

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: P400045

Luminaire Tested: **ARCH-L-PA3-220-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400045  
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-PA3-220-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 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: 24495 lumens  
Efficiency: N/A  
Efficacy: 110.3 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

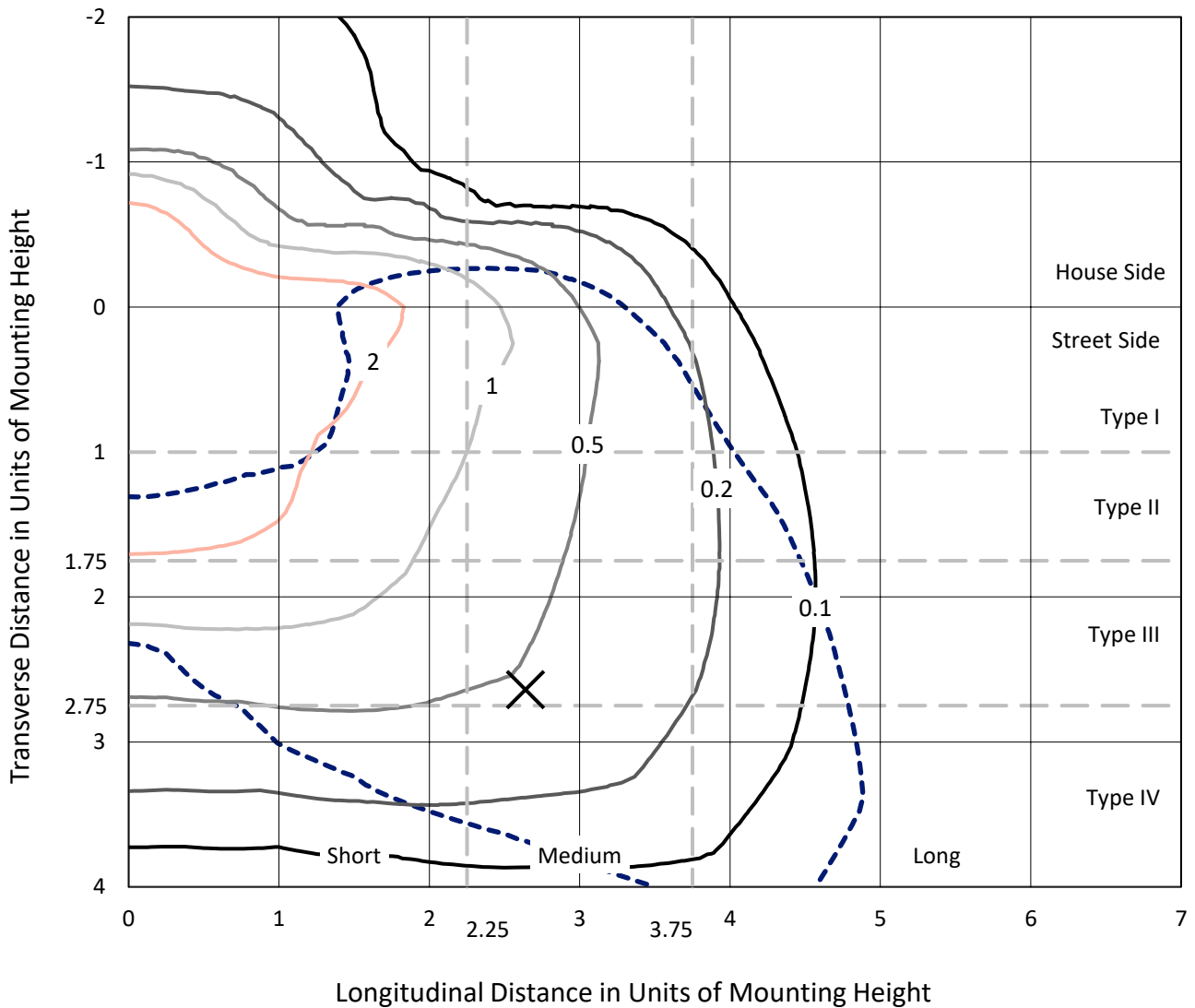
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

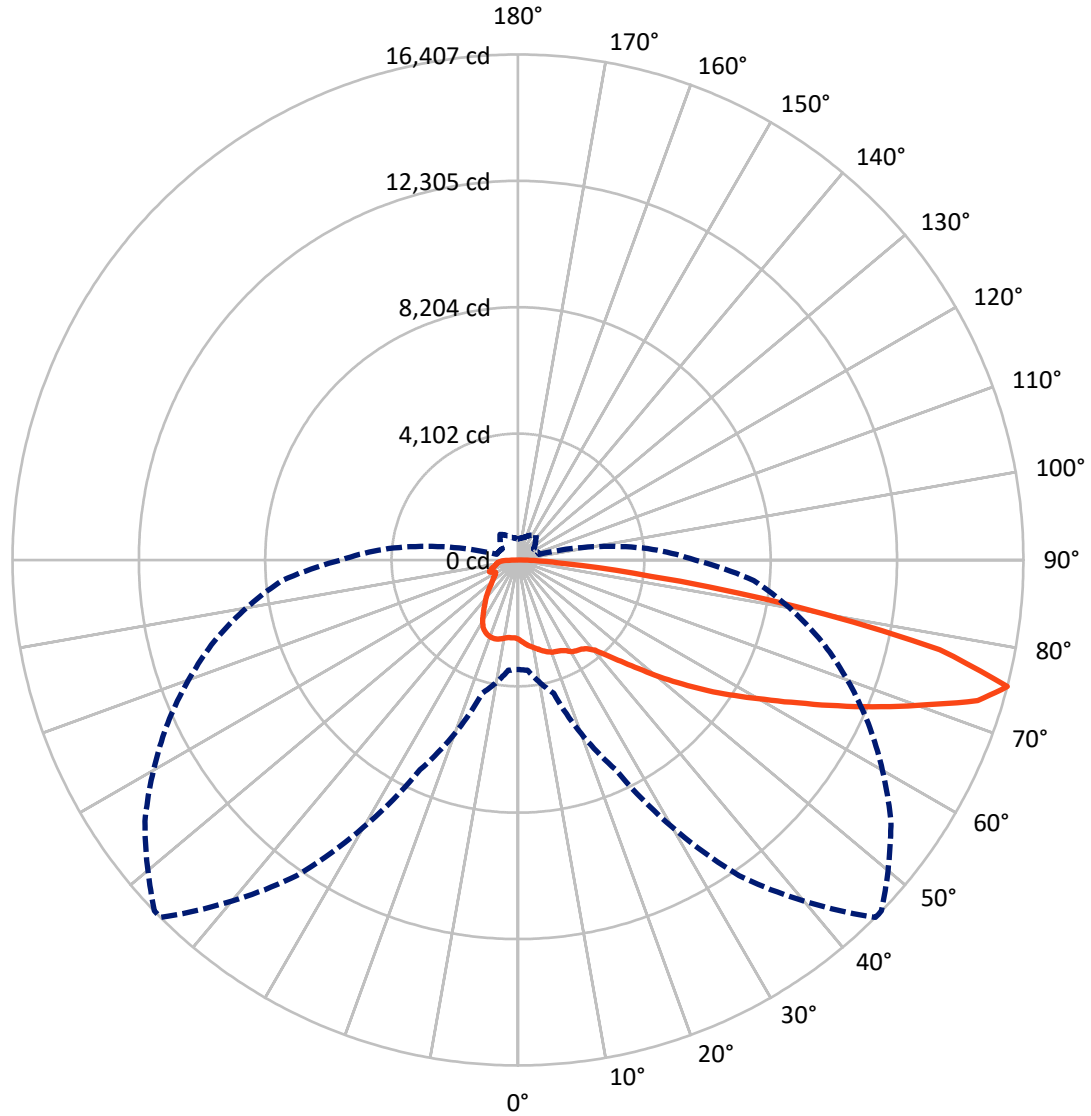
× Max cd  
 - - - 1/2 Max cd



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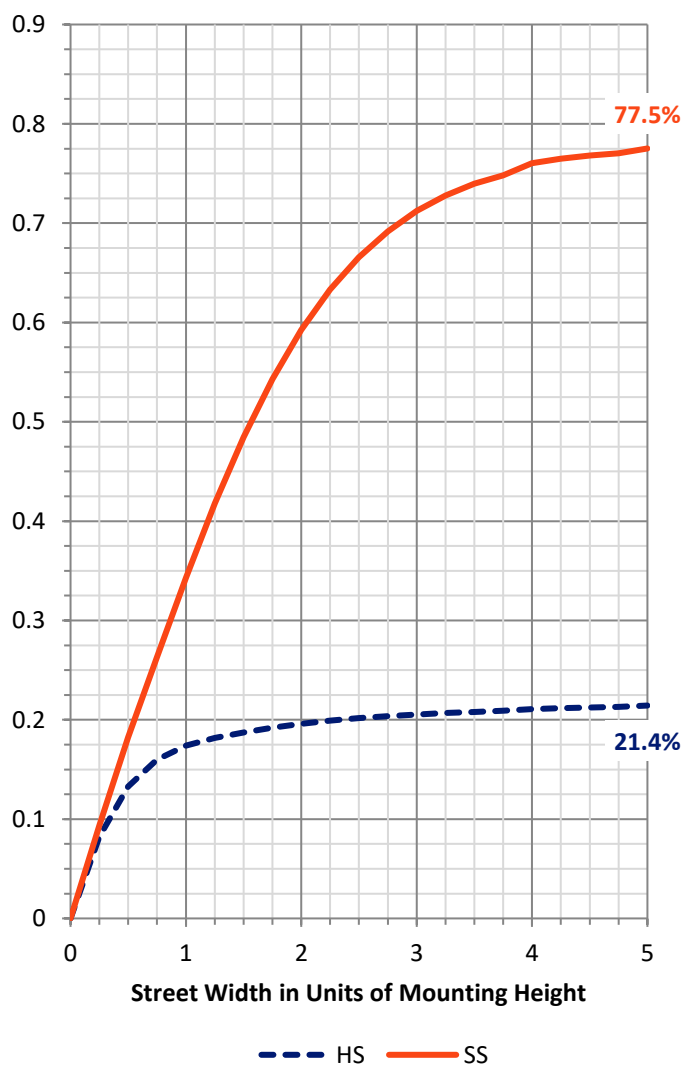
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5413.3	0.0	5413.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	19081.7	0.0	19081.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24495.0	0.0	24495.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.5	1.0
10°-20°	809.6	3.3
20°-30°	1380.3	5.6
30°-40°	1934.0	7.9
40°-50°	2841.3	11.6
50°-60°	4522.0	18.5
60°-70°	6432.5	26.3
70°-80°	5386.0	22.0
80°-90°	934.7	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°	24495.0	100.0
0°-180°	24495.0	100.0

