

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: P399712

Luminaire Tested: **ARCH-L-PA3-180-730-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399712  
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-PA3-180-730-U-T4W  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24254 lumens  
Efficiency: N/A  
Efficacy: 134.0 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

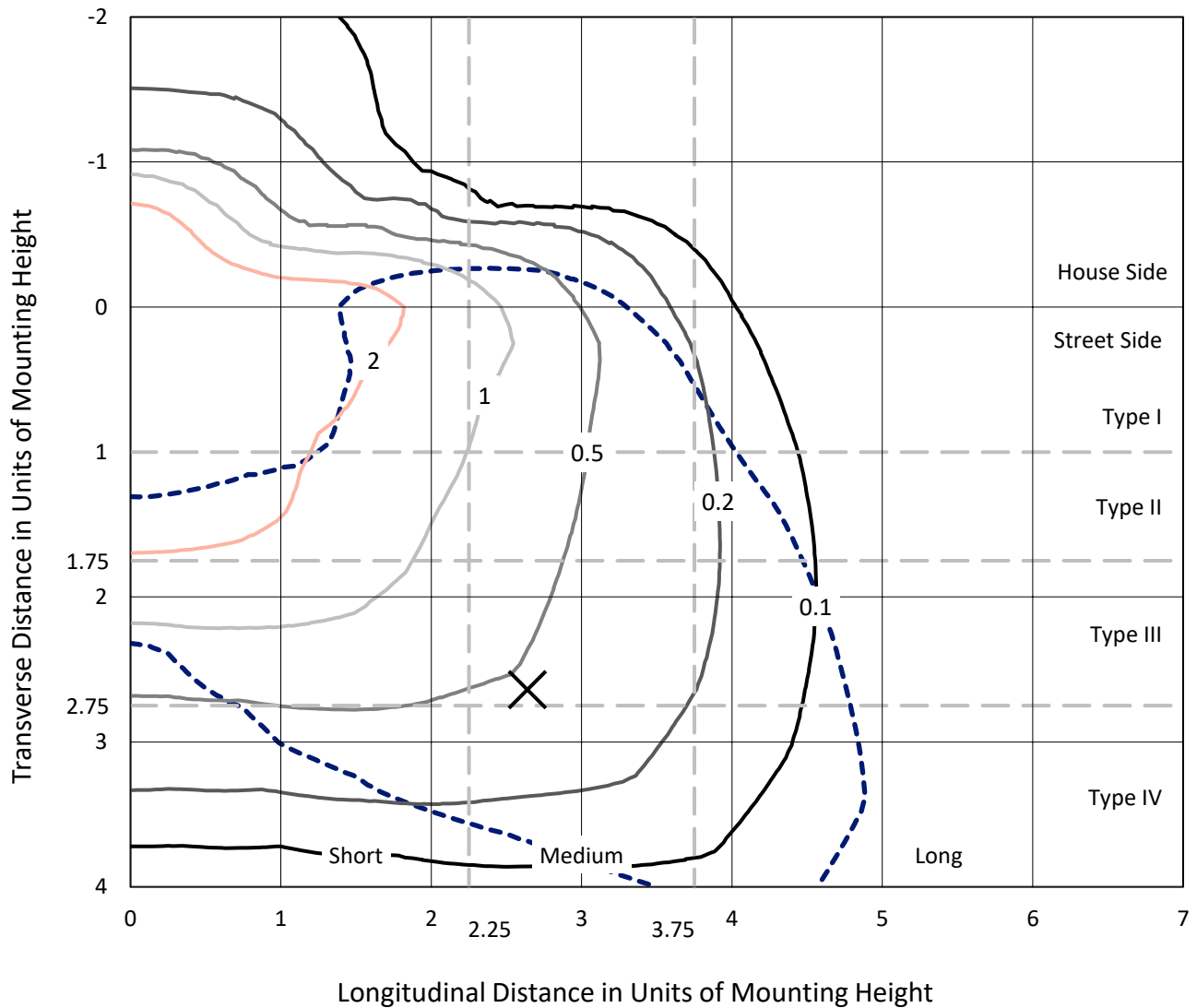
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

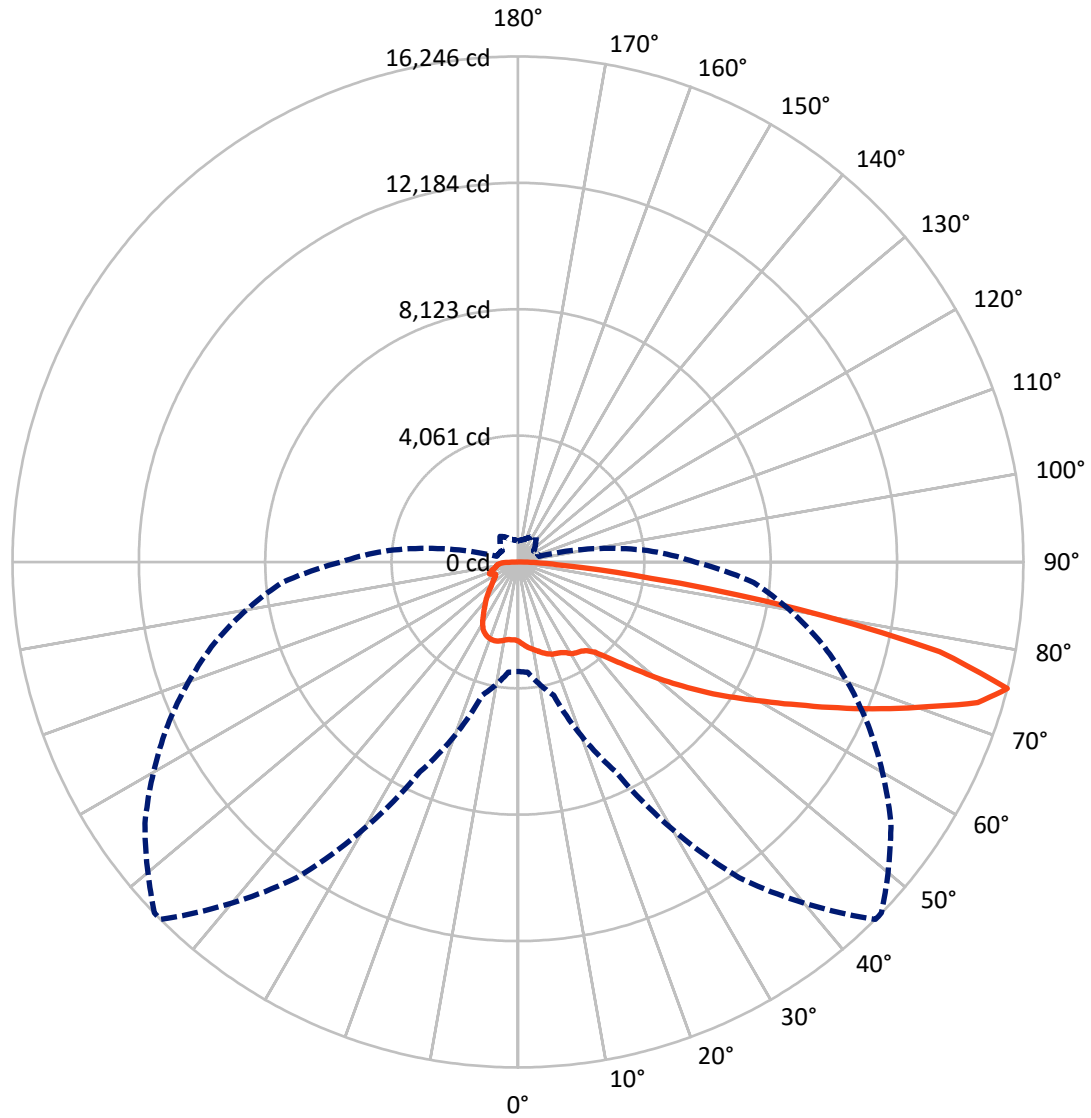
× Max cd  
 - - - 1/2 Max cd



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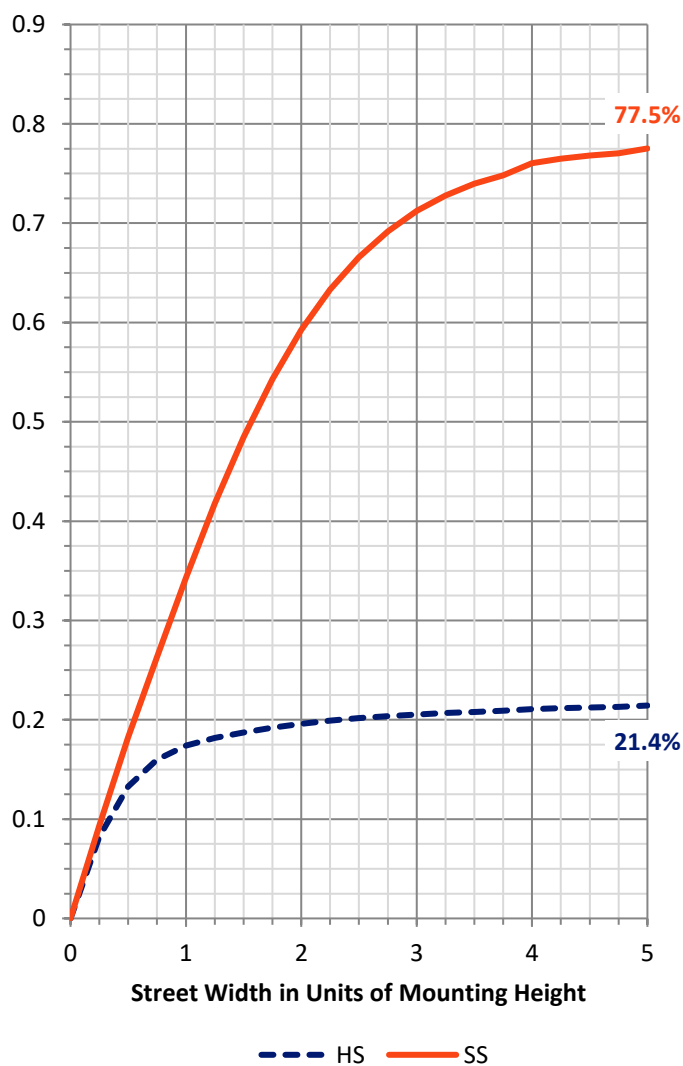
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5360.0	0.0	5360.0
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	18894.0	0.0	18894.0
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	24254.0	0.0	24254.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	252.0	1.0
10°-20°	801.7	3.3
20°-30°	1366.7	5.6
30°-40°	1915.0	7.9
40°-50°	2813.4	11.6
50°-60°	4477.5	18.5
60°-70°	6369.3	26.3
70°-80°	5333.0	22.0
80°-90°	925.5	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°	24254.0	100.0
0°-180°	24254.0	100.0

**Coefficient of Utilization**

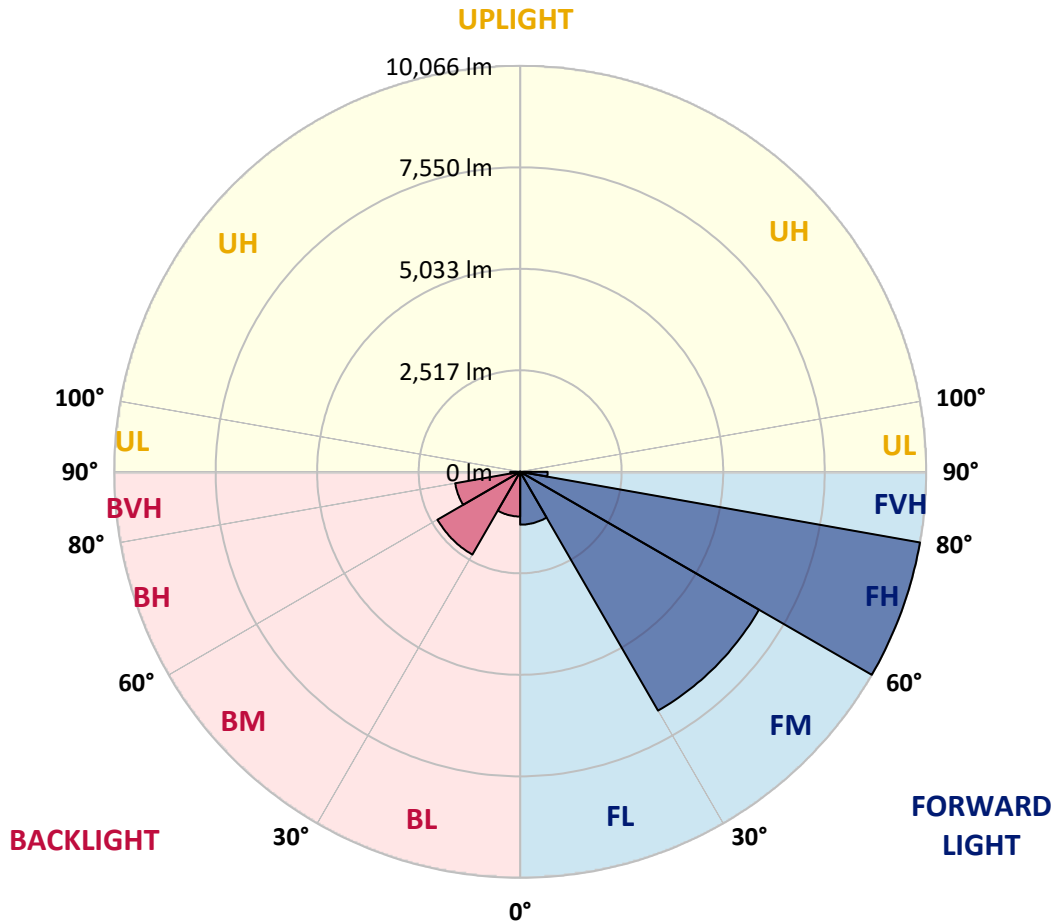


