

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: P400189

Luminaire Tested: **ARCH-L-PA3-240-830-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400189  
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-PA3-240-830-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25959 lumens  
Efficiency: N/A  
Efficacy: 107.3 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

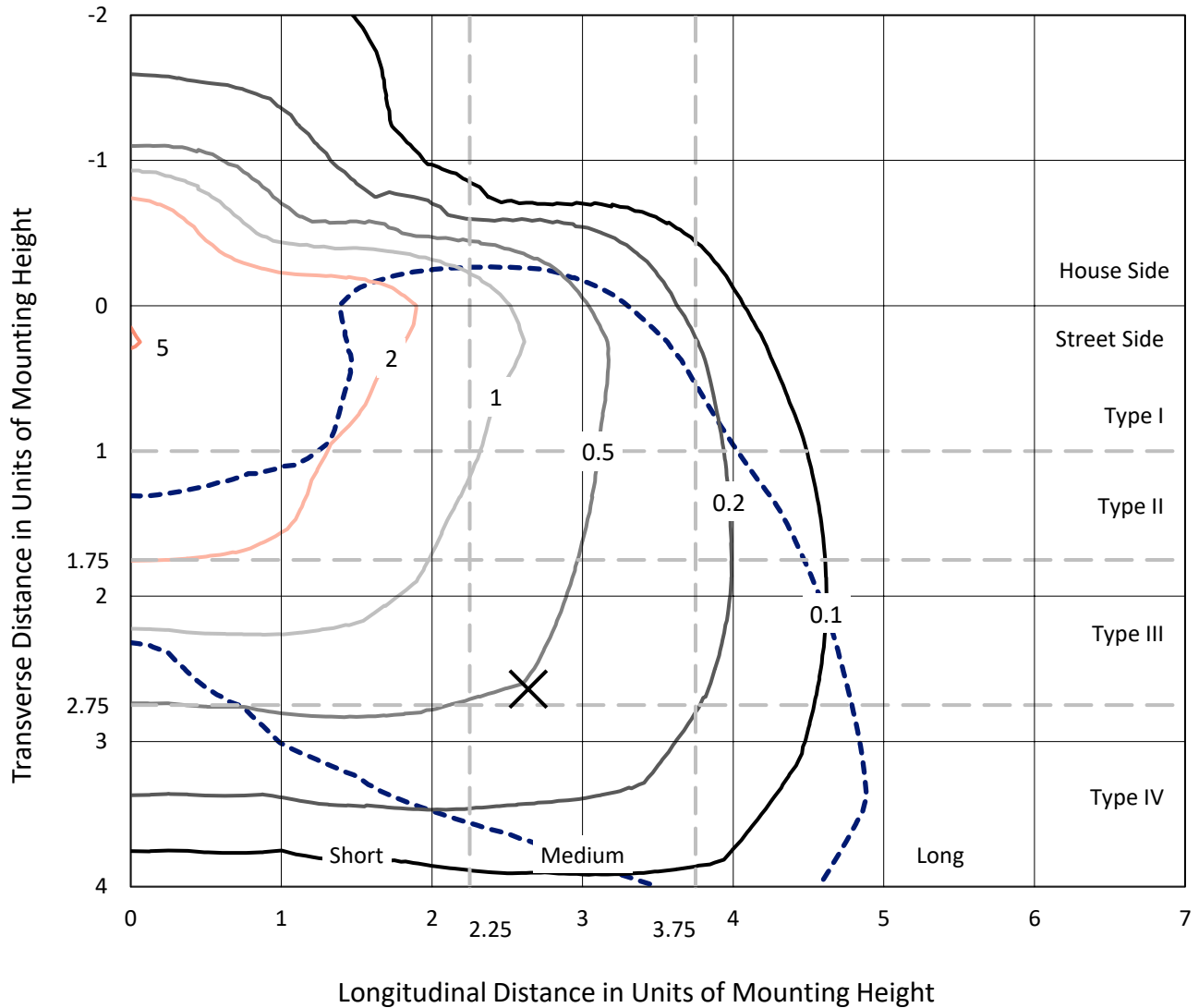
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P400189  
 CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

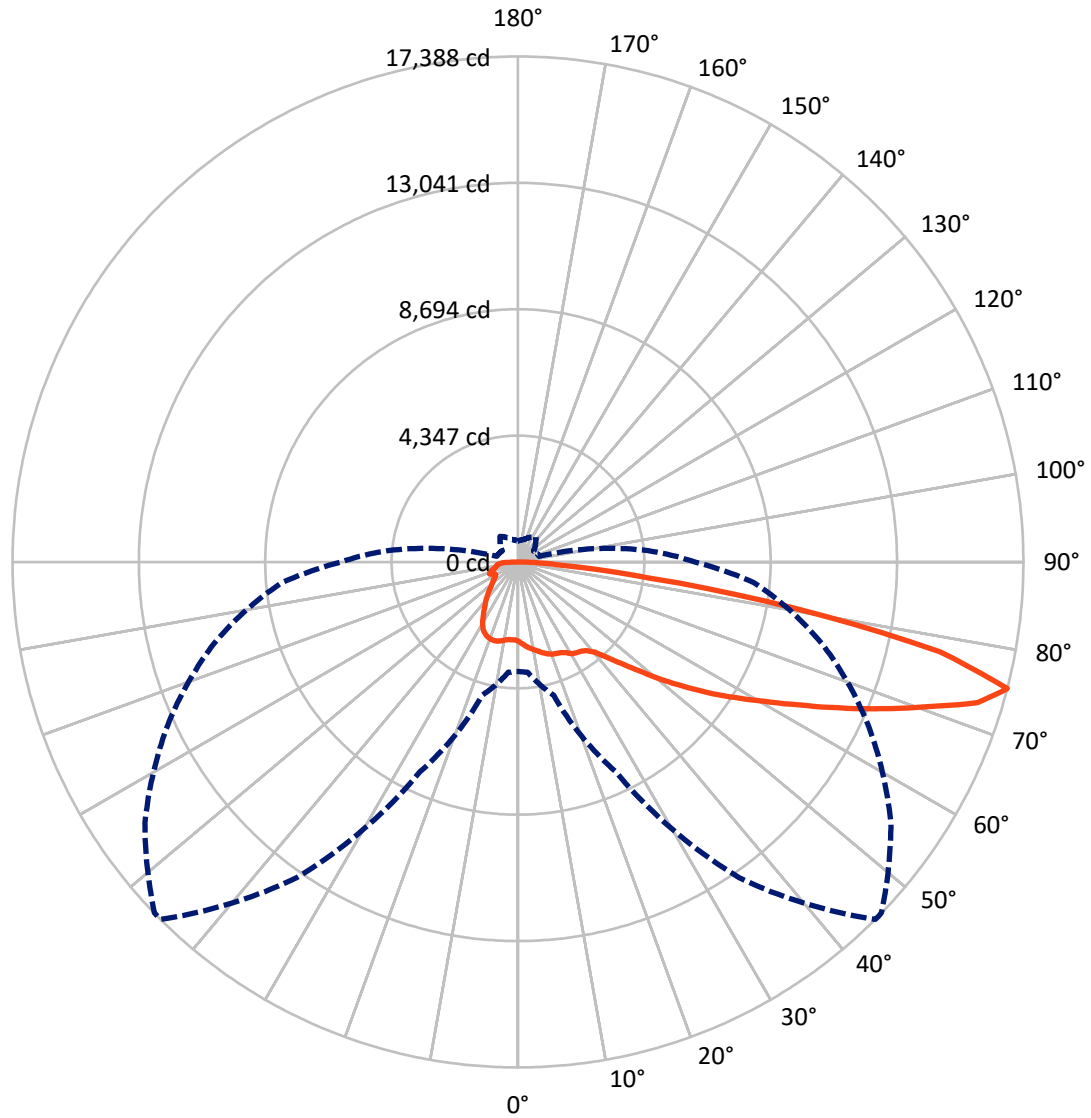
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P400189  
CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P400189  
 CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

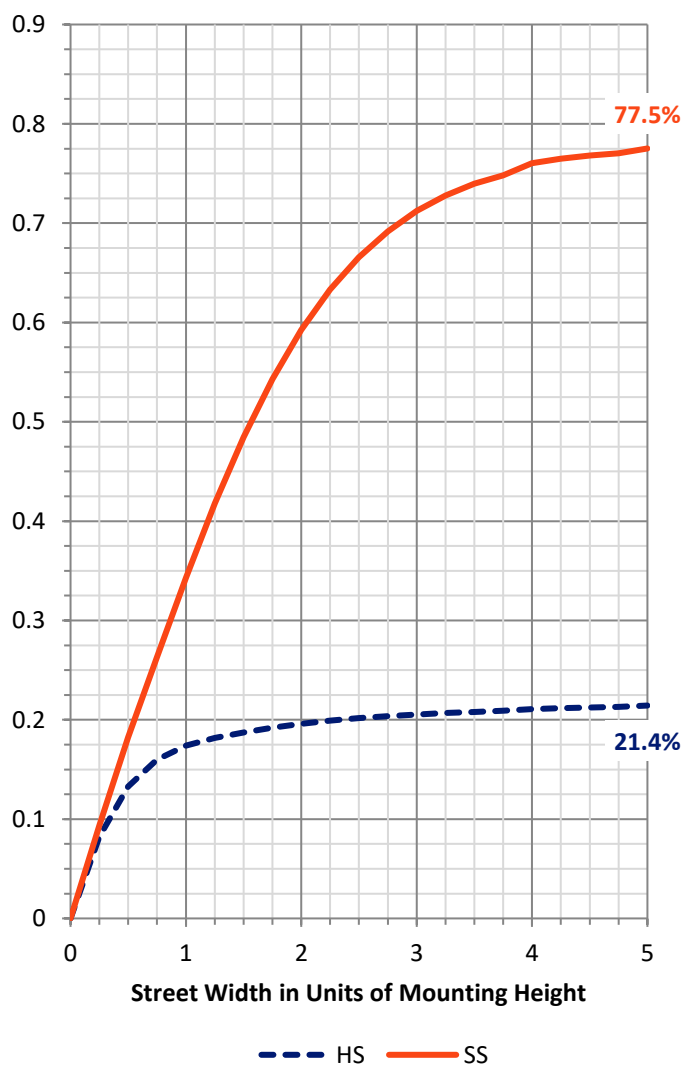
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5736.8	0.0	5736.8
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	20222.2	0.0	20222.2
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	25959.0	0.0	25959.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.7	1.0
10°-20°	858.0	3.3
20°-30°	1462.8	5.6
30°-40°	2049.6	7.9
40°-50°	3011.1	11.6
50°-60°	4792.3	18.5
60°-70°	6817.0	26.3
70°-80°	5707.9	22.0
80°-90°	990.6	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°	25959.0	100.0
