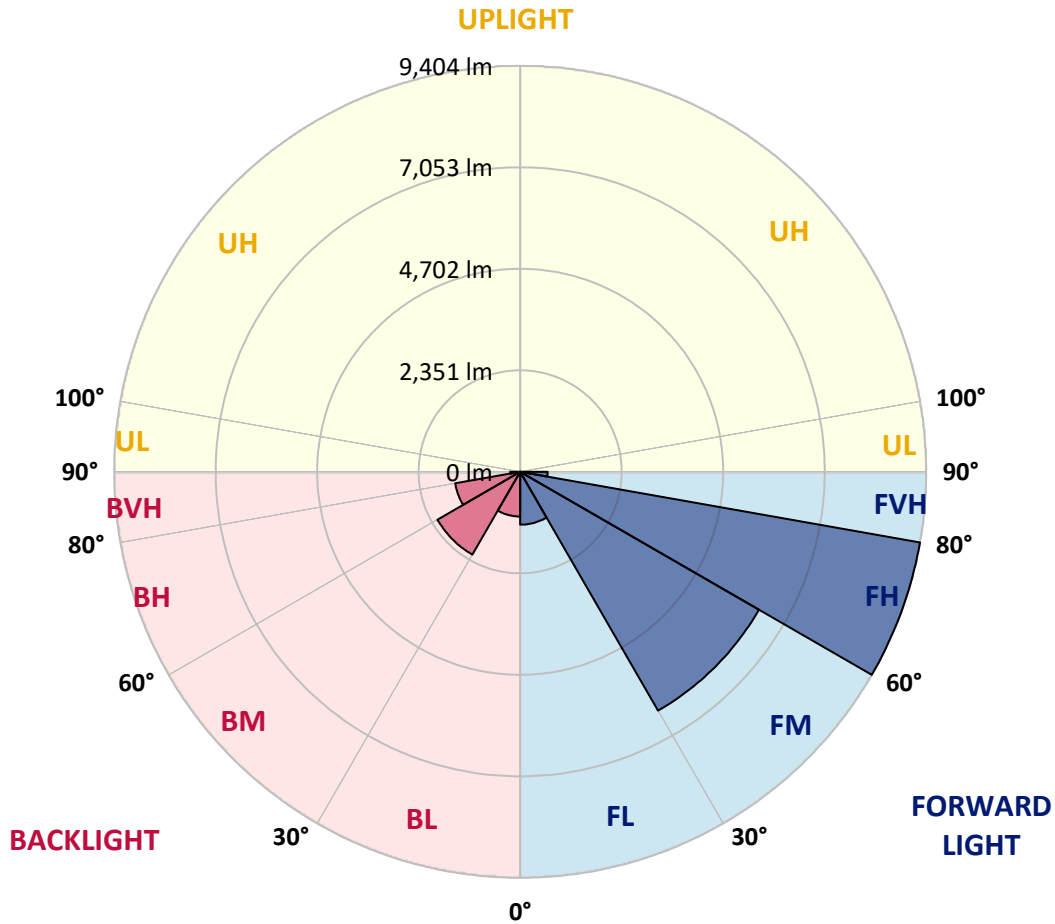


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1224.9	5.4			
FM (30°-60°)	6387.2	28.2			
FH (60°-80°)	9404.5	41.5			G4/12000
FVH (80°-90°)	635.7	2.8			G4/750
BL (0°-30°)	1036.4	4.6	B3/2500		
BM (30°-60°)	2213.7	9.8	B2/2500		
BH (60°-80°)	1528.7	6.7	B3/2500		G3/2500
BVH (80°-90°)	229.0	1.0			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°	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8
2.5°	2516.0	2503.9	2497.9	2497.9	2473.7	2458.5	2455.5	2434.3	2416.1	2398.0	2382.8
5°	2661.4	2652.3	2634.1	2619.0	2585.7	2543.3	2537.2	2491.8	2446.4	2404.0	2367.7
7.5°	2794.6	2776.4	2755.2	2725.0	2670.5	2612.9	2603.8	2540.3	2476.7	2413.1	2364.7
10°	2906.6	2888.5	2858.2	2815.8	2746.2	2676.5	2667.4	2600.8	2534.2	2458.5	2388.9
12.5°	3012.6	2997.5	2952.0	2894.5	2812.8	2749.2	2740.1	2682.6	2612.9	2528.2	2437.3
15°	3103.4	3088.3	3039.8	2973.2	2879.4	2830.9	2818.8	2764.3	2694.7	2603.8	2510.0
17.5°	3148.8	3148.8	3097.4	3024.7	2936.9	2900.6	2891.5	2824.9	2761.3	2673.5	2579.6
20°	3164.0	3170.0	3133.7	3045.9	2970.2	2955.1	2946.0	2891.5	2818.8	2734.0	2646.2
22.5°	3173.1	3185.2	3154.9	3055.0	2991.4	2982.3	2976.3	2939.9	2882.4	2800.7	2712.8
25°	3203.3	3203.3	3182.1	3070.1	3018.6	3015.6	3015.6	2994.4	2955.1	2885.4	2797.6
27.5°	3248.8	3245.7	3218.5	3103.4	3079.2	3088.3	3085.3	3082.2	3055.0	2985.3	2891.5
30°	3324.4	3324.4	3294.2	3170.0	3154.9	3194.3	3197.3	3203.3	3161.0	3052.0	2976.3
32.5°	3439.5	3427.4	3397.1	3236.6	3212.4	3248.8	3254.8	3251.8	3215.4	3112.5	3076.2
35°	3793.7	3766.5	3657.5	3385.0	3263.9	3285.1	3288.1	3303.3	3309.3	3227.6	3209.4
37.5°	4414.4	4378.1	4211.6	3736.2	3427.4	3375.9	3372.9	3412.3	3445.6	3372.9	3372.9
40°	5089.6	5059.3	4962.4	4341.8	3730.2	3560.6	3548.5	3584.8	3627.2	3575.7	3590.9
42.5°	5670.9	5695.2	5704.2	4983.6	4184.3	3905.8	3872.5	3821.0	3887.6	3842.2	3902.7
45°	6106.9	6094.8	6261.3	5640.7	4771.7	4338.7	4293.3	4154.0	4238.8	4235.8	4369.0
47.5°	6570.2	6549.0	6618.6	6258.3	5440.8	4868.6	4799.0	4593.1	4720.2	4808.0	5029.1
50°	7009.2	7015.3	7039.5	6745.8	6167.5	5513.5	5425.7	5150.2	5331.8	5516.5	5828.4
