

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: P400184

Luminaire Tested: **ARCH-L-PA3-240-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400184  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
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-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18012 lumens  
Efficiency: N/A  
Efficacy: 74.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

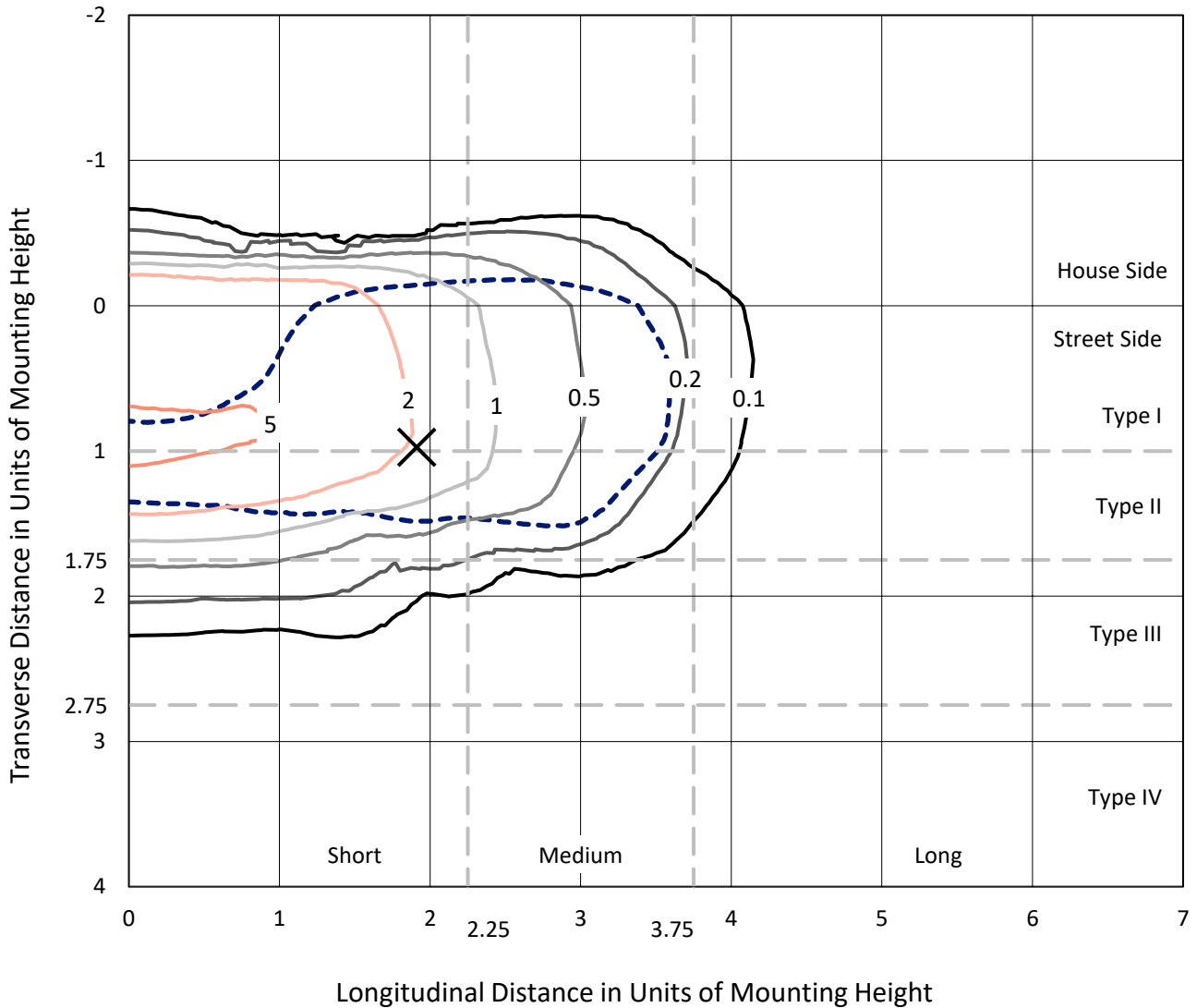
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

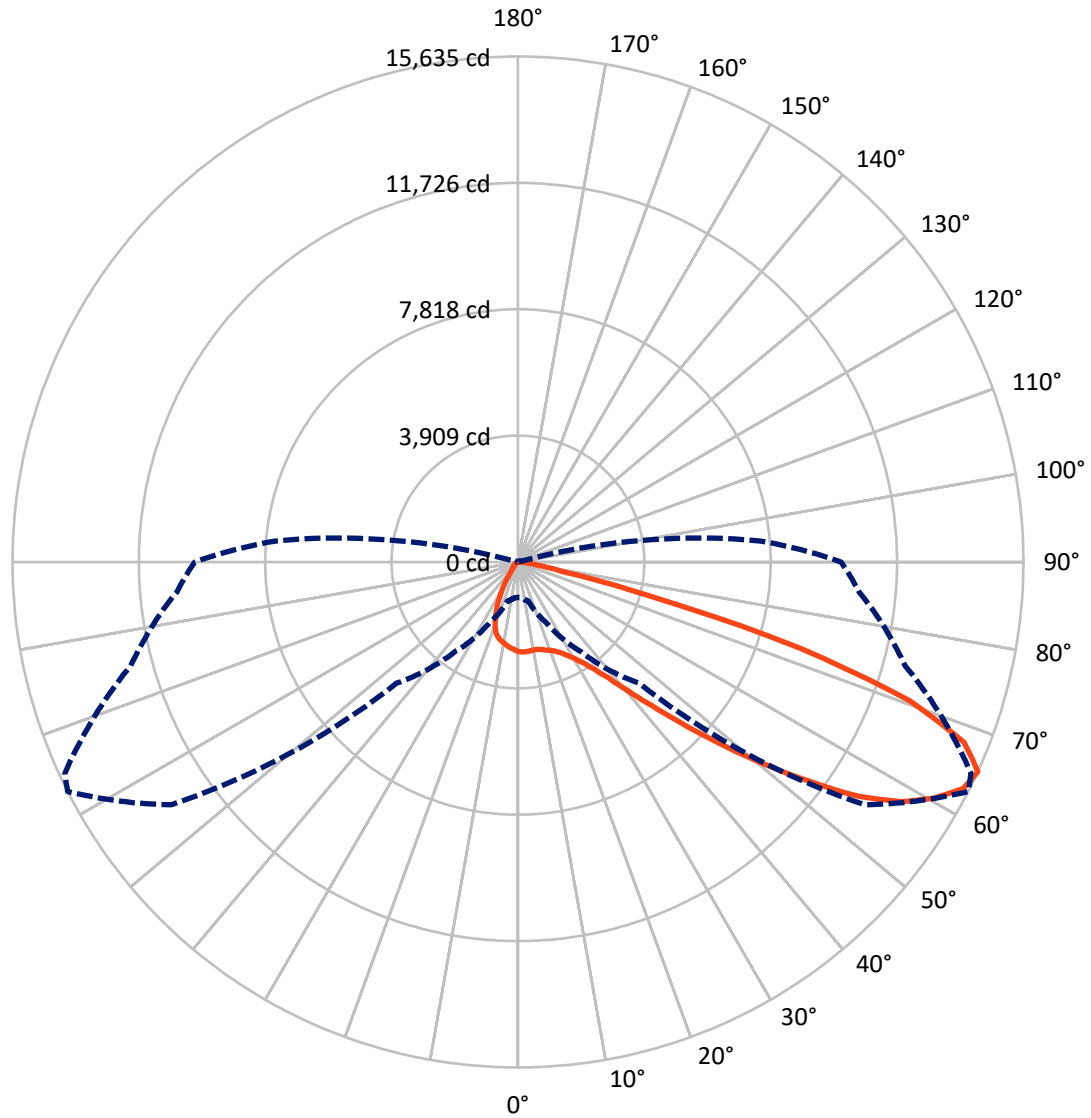
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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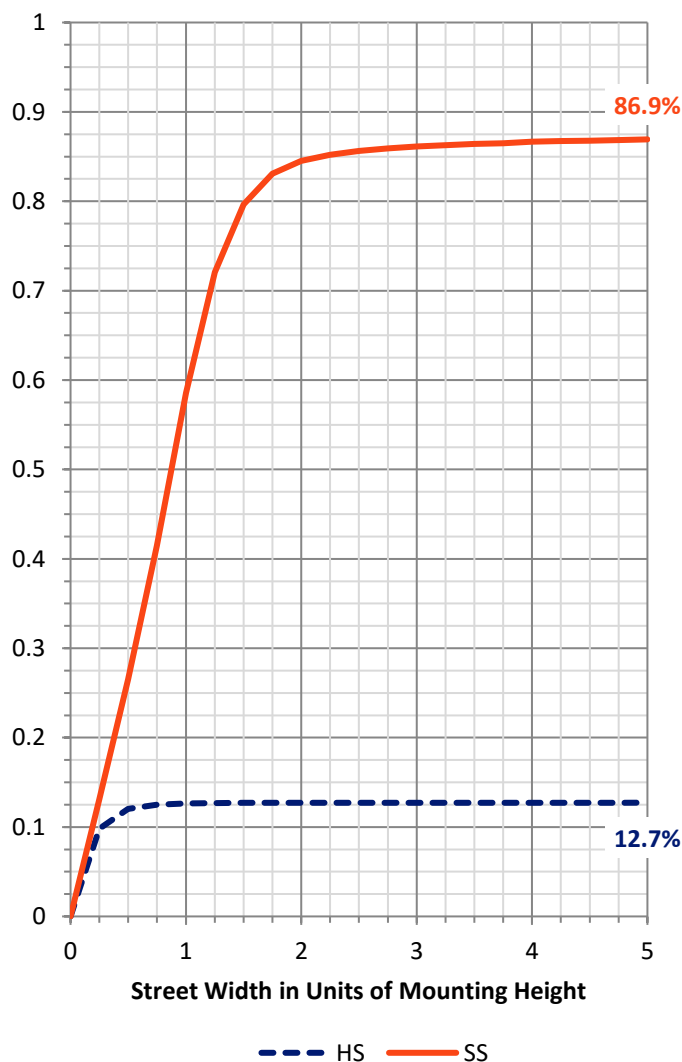
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2318.1	0.0	2318.1
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15693.9	0.0	15693.9
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	18012.0	0.0	18012.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.2	1.4
10°-20°	624.6	3.5
20°-30°	925.8	5.1
30°-40°	1718.9	9.5
40°-50°	3641.4	20.2
50°-60°	5035.1	28.0
60°-70°	4030.8	22.4
70°-80°	1674.7	9.3
80°-90°	107.5	0.6
