

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: P399644

Luminaire Tested: **ARCH-L-PA3-170-740-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399644  
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-PA3-170-740-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 750mA 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: 18048 lumens  
Efficiency: N/A  
Efficacy: 104.3 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

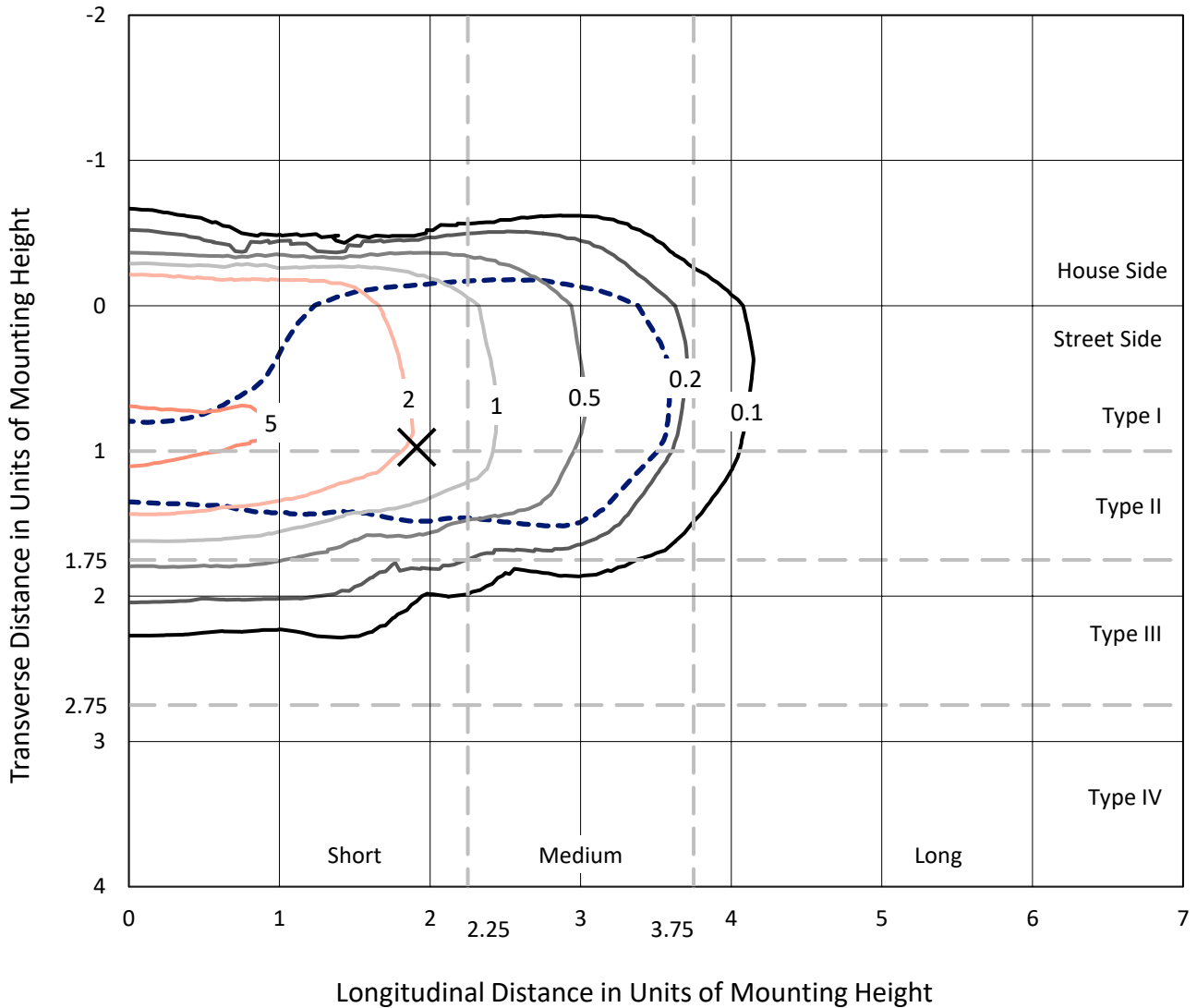
Input Watts (W): 173  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

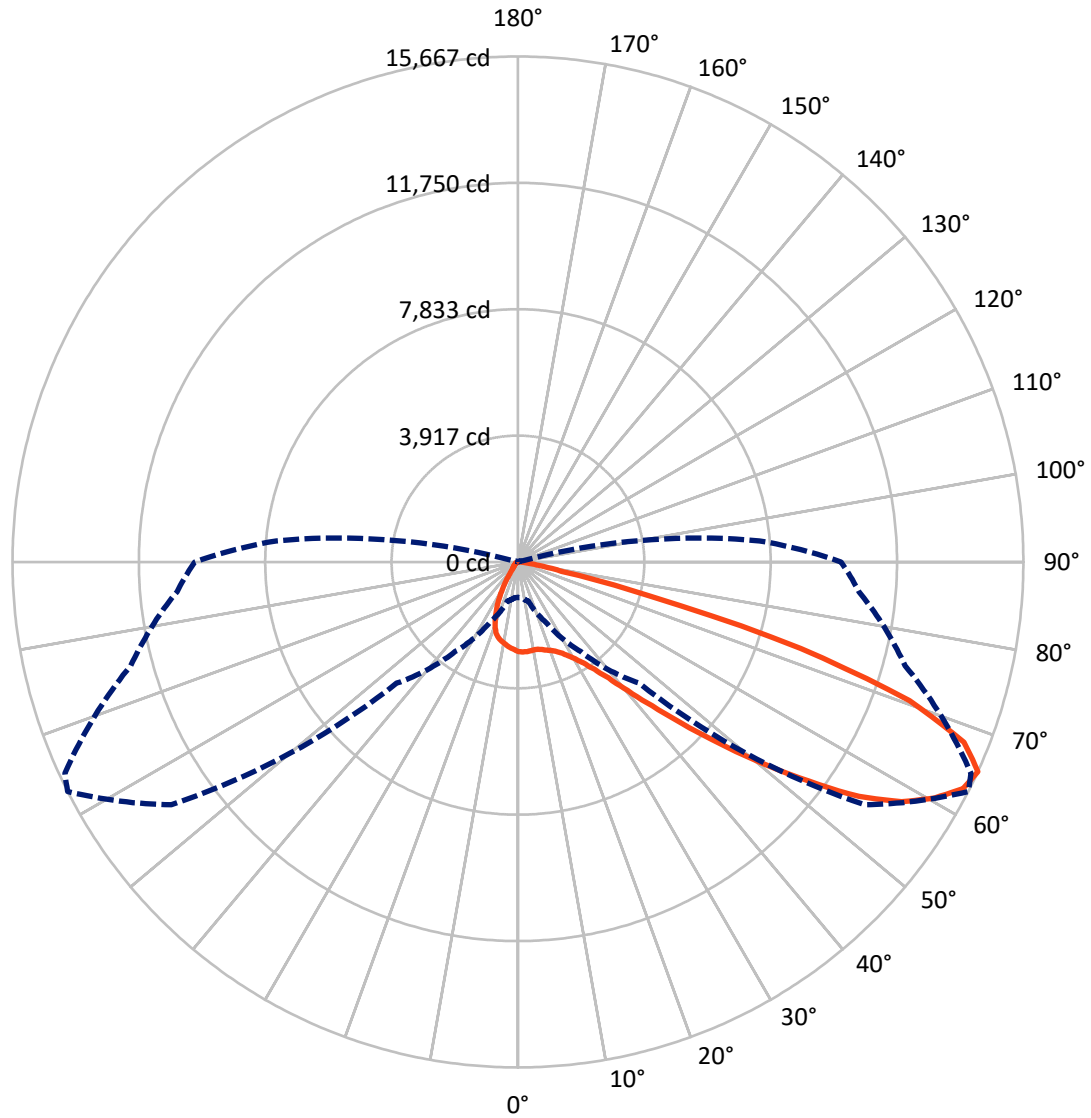
✕ Max cd  
 - - - 1/2 Max cd



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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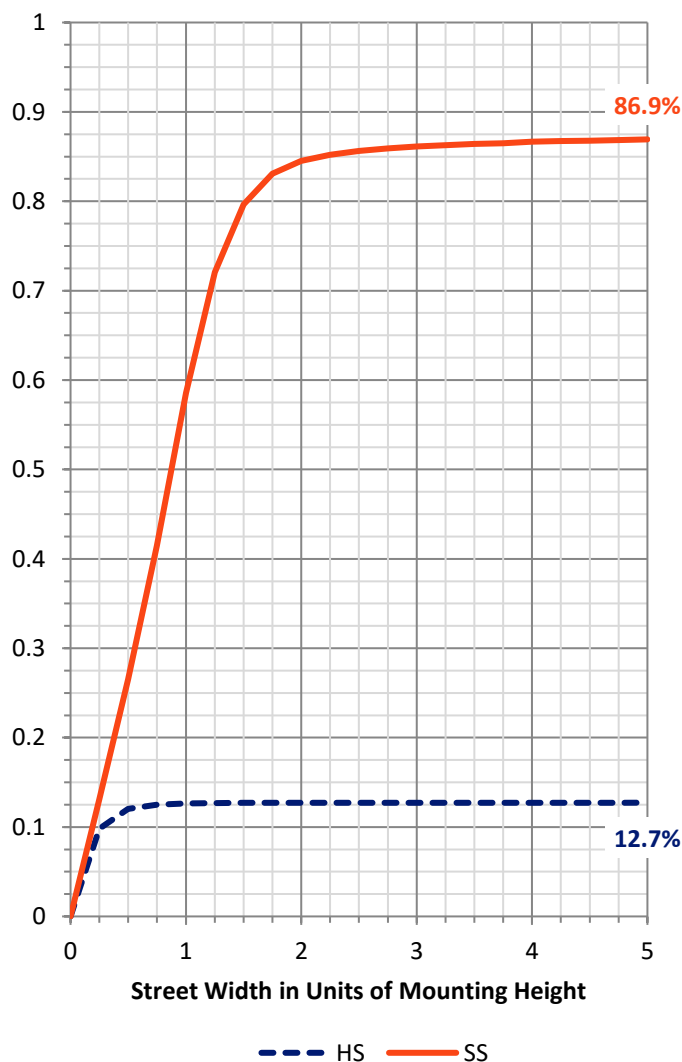
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2322.7	0.0	2322.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15725.3	0.0	15725.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	18048.0	0.0	18048.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.7	1.4
10°-20°	625.8	3.5
20°-30°	927.6	5.1
30°-40°	1722.3	9.5
40°-50°	3648.7	20.2
50°-60°	5045.2	28.0
60°-70°	4038.8	22.4