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1311.1	5.4			
FM (30°-60°)	6836.5	28.2			
FH (60°-80°)	10066.0	41.5			G4/12000
FVH (80°-90°)	680.4	2.8			G4/750
BL (0°-30°)	1109.3	4.6	B3/2500		
BM (30°-60°)	2369.4	9.8	B2/2500		
BH (60°-80°)	1636.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	245.1	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°	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2
2.5°	2693.0	2680.1	2673.6	2673.6	2647.7	2631.5	2628.2	2605.5	2586.1	2566.6	2550.4
5°	2848.6	2838.9	2819.4	2803.2	2767.6	2722.2	2715.7	2667.1	2618.5	2573.1	2534.2
7.5°	2991.2	2971.7	2949.0	2916.6	2858.3	2796.7	2787.0	2719.0	2650.9	2582.8	2531.0
10°	3111.1	3091.6	3059.2	3013.9	2939.3	2864.8	2855.1	2783.8	2712.5	2631.5	2556.9
12.5°	3224.5	3208.3	3159.7	3098.1	3010.6	2942.6	2932.8	2871.3	2796.7	2706.0	2608.8
15°	3321.7	3305.5	3253.7	3182.4	3081.9	3030.1	3017.1	2958.8	2884.2	2787.0	2686.6
17.5°	3370.3	3370.3	3315.2	3237.5	3143.5	3104.6	3094.9	3023.6	2955.5	2861.5	2761.1
20°	3386.5	3393.0	3354.1	3260.2	3179.1	3162.9	3153.2	3094.9	3017.1	2926.4	2832.4
22.5°	3396.3	3409.2	3376.8	3269.9	3201.8	3192.1	3185.6	3146.7	3085.2	2997.7	2903.7
25°	3428.7	3428.7	3406.0	3286.1	3231.0	3227.8	3227.8	3205.1	3162.9	3088.4	2994.4