**Coefficient of Utilization**

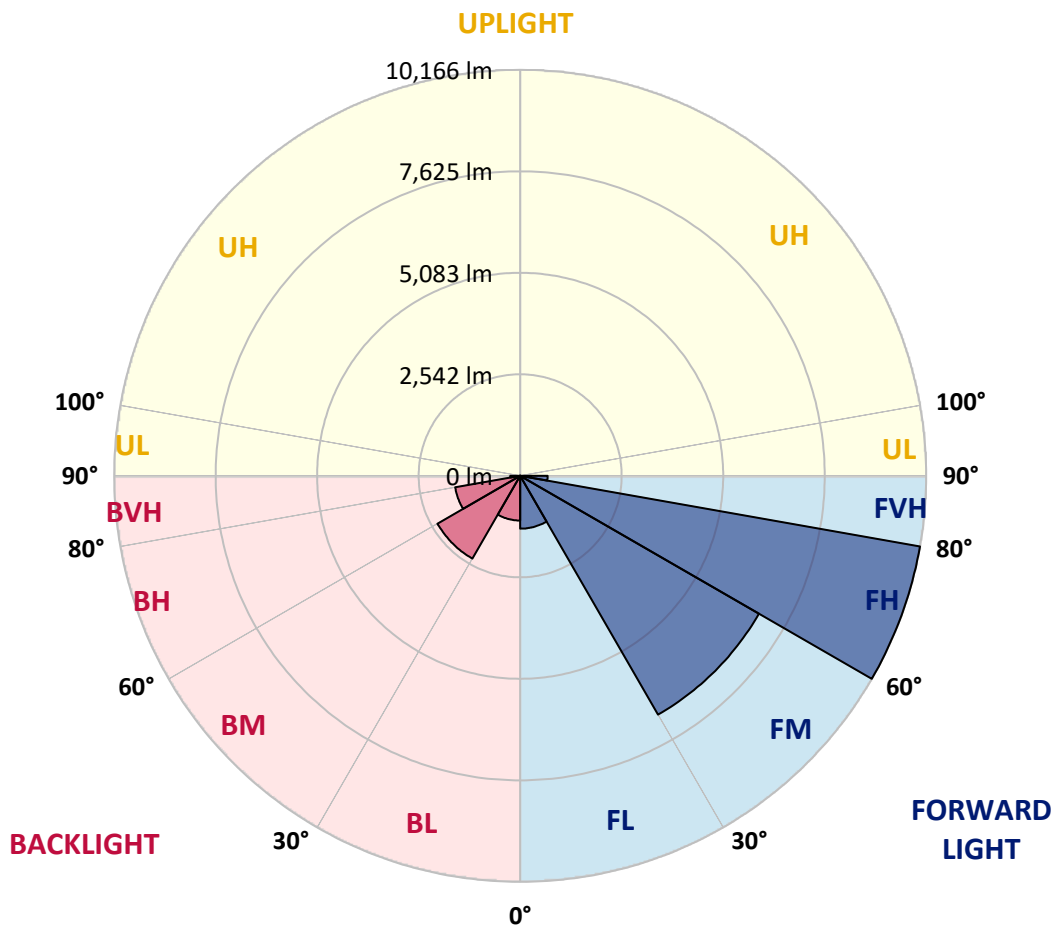


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1324.1	5.4			
FM (30°-60°)	6904.4	28.2			
FH (60°-80°)	10166.0	41.5			G4/12000
FVH (80°-90°)	687.2	2.8			G4/750
BL (0°-30°)	1120.3	4.6	B3/2500		
BM (30°-60°)	2392.9	9.8	B2/2500		
BH (60°-80°)	1652.5	6.7	B3/2500		G3/2500
BVH (80°-90°)	247.5	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°	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5
2.5°	2719.8	2706.7	2700.2	2700.2	2674.0	2657.6	2654.3	2631.4	2611.8	2592.1	2575.8
5°	2876.9	2867.1	2847.4	2831.1	2795.1	2749.2	2742.7	2693.6	2644.5	2598.7	2559.4
7.5°	3020.9	3001.3	2978.4	2945.6	2886.7	2824.5	2814.7	2746.0	2677.2	2608.5	2556.1
10°	3142.0	3122.4	3089.6	3043.8	2968.5	2893.3	2883.4	2811.4	2739.4	2657.6	2582.3
12.5°	3256.6	3240.2	3191.1	3128.9	3040.5	2971.8	2962.0	2899.8	2824.5	2732.9	2634.7
15°	3354.7	3338.4	3286.0	3214.0	3112.5	3060.2	3047.1	2988.2	2912.9	2814.7	2713.2
17.5°	3403.8	3403.8	3348.2	3269.6	3174.7	3135.5	3125.6	3053.6	2984.9	2890.0	2788.5
20°	3420.2	3426.7	3387.5	3292.6	3210.7	3194.4	3184.5	3125.6	3047.1	2955.4	2860.5
22.5°	3430.0	3443.1	3410.4	3302.4	3233.6	3223.8	3217.3	3178.0	3115.8	3027.4	2932.5
25°	3462.7	3462.7	3439.8	3318.7	3263.1	3259.8	3259.8	3236.9	3194.4	3119.1	3024.2
