

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: P399847

Luminaire Tested: **ARCH-L-PA3-200-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399847  
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-PA3-200-727-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24166 lumens  
Efficiency: N/A  
Efficacy: 120.2 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

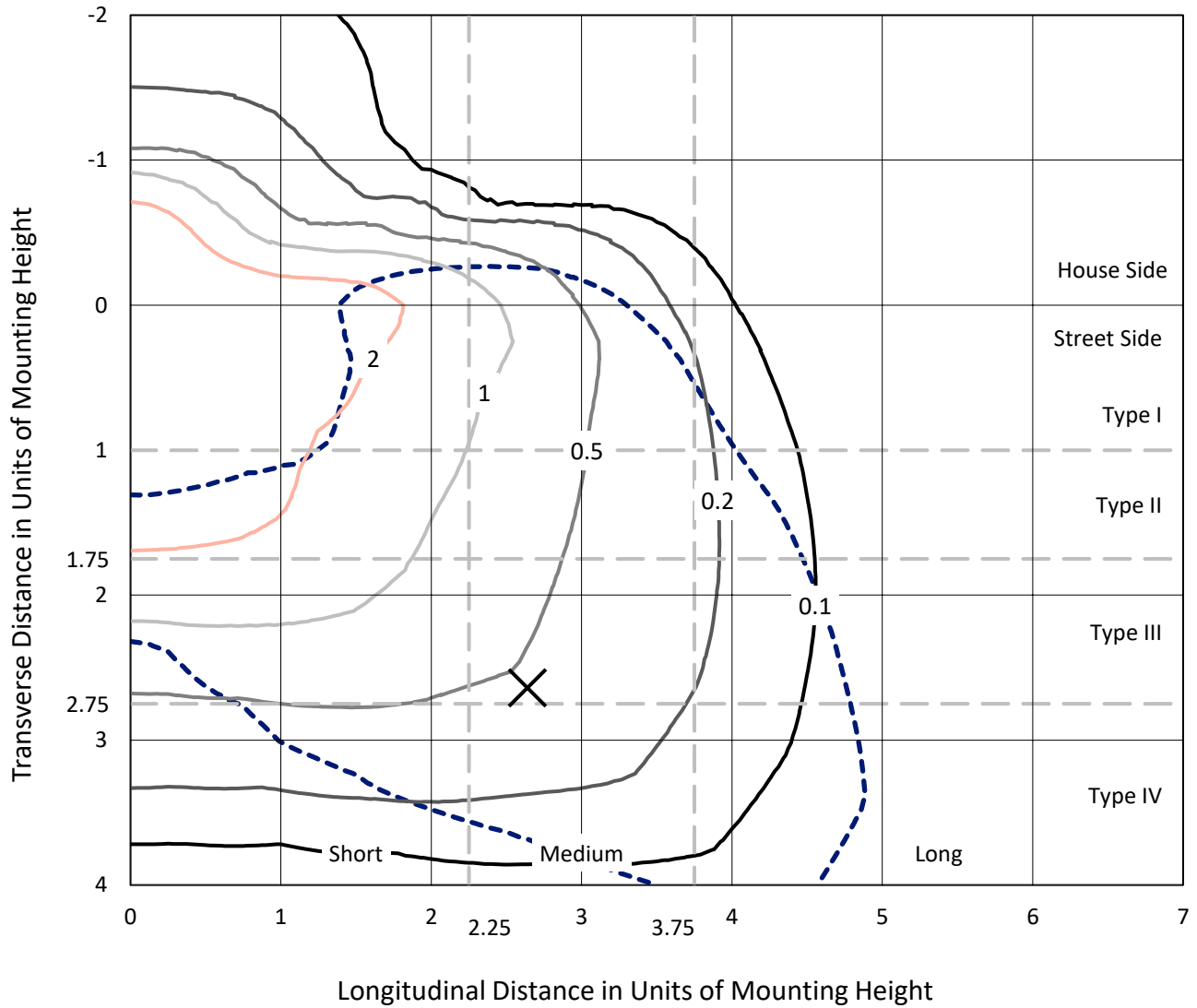
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399847  
 CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

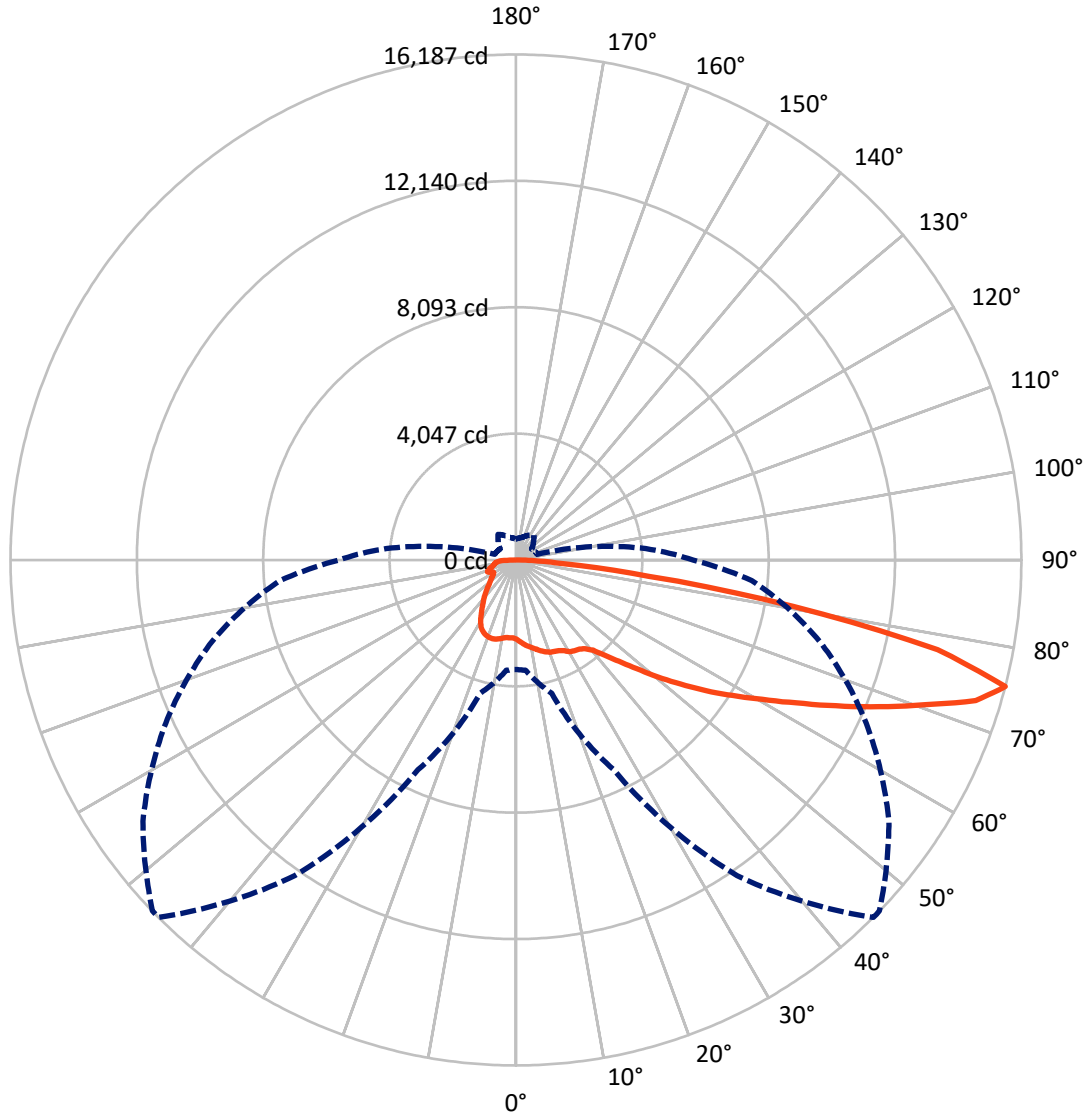
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399847  
CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P399847  
 CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

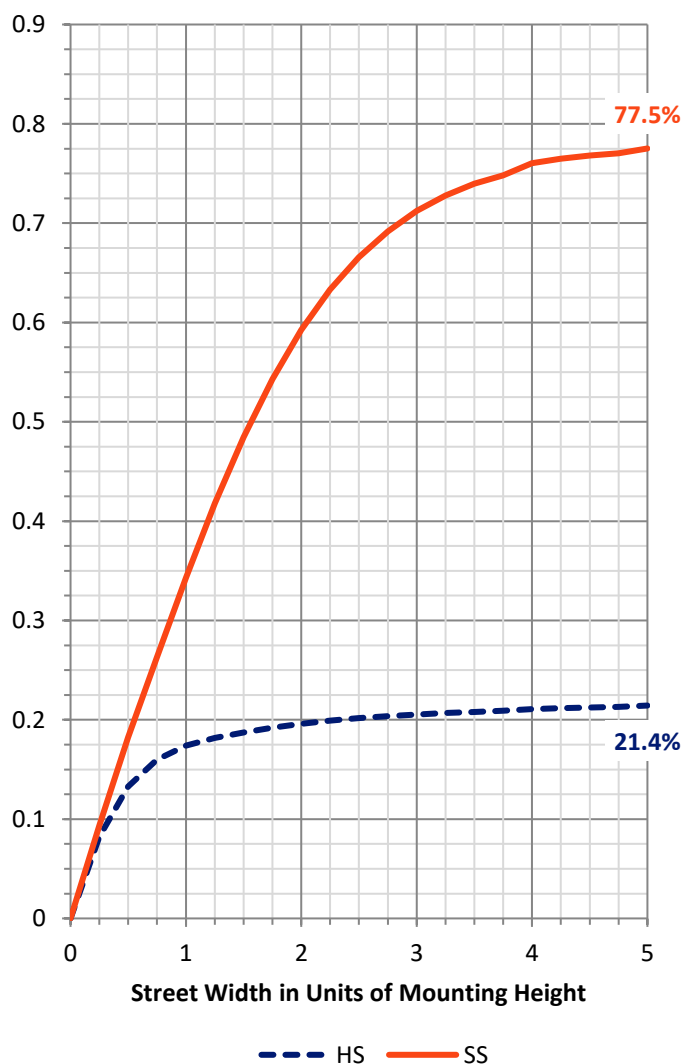
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5340.6	0.0	5340.6
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	18825.4	0.0	18825.4
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24166.0	0.0	24166.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.1	1.0
10°-20°	798.8	3.3
20°-30°	1361.8	5.6
30°-40°	1908.0	7.9
40°-50°	2803.2	11.6
50°-60°	4461.3	18.5
60°-70°	6346.1	26.3
70°-80°	5313.6	22.0
80°-90°	922.2	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°	24166.0	100.0