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°	18012.0	100.0
0°-180°	18012.0	100.0

**Coefficient of Utilization**



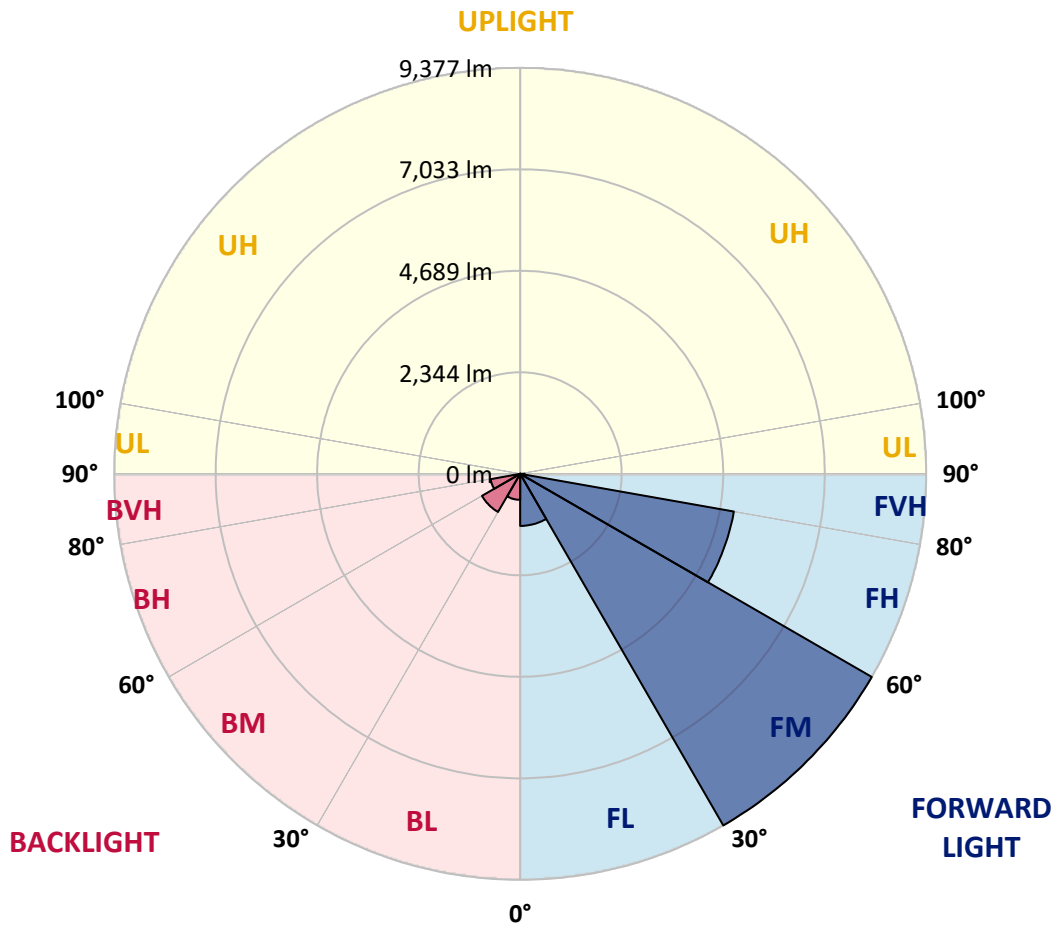
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1202.8	6.7			
FM (30°-60°)	9377.1	52.1			
FH (60°-80°)	5011.3	27.8			G3/7500
FVH (80°-90°)	102.6	0.6			G2/225
BL (0°-30°)	600.8	3.3	B2/1000		
BM (30°-60°)	1018.3	5.7	B2/2500		
BH (60°-80°)	694.1	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8
2.5°	2822.4	2815.6	2808.8	2805.4	2805.4	2802.0	2788.4	2785.0	2778.2	2771.4	2764.6
5°	2795.2	2785.0	2781.6	2785.0	2788.4	2795.2	2788.4	2788.4	2781.6	2774.8	2761.2
7.5°	2727.2	2720.4	2723.8	2734.0	2737.4	2761.2	2764.6	2774.8	2774.8	2768.0	2757.8
10°	2645.5	2642.1	2642.1	2659.1	2676.1	2710.1	2734.0	2761.2	2764.6	2764.6	2747.6
12.5°	2584.3	2580.9	2591.1	2611.5	2645.5	2689.7	2730.6	2771.4	2778.2	2781.6	2754.4
15°	2546.9	2546.9	2560.5	2601.3	2648.9	2710.1	2757.8	2812.2	2819.0	2815.6	2778.2
17.5°	2512.9	2516.3	2543.5	2611.5	2665.9	2747.6	2805.4	2866.6	2870.0	2866.6	2805.4
20°	2499.3	2506.1	2546.9	2635.3	2696.5	2788.4	2863.2	2924.4	2927.8	2914.2	2832.6
22.5°	2536.7	2540.1	2591.1	2686.3	2744.2	2846.2	2941.4	2999.2	3002.6	2982.2	2873.4