27.5°	3511.8	3508.6	3479.1	3354.7	3328.6	3338.4	3335.1	3331.8	3302.4	3227.1	3125.6
30°	3593.7	3593.7	3560.9	3426.7	3410.4	3452.9	3456.2	3462.7	3416.9	3299.1	3217.3
32.5°	3718.0	3704.9	3672.2	3498.7	3472.6	3511.8	3518.4	3515.1	3475.8	3364.6	3325.3
35°	4101.0	4071.5	3953.7	3659.1	3528.2	3551.1	3554.4	3570.8	3577.3	3488.9	3469.3
37.5°	4771.9	4732.6	4552.6	4038.8	3704.9	3649.3	3646.0	3688.6	3724.6	3646.0	3646.0
40°	5501.8	5469.0	5364.3	4693.4	4032.2	3848.9	3835.9	3875.1	3921.0	3865.3	3881.7
42.5°	6130.2	6156.4	6166.2	5387.2	4523.2	4222.1	4186.1	4130.4	4202.4	4153.3	4218.8
45°	6601.5	6588.4	6768.4	6097.4	5158.1	4690.1	4641.0	4490.4	4582.1	4578.8	4722.8
47.5°	7102.2	7079.3	7154.6	6765.1	5881.4	5262.8	5187.6	4965.0	5102.5	5197.4	5436.3
50°	7576.8	7583.3	7609.5	7292.1	6666.9	5960.0	5865.1	5567.2	5763.6	5963.3	6300.4
52.5°	8195.4	8149.6	8116.8	7907.4	7547.3	6686.6	6624.4	6284.0	6558.9	6794.6	7243.0
55°	8735.4	8706.0	8686.3	8676.5	8283.7	7488.4	7423.0	7069.5	7465.5	7632.4	8293.6
57.5°	9311.4	9295.1	9399.8	9566.7	9409.6	8303.4	8234.7	7894.3	8336.1	8453.9	9432.5
60°	9733.6	9743.5	10031.5	10457.0	10349.0	9187.1	9105.2	8804.1	9183.8	9288.5	10571.5
62.5°	9736.9	9835.1	10502.8	11265.4	11389.7	10204.9	10110.0	9782.7	10054.4	10054.4	11592.7
