

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: P400104

Luminaire Tested: **ARCH-L-PA3-230-827-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400104  
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-PA3-230-827-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23254 lumens  
Efficiency: N/A  
Efficacy: 101.5 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

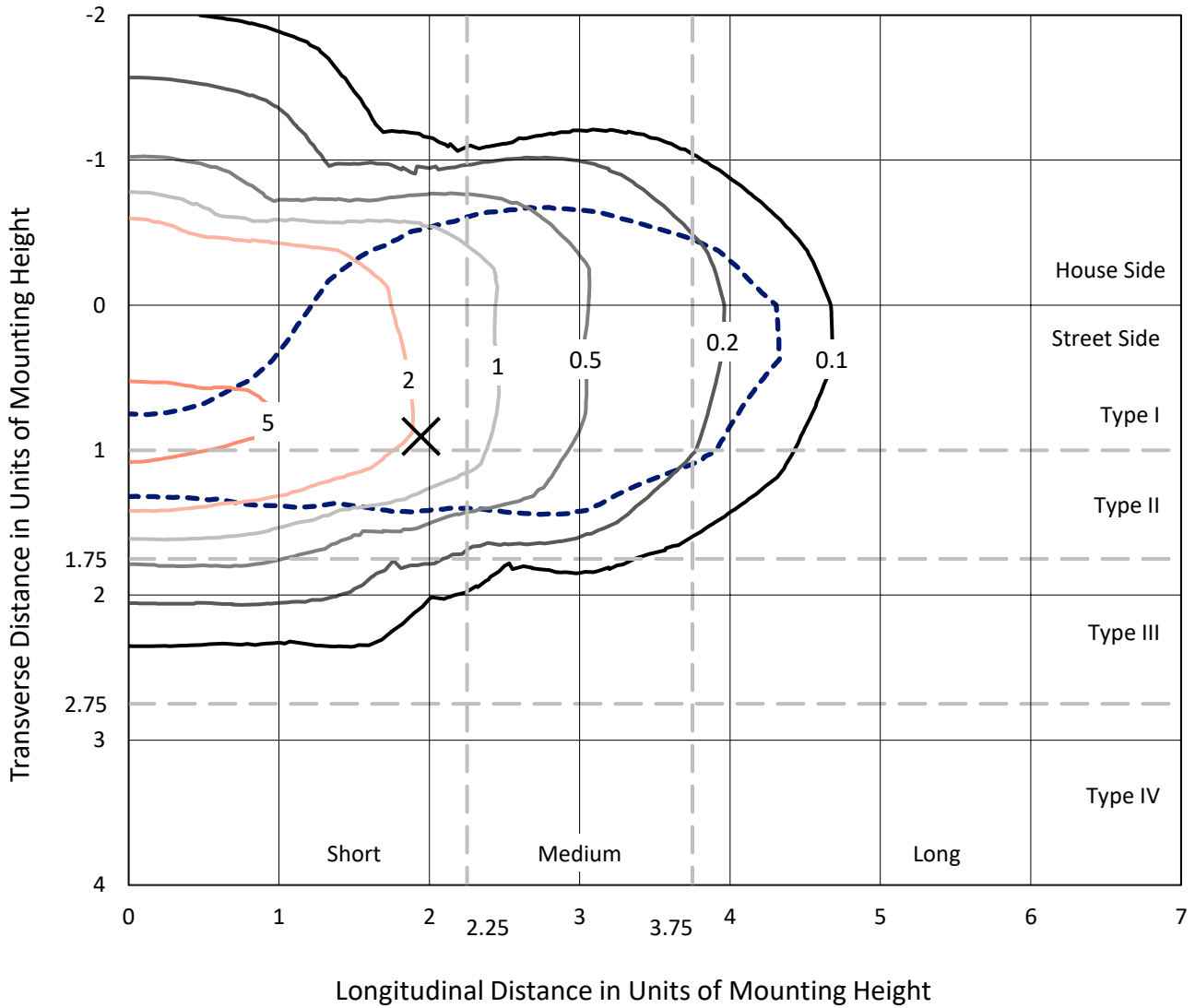
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

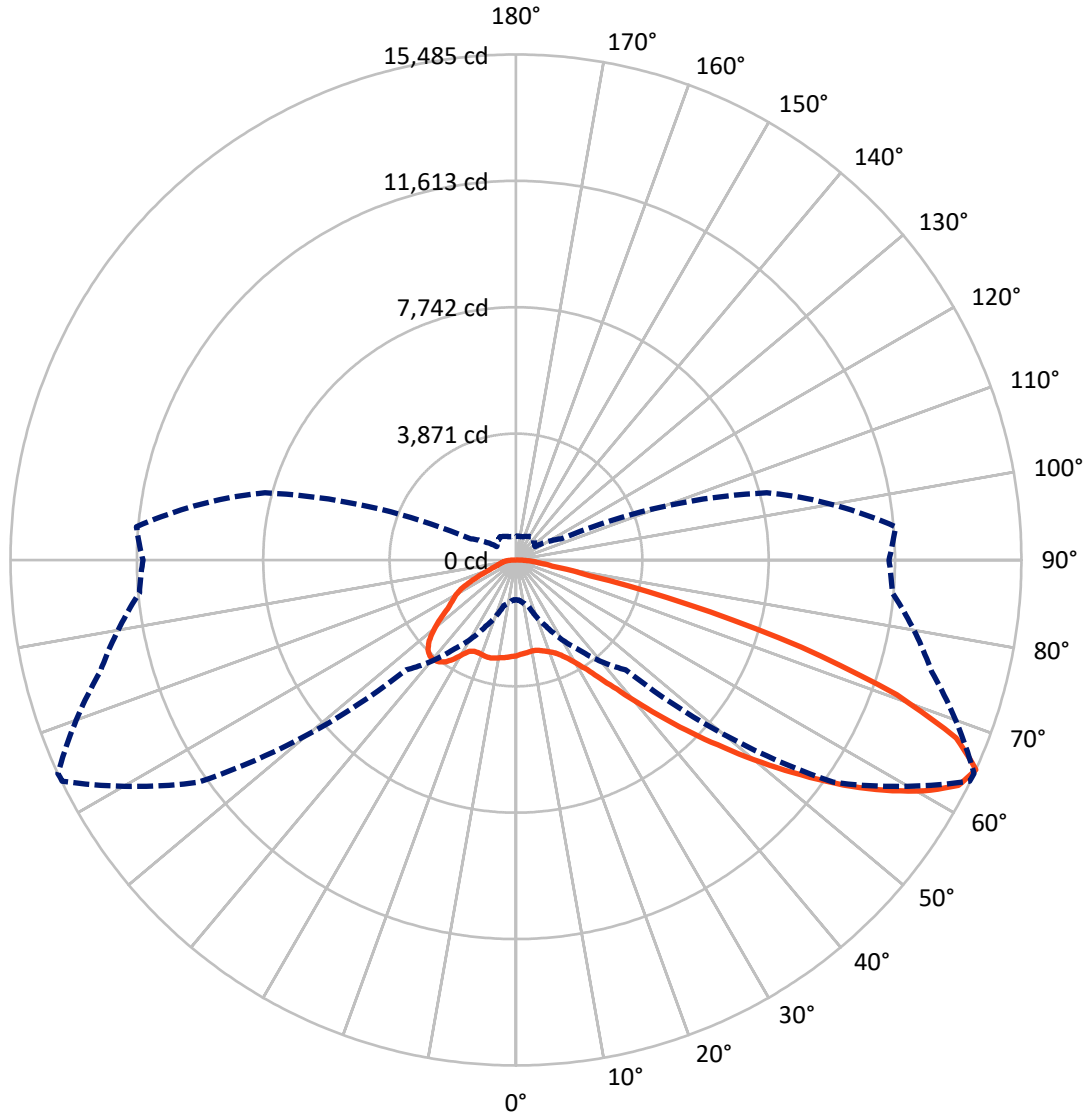
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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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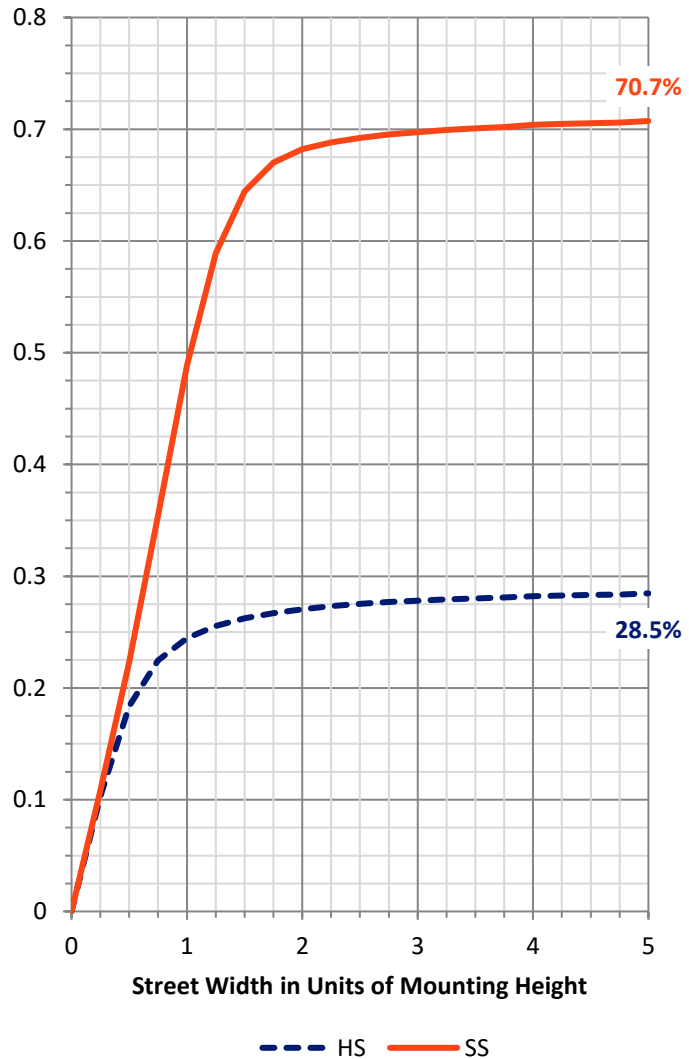
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6723.1	0.0	6723.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	16530.9	0.0	16530.9
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	23254.0	0.0	23254.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.9	1.2
10°-20°	835.8	3.6
20°-30°	1484.6	6.4
30°-40°	2511.6	10.8
40°-50°	4372.2	18.8
50°-60°	5650.3	24.3
60°-70°	4944.3	21.3
70°-80°	2689.4	11.6
80°-90°	485.9	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°	23254.0	100.0
0°-180°	23254.0	100.0