0°-180°	24166.0	100.0

**Coefficient of Utilization**



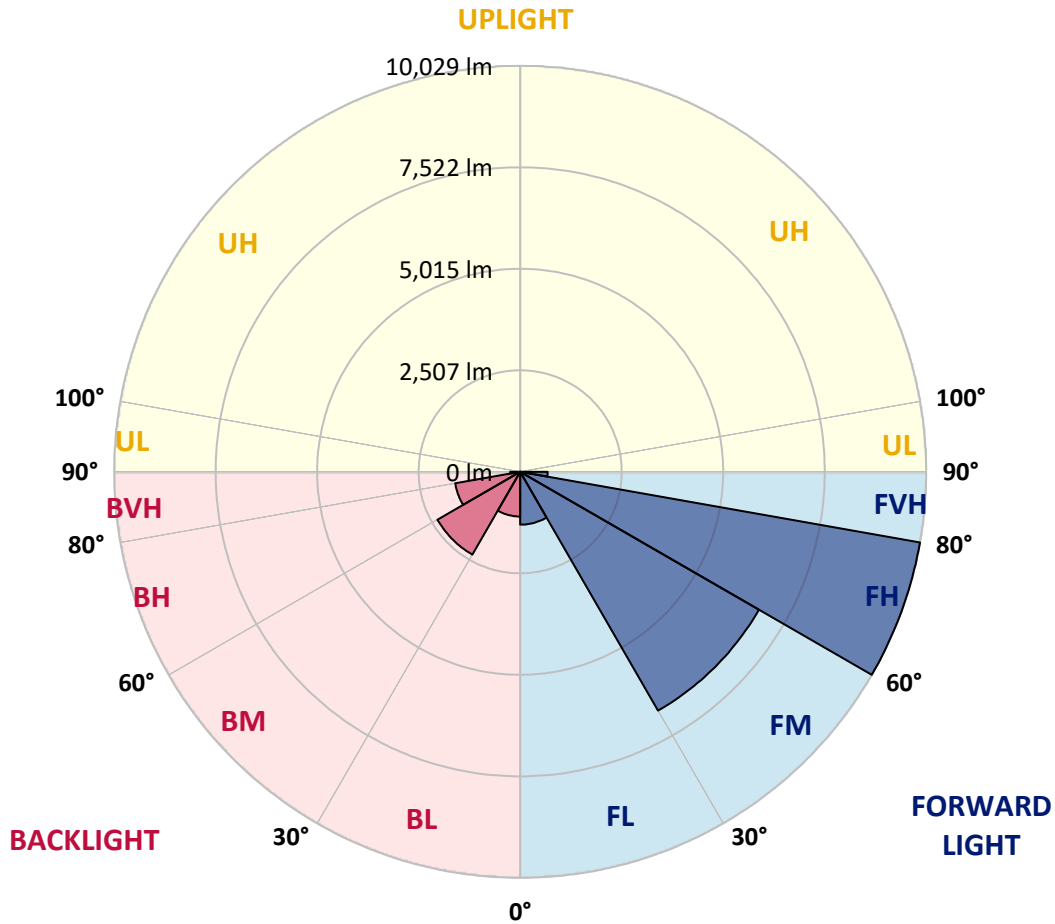
REPORT NUMBER: P399847  
 CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1306.3	5.4			
FM (30°-60°)	6811.7	28.2			
FH (60°-80°)	10029.5	41.5			G4/12000
FVH (80°-90°)	678.0	2.8			G4/750
BL (0°-30°)	1105.3	4.6	B3/2500		
BM (30°-60°)	2360.8	9.8	B2/2500		
BH (60°-80°)	1630.3	6.7	B3/2500		G3/2500
BVH (80°-90°)	244.2	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





REPORT NUMBER: P399847

CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0
2.5°	2683.3	2670.3	2663.9	2663.9	2638.1	2621.9	2618.7	2596.1	2576.7	2557.3	2541.2
5°	2838.3	2828.6	2809.2	2793.0	2757.5	2712.3	2705.9	2657.4	2609.0	2563.8	2525.0
7.5°	2980.3	2961.0	2938.3	2906.1	2847.9	2786.6	2776.9	2709.1	2641.3	2573.5	2521.8
10°	3099.8	3080.4	3048.1	3002.9	2928.7	2854.4	2844.7	2773.7	2702.6	2621.9	2547.6
12.5°	3212.8	3196.7	3148.2	3086.9	2999.7	2931.9	2922.2	2860.9	2786.6	2696.2	2599.3
15°	3309.7	3293.5	3241.9	3170.8	3070.7	3019.1	3006.2	2948.0	2873.8	2776.9	2676.8
17.5°	3358.1	3358.1	3303.2	3225.7	3132.1	3093.3	3083.7	3012.6	2944.8	2851.2	2751.1
20°	3374.3	3380.7	3342.0	3248.3	3167.6	3151.5	3141.8	3083.7	3006.2	2915.7	2822.1
22.5°	3383.9	3396.9	3364.6	3258.0	3190.2	3180.5	3174.1	3135.3	3074.0	2986.8	2893.1