65°	8807.4	8918.7	10417.7	11465.0	12443.6	11415.9	11324.3	10810.4	10911.9	10774.4	12551.6
67.5°	7881.2	8012.1	9422.7	11481.4	13183.3	12712.0	12604.0	11838.1	11664.7	11317.7	13222.6
70°	7265.9	7357.5	8535.8	11268.6	13628.4	14067.0	13985.2	12813.5	12257.1	11772.7	13081.8
72.5°	6117.1	6084.3	7210.2	10257.3	13877.2	15605.3	15536.5	13873.9	12770.9	11556.7	11157.4
75°	3551.1	3590.4	4474.1	7514.6	12509.1	16407.1	16400.6	14780.5	12545.1	10208.2	7688.1
77.5°	1024.4	1053.9	1469.5	3302.4	7910.6	13995.0	14443.4	13517.1	10604.2	7275.7	3986.4
80°	448.4	471.3	638.2	1099.7	3407.1	9141.3	9534.0	9141.3	6395.3	3338.4	1564.5
82.5°	265.1	281.5	415.7	680.8	1633.2	4349.7	4879.9	4261.3	2759.1	1417.2	648.0
85°	150.6	157.1	238.9	432.0	1027.7	1521.9	1708.5	1600.5	1345.2	805.1	340.4
87.5°	68.7	72.0	117.8	202.9	576.0	513.8	533.5	706.9	779.0	490.9	170.2
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°	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5	2572.5
2.5°	2569.2	2559.4	2539.8	2533.2	2523.4	2526.7	2530.0	2530.0	2533.2	2523.4	2523.4
5°	2543.1	2526.7	2507.1	2507.1	2507.1	2533.2	2556.1	2569.2	2575.8	2575.8	2569.2
7.5°	2533.2	2513.6	2490.7	2497.2	2503.8	2536.5	2579.1	2621.6	2634.7	2634.7	2628.2
10°	2552.9	2533.2	2516.9	2526.7	2543.1	2569.2	2602.0	2641.2	2674.0	2677.2	2674.0