27.5°	3477.3	3474.0	3444.9	3321.7	3295.8	3305.5	3302.3	3299.0	3269.9	3195.3	3094.9
30°	3558.3	3558.3	3525.9	3393.0	3376.8	3419.0	3422.2	3428.7	3383.3	3266.6	3185.6
32.5°	3681.5	3668.5	3636.1	3464.3	3438.4	3477.3	3483.8	3480.5	3441.6	3331.5	3292.6
35°	4060.6	4031.4	3914.8	3623.1	3493.5	3516.2	3519.4	3535.6	3542.1	3454.6	3435.2
37.5°	4725.0	4686.1	4507.8	3999.0	3668.5	3613.4	3610.2	3652.3	3687.9	3610.2	3610.2
40°	5447.6	5415.2	5311.5	4647.2	3992.6	3811.1	3798.1	3837.0	3882.4	3827.3	3843.5
42.5°	6069.9	6095.8	6105.5	5334.2	4478.7	4180.5	4144.9	4089.8	4161.1	4112.5	4177.3
45°	6536.5	6523.6	6701.8	6037.4	5107.4	4643.9	4595.3	4446.3	4537.0	4533.8	4676.3
47.5°	7032.3	7009.7	7084.2	6698.6	5823.6	5211.1	5136.5	4916.2	5052.3	5146.3	5382.8
50°	7502.3	7508.7	7534.7	7220.3	6601.3	5901.3	5807.4	5512.5	5706.9	5904.6	6238.4
52.5°	8114.7	8069.4	8037.0	7829.6	7473.1	6620.8	6559.2	6222.2	6494.4	6727.7	7171.7
55°	8649.5	8620.3	8600.9	8591.1	8202.2	7414.8	7349.9	6999.9	7392.1	7557.3	8212.0
57.5°	9219.8	9203.6	9307.3	9472.6	9317.1	8221.7	8153.6	7816.6	8254.1	8370.8	9339.7
60°	9637.9	9647.6	9932.8	10354.1	10247.1	9096.7	9015.7	8717.5	9093.4	9197.1	10467.5
62.5°	9641.1	9738.3	10399.4	11154.5	11277.7	10104.5	10010.6	9686.5	9955.5	9955.5	11478.6
