

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: P237315

Luminaire Tested: **ARCH-L-AF72-220-D-U-T4W-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237315  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-T4W-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 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: 25089.2 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

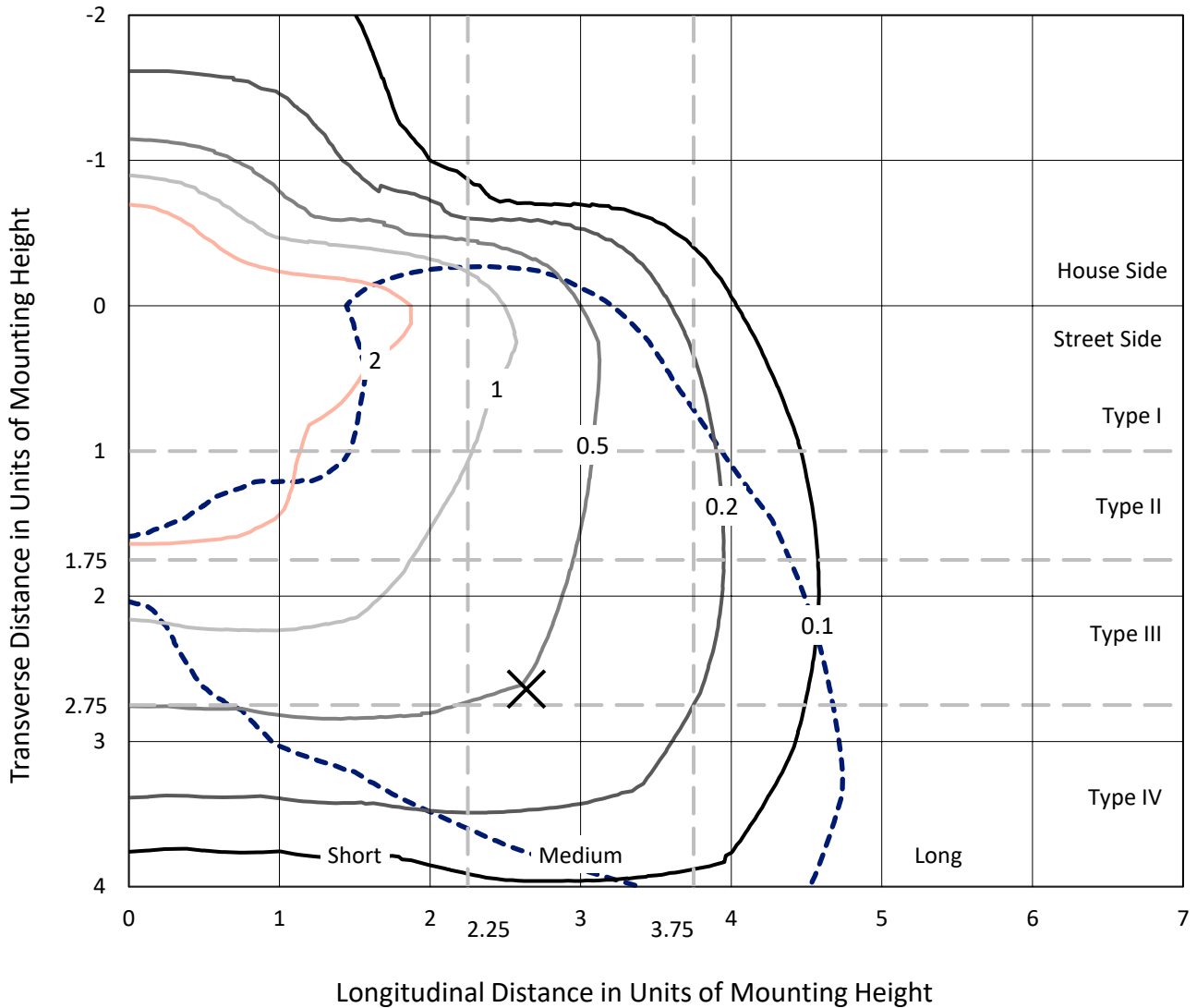
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

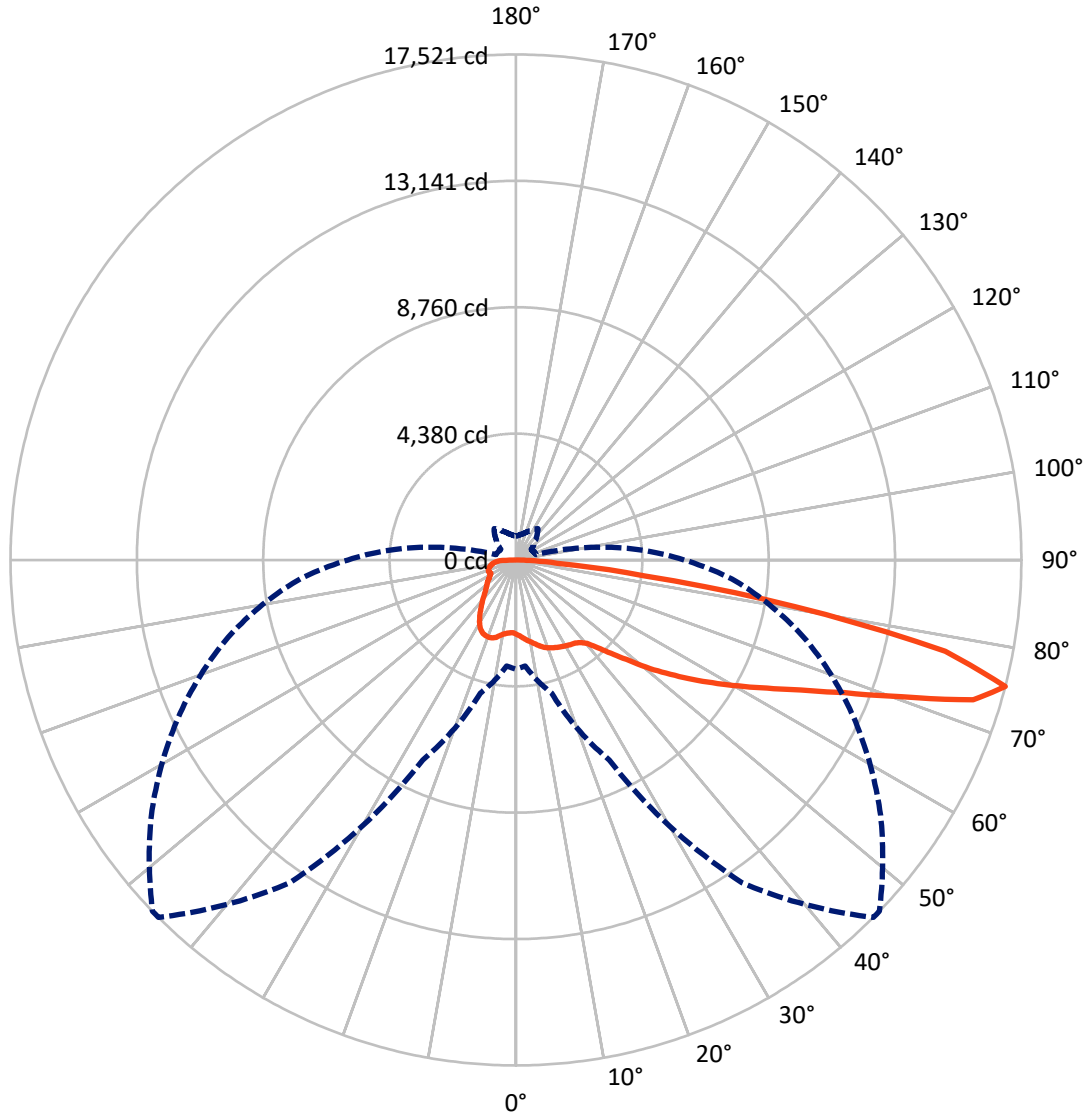
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 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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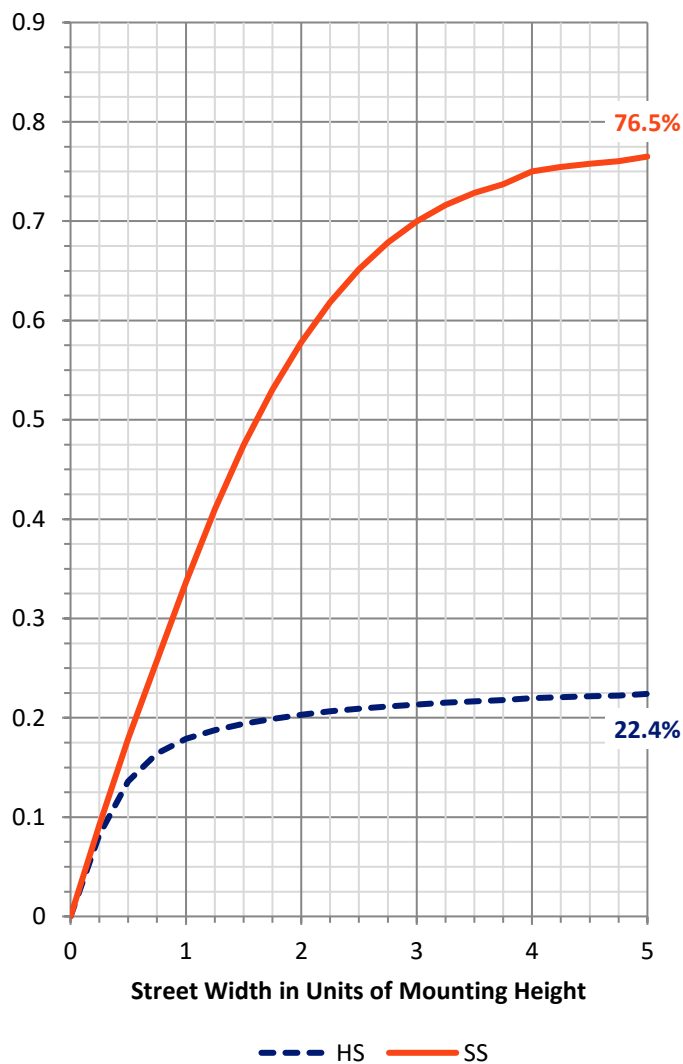
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5812.1	0.0	5812.1
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	19277.1	0.0	19277.1
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	25089.2	0.0	25089.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.9	1.0
10°-20°	826.0	3.3
20°-30°	1417.4	5.6
30°-40°	1982.3	7.9
40°-50°	2907.9	11.6
50°-60°	4529.8	18.1
60°-70°	6518.0	26.0
70°-80°	5677.9	22.6
80°-90°	975.1	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°	25089.2	100.0
0°-180°	25089.2	100.0