12.5°	2598.7	2575.8	2559.4	2579.1	2598.7	2615.1	2631.4	2647.8	2690.3	2696.9	2696.9
15°	2674.0	2651.1	2631.4	2647.8	2654.3	2654.3	2654.3	2654.3	2696.9	2703.4	2703.4
17.5°	2749.2	2729.6	2710.0	2713.2	2693.6	2667.4	2657.6	2654.3	2677.2	2696.9	2700.2
20°	2821.3	2804.9	2785.3	2752.5	2703.4	2654.3	2638.0	2638.0	2651.1	2680.5	2680.5
22.5°	2899.8	2880.2	2847.4	2772.2	2690.3	2621.6	2605.2	2615.1	2631.4	2670.7	2667.4
25°	2988.2	2962.0	2906.3	2765.6	2647.8	2566.0	2569.2	2598.7	2628.2	2670.7	2670.7
27.5°	3086.4	3050.4	2939.1	2713.2	2552.9	2474.3	2503.8	2572.5	2615.1	2660.9	2667.4
30°	3194.4	3161.6	2965.3	2621.6	2399.0	2327.0	2399.0	2510.3	2575.8	2618.3	2628.2
32.5°	3325.3	3299.1	2988.2	2503.8	2199.4	2137.2	2241.9	2379.4	2484.1	2533.2	2543.1
35°	3488.9	3462.7	3017.6	2369.6	2012.8	1947.4	2042.3	2183.0	2320.5	2382.7	2402.3
37.5°	3701.7	3662.4	3043.8	2225.6	1855.7	1780.5	1826.3	1953.9	2078.3	2163.4	2186.3
40°	3973.3	3911.1	3066.7	2061.9	1718.3	1633.2	1649.5	1711.7	1783.7	1859.0	1888.5
42.5°	4356.2	4231.9	3070.0	1888.5	1577.5	1499.0	1492.4	1512.1	1512.1	1512.1	1521.9
45°	4889.7	4654.1	3076.5	1724.8	1433.5	1351.7	1332.1	1325.5	1276.4	1181.5	1175.0
47.5°	5564.0	5207.2	3106.0	1587.4	1283.0	1211.0	1184.8	1158.6	1067.0	968.8	949.1