65°	8720.8	8830.9	10315.2	11352.2	12321.2	11303.6	11212.9	10704.1	10804.5	10668.4	12428.1
67.5°	7803.6	7933.3	9330.0	11368.4	13053.6	12586.9	12480.0	11721.7	11549.9	11206.4	13092.5
70°	7194.4	7285.1	8451.8	11157.8	13494.3	13928.6	13847.6	12687.4	12136.5	11656.8	12953.1
72.5°	6056.9	6024.5	7139.3	10156.4	13740.6	15451.7	15383.7	13737.4	12645.3	11443.0	11047.6
75°	3516.2	3555.1	4430.1	7440.7	12386.0	16245.7	16239.2	14635.1	12421.7	10107.8	7612.4
77.5°	1014.3	1043.5	1455.1	3269.9	7832.8	13857.3	14301.3	13384.1	10499.9	7204.1	3947.2
80°	444.0	466.7	631.9	1088.9	3373.6	9051.3	9440.2	9051.3	6332.4	3305.5	1549.1
82.5°	262.5	278.7	411.6	674.1	1617.1	4306.9	4831.9	4219.4	2731.9	1403.2	641.7
85°	149.1	155.6	236.6	427.8	1017.6	1506.9	1691.7	1584.7	1331.9	797.2	337.0
87.5°	68.1	71.3	116.7	200.9	570.4	508.8	528.2	700.0	771.3	486.1	168.5
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°	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2	2547.2
2.5°	2544.0	2534.2	2514.8	2508.3	2498.6	2501.8	2505.1	2505.1	2508.3	2498.6	2498.6
5°	2518.0	2501.8	2482.4	2482.4	2482.4	2508.3	2531.0	2544.0	2550.4	2550.4	2544.0
7.5°	2508.3	2488.9	2466.2	2472.7	2479.1	2511.6	2553.7	2595.8	2608.8	2608.8	2602.3
10°	2527.8	2508.3	2492.1	2501.8	2518.0	2544.0	2576.4	2615.3	2647.7	2650.9	2647.7