52.5°	7581.4	7539.0	7508.8	7315.0	6981.9	6185.7	6128.1	5813.2	6067.6	6285.6	6700.4
55°	8081.0	8053.8	8035.6	8026.5	7663.2	6927.4	6866.9	6539.9	6906.3	7060.7	7672.3
57.5°	8613.9	8598.8	8695.6	8850.1	8704.7	7681.4	7617.8	7302.9	7711.6	7820.6	8725.9
60°	9004.5	9013.6	9280.0	9673.6	9573.7	8498.8	8423.1	8144.6	8495.8	8592.7	9779.6
62.5°	9007.5	9098.3	9716.0	10421.4	10536.5	9440.5	9352.7	9049.9	9301.2	9301.2	10724.2
65°	8147.6	8250.6	9637.3	10606.1	11511.4	10560.7	10475.9	10000.6	10094.5	9967.3	11611.3
67.5°	7290.8	7411.9	8716.8	10621.3	12195.7	11759.7	11659.8	10951.3	10790.8	10469.9	12232.0
70°	6721.6	6806.3	7896.3	10424.5	12607.5	13013.2	12937.5	11853.6	11338.8	10890.7	12101.8
72.5°	5658.8	5628.6	6670.1	9488.9	12837.6	14436.2	14372.6	12834.5	11814.2	10690.9	10321.5
75°	3285.1	3321.4	4138.9	6951.7	11572.0	15178.0	15172.0	13673.2	11605.3	9443.5	7112.1
77.5°	947.7	974.9	1359.5	3055.0	7318.0	12946.6	13361.4	12504.5	9809.8	6730.6	3687.8
80°	414.8	436.0	590.4	1017.3	3151.9	8456.5	8819.8	8456.5	5916.2	3088.3	1447.3
82.5°	245.2	260.4	384.5	629.8	1510.8	4023.9	4514.3	3942.1	2552.4	1311.0	599.5
85°	139.3	145.3	221.0	399.7	950.7	1407.9	1580.5	1480.6	1244.4	744.8	314.9
87.5°	63.6	66.6	109.0	187.7	532.9	475.4	493.5	654.0	720.6	454.2	157.4
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°	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8	2379.8
2.5°	2376.8	2367.7	2349.5	2343.5	2334.4	2337.4	2340.4	2340.4	2343.5	2334.4	2334.4
5°	2352.5	2337.4	2319.2	2319.2	2319.2	2343.5	2364.7	2376.8	2382.8	2382.8	2376.8
7.5°	2343.5	2325.3	2304.1	2310.2	2316.2	2346.5	2385.9	2425.2	2437.3	2437.3	2431.3
10°	2361.6	2343.5	2328.3	2337.4	2352.5	2376.8	2407.0	2443.4	2473.7	2476.7	2473.7
12.5°	2404.0	2382.8	2367.7	2385.9	2404.0	2419.2	2434.3	2449.4	2488.8	2494.8	2494.8
15°	2473.7	2452.5	2434.3	2449.4	2455.5	2455.5	2455.5	2455.5	2494.8	2500.9	2500.9
17.5°	2543.3	2525.1	2507.0	2510.0	2491.8	2467.6	2458.5	2455.5	2476.7	2494.8	2497.9
20°	2609.9	2594.8	2576.6	2546.3	2500.9	2455.5	2440.4	2440.4	2452.5	2479.7	2479.7
22.5°	2682.6	2664.4	2634.1	2564.5	2488.8	2425.2	2410.1	2419.2	2434.3	2470.6	2467.6