50°	6428.0	5848.7	3164.9	1456.4	1155.3	1106.2	1073.5	1011.3	909.9	834.6	815.0
52.5°	7423.0	6611.3	3220.5	1319.0	1060.4	1027.7	988.4	913.1	805.1	759.3	752.8
55°	8565.2	7462.2	3331.8	1197.9	978.6	955.7	919.7	847.7	765.9	733.1	729.9
57.5°	9733.6	8414.7	3488.9	1089.9	900.1	887.0	887.0	824.8	772.4	759.3	759.3
60°	10859.5	9232.9	3367.8	988.4	828.0	834.6	896.8	880.4	841.1	857.5	867.3
62.5°	11733.4	9714.0	2732.9	906.6	775.7	834.6	995.0	995.0	949.1	942.6	942.6
65°	12106.5	9707.5	1921.2	844.4	756.0	916.4	1109.5	1057.2	936.1	890.2	880.4
67.5°	12011.6	9282.0	1325.5	801.9	749.5	1001.5	1161.9	1014.6	877.1	837.9	808.4
70°	11177.0	8381.9	1021.1	762.6	739.7	965.5	1145.5	965.5	831.3	795.3	769.1
72.5°	9016.9	6722.6	847.7	723.3	700.4	893.5	1089.9	919.7	795.3	756.0	729.9
75°	5750.5	4228.6	716.8	670.9	625.1	801.9	1014.6	873.9	756.0	703.7	684.0
77.5°	2765.6	1823.0	625.1	608.8	562.9	743.0	939.3	815.0	703.7	661.1	648.0
80°	1119.3	834.6	543.3	546.6	517.1	706.9	887.0	759.3	651.3	605.5	582.6
82.5°	582.6	484.4	458.2	471.3	471.3	674.2	847.7	713.5	605.5	585.9	510.6
85°	314.2	301.1	353.5	379.7	409.1	608.8	788.8	664.4	553.1	474.6	458.2
87.5°	153.8	196.4	199.6	229.1	284.7	487.7	664.4	556.4	461.5	382.9	376.4
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)