**Coefficient of Utilization**



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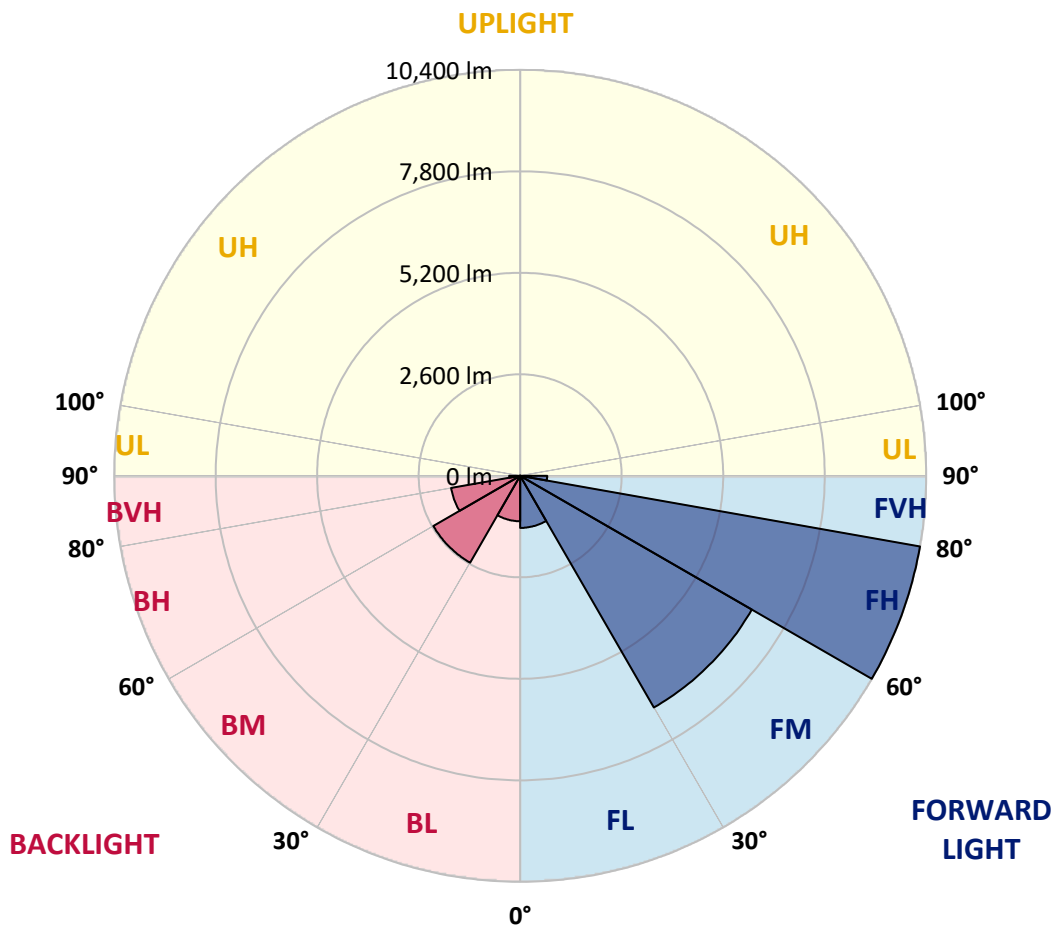
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1334.2	5.3			
FM (30°-60°)	6851.4	27.3			
FH (60°-80°)	10399.7	41.5			G4/12000
FVH (80°-90°)	691.8	2.8			G4/750
BL (0°-30°)	1164.1	4.6	B3/2500		
BM (30°-60°)	2568.7	10.2	B3/5000		
BH (60°-80°)	1796.1	7.2	B3/2500		G3/2500
BVH (80°-90°)	283.3	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°	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0
2.5°	2698.9	2679.4	2679.4	2664.8	2664.8	2640.4	2630.5	2625.7	2601.3	2586.6	2572.0
5°	2855.1	2830.7	2825.8	2791.6	2777.0	2723.3	2718.4	2684.3	2640.4	2596.4	2562.2
7.5°	2996.6	2981.9	2957.5	2923.3	2879.4	2811.1	2806.3	2752.6	2679.4	2620.8	2572.0
10°	3099.1	3089.3	3055.2	3011.3	2962.4	2894.1	2889.3	2830.7	2742.9	2674.4	2606.2
12.5°	3221.1	3206.4	3162.5	3103.9	3050.3	2986.8	2981.9	2933.2	2835.5	2747.7	2659.8
15°	3338.2	3318.7	3265.0	3206.4	3147.9	3094.2	3094.2	3040.5	2938.0	2835.5	2733.0
17.5°	3396.8	3387.0	3333.4	3269.9	3221.1	3182.0	3177.2	3128.4	3025.9	2918.6	2806.3
20°	3416.3	3421.2	3372.4	3304.1	3269.9	3250.4	3245.5	3211.3	3099.1	2996.6	2889.3
22.5°	3411.4	3426.1	3387.0	3313.9	3304.1	3304.1	3304.1	3265.0	3177.2	3074.7	2967.3
