

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: P399581

Luminaire Tested: **ARCH-L-PA3-160-750-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399581  
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-PA3-160-750-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 705mA 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: 17221 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

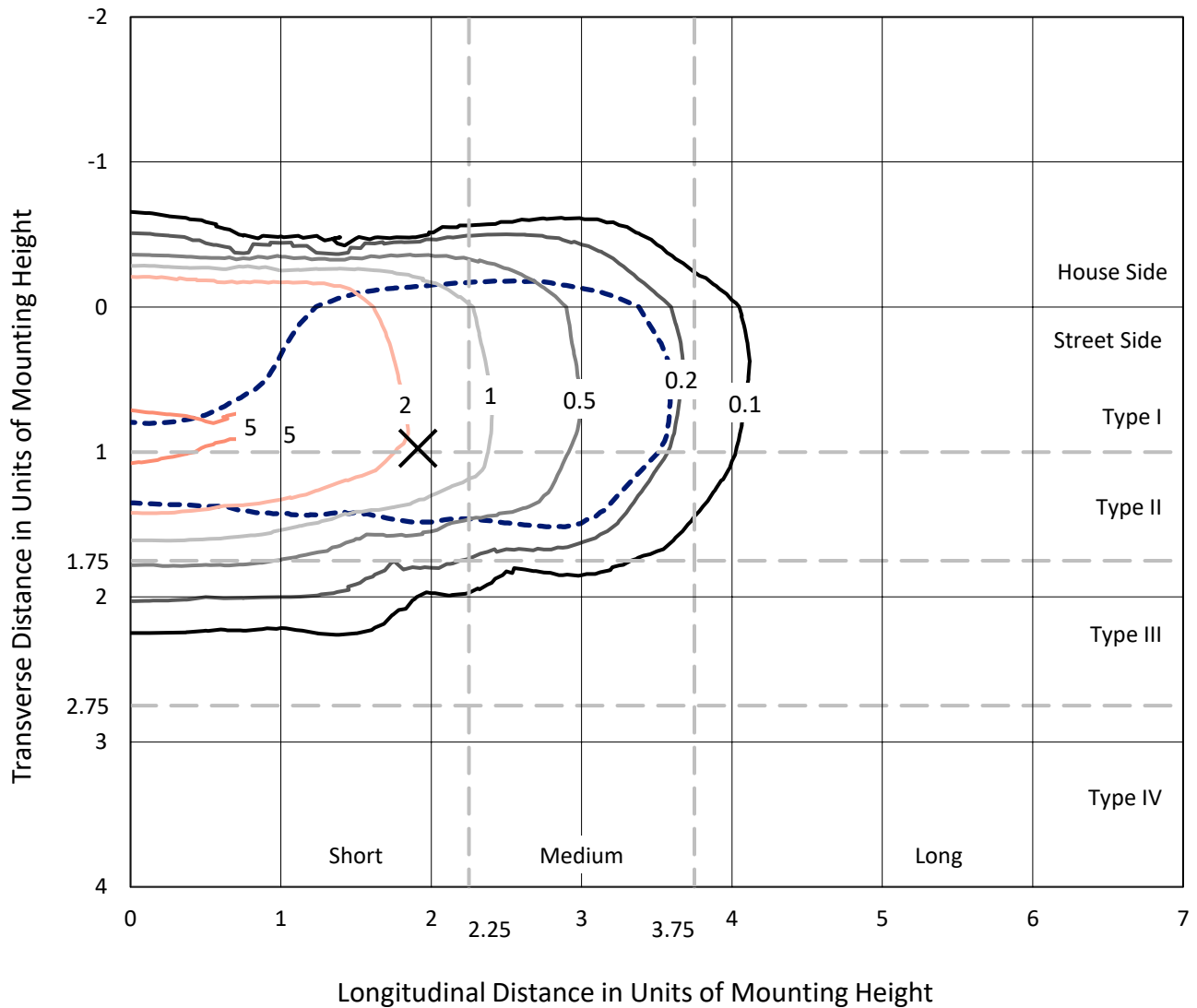
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

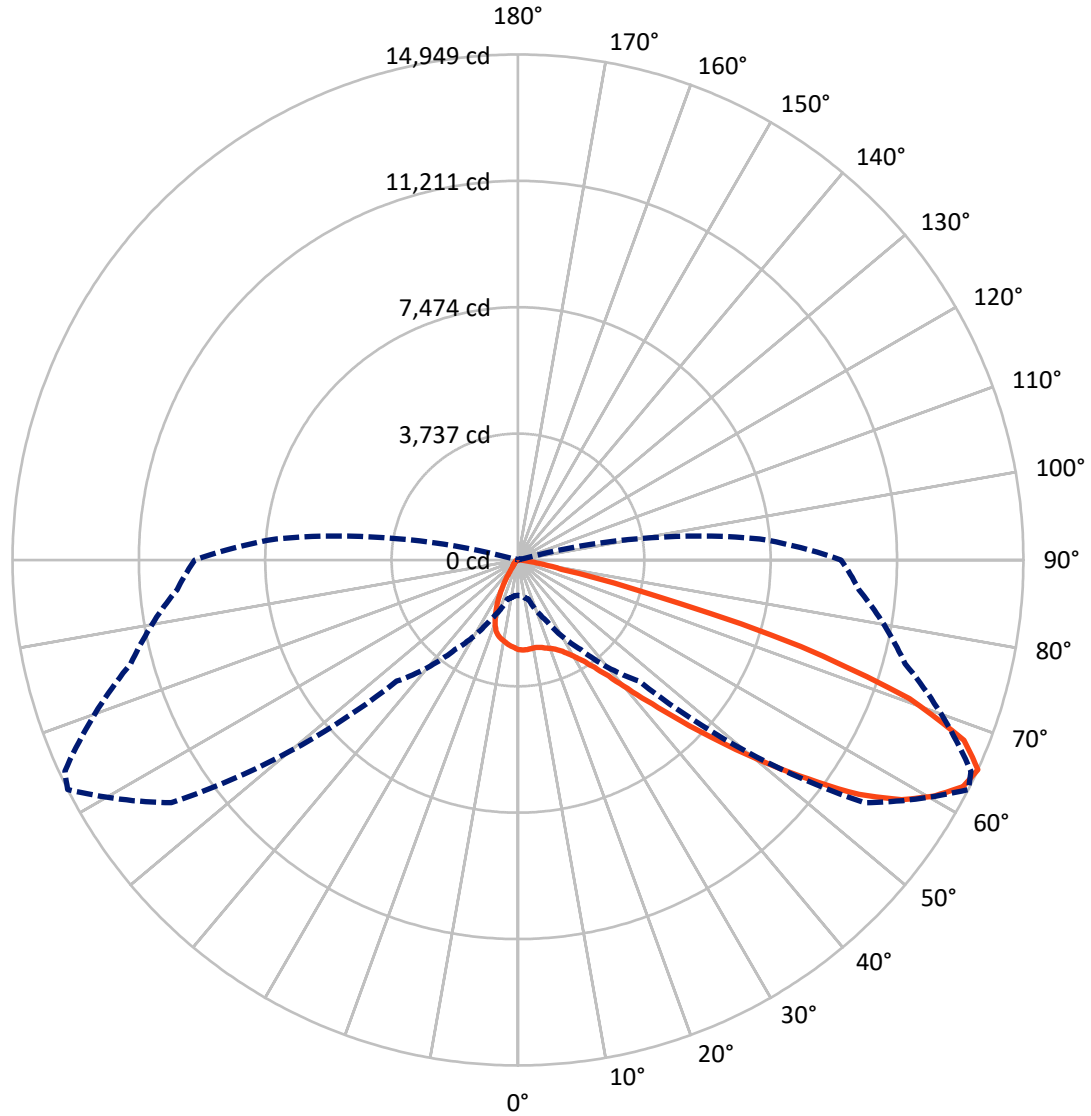
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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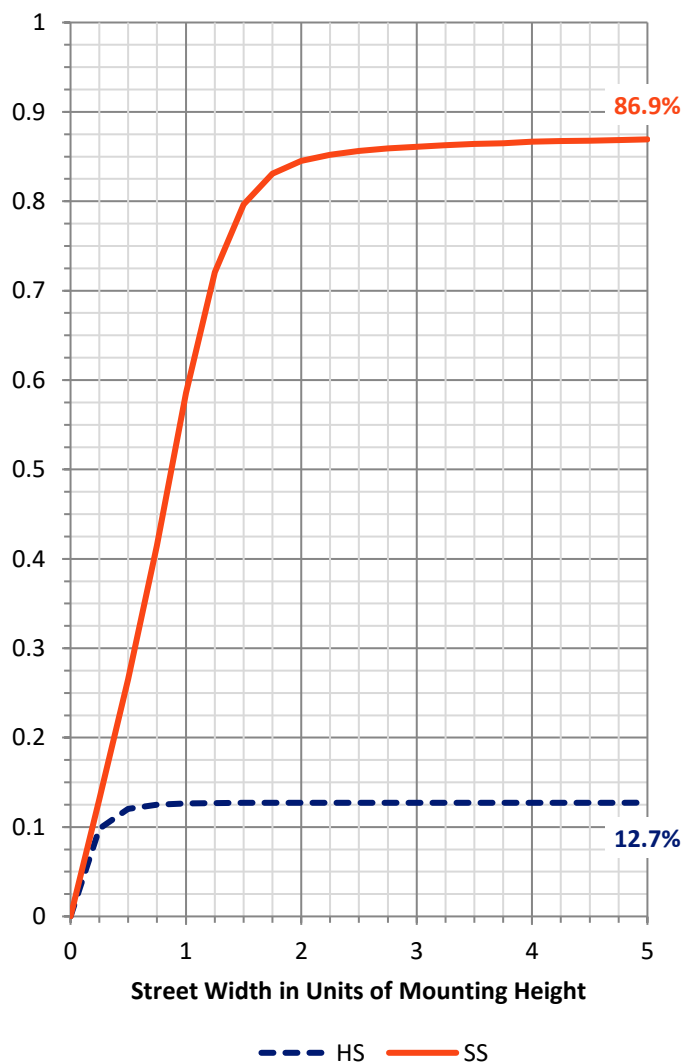
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2216.3	0.0	2216.3
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15004.7	0.0	15004.7