70°-80°	1678.0	9.3
80°-90°	107.7	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°	18048.0	100.0
0°-180°	18048.0	100.0

**Coefficient of Utilization**



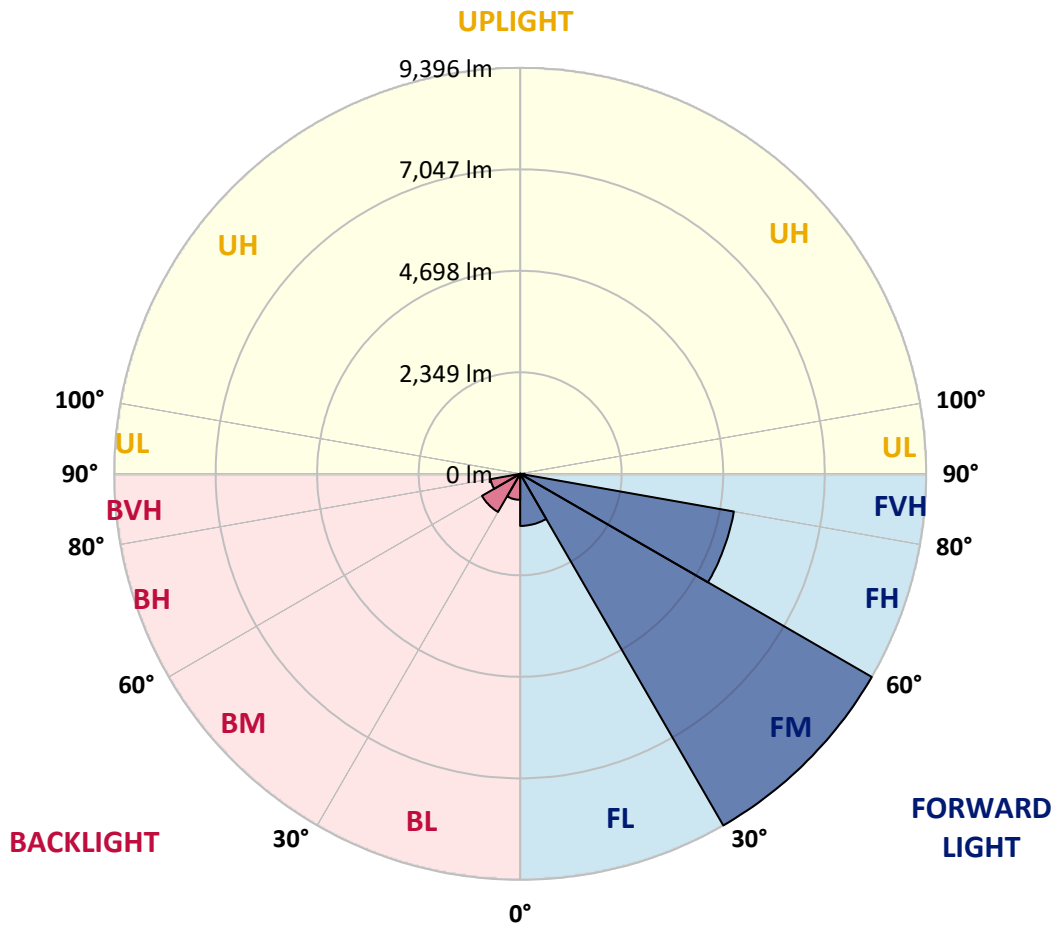
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1205.2	6.7			
FM (30°-60°)	9395.9	52.1			
FH (60°-80°)	5021.4	27.8			G3/7500
FVH (80°-90°)	102.8	0.6			G2/225
BL (0°-30°)	602.0	3.3	B2/1000		
BM (30°-60°)	1020.3	5.7	B2/2500		
BH (60°-80°)	695.5	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°	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3
2.5°	2828.0	2821.2	2814.4	2811.0	2811.0	2807.6	2793.9	2790.5	2783.7	2776.9	2770.1
5°	2800.7	2790.5	2787.1	2790.5	2793.9	2800.7	2793.9	2793.9	2787.1	2780.3	2766.7
7.5°	2732.6	2725.8	2729.2	2739.4	2742.8	2766.7	2770.1	2780.3	2780.3	2773.5	2763.3
10°	2650.8	2647.4	2647.4	2664.5	2681.5	2715.6	2739.4	2766.7	2770.1	2770.1	2753.0
12.5°	2589.5	2586.1	2596.3	2616.8	2650.8	2695.1	2736.0	2776.9	2783.7	2787.1	2759.9
15°	2552.0	2552.0	2565.6	2606.5	2654.2	2715.6	2763.3	2817.8	2824.6	2821.2	2783.7
17.5°	2517.9	2521.4	2548.6	2616.8	2671.3	2753.0	2811.0	2872.3	2875.7	2872.3	2811.0
20°	2504.3	2511.1	2552.0	2640.6	2701.9	2793.9	2868.9	2930.2	2933.6	2920.0	2838.2
