

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: P400058

Luminaire Tested: **ARCH-L-PA3-230-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400058  
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-PA3-230-727-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 980mA 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: 18335 lumens  
Efficiency: N/A  
Efficacy: 80.1 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

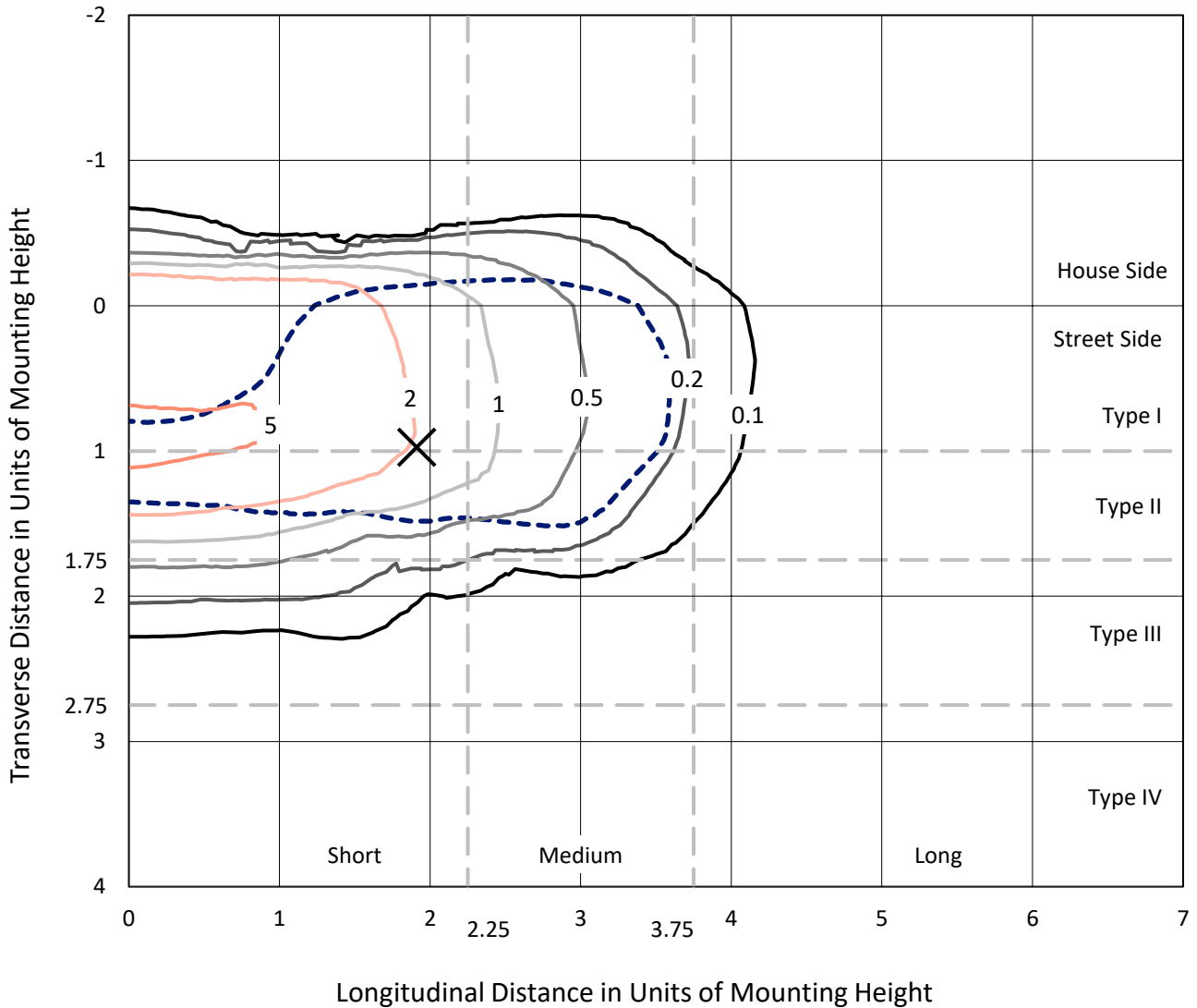
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

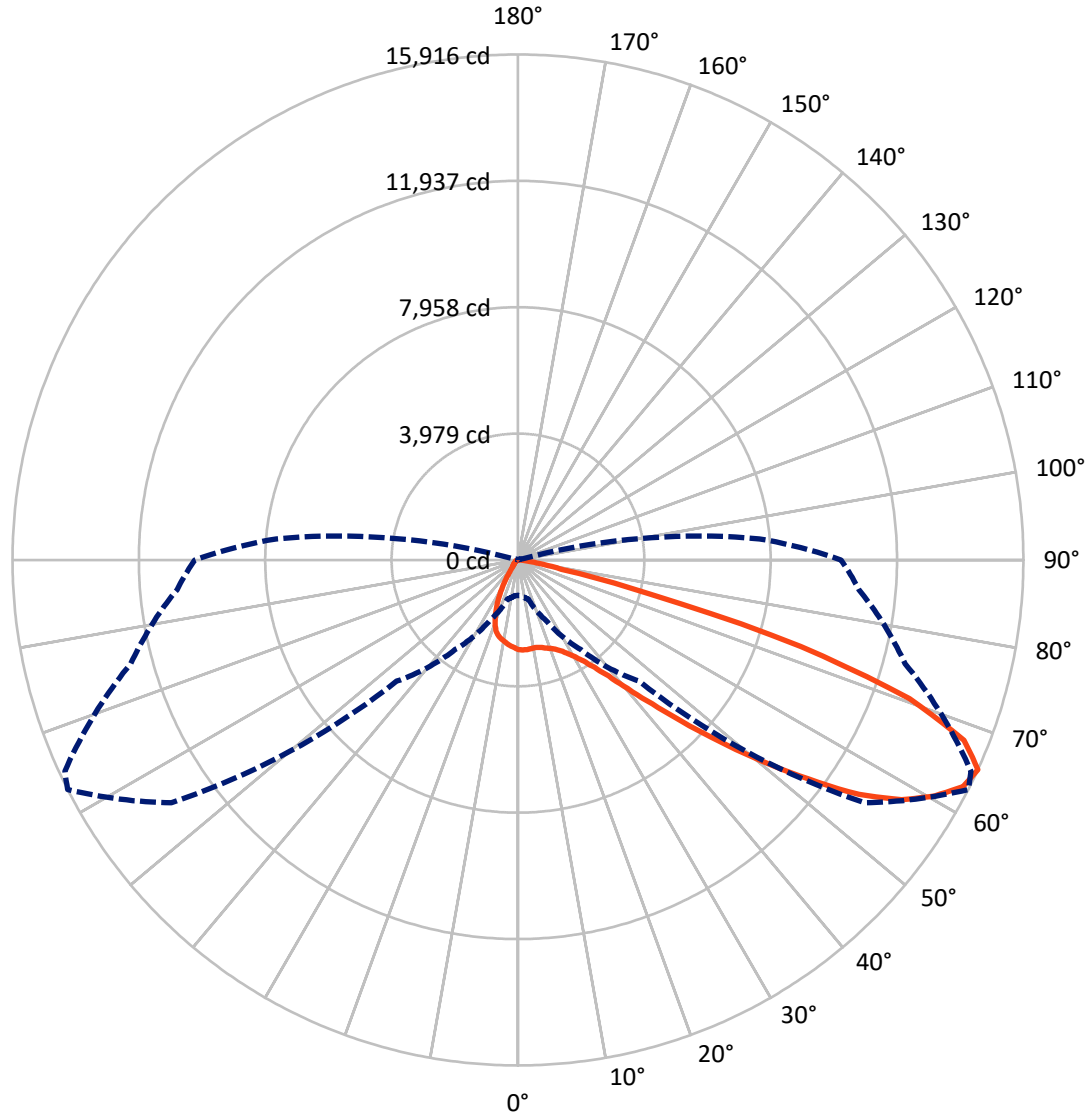
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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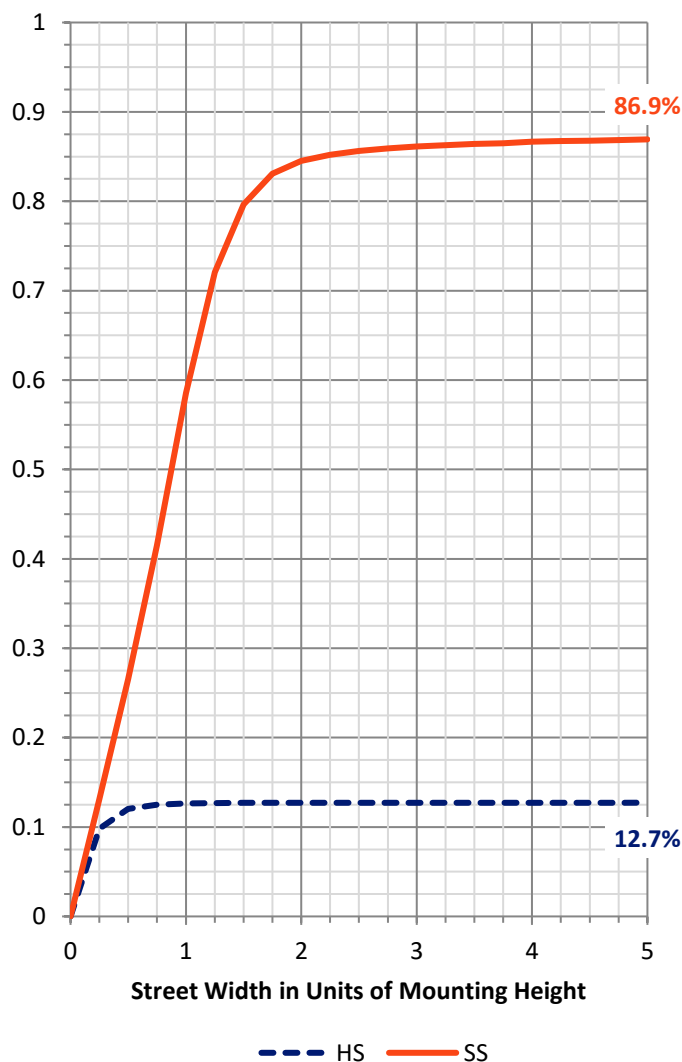
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2359.7	0.0	2359.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15975.3	0.0	15975.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	18335.0	0.0	18335.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.7	1.4
10°-20°	635.8	3.5
20°-30°	942.4	5.1
30°-40°	1749.7	9.5
40°-50°	3706.7	20.2
50°-60°	5125.4	28.0
60°-70°	4103.1	22.4
70°-80°	1704.7	9.3
80°-90°	109.5	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°	18335.0	100.0