**Coefficient of Utilization**

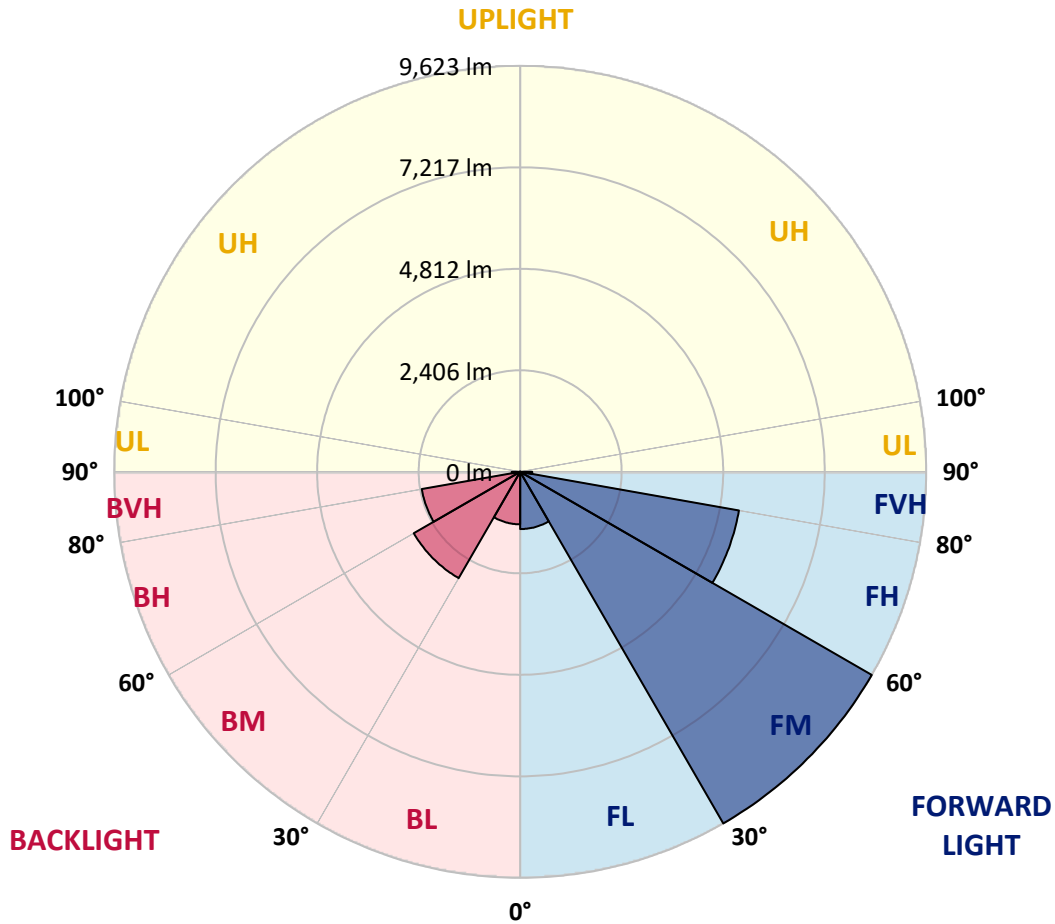


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1356.8	5.8			
FM (30°-60°)	9623.1	41.4			
FH (60°-80°)	5265.0	22.6			G3/7500
FVH (80°-90°)	285.9	1.2			G3/500
BL (0°-30°)	1243.5	5.3	B3/2500		
BM (30°-60°)	2910.9	12.5	B3/5000		
BH (60°-80°)	2368.6	10.2	B3/2500		G3/2500
BVH (80°-90°)	200.0	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°	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4
2.5°	2886.3	2883.3	2877.2	2883.3	2886.3	2892.5	2889.4	2895.5	2892.5	2901.6	2916.9
5°	2812.9	2806.8	2803.7	2819.0	2828.2	2843.5	2849.6	2871.0	2868.0	2883.3	2907.8
7.5°	2730.2	2730.2	2727.2	2745.5	2757.8	2785.3	2806.8	2843.5	2846.5	2874.1	2901.6
10°	2666.0	2669.0	2666.0	2681.3	2699.6	2733.3	2770.0	2822.1	2825.1	2864.9	2892.5
12.5°	2641.5	2641.5	2641.5	2662.9	2687.4	2733.3	2776.1	2831.2	2837.4	2880.2	2904.7
15°	2675.1	2678.2	2672.1	2693.5	2721.1	2776.1	2815.9	2874.1	2880.2	2920.0	2935.3
17.5°	2794.5	2806.8	2791.4	2803.7	2797.6	2840.4	2877.2	2935.3	2938.4	2972.0	2978.2
20°	3030.2	3042.4	3017.9	3002.6	2947.5	2944.5	2959.8	3005.7	3005.7	3027.1	3011.8
22.5°	3394.4	3406.7	3363.8	3305.7	3174.0	3109.8	3076.1	3097.5	3094.5	3103.7	3063.9
25°	3878.0	3875.0	3822.9	3715.8	3504.6	3348.5	3265.9	3232.2	3232.2	3213.8	3164.9