22.5°	2541.8	2545.2	2596.3	2691.7	2749.6	2851.9	2947.3	3005.2	3008.6	2988.1	2879.1
25°	2671.3	2671.3	2715.6	2797.3	2848.4	2950.7	3052.9	3121.0	3121.0	3097.2	2971.1
27.5°	2974.5	2947.3	2937.0	2960.9	2977.9	3087.0	3196.0	3281.2	3277.8	3243.7	3090.4
30°	3560.6	3492.4	3383.4	3260.7	3199.4	3274.4	3376.6	3485.6	3482.2	3427.7	3236.9
32.5°	4545.3	4446.4	4187.5	3863.8	3601.4	3516.3	3611.7	3730.9	3734.3	3669.6	3472.0
35°	5925.2	5768.4	5305.1	4855.3	4255.6	3931.9	3959.2	4088.7	4129.6	4095.5	3867.2
37.5°	7254.0	7110.9	6668.0	6044.4	5230.1	4569.1	4453.3	4565.7	4613.4	4613.4	4371.5
40°	8593.0	8426.1	8034.3	7407.3	6548.7	5564.0	5148.3	5240.3	5291.4	5301.7	4984.8
42.5°	9666.3	9557.3	9257.5	8770.2	7966.1	7308.5	6150.1	6099.0	6146.7	6109.2	5696.9
45°	10409.1	10323.9	10116.1	9932.1	9540.3	9209.8	7489.1	7145.0	7175.6	7046.2	6497.6
47.5°	10562.4	10467.0	10422.7	10678.3	10957.7	11039.4	9134.8	8388.6	8357.9	8071.7	7329.0
50°	9894.6	9904.8	10068.4	10797.5	11962.8	12698.8	11042.8	9792.4	9680.0	9042.8	8102.4
52.5°	8453.4	8616.9	9029.2	10211.5	12269.5	13904.9	12950.9	11281.4	11107.6	9986.6	8681.6
55°	6613.4	6824.7	7502.7	8862.2	11628.9	14443.3	14559.1	12828.2	12433.0	10695.3	9131.4