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	17221.0	0.0	17221.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.1	1.4
10°-20°	597.2	3.5
20°-30°	885.1	5.1
30°-40°	1643.4	9.5
40°-50°	3481.5	20.2
50°-60°	4814.0	28.0
60°-70°	3853.8	22.4
70°-80°	1601.1	9.3
80°-90°	102.8	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°	17221.0	100.0
0°-180°	17221.0	100.0

**Coefficient of Utilization**



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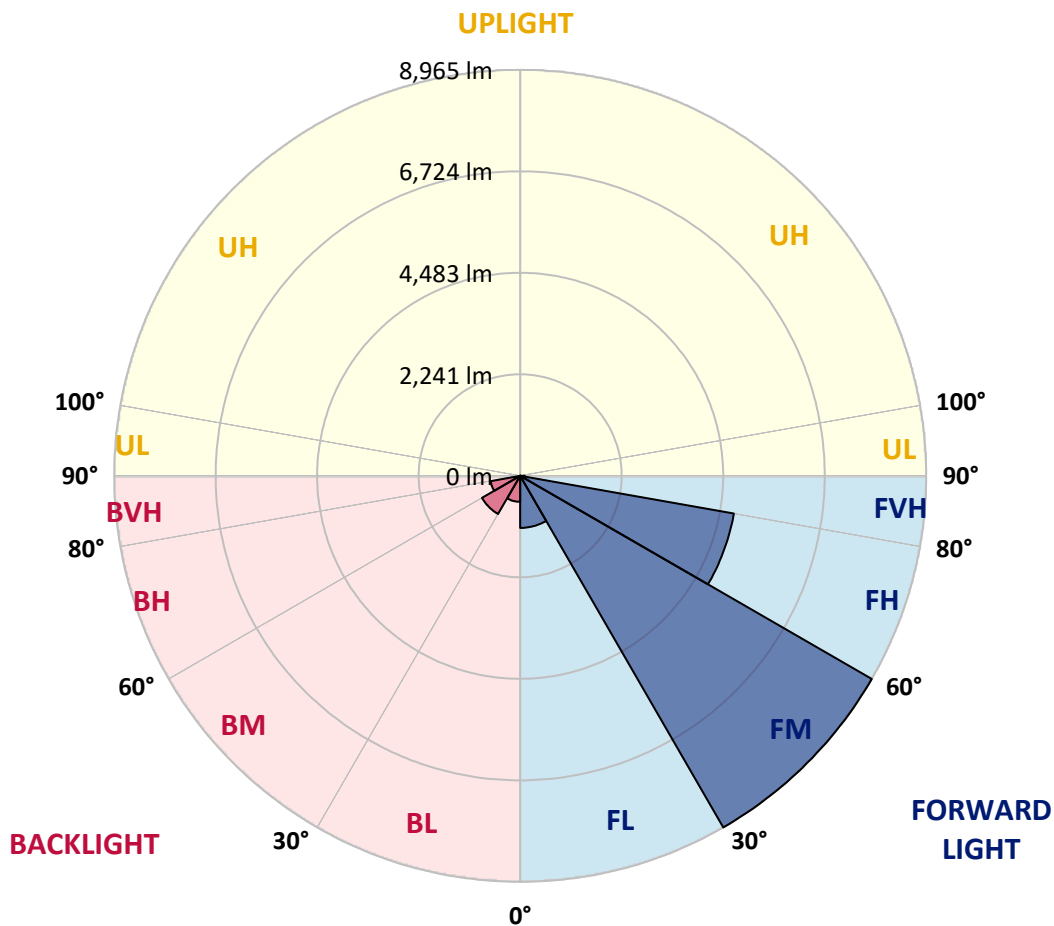
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1150.0	6.7			
FM (30°-60°)	8965.3	52.1			
FH (60°-80°)	4791.3	27.8			G2/5000
FVH (80°-90°)	98.1	0.6			G1/100
BL (0°-30°)	574.4	3.3	B2/1000		
BM (30°-60°)	973.6	5.7	B1/1000		
BH (60°-80°)	663.6	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.7	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9
2.5°	2698.4	2691.9	2685.4	2682.2	2682.2	2678.9	2665.9	2662.7	2656.2	2649.7	2643.2
