

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: P399753

Luminaire Tested: **ARCH-L-PA3-180-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399753  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-180-830-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21188 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

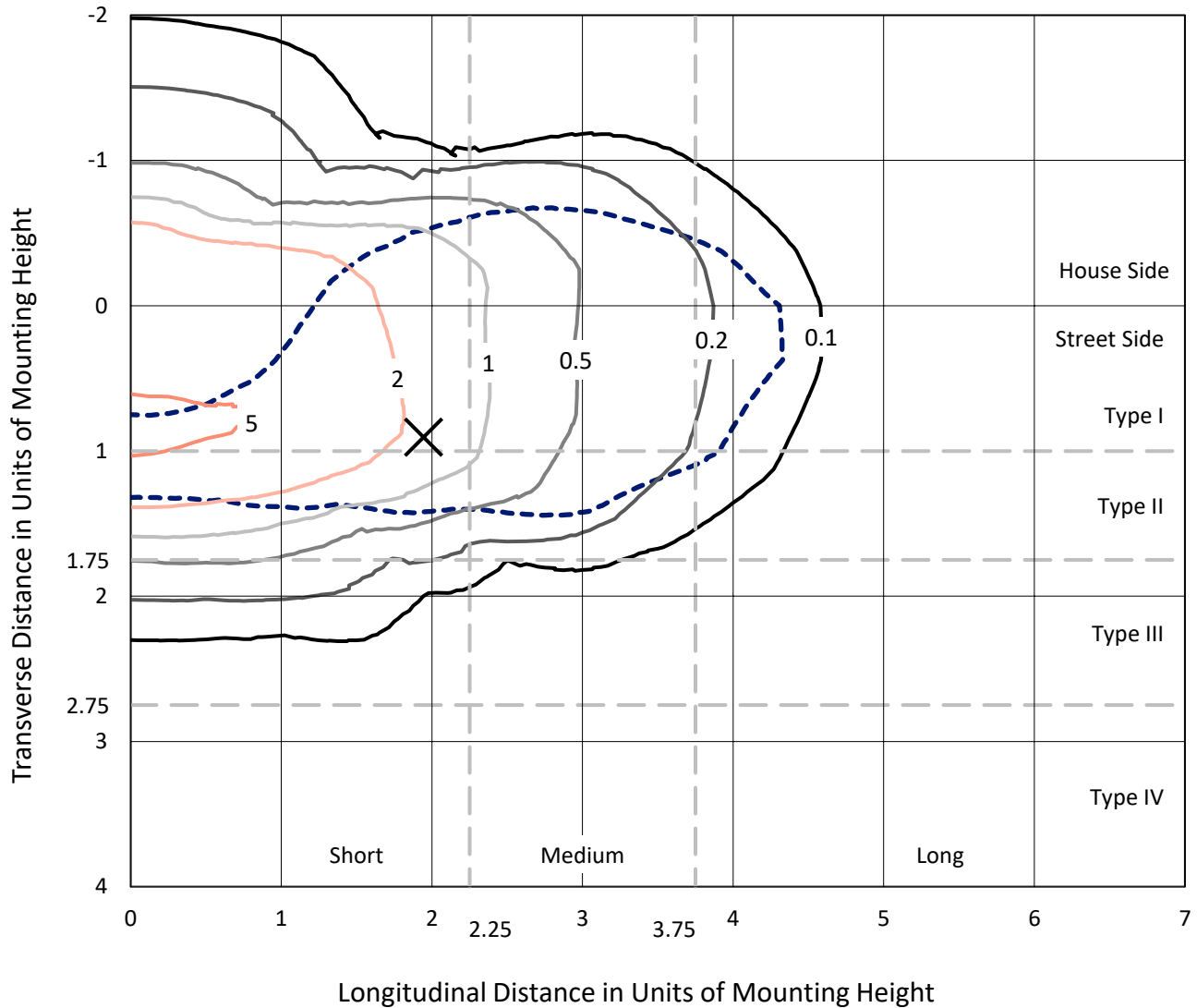
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

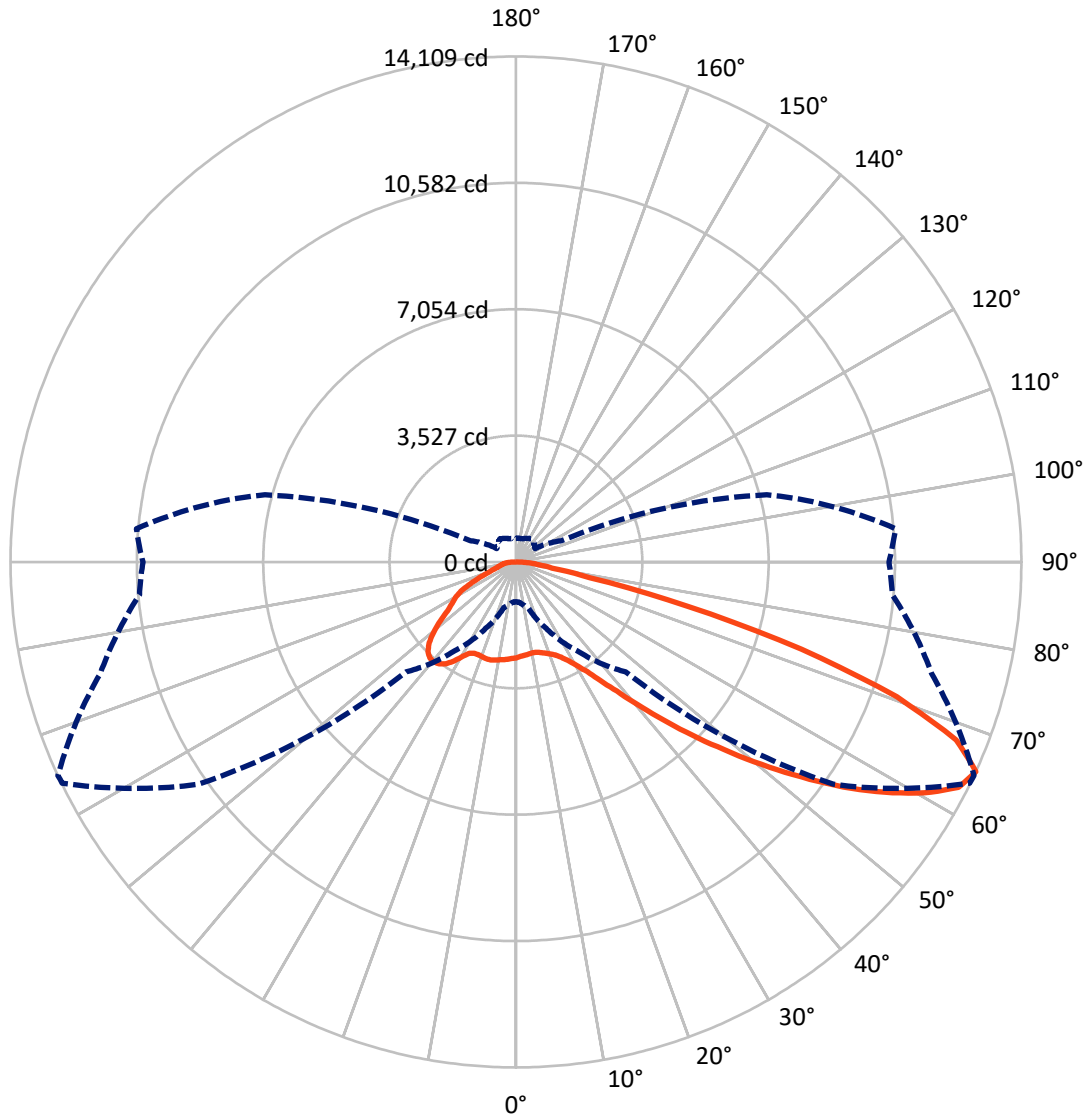
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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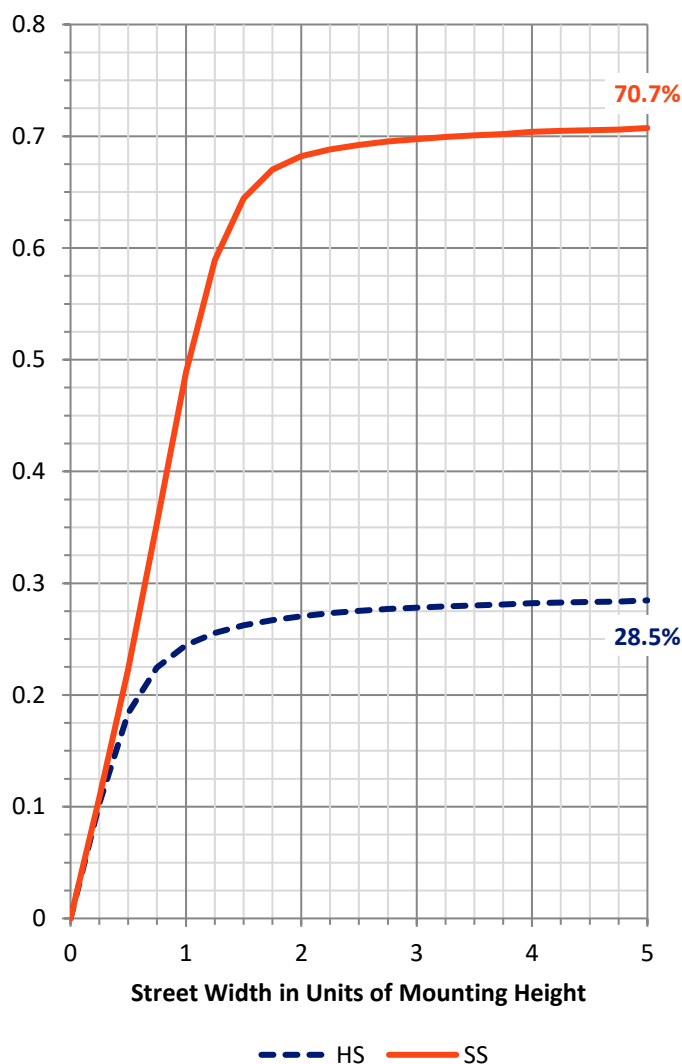
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6125.8	0.0	6125.8
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	15062.2	0.0	15062.2
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	21188.0	0.0	21188.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.1	1.2
10°-20°	761.5	3.6
20°-30°	1352.7	6.4
30°-40°	2288.4	10.8
40°-50°	3983.8	18.8
50°-60°	5148.3	24.3
60°-70°	4505.0	21.3
70°-80°	2450.4	11.6
80°-90°	442.7	2.1
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°	21188.0	100.0
0°-180°	21188.0	100.0

**Coefficient of Utilization**



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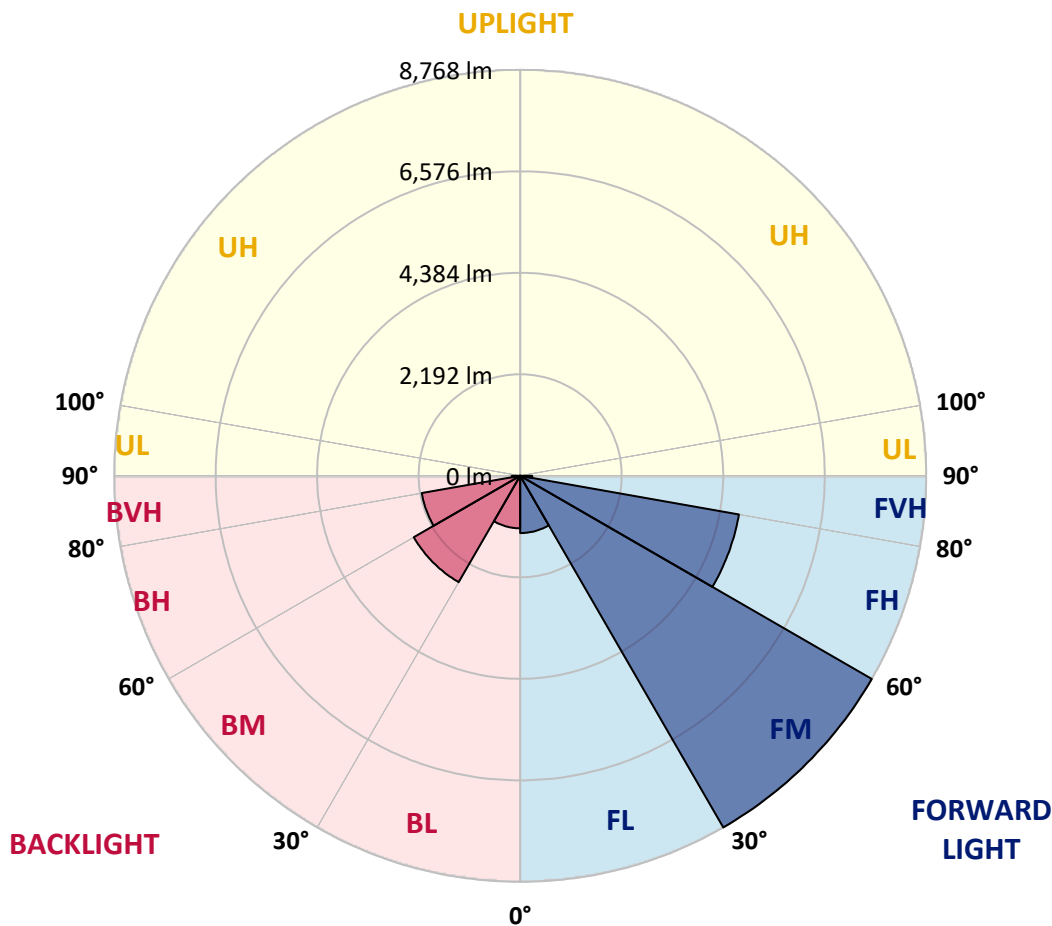
