

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: P399995

Luminaire Tested: **ARCH-L-PA3-220-730-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399995  
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-PA3-220-730-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 945mA 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: 19478 lumens  
Efficiency: N/A  
Efficacy: 87.7 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

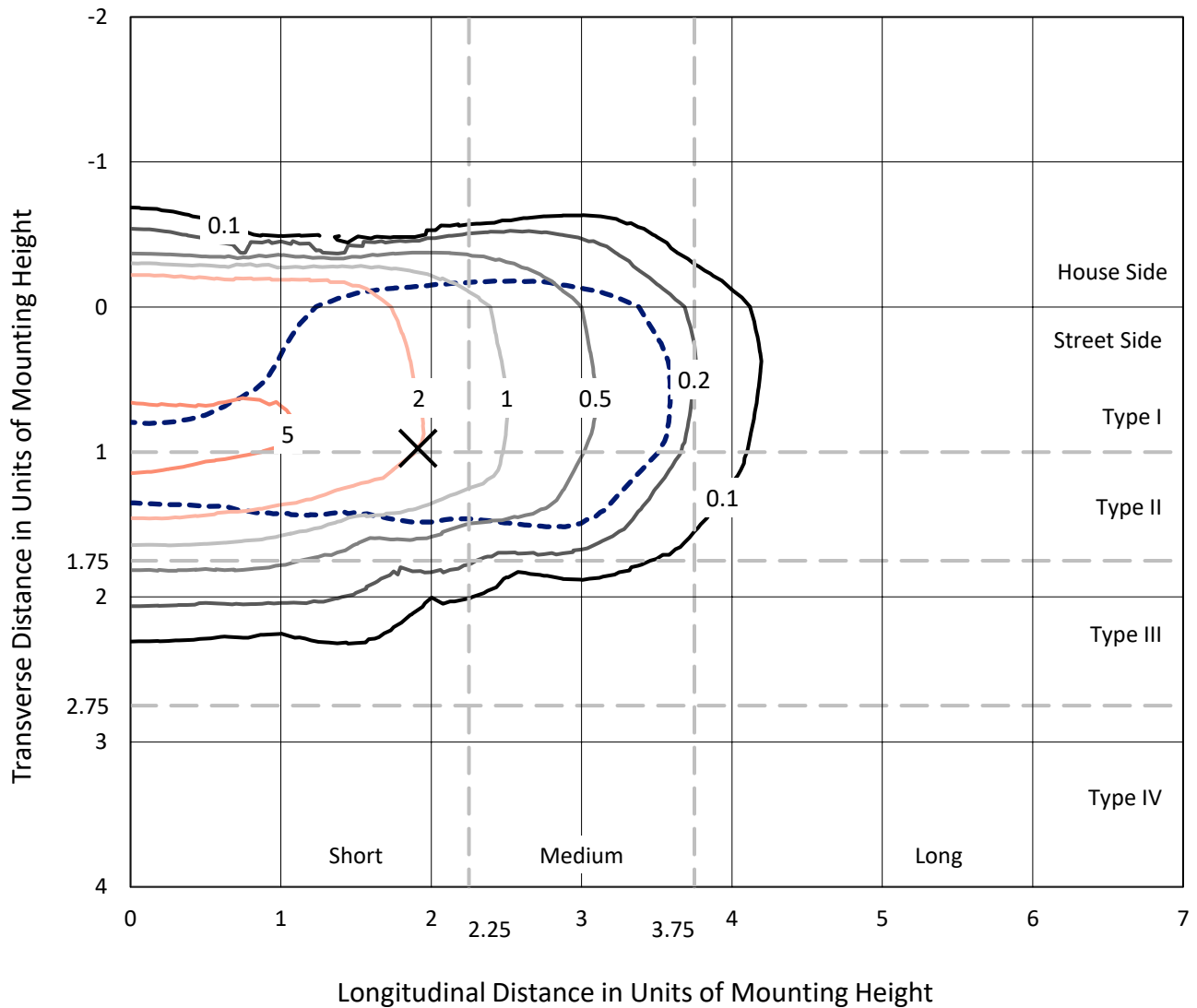
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

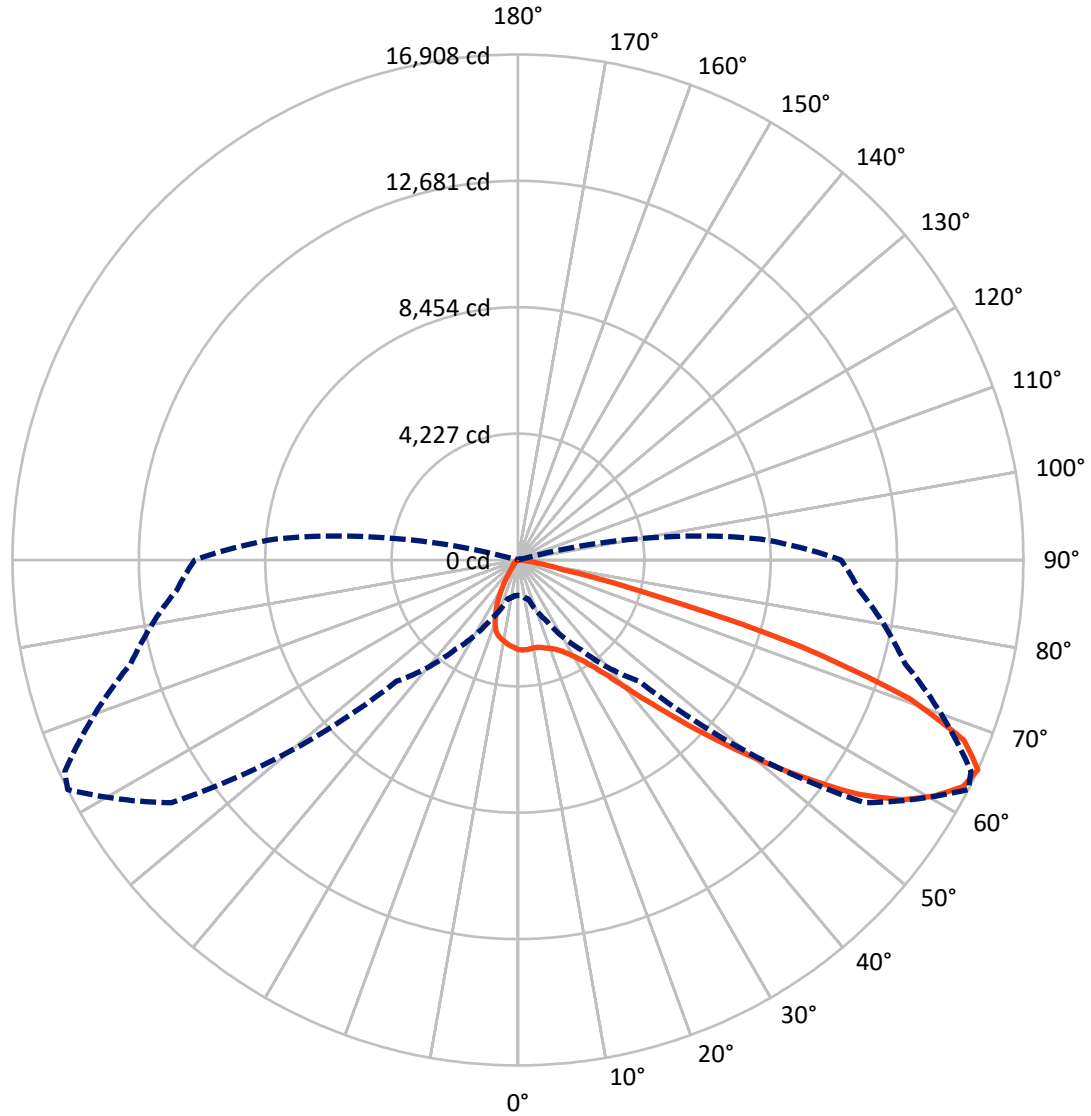
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 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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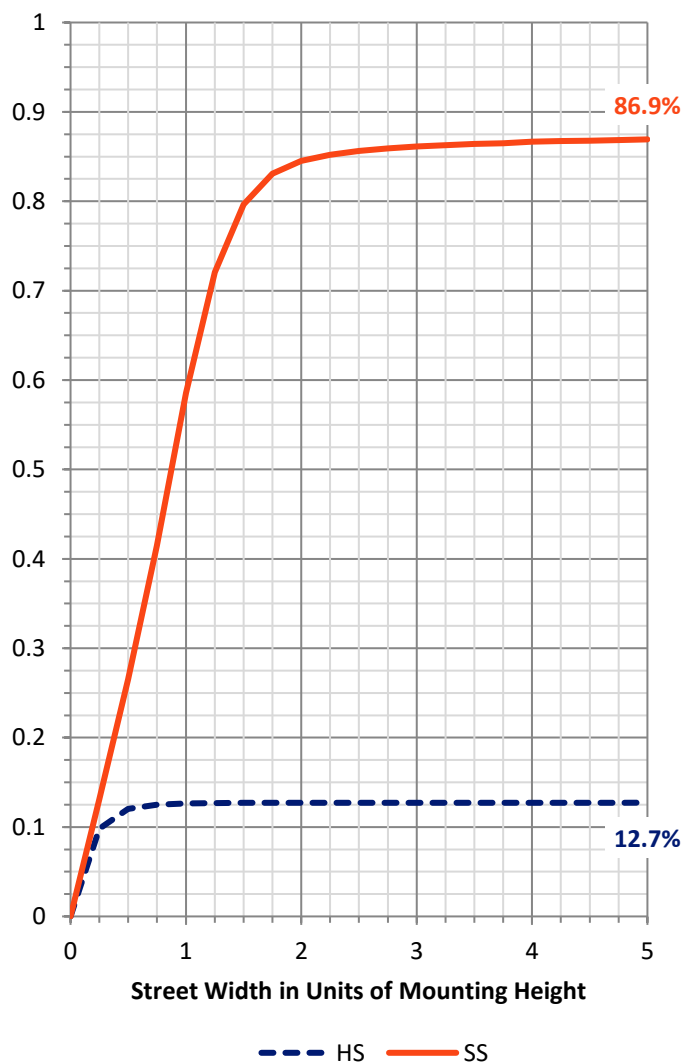
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2506.8	0.0	2506.8
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	16971.2	0.0	16971.2
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	19478.0	0.0	19478.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.8	1.4
10°-20°	675.4	3.5
20°-30°	1001.1	5.1
30°-40°	1858.8	9.5
40°-50°	3937.8	20.2
50°-60°	5444.9	28.0
60°-70°	4358.8	22.4
70°-80°	1811.0	9.3