5°	2672.4	2662.7	2659.4	2662.7	2665.9	2672.4	2665.9	2665.9	2659.4	2652.9	2639.9
7.5°	2607.4	2600.9	2604.1	2613.9	2617.1	2639.9	2643.2	2652.9	2652.9	2646.4	2636.6
10°	2529.4	2526.1	2526.1	2542.4	2558.6	2591.1	2613.9	2639.9	2643.2	2643.2	2626.9
12.5°	2470.8	2467.6	2477.3	2496.9	2529.4	2571.6	2610.6	2649.7	2656.2	2659.4	2633.4
15°	2435.1	2435.1	2448.1	2487.1	2532.6	2591.1	2636.6	2688.7	2695.2	2691.9	2656.2
17.5°	2402.6	2405.8	2431.8	2496.9	2548.9	2626.9	2682.2	2740.7	2743.9	2740.7	2682.2
20°	2389.6	2396.1	2435.1	2519.6	2578.1	2665.9	2737.4	2796.0	2799.2	2786.2	2708.2
22.5°	2425.3	2428.6	2477.3	2568.4	2623.6	2721.2	2812.2	2867.5	2870.7	2851.2	2747.2
25°	2548.9	2548.9	2591.1	2669.2	2717.9	2815.5	2913.0	2978.0	2978.0	2955.3	2835.0
27.5°	2838.2	2812.2	2802.5	2825.2	2841.5	2945.5	3049.5	3130.8	3127.6	3095.1	2948.8
30°	3397.4	3332.4	3228.4	3111.3	3052.8	3124.3	3221.8	3325.9	3322.6	3270.6	3088.6