57.5°	4916.6	4981.4	5771.9	7012.1	10112.7	13915.1	15383.7	14020.8	13513.1	11260.9	9577.7
60°	3063.1	3104.0	3938.8	5339.1	7659.5	11962.8	15383.7	14841.9	14358.1	11768.6	9986.6
62.5°	1904.6	1918.3	2231.7	3659.4	5206.3	8872.4	14746.5	15479.1	15090.6	12133.2	10337.6
65°	1097.1	1110.8	1257.3	2068.2	3386.8	5311.9	13117.9	15666.5	15492.7	12422.8	10610.1
67.5°	800.7	807.5	865.4	1161.9	2214.7	2729.2	9853.7	14913.5	15131.5	12565.9	10603.3
70°	695.1	705.3	780.3	906.3	1598.0	1676.4	5015.5	12879.3	13489.2	12361.5	10286.4
72.5°	534.9	548.6	661.0	851.8	1172.1	1206.2	1816.1	9165.5	10088.8	11083.7	9417.6
75°	368.0	381.6	494.0	701.9	967.7	902.9	998.3	4218.2	5322.1	7434.6	7168.8
77.5°	235.1	238.5	310.1	511.1	834.8	640.6	684.9	1376.5	1931.9	3362.9	3383.4
80°	156.7	160.1	190.8	330.5	572.4	592.9	422.5	637.2	698.5	981.3	681.4
82.5°	95.4	95.4	129.5	207.8	347.5	490.6	276.0	333.9	357.8	378.2	177.2
85°	37.5	37.5	78.4	136.3	218.1	228.3	173.8	194.2	204.4	221.5	81.8
87.5°	10.2	10.2	44.3	75.0	95.4	105.6	105.6	95.4	102.2	126.1	40.9
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°	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3	2780.3