80°-90°	116.3	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°	19478.0	100.0
0°-180°	19478.0	100.0

**Coefficient of Utilization**

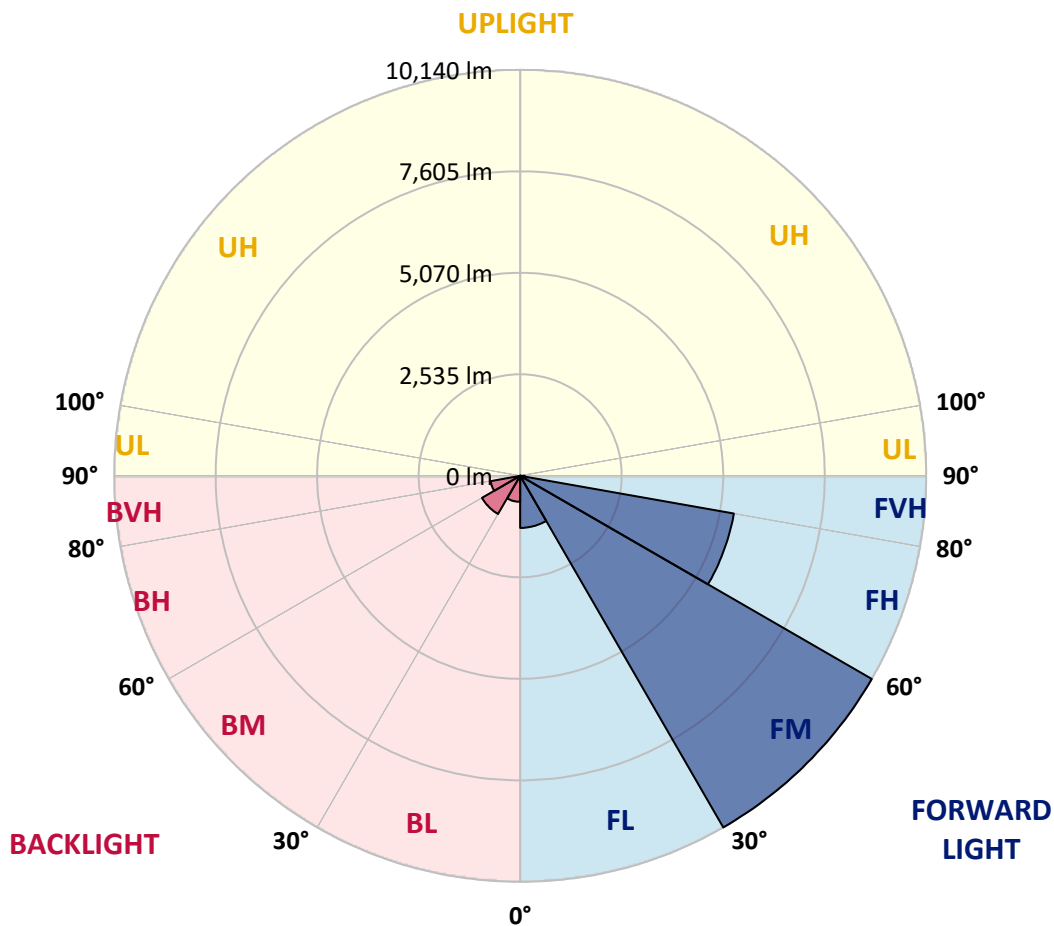


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1300.7	6.7			
FM (30°-60°)	10140.3	52.1			
FH (60°-80°)	5419.2	27.8			G3/7500
FVH (80°-90°)	111.0	0.6			G2/225
BL (0°-30°)	649.7	3.3	B2/1000		
BM (30°-60°)	1101.2	5.7	B2/2500		
BH (60°-80°)	750.6	3.9	B2/1000		G2/1000
BVH (80°-90°)	5.3	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°	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6
2.5°	3052.1	3044.7	3037.4	3033.7	3033.7	3030.0	3015.3	3011.6	3004.3	2996.9	2989.6
5°	3022.7	3011.6	3008.0	3011.6	3015.3	3022.7	3015.3	3015.3	3008.0	3000.6	2985.9
7.5°	2949.1	2941.8	2945.4	2956.5	2960.1	2985.9	2989.6	3000.6	3000.6	2993.2	2982.2
10°	2860.9	2857.2	2857.2	2875.6	2894.0	2930.7	2956.5	2985.9	2989.6	2989.6	2971.2
12.5°	2794.7	2791.0	2802.0	2824.1	2860.9	2908.7	2952.8	2996.9	3004.3	3008.0	2978.5
15°	2754.2	2754.2	2768.9	2813.1	2864.5	2930.7	2982.2	3041.0	3048.4	3044.7	3004.3
17.5°	2717.5	2721.1	2750.5	2824.1	2882.9	2971.2	3033.7	3099.9	3103.6	3099.9	3033.7
20°	2702.7	2710.1	2754.2	2849.8	2916.0	3015.3	3096.2	3162.4	3166.1	3151.4	3063.1