0°-180°	25959.0	100.0

**Coefficient of Utilization**

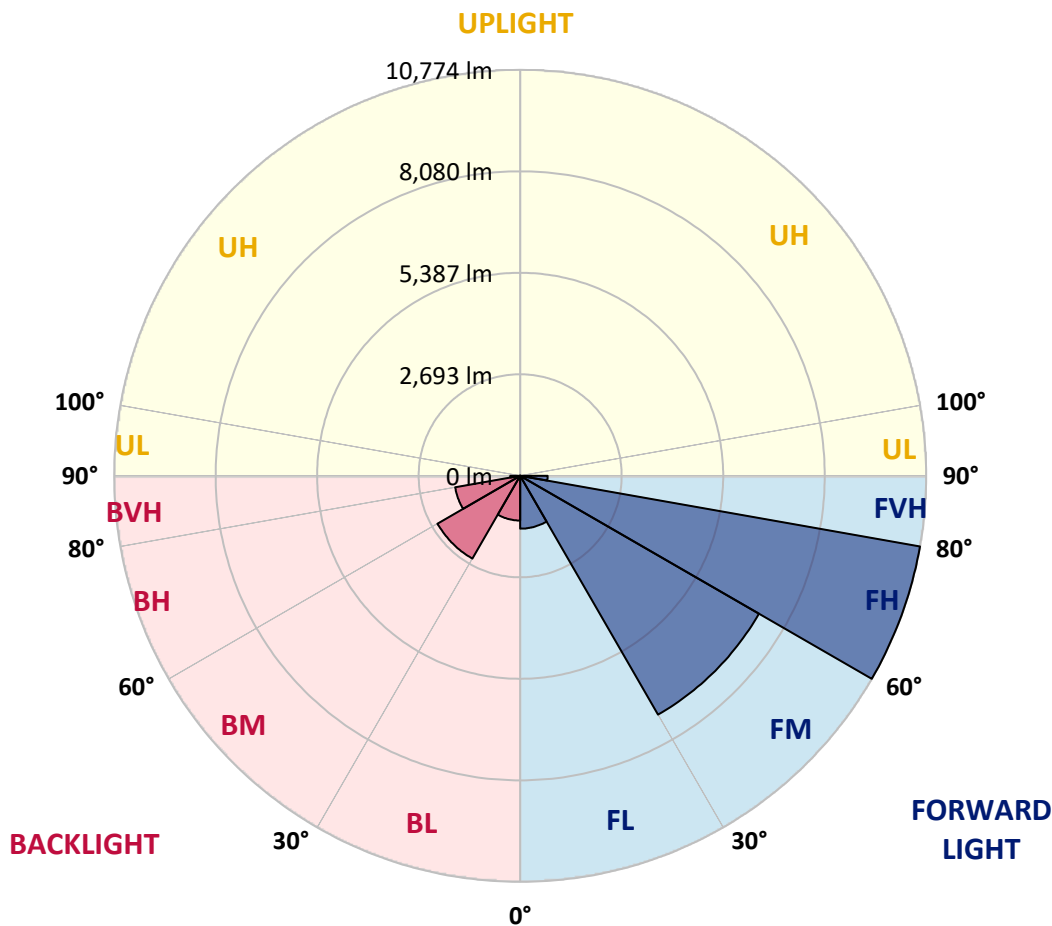


REPORT NUMBER: P400189  
 CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1403.2	5.4			
FM (30°-60°)	7317.0	28.2			
FH (60°-80°)	10773.6	41.5			G4/12000
FVH (80°-90°)	728.3	2.8			G4/750
BL (0°-30°)	1187.3	4.6	B3/2500		
BM (30°-60°)	2535.9	9.8	B3/5000		
BH (60°-80°)	1751.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	262.3	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: P400189

CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3
2.5°	2882.3	2868.5	2861.5	2861.5	2833.8	2816.4	2813.0	2788.7	2767.9	2747.1	2729.7
5°	3048.8	3038.4	3017.6	3000.3	2962.1	2913.6	2906.6	2854.6	2802.6	2754.0	2712.4
7.5°	3201.5	3180.6	3156.4	3121.7	3059.2	2993.3	2982.9	2910.1	2837.3	2764.4	2708.9
10°	3329.8	3309.0	3274.3	3225.7	3146.0	3066.2	3055.8	2979.5	2903.2	2816.4	2736.7
12.5°	3451.2	3433.8	3381.8	3315.9	3222.3	3149.4	3139.0	3073.1	2993.3	2896.2	2792.2
15°	3555.2	3537.9	3482.4	3406.1	3298.6	3243.1	3229.2	3166.8	3087.0	2982.9	2875.4
17.5°	3607.3	3607.3	3548.3	3465.1	3364.5	3322.8	3312.4	3236.1	3163.3	3062.7	2955.2
20°	3624.6	3631.5	3589.9	3489.3	3402.6	3385.3	3374.9	3312.4	3229.2	3132.1	3031.5
22.5°	3635.0	3648.9	3614.2	3499.7	3426.9	3416.5	3409.6	3367.9	3302.0	3208.4	3107.8