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1236.3	5.8			
FM (30°-60°)	8768.2	41.4			
FH (60°-80°)	4797.3	22.6			G2/5000
FVH (80°-90°)	260.5	1.2			G3/500
BL (0°-30°)	1133.1	5.3	B3/2500		
BM (30°-60°)	2652.3	12.5	B3/5000		
BH (60°-80°)	2158.2	10.2	B3/2500		G3/2500
BVH (80°-90°)	182.2	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3
2.5°	2629.9	2627.1	2621.5	2627.1	2629.9	2635.5	2632.7	2638.3	2635.5	2643.8	2657.8
5°	2563.0	2557.4	2554.6	2568.5	2576.9	2590.9	2596.4	2616.0	2613.2	2627.1	2649.4
7.5°	2487.7	2487.7	2484.9	2501.6	2512.8	2537.9	2557.4	2590.9	2593.6	2618.7	2643.8
10°	2429.1	2431.9	2429.1	2443.0	2459.8	2490.5	2523.9	2571.3	2574.1	2610.4	2635.5
12.5°	2406.8	2406.8	2406.8	2426.3	2448.6	2490.5	2529.5	2579.7	2585.3	2624.3	2646.6
15°	2437.5	2440.3	2434.7	2454.2	2479.3	2529.5	2565.8	2618.7	2624.3	2660.6	2674.5
17.5°	2546.2	2557.4	2543.4	2554.6	2549.0	2588.1	2621.5	2674.5	2677.3	2708.0	2713.6
20°	2761.0	2772.1	2749.8	2735.9	2685.7	2682.9	2696.8	2738.7	2738.7	2758.2	2744.2
22.5°	3092.8	3104.0	3065.0	3012.0	2892.1	2833.5	2802.8	2822.3	2819.5	2827.9	2791.7
25°	3533.5	3530.7	3483.3	3385.7	3193.2	3051.0	2975.7	2945.0	2945.0	2928.3	2883.7