22.5°	2743.2	2746.9	2802.0	2905.0	2967.5	3077.8	3180.8	3243.3	3247.0	3224.9	3107.2
25°	2882.9	2882.9	2930.7	3019.0	3074.1	3184.5	3294.8	3368.3	3368.3	3342.6	3206.5
27.5°	3210.2	3180.8	3169.7	3195.5	3213.9	3331.5	3449.2	3541.1	3537.5	3500.7	3335.2
30°	3842.7	3769.1	3651.5	3519.1	3452.9	3533.8	3644.1	3761.8	3758.1	3699.3	3493.3
32.5°	4905.4	4798.7	4519.3	4169.9	3886.8	3794.9	3897.8	4026.5	4030.2	3960.3	3747.1
35°	6394.7	6225.5	5725.4	5240.0	4592.8	4243.5	4272.9	4412.6	4456.8	4420.0	4173.6
37.5°	7828.8	7674.3	7196.3	6523.4	5644.5	4931.1	4806.1	4927.4	4978.9	4978.9	4717.8
40°	9273.9	9093.7	8670.8	7994.2	7067.6	6004.9	5556.3	5655.5	5710.7	5721.7	5379.7
42.5°	10432.2	10314.5	9991.0	9465.1	8597.3	7887.6	6637.3	6582.2	6633.7	6593.2	6148.3
45°	11233.9	11141.9	10917.6	10719.0	10296.2	9939.5	8082.5	7711.1	7744.2	7604.5	7012.4
47.5°	11399.3	11296.4	11248.6	11524.3	11825.9	11914.1	9858.6	9053.3	9020.2	8711.3	7909.7
50°	10678.6	10689.6	10866.1	11653.1	12910.7	13704.9	11917.8	10568.3	10446.9	9759.3	8744.4
52.5°	9123.1	9299.6	9744.6	11020.6	13241.6	15006.7	13977.0	12175.2	11987.7	10777.9	9369.5
55°	7137.4	7365.4	8097.2	9564.4	12550.3	15587.7	15712.7	13844.7	13418.1	11542.7	9854.9