27.5°	4477.9	4432.0	4340.2	4211.7	3917.8	3700.5	3523.0	3437.3	3422.0	3366.9	3275.1
30°	5117.7	5084.0	4952.4	4765.7	4425.9	4147.4	3853.5	3682.1	3673.0	3553.6	3415.9
32.5°	5870.6	5815.5	5668.6	5445.2	5038.1	4646.3	4279.0	4018.8	4003.5	3813.8	3624.0
35°	6837.8	6791.9	6507.3	6283.8	5760.4	5246.2	4811.6	4465.7	4453.5	4220.8	3979.0
37.5°	7997.9	7878.5	7603.0	7183.7	6632.8	6023.7	5472.7	5038.1	5022.8	4765.7	4459.6
40°	9032.4	8925.3	8680.4	8294.8	7704.0	7027.6	6280.8	5754.3	5739.0	5426.8	5041.1
42.5°	9797.6	9724.2	9565.0	9341.6	8919.2	8509.0	7312.2	6620.5	6593.0	6188.9	5708.4
45°	10241.4	10183.3	10091.5	10146.5	10140.4	10063.9	8542.7	7652.0	7563.2	7039.8	6452.2
47.5°	10134.3	10082.3	10119.0	10547.5	11138.2	11582.1	9975.1	8708.0	8588.6	7906.0	7244.9
50°	9359.9	9381.3	9574.2	10394.5	11719.8	12705.4	11563.7	9910.9	9751.7	8778.4	7997.9
52.5°	7948.9	8000.9	8469.2	9617.0	11655.5	13433.8	12999.2	11153.6	10942.4	9629.3	8683.5
55°	6314.4	6446.0	7052.1	8258.0	10816.9	13485.9	14082.7	12402.4	12169.7	10428.1	9280.3
57.5°	4670.8	4866.7	5567.6	6675.6	9209.9	12662.5	14624.5	13596.1	13314.5	11220.9	9910.9
60°	2962.9	3082.2	3890.3	5197.2	7049.0	10648.5	14554.1	14612.3	14367.4	12010.6	10568.9