25°	2665.9	2665.9	2710.1	2791.8	2842.8	2944.8	3046.8	3114.8	3114.8	3091.0	2965.2
27.5°	2968.6	2941.4	2931.2	2955.0	2972.0	3080.8	3189.6	3274.6	3271.2	3237.2	3084.2
30°	3553.5	3485.5	3376.6	3254.2	3193.0	3267.8	3369.8	3478.6	3475.2	3420.8	3230.4
32.5°	4536.2	4437.6	4179.1	3856.1	3594.3	3509.3	3604.5	3723.5	3726.9	3662.3	3465.0
35°	5913.4	5756.9	5294.5	4845.6	4247.1	3924.1	3951.3	4080.5	4121.3	4087.3	3859.5
37.5°	7239.5	7096.7	6654.7	6032.4	5219.7	4560.0	4444.4	4556.6	4604.2	4604.2	4362.8
40°	8575.9	8409.3	8018.2	7392.6	6535.6	5552.9	5138.1	5229.9	5280.9	5291.1	4974.8
42.5°	9647.0	9538.2	9239.0	8752.7	7950.2	7293.9	6137.8	6086.8	6134.4	6097.0	5685.5
45°	10388.3	10303.3	10095.9	9912.3	9521.2	9191.4	7474.2	7130.7	7161.3	7032.1	6484.6
47.5°	10541.4	10446.1	10401.9	10657.0	10935.8	11017.4	9116.6	8371.9	8341.3	8055.6	7314.3
50°	9874.9	9885.1	10048.3	10776.0	11938.9	12673.4	11020.8	9772.9	9660.6	9024.8	8086.2
52.5°	8436.5	8599.7	9011.2	10191.1	12245.0	13877.2	12925.1	11258.9	11085.4	9966.7	8664.3
55°	6600.3	6811.1	7487.8	8844.5	11605.7	14414.5	14530.1	12802.7	12408.2	10674.0	9113.2
57.5°	4906.8	4971.4	5760.3	6998.1	10092.5	13887.4	15353.0	13992.8	13486.1	11238.5	9558.6