27.5°	4080.1	4038.3	3954.6	3837.5	3569.7	3371.7	3210.0	3131.9	3117.9	3067.7	2984.1
30°	4663.0	4632.3	4512.4	4342.3	4032.7	3778.9	3511.2	3355.0	3346.6	3237.9	3112.4
32.5°	5349.0	5298.8	5165.0	4961.4	4590.5	4233.5	3898.8	3661.8	3647.8	3474.9	3302.0
35°	6230.3	6188.5	5929.1	5725.5	5248.6	4780.1	4384.1	4069.0	4057.8	3845.8	3625.5
37.5°	7287.3	7178.5	6927.5	6545.5	6043.5	5488.5	4986.5	4590.5	4576.5	4342.3	4063.4
40°	8229.9	8132.3	7909.2	7557.8	7019.6	6403.2	5722.7	5243.1	5229.1	4944.7	4593.3
42.5°	8927.1	8860.2	8715.2	8511.6	8126.7	7753.0	6662.6	6032.3	6007.2	5639.1	5201.2
45°	9331.5	9278.5	9194.9	9245.1	9239.5	9169.8	7783.7	6972.2	6891.3	6414.4	5878.9
47.5°	9233.9	9186.5	9220.0	9610.4	10148.7	10553.1	9088.9	7934.3	7825.5	7203.6	6601.2
50°	8528.3	8547.9	8723.6	9471.0	10678.6	11576.6	10536.3	9030.3	8885.3	7998.5	7287.3
52.5°	7242.7	7290.1	7716.8	8762.6	10620.0	12240.3	11844.3	10162.6	9970.2	8773.8	7912.0
55°	5753.4	5873.3	6425.5	7524.4	9855.8	12287.7	12831.6	11300.5	11088.5	9501.7	8455.8
57.5°	4255.8	4434.3	5072.9	6082.5	8391.7	11537.5	13325.2	12388.1	12131.6	10224.0	9030.3
60°	2699.6	2808.4	3544.6	4735.5	6422.8	9702.5	13261.0	13314.0	13090.9	10943.5	9629.9
62.5°	1723.5	1776.5	2147.4	3377.3	4490.1	7184.1	12561.0	14014.0	13863.4	11598.9	10198.9