25°	3669.7	3669.7	3645.4	3517.1	3458.1	3454.7	3454.7	3430.4	3385.3	3305.5	3204.9
27.5°	3721.7	3718.3	3687.0	3555.2	3527.5	3537.9	3534.4	3531.0	3499.7	3420.0	3312.4
30°	3808.4	3808.4	3773.8	3631.5	3614.2	3659.3	3662.8	3669.7	3621.1	3496.3	3409.6
32.5°	3940.2	3926.4	3891.7	3707.9	3680.1	3721.7	3728.7	3725.2	3683.6	3565.6	3524.0
35°	4346.1	4314.8	4190.0	3877.8	3739.1	3763.4	3766.8	3784.2	3791.1	3697.5	3676.6
37.5°	5057.1	5015.5	4824.7	4280.2	3926.4	3867.4	3863.9	3909.0	3947.2	3863.9	3863.9
40°	5830.6	5795.9	5684.9	4973.9	4273.2	4079.0	4065.1	4106.7	4155.3	4096.3	4113.7
42.5°	6496.6	6524.3	6534.7	5709.2	4793.5	4474.4	4436.2	4377.3	4453.6	4401.6	4470.9
45°	6996.0	6982.1	7172.9	6461.9	5466.4	4970.4	4918.4	4758.8	4855.9	4852.5	5005.1
47.5°	7526.7	7502.4	7582.2	7169.4	6232.9	5577.4	5497.6	5261.8	5407.4	5508.0	5761.2
50°	8029.6	8036.6	8064.3	7727.9	7065.4	6316.2	6215.6	5900.0	6108.1	6319.7	6676.9
52.5°	8685.2	8636.6	8601.9	8380.0	7998.4	7086.2	7020.3	6659.6	6950.9	7200.7	7675.9
55°	9257.5	9226.3	9205.5	9195.1	8778.8	7936.0	7866.6	7492.0	7911.7	8088.6	8789.3
57.5°	9868.0	9850.6	9961.6	10138.5	9972.0	8799.7	8726.8	8366.1	8834.3	8959.2	9996.3
60°	10315.4	10325.8	10631.0	11081.9	10967.5	9736.2	9649.4	9330.3	9732.7	9843.7	11203.3