60°	3057.0	3097.8	3930.9	5328.5	7644.2	11938.9	15353.0	14812.3	14329.5	11745.1	9966.7
62.5°	1900.8	1914.4	2227.3	3652.1	5195.9	8854.7	14717.1	15448.2	15060.5	12109.0	10316.9
65°	1094.9	1108.5	1254.8	2064.1	3380.0	5301.3	13091.7	15635.2	15461.8	12398.0	10589.0
67.5°	799.1	805.9	863.7	1159.5	2210.3	2723.8	9834.1	14883.7	15101.3	12540.8	10582.2
70°	693.7	703.9	778.7	904.5	1594.8	1673.0	5005.4	12853.7	13462.3	12336.8	10265.9
72.5°	533.9	547.5	659.7	850.1	1169.8	1203.8	1812.4	9147.2	10068.7	11061.6	9398.8
75°	367.2	380.8	493.1	700.5	965.7	901.1	996.3	4209.7	5311.5	7419.8	7154.5
77.5°	234.6	238.0	309.4	510.1	833.1	639.3	683.5	1373.8	1928.0	3356.2	3376.6
80°	156.4	159.8	190.4	329.8	571.3	591.7	421.7	635.9	697.1	979.3	680.1
82.5°	95.2	95.2	129.2	207.4	346.8	489.7	275.4	333.2	357.0	377.4	176.8
85°	37.4	37.4	78.2	136.0	217.6	227.8	173.4	193.8	204.0	221.0	81.6
87.5°	10.2	10.2	44.2	74.8	95.2	105.4	105.4	95.2	102.0	125.8	40.8
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°	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8	2774.8
2.5°	2761.2	2751.0	2737.4	2723.8	2710.1	2699.9	2689.7	2689.7	2682.9	2672.7	2665.9