57.5°	5306.2	5376.1	6229.2	7567.7	10913.9	15017.7	16602.6	15131.7	14583.8	12153.2	10336.6
60°	3305.8	3349.9	4250.8	5762.2	8266.3	12910.7	16602.6	16017.9	15495.7	12701.1	10777.9
62.5°	2055.6	2070.3	2408.6	3949.3	5618.8	9575.4	15914.9	16705.5	16286.3	13094.5	11156.6
65°	1184.1	1198.8	1356.9	2232.1	3655.1	5732.8	14157.2	16907.8	16720.2	13407.1	11450.8
67.5°	864.1	871.5	934.0	1253.9	2390.2	2945.4	10634.5	16095.1	16330.5	13561.5	11443.5
70°	750.1	761.2	842.1	978.1	1724.6	1809.2	5412.8	13899.8	14558.0	13340.9	11101.5
72.5°	577.3	592.0	713.4	919.3	1265.0	1301.7	1959.9	9891.7	10888.2	11961.9	10163.8
75°	397.1	411.8	533.2	757.5	1044.3	974.5	1077.4	4552.4	5743.8	8023.7	7736.8
77.5°	253.7	257.4	334.6	551.6	900.9	691.3	739.1	1485.6	2085.0	3629.4	3651.5
80°	169.2	172.8	205.9	356.7	617.8	639.8	456.0	687.6	753.8	1059.0	735.4
82.5°	103.0	103.0	139.7	224.3	375.1	529.5	297.9	360.4	386.1	408.2	191.2
85°	40.4	40.4	84.6	147.1	235.3	246.4	187.5	209.6	220.6	239.0	88.3
87.5°	11.0	11.0	47.8	80.9	103.0	114.0	114.0	103.0	110.3	136.1	44.1
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°	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6	3000.6
2.5°	2985.9	2974.9	2960.1	2945.4	2930.7	2919.7	2908.7	2908.7	2901.3	2890.3	2882.9