25°	3431.0	3450.5	3421.2	3333.4	3333.4	3352.8	3352.8	3333.4	3255.3	3167.4	3060.1
27.5°	3499.2	3513.9	3489.5	3367.5	3372.4	3401.7	3396.8	3401.7	3352.8	3269.9	3162.5
30°	3582.3	3601.7	3572.4	3421.2	3416.3	3445.6	3445.6	3470.0	3435.8	3348.0	3260.2
32.5°	3806.7	3801.9	3709.2	3479.8	3465.1	3494.4	3494.4	3518.8	3499.2	3431.0	3348.0
35°	4475.4	4402.2	4197.2	3670.1	3523.7	3538.4	3538.4	3582.3	3592.0	3538.4	3465.1
37.5°	5158.6	5134.2	4978.1	4177.6	3738.5	3631.0	3626.2	3689.5	3733.5	3689.5	3640.8
40°	5846.8	5827.3	5793.2	4856.0	4187.5	3797.0	3782.3	3836.0	3914.1	3884.8	3855.5
42.5°	6486.1	6476.4	6510.5	5524.7	4758.5	4153.3	4109.3	4045.9	4158.2	4148.3	4148.3
45°	6988.8	7013.3	7032.7	6149.3	5378.3	4612.1	4558.3	4343.6	4494.9	4533.9	4563.2
47.5°	7271.9	7291.4	7359.7	6759.5	5998.2	5144.0	5104.9	4753.6	4953.7	5070.8	5153.8
50°	7677.0	7623.2	7681.8	7354.9	6744.8	5837.0	5729.7	5305.1	5558.8	5763.9	5959.0
52.5°	8067.3	7979.5	8028.4	8043.0	7593.9	6515.4	6403.1	5954.2	6271.4	6593.5	6940.0
55°	8418.8	8413.9	8462.6	8711.6	8413.9	7242.6	7115.7	6671.6	7130.4	7476.8	8062.5
57.5°	8701.9	8750.7	8965.4	9487.6	9360.7	8033.2	7891.7	7506.1	8047.8	8394.4	9365.6
60°	9033.8	9111.7	9468.1	10146.5	10224.6	8862.9	8716.4	8438.3	8989.8	9341.2	10873.7
62.5°	9146.0	9258.2	9990.3	10839.5	11127.4	9770.6	9638.9	9453.4	9980.5	10297.8	12376.8