5°	2754.4	2737.4	2706.7	2682.9	2645.5	2618.3	2597.9	2580.9	2570.7	2546.9	2543.5
7.5°	2744.2	2723.8	2679.5	2631.9	2570.7	2523.1	2475.5	2441.5	2407.5	2380.3	2373.5
10°	2727.2	2703.3	2638.7	2570.7	2485.7	2397.3	2285.1	2155.9	2036.9	1968.9	1948.5
12.5°	2727.2	2696.5	2611.5	2519.7	2397.3	2179.7	1894.0	1608.4	1387.4	1288.8	1261.6
15°	2744.2	2703.3	2591.1	2465.3	2237.5	1795.4	1333.0	955.5	714.1	639.3	622.3
17.5°	2761.2	2703.3	2560.5	2390.5	1945.1	1302.4	758.3	503.3	425.1	408.1	408.1
20°	2768.0	2696.5	2519.7	2251.1	1554.0	809.3	452.3	377.4	346.8	336.6	336.6
22.5°	2795.2	2699.9	2489.1	2050.5	1128.9	476.1	357.0	316.2	285.6	275.4	275.4
25°	2863.2	2740.8	2495.9	1795.4	724.3	360.4	302.6	261.8	231.2	217.6	217.6
27.5°	2972.0	2832.6	2533.3	1499.6	455.7	309.4	255.0	210.8	187.0	173.4	173.4
30°	3094.4	2934.6	2550.3	1159.5	340.0	261.8	207.4	166.6	149.6	139.4	136.0
32.5°	3308.6	3111.4	2536.7	795.7	278.8	221.0	166.6	132.6	119.0	115.6	115.6
35°	3652.1	3420.8	2509.5	499.9	231.2	176.8	132.6	108.8	98.6	95.2	91.8
37.5°	4117.9	3873.1	2427.9	329.8	190.4	139.4	108.8	91.8	81.6	78.2	78.2
40°	4685.8	4390.0	2271.5	251.6	163.2	112.2	91.8	78.2	71.4	68.0	68.0
42.5°	5335.3	4964.6	2023.3	217.6	136.0	95.2	78.2	64.6	61.2	57.8	57.8