0°-180°	18335.0	100.0

**Coefficient of Utilization**



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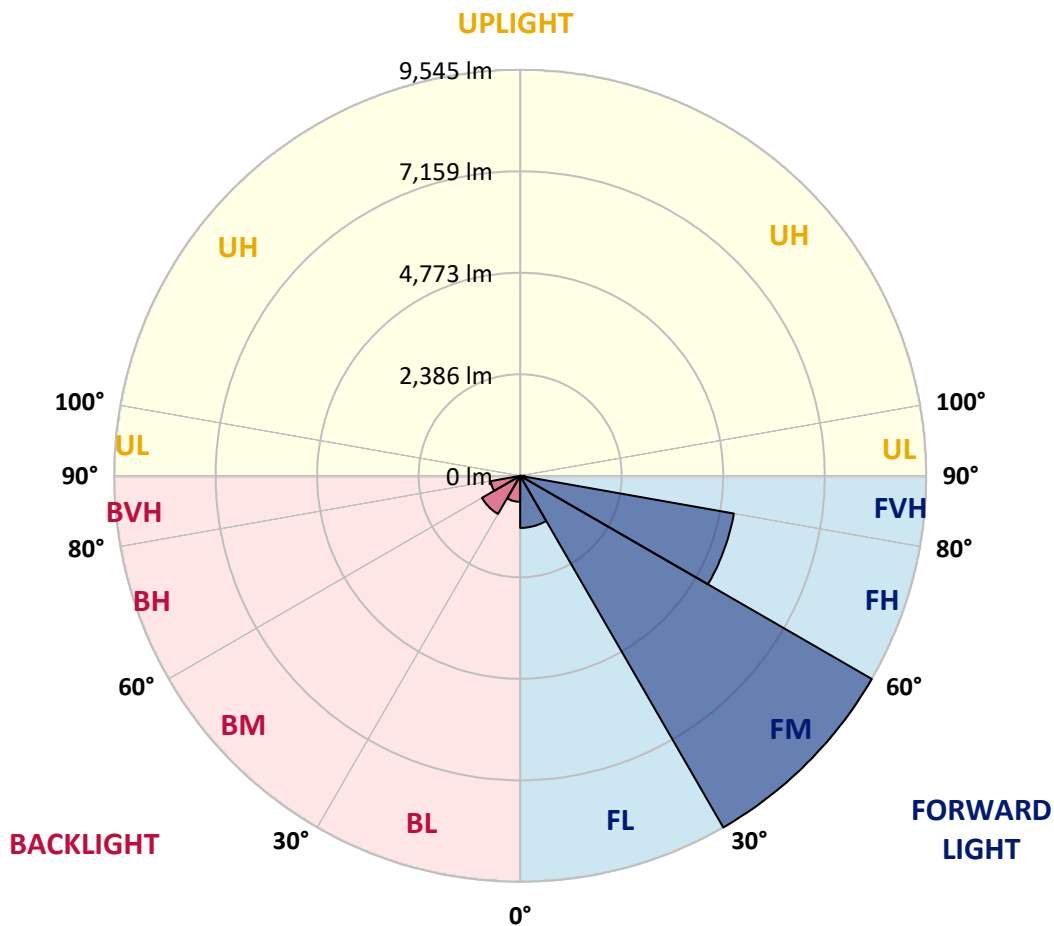
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1224.3	6.7			
FM (30°-60°)	9545.3	52.1			
FH (60°-80°)	5101.2	27.8			G3/7500
FVH (80°-90°)	104.5	0.6			G2/225
BL (0°-30°)	611.6	3.3	B2/1000		
BM (30°-60°)	1036.6	5.7	B2/2500		
BH (60°-80°)	706.6	3.9	B2/1000		G2/1000
BVH (80°-90°)	5.0	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°	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5
2.5°	2873.0	2866.1	2859.1	2855.7	2855.7	2852.2	2838.4	2834.9	2828.0	2821.1	2814.1
5°	2845.3	2834.9	2831.4	2834.9	2838.4	2845.3	2838.4	2838.4	2831.4	2824.5	2810.7
7.5°	2776.1	2769.1	2772.6	2783.0	2786.4	2810.7	2814.1	2824.5	2824.5	2817.6	2807.2
10°	2693.0	2689.5	2689.5	2706.8	2724.1	2758.7	2783.0	2810.7	2814.1	2814.1	2796.8
12.5°	2630.7	2627.2	2637.6	2658.4	2693.0	2738.0	2779.5	2821.1	2828.0	2831.4	2803.7
15°	2592.6	2592.6	2606.4	2648.0	2696.4	2758.7	2807.2	2862.6	2869.5	2866.1	2828.0
17.5°	2558.0	2561.4	2589.1	2658.4	2713.8	2796.8	2855.7	2918.0	2921.4	2918.0	2855.7
20°	2544.1	2551.1	2592.6	2682.6	2744.9	2838.4	2914.5	2976.8	2980.3	2966.4	2883.4