62.5°	10318.9	10422.9	11130.5	11938.7	12070.5	10814.9	10714.3	10367.4	10655.3	10655.3	12285.5
65°	9333.8	9451.7	11040.3	12150.3	13187.3	12098.2	12001.1	11456.5	11564.1	11418.4	13301.8
67.5°	8352.2	8491.0	9985.9	12167.6	13971.2	13471.8	13357.3	12545.7	12361.8	11994.2	14012.9
70°	7700.1	7797.3	9045.9	11942.1	14443.0	14907.7	14821.0	13579.3	12989.6	12476.3	13863.7
72.5°	6482.7	6448.0	7641.2	10870.4	14706.6	16537.9	16465.1	14703.1	13534.2	12247.4	11824.2
75°	3763.4	3805.0	4741.5	7963.7	13256.7	17387.7	17380.8	15663.9	13294.9	10818.3	8147.6
77.5°	1085.6	1116.9	1557.4	3499.7	8383.4	14831.4	15306.6	14325.0	11238.0	7710.5	4224.7
80°	475.2	499.5	676.4	1165.4	3610.7	9687.6	10103.8	9687.6	6777.5	3537.9	1658.0
82.5°	281.0	298.3	440.5	721.5	1730.8	4609.7	5171.6	4516.0	2924.0	1501.9	686.8
85°	159.6	166.5	253.2	457.8	1089.1	1612.9	1810.6	1696.1	1425.6	853.3	360.7
87.5°	72.8	76.3	124.9	215.0	610.5	544.6	565.4	749.2	825.5	520.3	180.4
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: P400189

CATALOG NUMBER: ARCH-L-PA3-240-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3	2726.3
2.5°	2722.8	2712.4	2691.6	2684.6	2674.2	2677.7	2681.2	2681.2	2684.6	2674.2	2674.2
5°	2695.0	2677.7	2656.9	2656.9	2656.9	2684.6	2708.9	2722.8	2729.7	2729.7	2722.8
7.5°	2684.6	2663.8	2639.5	2646.5	2653.4	2688.1	2733.2	2778.3	2792.2	2792.2	2785.2