45°	6046.0	5566.5	1679.8	193.8	115.6	78.2	64.6	57.8	51.0	51.0	47.6
47.5°	6800.9	6171.8	1292.2	170.0	98.6	68.0	57.8	47.6	44.2	40.8	40.8
50°	7528.6	6712.5	907.9	146.2	81.6	57.8	47.6	40.8	37.4	34.0	34.0
52.5°	8042.0	7038.9	642.7	125.8	68.0	51.0	37.4	30.6	27.2	27.2	27.2
55°	8453.5	7242.9	448.9	105.4	57.8	44.2	30.6	23.8	23.8	20.4	20.4
57.5°	8841.1	7375.6	329.8	88.4	47.6	34.0	23.8	17.0	17.0	13.6	13.6
60°	9242.4	7447.0	251.6	71.4	40.8	27.2	17.0	13.6	10.2	10.2	10.2
62.5°	9647.0	7491.2	193.8	57.8	34.0	20.4	13.6	10.2	6.8	3.4	3.4
65°	10000.7	7504.8	149.6	44.2	27.2	13.6	10.2	3.4	0.0	0.0	0.0
67.5°	10106.1	7348.3	115.6	34.0	20.4	10.2	6.8	0.0	0.0	0.0	0.0
70°	9820.5	6933.5	88.4	27.2	17.0	6.8	3.4	0.0	0.0	0.0	0.0
72.5°	8715.3	5814.8	68.0	17.0	13.6	6.8	3.4	0.0	0.0	0.0	0.0
75°	6236.4	3101.2	47.6	13.6	10.2	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	2870.0	1200.4	34.0	10.2	6.8	3.4	0.0	0.0	0.0	0.0	0.0
80°	561.1	299.2	13.6	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	129.2	51.0	6.8	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	44.2	17.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.0	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)