65°	1107.2	1129.5	1319.1	2077.7	3056.6	4336.7	10818.0	14089.3	14108.9	12008.8	10550.3
67.5°	900.8	912.0	981.7	1282.9	2161.4	2395.6	7535.5	13018.4	13255.5	11902.9	10430.3
70°	819.9	833.9	906.4	1023.5	1673.3	1653.8	3647.8	10893.3	11280.9	11292.1	9897.7
72.5°	691.6	711.2	808.8	967.7	1294.0	1305.2	1545.0	7758.6	8330.3	10092.9	9097.3
75°	577.3	588.4	672.1	853.4	1096.0	1043.0	1084.9	4113.6	4939.1	8093.3	8246.7
77.5°	468.5	479.7	541.0	680.5	973.3	811.6	853.4	1704.0	2105.6	5494.1	6740.7
80°	334.7	345.8	415.5	529.9	736.3	730.7	633.1	939.8	1020.7	2970.1	4378.5
82.5°	239.8	248.2	315.1	379.3	510.4	733.5	476.9	638.6	669.3	1316.3	1765.3
85°	161.8	161.8	217.5	251.0	329.1	463.0	384.9	432.3	451.8	624.7	476.9
87.5°	69.7	69.7	117.1	128.3	172.9	214.7	287.3	217.5	223.1	337.5	195.2
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°	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3	2677.3
2.5°	2666.2	2668.9	2674.5	2691.3	2702.4	2719.1	2727.5	2738.7	2738.7	2733.1	2735.9
5°	2660.6	2668.9	2688.5	2719.1	2738.7	2769.3	2791.7	2808.4	2814.0	2808.4	2811.2
7.5°	2657.8	2671.7	2705.2	2749.8	2777.7	2816.8	2847.4	2867.0	2880.9	2875.3	2878.1
10°	2649.4	2671.7	2713.6	2769.3	2811.2	2850.2	2878.1	2886.5	2894.8	2889.3	2886.5