12.5°	2573.1	2550.4	2534.2	2553.7	2573.1	2589.3	2605.5	2621.7	2663.9	2670.3	2670.3
15°	2647.7	2625.0	2605.5	2621.7	2628.2	2628.2	2628.2	2628.2	2670.3	2676.8	2676.8
17.5°	2722.2	2702.8	2683.3	2686.6	2667.1	2641.2	2631.5	2628.2	2650.9	2670.3	2673.6
20°	2793.5	2777.3	2757.8	2725.4	2676.8	2628.2	2612.0	2612.0	2625.0	2654.1	2654.1
22.5°	2871.3	2851.8	2819.4	2744.9	2663.9	2595.8	2579.6	2589.3	2605.5	2644.4	2641.2
25°	2958.8	2932.8	2877.8	2738.4	2621.7	2540.7	2544.0	2573.1	2602.3	2644.4	2644.4
27.5°	3056.0	3020.3	2910.2	2686.6	2527.8	2450.0	2479.1	2547.2	2589.3	2634.7	2641.2
30°	3162.9	3130.5	2936.1	2595.8	2375.4	2304.1	2375.4	2485.6	2550.4	2592.6	2602.3
32.5°	3292.6	3266.6	2958.8	2479.1	2177.8	2116.2	2219.9	2356.0	2459.7	2508.3	2518.0
35°	3454.6	3428.7	2987.9	2346.3	1993.0	1928.2	2022.2	2161.6	2297.7	2359.2	2378.7
37.5°	3665.2	3626.4	3013.9	2203.7	1837.5	1762.9	1808.3	1934.7	2057.9	2142.1	2164.8
40°	3934.2	3872.7	3036.5	2041.6	1701.4	1617.1	1633.3	1694.9	1766.2	1840.7	1869.9
42.5°	4313.4	4190.2	3039.8	1869.9	1562.0	1484.2	1477.8	1497.2	1497.2	1497.2	1506.9
45°	4841.6	4608.3	3046.3	1707.9	1419.4	1338.4	1319.0	1312.5	1263.9	1169.9	1163.4
47.5°	5509.2	5156.0	3075.4	1571.7	1270.4	1199.1	1173.1	1147.2	1056.5	959.3	939.8