10°	2705.5	2684.6	2667.3	2677.7	2695.0	2722.8	2757.5	2799.1	2833.8	2837.3	2833.8
12.5°	2754.0	2729.7	2712.4	2733.2	2754.0	2771.4	2788.7	2806.0	2851.1	2858.1	2858.1
15°	2833.8	2809.5	2788.7	2806.0	2813.0	2813.0	2813.0	2813.0	2858.1	2865.0	2865.0
17.5°	2913.6	2892.8	2871.9	2875.4	2854.6	2826.9	2816.4	2813.0	2837.3	2858.1	2861.5
20°	2989.9	2972.5	2951.7	2917.0	2865.0	2813.0	2795.6	2795.6	2809.5	2840.7	2840.7
22.5°	3073.1	3052.3	3017.6	2937.8	2851.1	2778.3	2760.9	2771.4	2788.7	2830.3	2826.9
25°	3166.8	3139.0	3080.1	2930.9	2806.0	2719.3	2722.8	2754.0	2785.2	2830.3	2830.3
27.5°	3270.8	3232.7	3114.7	2875.4	2705.5	2622.2	2653.4	2726.3	2771.4	2819.9	2826.9
30°	3385.3	3350.6	3142.5	2778.3	2542.4	2466.1	2542.4	2660.4	2729.7	2774.8	2785.2
32.5°	3524.0	3496.3	3166.8	2653.4	2330.9	2264.9	2375.9	2521.6	2632.6	2684.6	2695.0
35°	3697.5	3669.7	3198.0	2511.2	2133.1	2063.8	2164.4	2313.5	2459.2	2525.1	2545.9
37.5°	3922.9	3881.3	3225.7	2358.6	1966.7	1886.9	1935.4	2070.7	2202.5	2292.7	2317.0
40°	4210.8	4144.9	3250.0	2185.2	1821.0	1730.8	1748.1	1814.0	1890.3	1970.1	2001.3
42.5°	4616.6	4484.8	3253.5	2001.3	1671.8	1588.6	1581.6	1602.5	1602.5	1602.5	1612.9
45°	5182.0	4932.2	3260.4	1827.9	1519.2	1432.5	1411.7	1404.8	1352.7	1252.1	1245.2
47.5°	5896.5	5518.4	3291.6	1682.2	1359.7	1283.4	1255.6	1227.9	1130.7	1026.7	1005.9