32.5°	4337.0	4242.7	3995.6	3686.8	3436.4	3355.1	3446.2	3560.0	3563.2	3501.4	3312.9
35°	5653.7	5504.1	5062.0	4632.8	4060.6	3751.8	3777.8	3901.3	3940.3	3907.8	3690.0
37.5°	6921.6	6785.1	6362.4	5767.5	4990.5	4359.7	4249.2	4356.5	4402.0	4402.0	4171.2
40°	8199.3	8040.0	7666.1	7067.9	6248.6	5309.1	4912.4	5000.2	5049.0	5058.7	4756.4
42.5°	9223.4	9119.4	8833.3	8368.4	7601.1	6973.6	5868.3	5819.5	5865.0	5829.2	5435.9
45°	9932.1	9850.9	9652.5	9477.0	9103.1	8787.7	7145.9	6817.6	6846.8	6723.3	6199.9
47.5°	10078.4	9987.4	9945.1	10189.0	10455.6	10533.6	8716.2	8004.2	7975.0	7701.9	6993.1
50°	9441.2	9451.0	9607.0	10302.8	11414.6	12116.9	10536.8	9343.7	9236.4	8628.4	7731.1
52.5°	8066.0	8222.1	8615.4	9743.6	11707.2	13267.8	12357.5	10764.4	10598.6	9529.0	8283.8
55°	6310.4	6512.0	7158.9	8456.1	11096.0	13781.4	13892.0	12240.4	11863.3	10205.2	8713.0
57.5°	4691.3	4753.1	5507.4	6690.8	9649.3	13277.5	14678.8	13378.3	12893.9	10744.9	9138.9