50°	6364.8	5791.2	3133.8	1442.1	1144.0	1095.4	1063.0	1001.4	900.9	826.4	806.9
52.5°	7349.9	6546.2	3188.9	1306.0	1050.0	1017.6	978.7	904.2	797.2	751.8	745.4
55°	8480.9	7388.8	3299.0	1186.1	969.0	946.3	910.6	839.3	758.3	725.9	722.7
57.5°	9637.9	8331.9	3454.6	1079.2	891.2	878.2	878.2	816.7	764.8	751.8	751.8
60°	10752.7	9142.1	3334.7	978.7	819.9	826.4	888.0	871.8	832.9	849.1	858.8
62.5°	11618.0	9618.4	2706.0	897.7	768.0	826.4	985.2	985.2	939.8	933.3	933.3
65°	11987.4	9612.0	1902.3	836.1	748.6	907.4	1098.6	1046.8	926.8	881.5	871.8
67.5°	11893.4	9190.7	1312.5	794.0	742.1	991.7	1150.5	1004.6	868.5	829.6	800.5
70°	11067.0	8299.5	1011.1	755.1	732.4	956.0	1134.2	956.0	823.1	787.5	761.6
72.5°	8928.2	6656.4	839.3	716.2	693.5	884.7	1079.2	910.6	787.5	748.6	722.7
75°	5693.9	4187.0	709.7	664.3	619.0	794.0	1004.6	865.3	748.6	696.8	677.3
77.5°	2738.4	1805.1	619.0	602.8	557.4	735.6	930.1	806.9	696.8	654.6	641.7
80°	1108.3	826.4	538.0	541.2	512.0	700.0	878.2	751.8	644.9	599.5	576.8
82.5°	576.8	479.6	453.7	466.7	466.7	667.6	839.3	706.5	599.5	580.1	505.6
85°	311.1	298.1	350.0	375.9	405.1	602.8	781.0	657.9	547.7	469.9	453.7
87.5°	152.3	194.4	197.7	226.8	281.9	482.9	657.9	550.9	456.9	379.2	372.7
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)