25°	3416.2	3416.2	3393.6	3274.2	3219.3	3216.0	3216.0	3193.4	3151.5	3077.2	2983.6
27.5°	3464.7	3461.4	3432.4	3309.7	3283.8	3293.5	3290.3	3287.1	3258.0	3183.7	3083.7
30°	3545.4	3545.4	3513.1	3380.7	3364.6	3406.5	3409.8	3416.2	3371.0	3254.8	3174.1
32.5°	3668.1	3655.2	3622.9	3451.8	3425.9	3464.7	3471.1	3467.9	3429.2	3319.4	3280.6
35°	4045.9	4016.8	3900.6	3610.0	3480.8	3503.4	3506.6	3522.8	3529.2	3442.1	3422.7
37.5°	4707.8	4669.1	4491.5	3984.5	3655.2	3600.3	3597.1	3639.0	3674.6	3597.1	3597.1
40°	5427.9	5395.6	5292.3	4630.3	3978.1	3797.3	3784.3	3823.1	3868.3	3813.4	3829.5
42.5°	6047.8	6073.7	6083.4	5314.9	4462.4	4165.4	4129.8	4074.9	4146.0	4097.5	4162.1
45°	6512.8	6499.9	6677.5	6015.5	5088.8	4627.1	4578.7	4430.1	4520.5	4517.3	4659.4
47.5°	7006.8	6984.2	7058.5	6674.3	5802.4	5192.2	5117.9	4898.3	5033.9	5127.6	5363.3
50°	7475.0	7481.5	7507.3	7194.1	6577.4	5879.9	5786.3	5492.5	5686.2	5883.2	6215.7
52.5°	8085.3	8040.1	8007.8	7801.2	7446.0	6596.8	6535.4	6199.6	6470.8	6703.3	7145.7
55°	8618.1	8589.0	8569.6	8560.0	8172.5	7387.8	7323.3	6974.5	7365.2	7529.9	8182.2
57.5°	9186.4	9170.2	9273.6	9438.2	9283.2	8191.9	8124.1	7788.2	8224.1	8340.4	9305.8
60°	9602.9	9612.6	9896.7	10316.5	10210.0	9063.7	8983.0	8685.9	9060.4	9163.8	10429.5