50°	6812.2	6198.3	3354.1	1543.5	1224.4	1172.4	1137.7	1071.8	964.3	884.5	863.7
52.5°	7866.6	7006.4	3413.0	1397.8	1123.8	1089.1	1047.5	967.7	853.3	804.7	797.8
55°	9077.1	7908.2	3531.0	1269.5	1037.1	1012.8	974.7	898.3	811.6	777.0	773.5
57.5°	10315.4	8917.6	3697.5	1155.0	953.8	940.0	940.0	874.1	818.6	804.7	804.7
60°	11508.6	9784.7	3569.1	1047.5	877.5	884.5	950.4	933.0	891.4	908.8	919.2
62.5°	12434.7	10294.6	2896.2	960.8	822.0	884.5	1054.4	1054.4	1005.9	998.9	998.9
65°	12830.1	10287.7	2036.0	894.9	801.2	971.2	1175.8	1120.3	992.0	943.4	933.0
67.5°	12729.5	9836.7	1404.8	849.8	794.3	1061.4	1231.3	1075.2	929.6	887.9	856.7
70°	11845.0	8882.9	1082.2	808.2	783.9	1023.2	1214.0	1023.2	881.0	842.9	815.1
72.5°	9555.8	7124.4	898.3	766.5	742.3	946.9	1155.0	974.7	842.9	801.2	773.5
75°	6094.2	4481.3	759.6	711.0	662.5	849.8	1075.2	926.1	801.2	745.7	724.9
77.5°	2930.9	1932.0	662.5	645.1	596.6	787.4	995.5	863.7	745.7	700.6	686.8
80°	1186.2	884.5	575.8	579.2	548.0	749.2	940.0	804.7	690.2	641.7	617.4
82.5°	617.4	513.3	485.6	499.5	499.5	714.5	898.3	756.1	641.7	620.9	541.1
85°	333.0	319.1	374.6	402.3	433.6	645.1	835.9	704.1	586.2	502.9	485.6
87.5°	163.0	208.1	211.6	242.8	301.8	516.8	704.1	589.6	489.1	405.8	398.9
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)