65°	8399.3	8614.0	10278.2	11195.8	12098.6	10863.8	10751.6	10590.6	10966.4	11176.2	13396.9
67.5°	8194.3	8291.9	9717.0	11708.2	13011.2	12269.5	12157.2	11879.0	11888.8	11801.0	13728.8
70°	7906.3	8013.7	9141.0	12093.8	14319.3	14192.3	14055.6	13235.7	12733.1	12201.1	13074.7
72.5°	6735.1	6700.9	7877.0	11054.2	14948.9	16574.0	16412.9	14695.1	13357.8	11854.6	11034.7
75°	3782.3	3684.8	4778.0	7647.7	13650.7	17520.9	17515.9	15432.0	12918.6	10327.0	7511.0
77.5°	1098.0	1068.8	1576.4	3206.4	9189.9	15222.1	15407.6	13919.1	10780.9	7418.2	4124.0
80°	517.4	527.0	678.4	1059.0	3923.9	9824.4	10356.3	9165.5	6442.3	3421.2	1703.3
82.5°	327.0	331.8	463.7	683.3	1659.3	4460.7	4899.9	4124.0	2552.6	1478.9	751.6
85°	205.0	205.0	307.4	449.0	990.8	1425.1	1547.1	1405.6	1093.2	805.2	409.9
87.5°	112.2	112.2	185.4	258.6	541.7	458.8	473.4	561.3	683.3	493.0	205.0
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°	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0	2572.0
2.5°	2567.1	2557.3	2542.7	2537.9	2532.9	2528.0	2532.9	2542.7	2532.9	2532.9	2537.9
5°	2552.6	2542.7	2523.3	2523.3	2528.0	2532.9	2557.3	2572.0	2576.9	2576.9	2576.9
7.5°	2552.6	2537.9	2523.3	2528.0	2537.9	2557.3	2596.4	2620.8	2640.4	2645.1	2645.1
10°	2576.9	2557.3	2547.6	2557.3	2586.6	2601.3	2640.4	2679.4	2703.7	2713.6	2713.6