62.5°	9606.1	9703.0	10361.7	11114.1	11236.8	10067.9	9974.2	9651.3	9919.4	9919.4	11437.0
65°	8689.1	8798.9	10277.8	11311.0	12276.5	11262.6	11172.2	10665.2	10765.3	10629.7	12383.0
67.5°	7775.3	7904.5	9296.2	11327.2	13006.2	12541.3	12434.7	11679.1	11508.0	11165.7	13045.0
70°	7168.3	7258.7	8421.1	11117.3	13445.4	13878.0	13797.3	12641.4	12092.4	11614.6	12906.1
72.5°	6034.9	6002.6	7113.4	10119.5	13690.8	15395.7	15327.9	13687.5	12599.4	11401.4	11007.5
75°	3503.4	3542.2	4414.0	7413.7	12341.1	16186.8	16180.3	14582.0	12376.6	10071.1	7584.8
77.5°	1010.7	1039.7	1449.8	3258.0	7804.4	13807.0	14249.4	13335.6	10461.8	7178.0	3932.9
80°	442.4	465.0	629.6	1084.9	3361.3	9018.5	9405.9	9018.5	6309.4	3293.5	1543.4
82.5°	261.5	277.7	410.1	671.6	1611.2	4291.3	4814.4	4204.1	2722.0	1398.1	639.3
85°	148.5	155.0	235.7	426.2	1013.9	1501.5	1685.5	1579.0	1327.1	794.3	335.8
87.5°	67.8	71.0	116.2	200.2	568.3	506.9	526.3	697.5	768.5	484.3	167.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399847

CATALOG NUMBER: ARCH-L-PA3-200-727-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0	2538.0
2.5°	2534.7	2525.0	2505.7	2499.2	2489.5	2492.8	2496.0	2496.0	2499.2	2489.5	2489.5
5°	2508.9	2492.8	2473.4	2473.4	2473.4	2499.2	2521.8	2534.7	2541.2	2541.2	2534.7
7.5°	2499.2	2479.8	2457.2	2463.7	2470.2	2502.4	2544.4	2586.4	2599.3	2599.3	2592.9