12.5°	2660.6	2685.7	2730.3	2797.2	2844.6	2875.3	2883.7	2869.7	2850.2	2839.1	2836.3
15°	2682.9	2708.0	2752.6	2822.3	2864.2	2875.3	2855.8	2811.2	2766.6	2741.5	2738.7
17.5°	2713.6	2730.3	2766.6	2827.9	2861.4	2847.4	2808.4	2755.4	2721.9	2702.4	2705.2
20°	2733.1	2733.1	2761.0	2808.4	2836.3	2825.1	2777.7	2719.1	2666.2	2641.1	2632.7
22.5°	2761.0	2747.0	2749.8	2791.7	2830.7	2814.0	2713.6	2610.4	2535.1	2507.2	2504.4
25°	2836.3	2797.2	2772.1	2797.2	2889.3	2752.6	2551.8	2431.9	2362.2	2337.1	2339.9
27.5°	2928.3	2875.3	2822.3	2864.2	2936.7	2613.2	2345.4	2208.8	2166.9	2147.4	2155.8
30°	3020.3	2950.6	2880.9	3031.5	2903.2	2395.6	2080.5	1946.6	1910.4	1896.4	1907.6
32.5°	3190.5	3076.1	2992.4	3254.6	2800.0	2147.4	1793.2	1670.5	1637.1	1620.3	1614.8
35°	3474.9	3329.9	3246.2	3449.8	2655.0	1871.3	1531.1	1444.6	1408.4	1372.1	1366.5
37.5°	3884.9	3709.2	3633.9	3561.4	2451.4	1598.0	1330.3	1271.7	1218.7	1163.0	1160.2
40°	4375.7	4147.0	4091.3	3611.6	2169.7	1341.4	1190.8	1135.1	1068.1	1015.1	1017.9
42.5°	4941.9	4649.0	4529.1	3597.6	1821.1	1204.8	1090.4	1029.1	970.5	923.1	920.3
45°	5547.0	5215.2	4939.1	3500.0	1475.3	1110.0	1029.1	956.6	898.0	845.0	839.4
47.5°	6216.4	5845.5	5318.4	3310.4	1218.7	1043.0	992.8	889.6	836.7	803.2	803.2