12.5°	2620.8	2601.3	2601.3	2620.8	2659.8	2679.4	2713.6	2742.9	2772.1	2786.7	2786.7
15°	2694.0	2669.6	2674.4	2708.6	2752.6	2772.1	2796.5	2806.3	2830.7	2850.1	2850.1
17.5°	2762.3	2737.9	2747.7	2786.7	2816.0	2825.8	2840.4	2835.5	2845.3	2860.0	2864.8
20°	2840.4	2816.0	2820.8	2845.3	2850.1	2840.4	2840.4	2825.8	2820.8	2845.3	2855.1
22.5°	2918.6	2894.1	2889.3	2874.6	2850.1	2825.8	2811.1	2796.5	2786.7	2811.1	2820.8
25°	3011.3	2977.1	2952.6	2889.3	2825.8	2781.8	2762.3	2752.6	2747.7	2772.1	2781.8
27.5°	3113.8	3079.6	3006.4	2869.7	2767.2	2694.0	2679.4	2679.4	2689.1	2703.7	2713.6
30°	3211.3	3177.2	3045.4	2825.8	2664.8	2557.3	2542.7	2557.3	2581.8	2596.4	2611.1
32.5°	3308.9	3274.8	3069.8	2757.4	2513.4	2376.8	2367.0	2391.4	2430.5	2440.2	2450.0
35°	3440.7	3406.6	3099.1	2659.8	2323.1	2176.7	2166.9	2181.6	2215.8	2230.4	2245.1
37.5°	3626.2	3606.6	3143.1	2552.6	2147.4	1986.4	1957.1	1947.3	1966.7	1962.0	1981.4
40°	3870.2	3884.8	3221.1	2411.0	1976.6	1810.7	1747.2	1717.9	1698.4	1659.3	1678.9
42.5°	4226.4	4236.2	3308.9	2249.8	1830.2	1644.7	1561.8	1508.1	1469.0	1405.6	1415.4
45°	4748.7	4665.7	3411.4	2079.1	1698.4	1512.9	1415.4	1351.9	1298.2	1244.5	1249.4
47.5°	5441.6	5187.9	3523.7	1937.5	1566.7	1405.6	1317.7	1244.5	1181.1	1137.2	1142.0