2.5°	2766.7	2756.5	2742.8	2729.2	2715.6	2705.3	2695.1	2695.1	2688.3	2678.1	2671.3
5°	2759.9	2742.8	2712.2	2688.3	2650.8	2623.6	2603.1	2586.1	2575.9	2552.0	2548.6
7.5°	2749.6	2729.2	2684.9	2637.2	2575.9	2528.2	2480.5	2446.4	2412.3	2385.1	2378.3
10°	2732.6	2708.8	2644.0	2575.9	2490.7	2402.1	2289.7	2160.2	2040.9	1972.8	1952.3
12.5°	2732.6	2701.9	2616.8	2524.8	2402.1	2184.0	1897.8	1611.6	1390.2	1291.3	1264.1
15°	2749.6	2708.8	2596.3	2470.2	2242.0	1799.0	1335.6	957.4	715.5	640.6	623.5
17.5°	2766.7	2708.8	2565.6	2395.3	1948.9	1305.0	759.8	504.3	425.9	408.9	408.9
20°	2773.5	2701.9	2524.8	2255.6	1557.1	810.9	453.2	378.2	347.5	337.3	337.3
22.5°	2800.7	2705.3	2494.1	2054.6	1131.2	477.0	357.8	316.9	286.2	276.0	276.0
25°	2868.9	2746.2	2500.9	1799.0	725.7	361.2	303.2	262.4	231.7	218.1	218.1
27.5°	2977.9	2838.2	2538.4	1502.6	456.6	310.1	255.5	211.2	187.4	173.8	173.8
30°	3100.6	2940.4	2555.4	1161.9	340.7	262.4	207.8	167.0	149.9	139.7	136.3
32.5°	3315.2	3117.6	2541.8	797.3	279.4	221.5	167.0	132.9	119.3	115.8	115.8
35°	3659.4	3427.7	2514.5	500.9	231.7	177.2	132.9	109.0	98.8	95.4	92.0
37.5°	4126.2	3880.8	2432.8	330.5	190.8	139.7	109.0	92.0	81.8	78.4	78.4
40°	4695.2	4398.7	2276.0	252.1	163.5	112.4	92.0	78.4	71.6	68.1	68.1