22.5°	2582.2	2585.7	2637.6	2734.5	2793.4	2897.2	2994.1	3053.0	3056.4	3035.7	2924.9
25°	2713.8	2713.8	2758.7	2841.8	2893.7	2997.6	3101.4	3170.7	3170.7	3146.4	3018.4
27.5°	3021.8	2994.1	2983.7	3008.0	3025.3	3136.0	3246.8	3333.3	3329.9	3295.3	3139.5
30°	3617.2	3548.0	3437.2	3312.6	3250.3	3326.4	3430.3	3541.0	3537.6	3482.2	3288.3
32.5°	4617.5	4517.1	4254.1	3925.2	3658.7	3572.2	3669.1	3790.3	3793.7	3727.9	3527.2
35°	6019.4	5860.2	5389.4	4932.5	4323.3	3994.5	4022.2	4153.7	4195.2	4160.6	3928.7
37.5°	7369.4	7224.0	6774.0	6140.6	5313.3	4641.8	4524.1	4638.3	4686.8	4686.8	4441.0
40°	8729.7	8560.1	8162.0	7525.1	6652.8	5652.5	5230.2	5323.7	5375.6	5386.0	5064.1
42.5°	9820.0	9709.3	9404.7	8909.7	8092.8	7424.7	6247.9	6195.9	6244.4	6206.3	5787.5
45°	10574.6	10488.1	10276.9	10090.0	9692.0	9356.2	7608.2	7258.6	7289.7	7158.2	6600.9
47.5°	10730.4	10633.5	10588.5	10848.1	11131.9	11215.0	9280.1	8522.0	8490.9	8200.1	7445.5
50°	10052.0	10062.3	10228.5	10969.2	12153.0	12900.7	11218.5	9948.1	9833.9	9186.6	8231.3
52.5°	8587.8	8753.9	9172.8	10373.9	12464.6	14126.0	13156.8	11460.8	11284.2	10145.4	8819.7
55°	6718.6	6933.2	7622.0	9003.1	11813.8	14672.9	14790.6	13032.2	12630.7	10865.4	9276.6