10°	2518.6	2499.2	2483.1	2492.8	2508.9	2534.7	2567.0	2605.8	2638.1	2641.3	2638.1
12.5°	2563.8	2541.2	2525.0	2544.4	2563.8	2579.9	2596.1	2612.2	2654.2	2660.7	2660.7
15°	2638.1	2615.5	2596.1	2612.2	2618.7	2618.7	2618.7	2618.7	2660.7	2667.1	2667.1
17.5°	2712.3	2692.9	2673.6	2676.8	2657.4	2631.6	2621.9	2618.7	2641.3	2660.7	2663.9
20°	2783.4	2767.2	2747.8	2715.6	2667.1	2618.7	2602.5	2602.5	2615.5	2644.5	2644.5
22.5°	2860.9	2841.5	2809.2	2734.9	2654.2	2586.4	2570.2	2579.9	2596.1	2634.8	2631.6
25°	2948.0	2922.2	2867.3	2728.5	2612.2	2531.5	2534.7	2563.8	2592.9	2634.8	2634.8
27.5°	3044.9	3009.4	2899.6	2676.8	2518.6	2441.1	2470.2	2538.0	2579.9	2625.1	2631.6
30°	3151.5	3119.2	2925.4	2586.4	2366.8	2295.8	2366.8	2476.6	2541.2	2583.2	2592.9
32.5°	3280.6	3254.8	2948.0	2470.2	2169.9	2108.5	2211.8	2347.5	2450.8	2499.2	2508.9
35°	3442.1	3416.2	2977.1	2337.8	1985.8	1921.2	2014.9	2153.7	2289.3	2350.7	2370.1
37.5°	3651.9	3613.2	3002.9	2195.7	1830.8	1756.6	1801.8	1927.7	2050.4	2134.3	2156.9
40°	3920.0	3858.6	3025.5	2034.2	1695.2	1611.2	1627.4	1688.7	1759.8	1834.0	1863.1
42.5°	4297.7	4175.0	3028.8	1863.1	1556.4	1478.9	1472.4	1491.8	1491.8	1491.8	1501.5
45°	4824.1	4591.6	3035.2	1701.7	1414.3	1333.6	1314.2	1307.7	1259.3	1165.7	1159.2
47.5°	5489.2	5137.3	3064.3	1566.0	1265.8	1194.7	1168.9	1143.1	1052.6	955.8	936.4