62.5°	1891.6	1949.7	2356.8	3706.6	4927.9	7884.6	13785.8	15380.5	15215.2	12729.9	11193.3
65°	1215.1	1239.6	1447.8	2280.3	3354.6	4759.5	11872.8	15463.2	15484.6	13179.8	11579.0
67.5°	988.6	1000.9	1077.4	1408.0	2372.1	2629.2	8270.3	14287.8	14548.0	13063.5	11447.4
70°	899.9	915.2	994.8	1123.3	1836.5	1815.1	4003.5	11955.5	12380.9	12393.2	10862.8
72.5°	759.1	780.5	887.6	1062.1	1420.2	1432.5	1695.7	8515.1	9142.6	11077.0	9984.3
75°	633.6	645.8	737.7	936.6	1202.9	1144.7	1190.7	4514.7	5420.7	8882.4	9050.8
77.5°	514.2	526.5	593.8	746.8	1068.2	890.7	936.6	1870.1	2310.9	6029.8	7398.0
80°	367.3	379.5	456.1	581.6	808.1	801.9	694.8	1031.5	1120.3	3259.8	4805.5
82.5°	263.2	272.4	345.9	416.3	560.1	805.0	523.4	700.9	734.6	1444.7	1937.5
85°	177.5	177.5	238.7	275.5	361.2	508.1	422.4	474.4	495.8	685.6	523.4
87.5°	76.5	76.5	128.6	140.8	189.8	235.7	315.3	238.7	244.9	370.4	214.3
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°	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4	2938.4
2.5°	2926.1	2929.2	2935.3	2953.7	2965.9	2984.3	2993.5	3005.7	3005.7	2999.6	3002.6
5°	2920.0	2929.2	2950.6	2984.3	3005.7	3039.4	3063.9	3082.2	3088.3	3082.2	3085.3
7.5°	2916.9	2932.2	2969.0	3017.9	3048.6	3091.4	3125.1	3146.5	3161.8	3155.7	3158.7
10°	2907.8	2932.2	2978.2	3039.4	3085.3	3128.1	3158.7	3167.9	3177.1	3171.0	3167.9