42.5°	5346.0	4974.6	2027.3	218.1	136.3	95.4	78.4	64.7	61.3	57.9	57.9
45°	6058.1	5577.6	1683.2	194.2	115.8	78.4	64.7	57.9	51.1	51.1	47.7
47.5°	6814.5	6184.1	1294.7	170.4	98.8	68.1	57.9	47.7	44.3	40.9	40.9
50°	7543.6	6725.9	909.7	146.5	81.8	57.9	47.7	40.9	37.5	34.1	34.1
52.5°	8058.1	7053.0	644.0	126.1	68.1	51.1	37.5	30.7	27.3	27.3	27.3
55°	8470.4	7257.4	449.8	105.6	57.9	44.3	30.7	23.9	23.9	20.4	20.4
57.5°	8858.8	7390.3	330.5	88.6	47.7	34.1	23.9	17.0	17.0	13.6	13.6
60°	9260.9	7461.8	252.1	71.6	40.9	27.3	17.0	13.6	10.2	10.2	10.2
62.5°	9666.3	7506.1	194.2	57.9	34.1	20.4	13.6	10.2	6.8	3.4	3.4
65°	10020.7	7519.8	149.9	44.3	27.3	13.6	10.2	3.4	0.0	0.0	0.0
67.5°	10126.3	7363.0	115.8	34.1	20.4	10.2	6.8	0.0	0.0	0.0	0.0
70°	9840.1	6947.4	88.6	27.3	17.0	6.8	3.4	0.0	0.0	0.0	0.0
72.5°	8732.7	5826.4	68.1	17.0	13.6	6.8	3.4	0.0	0.0	0.0	0.0
75°	6248.9	3107.4	47.7	13.6	10.2	3.4	0.0	0.0	0.0	0.0	0.0
77.5°	2875.7	1202.8	34.1	10.2	6.8	3.4	0.0	0.0	0.0	0.0	0.0
80°	562.2	299.8	13.6	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	129.5	51.1	6.8	6.8	3.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	44.3	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)