57.5°	4994.8	5060.6	5863.6	7123.6	10273.5	14136.4	15628.3	14243.7	13728.0	11440.0	9730.0
60°	3111.8	3153.4	4001.4	5424.0	7781.3	12153.0	15628.3	15077.9	14586.4	11955.7	10145.4
62.5°	1934.9	1948.8	2267.2	3717.6	5289.0	9013.5	14981.0	15725.2	15330.6	12326.1	10501.9
65°	1114.6	1128.4	1277.3	2101.1	3440.6	5396.3	13326.5	15915.6	15739.1	12620.3	10778.9
67.5°	813.4	820.4	879.2	1180.3	2249.9	2772.6	10010.4	15150.6	15372.2	12765.7	10771.9
70°	706.1	716.5	792.7	920.7	1623.4	1703.0	5095.2	13084.2	13703.8	12558.0	10450.0
72.5°	543.4	557.3	671.5	865.4	1190.7	1225.3	1844.9	9311.2	10249.3	11260.0	9567.4
75°	373.8	387.7	501.9	713.1	983.0	917.3	1014.2	4285.2	5406.7	7552.8	7282.8
77.5°	238.8	242.3	315.0	519.2	848.0	650.7	695.7	1398.4	1962.6	3416.4	3437.2
80°	159.2	162.7	193.8	335.8	581.5	602.3	429.2	647.3	709.6	996.9	692.3
82.5°	96.9	96.9	131.5	211.1	353.1	498.4	280.4	339.2	363.4	384.2	180.0
85°	38.1	38.1	79.6	138.5	221.5	231.9	176.5	197.3	207.7	225.0	83.1
87.5°	10.4	10.4	45.0	76.2	96.9	107.3	107.3	96.9	103.8	128.1	41.5
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°	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5	2824.5
2.5°	2810.7	2800.3	2786.4	2772.6	2758.7	2748.4	2738.0	2738.0	2731.1	2720.7	2713.8