50°	6891.3	6447.8	5667.0	3023.1	1068.1	992.8	939.8	853.4	811.6	783.7	783.7
52.5°	7468.6	7075.3	5954.2	2680.1	973.3	951.0	903.6	836.7	792.0	766.9	764.1
55°	8029.1	7658.2	6210.8	2339.9	895.2	895.2	895.2	822.7	772.5	750.2	747.4
57.5°	8586.9	8271.8	6478.5	2116.7	825.5	847.8	878.5	806.0	755.8	736.3	733.5
60°	9217.2	9008.0	6788.1	1960.6	764.1	797.6	856.2	786.5	727.9	711.2	708.4
62.5°	9886.5	9886.5	7069.8	1740.3	708.4	755.8	822.7	761.4	702.8	688.8	686.1
65°	10410.8	10636.7	7251.0	1411.2	652.6	713.9	783.7	727.9	669.3	666.5	661.0
67.5°	10472.2	10826.4	7136.7	1065.3	602.4	669.3	744.6	691.6	635.9	635.9	627.5
70°	10031.5	10391.3	6779.7	797.6	566.1	624.7	694.4	647.0	594.0	599.6	585.7
72.5°	9295.3	9384.5	5892.9	630.3	524.3	577.3	633.1	596.8	549.4	549.4	529.9
75°	8324.8	7828.3	4280.9	527.1	474.1	521.5	571.7	541.0	499.2	485.3	474.1
77.5°	6626.3	5672.5	2487.7	454.6	432.3	468.5	502.0	479.7	443.4	412.8	412.8
80°	4038.3	3324.3	1098.8	393.2	382.1	410.0	432.3	407.2	376.5	345.8	337.5
82.5°	1536.7	1282.9	532.7	337.5	334.7	351.4	368.1	343.0	320.7	306.8	264.9
85°	421.1	387.7	365.3	281.7	276.1	273.3	292.8	281.7	251.0	206.4	184.1
87.5°	159.0	181.3	198.0	172.9	184.1	170.1	195.2	178.5	159.0	103.2	92.0
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)