12.5°	2920.0	2947.5	2996.5	3070.0	3122.0	3155.7	3164.9	3149.6	3128.1	3115.9	3112.8
15°	2944.5	2972.0	3021.0	3097.5	3143.4	3155.7	3134.3	3085.3	3036.3	3008.8	3005.7
17.5°	2978.2	2996.5	3036.3	3103.7	3140.4	3125.1	3082.2	3024.1	2987.3	2965.9	2969.0
20°	2999.6	2999.6	3030.2	3082.2	3112.8	3100.6	3048.6	2984.3	2926.1	2898.6	2889.4
22.5°	3030.2	3014.9	3017.9	3063.9	3106.7	3088.3	2978.2	2864.9	2782.3	2751.7	2748.6
25°	3112.8	3070.0	3042.4	3070.0	3171.0	3021.0	2800.6	2669.0	2592.5	2564.9	2568.0
27.5°	3213.8	3155.7	3097.5	3143.4	3223.0	2868.0	2574.1	2424.2	2378.2	2356.8	2366.0
30°	3314.8	3238.3	3161.8	3327.1	3186.3	2629.2	2283.4	2136.4	2096.6	2081.3	2093.6
32.5°	3501.6	3376.1	3284.2	3572.0	3073.0	2356.8	1968.1	1833.4	1796.7	1778.3	1772.2
35°	3813.8	3654.6	3562.8	3786.2	2913.9	2053.8	1680.4	1585.5	1545.7	1505.9	1499.8
37.5°	4263.7	4070.9	3988.2	3908.6	2690.4	1753.8	1460.0	1395.7	1337.6	1276.4	1273.3
40°	4802.4	4551.4	4490.2	3963.7	2381.3	1472.2	1307.0	1245.7	1172.3	1114.1	1117.2
42.5°	5423.7	5102.4	4970.7	3948.4	1998.7	1322.3	1196.8	1129.4	1065.2	1013.1	1010.1
45°	6087.9	5723.7	5420.7	3841.3	1619.2	1218.2	1129.4	1049.9	985.6	927.4	921.3
47.5°	6822.5	6415.4	5836.9	3633.2	1337.6	1144.7	1089.6	976.4	918.2	881.5	881.5