50°	6341.7	5770.1	3122.4	1436.9	1139.8	1091.4	1059.1	997.7	897.6	823.4	804.0
52.5°	7323.3	6522.5	3177.3	1301.3	1046.2	1013.9	975.1	900.9	794.3	749.1	742.7
55°	8450.2	7362.0	3287.1	1181.8	965.5	942.9	907.3	836.3	755.6	723.3	720.1
57.5°	9602.9	8301.6	3442.1	1075.2	888.0	875.0	875.0	813.7	762.0	749.1	749.1
60°	10713.7	9108.9	3322.6	975.1	816.9	823.4	884.7	868.6	829.8	846.0	855.7
62.5°	11575.8	9583.5	2696.2	894.4	765.3	823.4	981.6	981.6	936.4	929.9	929.9
65°	11943.9	9577.1	1895.4	833.1	745.9	904.1	1094.6	1043.0	923.5	878.3	868.6
67.5°	11850.3	9157.3	1307.7	791.1	739.4	988.1	1146.3	1001.0	865.4	826.6	797.6
70°	11026.9	8269.4	1007.4	752.3	729.7	952.5	1130.1	952.5	820.2	784.6	758.8
72.5°	8895.8	6632.3	836.3	713.6	691.0	881.5	1075.2	907.3	784.6	745.9	720.1
75°	5673.3	4171.8	707.1	661.9	616.7	791.1	1001.0	862.1	745.9	694.2	674.9
77.5°	2728.5	1798.5	616.7	600.6	555.4	733.0	926.7	804.0	694.2	652.2	639.3
80°	1104.3	823.4	536.0	539.2	510.2	697.5	875.0	749.1	642.6	597.4	574.8
82.5°	574.8	477.9	452.1	465.0	465.0	665.2	836.3	703.9	597.4	578.0	503.7
85°	310.0	297.1	348.7	374.6	403.6	600.6	778.2	655.5	545.7	468.2	452.1
87.5°	151.8	193.7	197.0	226.0	280.9	481.1	655.5	548.9	455.3	377.8	371.3
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)