5°	2803.7	2786.4	2755.3	2731.1	2693.0	2665.3	2644.5	2627.2	2616.8	2592.6	2589.1
7.5°	2793.4	2772.6	2727.6	2679.1	2616.8	2568.4	2519.9	2485.3	2450.7	2423.0	2416.1
10°	2776.1	2751.8	2686.1	2616.8	2530.3	2440.3	2326.1	2194.5	2073.4	2004.2	1983.4
12.5°	2776.1	2744.9	2658.4	2564.9	2440.3	2218.8	1928.0	1637.3	1412.3	1311.9	1284.2
15°	2793.4	2751.8	2637.6	2509.5	2277.6	1827.6	1356.9	972.7	726.9	650.7	633.4
17.5°	2810.7	2751.8	2606.4	2433.4	1979.9	1325.7	771.9	512.3	432.7	415.4	415.4
20°	2817.6	2744.9	2564.9	2291.5	1581.9	823.8	460.4	384.2	353.1	342.7	342.7
22.5°	2845.3	2748.4	2533.8	2087.2	1149.2	484.6	363.4	321.9	290.8	280.4	280.4
25°	2914.5	2789.9	2540.7	1827.6	737.3	366.9	308.1	266.5	235.4	221.5	221.5
27.5°	3025.3	2883.4	2578.8	1526.5	463.8	315.0	259.6	214.6	190.4	176.5	176.5
30°	3149.9	2987.2	2596.1	1180.3	346.1	266.5	211.1	169.6	152.3	141.9	138.5
32.5°	3368.0	3167.2	2582.2	810.0	283.8	225.0	169.6	135.0	121.1	117.7	117.7
35°	3717.6	3482.2	2554.5	508.8	235.4	180.0	135.0	110.8	100.4	96.9	93.5
37.5°	4191.8	3942.6	2471.5	335.8	193.8	141.9	110.8	93.5	83.1	79.6	79.6
40°	4769.8	4468.7	2312.2	256.1	166.1	114.2	93.5	79.6	72.7	69.2	69.2
42.5°	5431.0	5053.7	2059.5	221.5	138.5	96.9	79.6	65.8	62.3	58.8	58.8