50°	7563.2	7076.6	6219.5	3317.9	1172.3	1089.6	1031.5	936.6	890.7	860.1	860.1
52.5°	8196.8	7765.2	6534.8	2941.4	1068.2	1043.7	991.7	918.2	869.3	841.7	838.7
55°	8812.0	8405.0	6816.4	2568.0	982.5	982.5	982.5	902.9	847.8	823.4	820.3
57.5°	9424.2	9078.3	7110.2	2323.1	906.0	930.5	964.2	884.6	829.5	808.1	805.0
60°	10115.9	9886.4	7450.0	2151.7	838.7	875.4	939.7	863.1	798.9	780.5	777.4
62.5°	10850.5	10850.5	7759.1	1909.9	777.4	829.5	902.9	835.6	771.3	756.0	753.0
65°	11426.0	11673.9	7958.1	1548.8	716.2	783.6	860.1	798.9	734.6	731.5	725.4
67.5°	11493.3	11882.0	7832.6	1169.2	661.1	734.6	817.2	759.1	697.9	697.9	688.7
70°	11009.7	11404.5	7440.8	875.4	621.3	685.6	762.1	710.1	652.0	658.1	642.8
72.5°	10201.6	10299.6	6467.5	691.7	575.4	633.6	694.8	655.0	603.0	603.0	581.6
75°	9136.5	8591.7	4698.3	578.5	520.3	572.4	627.5	593.8	547.9	532.6	520.3
77.5°	7272.5	6225.7	2730.2	498.9	474.4	514.2	550.9	526.5	486.7	453.0	453.0
80°	4432.0	3648.5	1206.0	431.6	419.3	449.9	474.4	446.9	413.2	379.5	370.4
82.5°	1686.5	1408.0	584.6	370.4	367.3	385.7	404.0	376.5	352.0	336.7	290.8
85°	462.2	425.5	401.0	309.1	303.0	300.0	321.4	309.1	275.5	226.5	202.0
87.5°	174.5	199.0	217.3	189.8	202.0	186.7	214.3	195.9	174.5	113.2	101.0
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)