50°	6295.7	5837.0	3635.9	1805.7	1434.9	1322.6	1244.5	1166.5	1103.0	1059.0	1054.2
52.5°	7423.2	6618.0	3709.2	1659.3	1303.1	1249.4	1181.1	1107.9	1029.8	976.1	971.2
55°	8594.5	7525.7	3772.6	1483.6	1176.1	1166.5	1132.3	1049.3	956.6	888.3	878.5
57.5°	9882.9	8496.9	3821.4	1312.9	1078.6	1098.0	1088.3	990.8	888.3	824.8	819.9
60°	11054.2	9502.3	3665.2	1161.5	990.8	1029.8	1039.5	956.6	902.9	917.6	922.3
62.5°	12235.3	10278.2	3069.8	1049.3	932.2	985.8	1068.8	1063.9	1039.5	1063.9	1068.8
65°	12659.9	10439.2	2176.7	956.6	873.6	1005.4	1161.5	1151.8	1039.5	995.6	985.8
67.5°	12420.7	9961.0	1464.2	883.4	829.8	1029.8	1259.1	1151.8	1000.5	942.0	922.3
70°	11283.6	8784.8	1073.7	810.1	790.6	1024.9	1312.9	1146.9	980.9	917.6	893.0
72.5°	8999.5	6779.0	863.8	741.9	732.0	1000.5	1342.1	1137.2	961.5	893.0	863.8
75°	5827.3	4216.8	727.2	673.5	644.2	961.5	1327.5	1107.9	937.0	849.2	829.8
77.5°	2703.7	1815.6	619.8	595.5	561.3	902.9	1283.6	1049.3	883.4	800.5	776.0
80°	1259.1	859.0	522.3	517.4	502.7	854.1	1225.1	980.9	819.9	751.6	712.6
82.5°	673.5	517.4	424.6	424.6	439.2	795.5	1151.8	898.0	737.0	702.7	600.3
85°	356.3	297.7	307.4	331.8	375.8	702.7	1054.2	810.1	644.2	536.9	522.3
87.5°	180.6	190.3	190.3	224.5	287.9	571.0	868.7	668.6	546.7	439.2	429.5
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)