45°	6154.4	5666.3	1709.9	197.3	117.7	79.6	65.8	58.8	51.9	51.9	48.5
47.5°	6922.8	6282.5	1315.3	173.1	100.4	69.2	58.8	48.5	45.0	41.5	41.5
50°	7663.6	6832.8	924.2	148.8	83.1	58.8	48.5	41.5	38.1	34.6	34.6
52.5°	8186.3	7165.1	654.2	128.1	69.2	51.9	38.1	31.2	27.7	27.7	27.7
55°	8605.1	7372.8	456.9	107.3	58.8	45.0	31.2	24.2	24.2	20.8	20.8
57.5°	8999.7	7507.8	335.8	90.0	48.5	34.6	24.2	17.3	17.3	13.8	13.8
60°	9408.1	7580.5	256.1	72.7	41.5	27.7	17.3	13.8	10.4	10.4	10.4
62.5°	9820.0	7625.5	197.3	58.8	34.6	20.8	13.8	10.4	6.9	3.5	3.5
65°	10180.0	7639.3	152.3	45.0	27.7	13.8	10.4	3.5	0.0	0.0	0.0
67.5°	10287.3	7480.1	117.7	34.6	20.8	10.4	6.9	0.0	0.0	0.0	0.0
70°	9996.6	7057.8	90.0	27.7	17.3	6.9	3.5	0.0	0.0	0.0	0.0
72.5°	8871.6	5919.0	69.2	17.3	13.8	6.9	3.5	0.0	0.0	0.0	0.0
75°	6348.2	3156.8	48.5	13.8	10.4	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	2921.4	1221.9	34.6	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
80°	571.1	304.6	13.8	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	131.5	51.9	6.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	45.0	17.3	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	17.3	6.9	3.5	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)