25°	2764.3	2740.1	2688.6	2558.4	2449.4	2373.7	2376.8	2404.0	2431.3	2470.6	2470.6
27.5°	2855.1	2821.8	2718.9	2510.0	2361.6	2289.0	2316.2	2379.8	2419.2	2461.5	2467.6
30°	2955.1	2924.8	2743.1	2425.2	2219.3	2152.7	2219.3	2322.3	2382.8	2422.2	2431.3
32.5°	3076.2	3052.0	2764.3	2316.2	2034.6	1977.1	2074.0	2201.2	2298.0	2343.5	2352.5
35°	3227.6	3203.3	2791.6	2192.1	1862.1	1801.5	1889.3	2019.5	2146.7	2204.2	2222.4
37.5°	3424.4	3388.0	2815.8	2058.9	1716.7	1647.1	1689.5	1807.6	1922.6	2001.3	2022.5
40°	3675.7	3618.1	2837.0	1907.5	1589.6	1510.8	1526.0	1583.5	1650.1	1719.8	1747.0
42.5°	4029.9	3914.9	2840.0	1747.0	1459.4	1386.7	1380.6	1398.8	1398.8	1398.8	1407.9
45°	4523.4	4305.4	2846.1	1595.6	1326.1	1250.5	1232.3	1226.2	1180.8	1093.0	1087.0
47.5°	5147.1	4817.1	2873.3	1468.4	1186.9	1120.3	1096.0	1071.8	987.0	896.2	878.0
50°	5946.5	5410.6	2927.8	1347.3	1068.8	1023.4	993.1	935.6	841.7	772.1	753.9
52.5°	6866.9	6116.0	2979.3	1220.2	981.0	950.7	914.4	844.7	744.8	702.4	696.4
55°	7923.6	6903.2	3082.2	1108.1	905.3	884.1	850.8	784.2	708.5	678.2	675.2
57.5°	9004.5	7784.3	3227.6	1008.2	832.6	820.5	820.5	763.0	714.5	702.4	702.4
60°	10046.0	8541.2	3115.5	914.4	766.0	772.1	829.6	814.5	778.1	793.3	802.3
62.5°	10854.4	8986.3	2528.2	838.7	717.6	772.1	920.4	920.4	878.0	872.0	872.0
65°	11199.6	8980.2	1777.3	781.2	699.4	847.8	1026.4	978.0	865.9	823.5	814.5
67.5°	11111.8	8586.6	1226.2	741.8	693.4	926.5	1074.8	938.6	811.4	775.1	747.8
70°	10339.7	7754.0	944.7	705.5	684.3	893.2	1059.7	893.2	769.0	735.7	711.5
72.5°	8341.4	6219.0	784.2	669.1	647.9	826.6	1008.2	850.8	735.7	699.4	675.2
75°	5319.7	3911.8	663.1	620.7	578.3	741.8	938.6	808.4	699.4	651.0	632.8
77.5°	2558.4	1686.4	578.3	563.2	520.8	687.3	869.0	753.9	651.0	611.6	599.5
80°	1035.5	772.1	502.6	505.6	478.4	654.0	820.5	702.4	602.5	560.1	538.9
82.5°	538.9	448.1	423.9	436.0	436.0	623.7	784.2	660.0	560.1	542.0	472.3
85°	290.7	278.6	327.0	351.2	378.5	563.2	729.7	614.6	511.7	439.0	423.9
87.5°	142.3	181.7	184.7	211.9	263.4	451.1	614.6	514.7	426.9	354.2	348.2
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)