5°	2978.5	2960.1	2927.1	2901.3	2860.9	2831.4	2809.4	2791.0	2780.0	2754.2	2750.5
7.5°	2967.5	2945.4	2897.6	2846.2	2780.0	2728.5	2677.0	2640.2	2603.5	2574.0	2566.7
10°	2949.1	2923.4	2853.5	2780.0	2688.0	2592.4	2471.1	2331.3	2202.6	2129.1	2107.0
12.5°	2949.1	2916.0	2824.1	2724.8	2592.4	2357.1	2048.2	1739.3	1500.3	1393.7	1364.2
15°	2967.5	2923.4	2802.0	2666.0	2419.6	1941.6	1441.5	1033.3	772.2	691.3	672.9
17.5°	2985.9	2923.4	2768.9	2585.1	2103.4	1408.4	820.0	544.2	459.7	441.3	441.3
20°	2993.2	2916.0	2724.8	2434.3	1680.5	875.2	489.1	408.2	375.1	364.0	364.0
22.5°	3022.7	2919.7	2691.7	2217.4	1220.8	514.8	386.1	342.0	308.9	297.9	297.9
25°	3096.2	2963.8	2699.1	1941.6	783.2	389.8	327.3	283.1	250.0	235.3	235.3
27.5°	3213.9	3063.1	2739.5	1621.6	492.7	334.6	275.8	228.0	202.2	187.5	187.5
30°	3346.3	3173.4	2757.9	1253.9	367.7	283.1	224.3	180.2	161.8	150.8	147.1
32.5°	3577.9	3364.6	2743.2	860.5	301.5	239.0	180.2	143.4	128.7	125.0	125.0
35°	3949.3	3699.3	2713.8	540.5	250.0	191.2	143.4	117.7	106.6	103.0	99.3
37.5°	4453.1	4188.3	2625.5	356.7	205.9	150.8	117.7	99.3	88.3	84.6	84.6
40°	5067.2	4747.3	2456.4	272.1	176.5	121.3	99.3	84.6	77.2	73.5	73.5
42.5°	5769.5	5368.7	2187.9	235.3	147.1	103.0	84.6	69.9	66.2	62.5	62.5
45°	6538.1	6019.6	1816.5	209.6	125.0	84.6	69.9	62.5	55.2	55.2	51.5
47.5°	7354.4	6674.1	1397.3	183.9	106.6	73.5	62.5	51.5	47.8	44.1	44.1
50°	8141.3	7258.8	981.8	158.1	88.3	62.5	51.5	44.1	40.4	36.8	36.8
52.5°	8696.6	7611.8	695.0	136.1	73.5	55.2	40.4	33.1	29.4	29.4	29.4
55°	9141.5	7832.4	485.4	114.0	62.5	47.8	33.1	25.7	25.7	22.1	22.1
57.5°	9560.7	7975.8	356.7	95.6	51.5	36.8	25.7	18.4	18.4	14.7	14.7
60°	9994.6	8053.1	272.1	77.2	44.1	29.4	18.4	14.7	11.0	11.0	11.0
62.5°	10432.2	8100.9	209.6	62.5	36.8	22.1	14.7	11.0	7.4	3.7	3.7
65°	10814.6	8115.6	161.8	47.8	29.4	14.7	11.0	3.7	0.0	0.0	0.0
67.5°	10928.6	7946.4	125.0	36.8	22.1	11.0	7.4	0.0	0.0	0.0	0.0
70°	10619.8	7497.8	95.6	29.4	18.4	7.4	3.7	0.0	0.0	0.0	0.0
72.5°	9424.7	6288.0	73.5	18.4	14.7	7.4	3.7	0.0	0.0	0.0	0.0
75°	6744.0	3353.6	51.5	14.7	11.0	3.7	0.0	0.0	0.0	0.0	0.0
77.5°	3103.6	1298.1	36.8	11.0	7.4	3.7	0.0	0.0	0.0	0.0	0.0
80°	606.7	323.6	14.7	7.4	3.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	139.7	55.2	7.4	7.4	3.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	47.8	18.4	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	18.4	7.4	3.7	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)