60°	2922.7	2961.8	3758.3	5094.5	7308.5	11414.6	14678.8	14161.8	13700.2	11229.3	9529.0
62.5°	1817.4	1830.4	2129.5	3491.7	4967.7	8465.9	14070.8	14769.8	14399.2	11577.2	9863.9
65°	1046.9	1059.9	1199.7	1973.4	3231.6	5068.5	12516.8	14948.6	14782.8	11853.5	10124.0
67.5°	764.0	770.5	825.8	1108.6	2113.2	2604.1	9402.2	14230.1	14438.2	11990.1	10117.4
70°	663.2	673.0	744.5	864.8	1524.8	1599.5	4785.6	12289.2	12871.1	11795.0	9815.1
72.5°	510.4	523.4	630.7	812.8	1118.4	1150.9	1732.8	8745.5	9626.5	10575.9	8986.1
75°	351.1	364.1	471.4	669.7	923.3	861.5	952.6	4024.9	5078.2	7093.9	6840.3
77.5°	224.3	227.6	295.9	487.7	796.5	611.2	653.5	1313.4	1843.4	3208.8	3228.4
80°	149.6	152.8	182.1	315.4	546.2	565.7	403.1	608.0	666.5	936.3	650.2
82.5°	91.0	91.0	123.5	198.3	331.6	468.2	263.3	318.6	341.4	360.9	169.1
85°	35.8	35.8	74.8	130.0	208.1	217.8	165.8	185.3	195.1	211.3	78.0
87.5°	9.8	9.8	42.3	71.5	91.0	100.8	100.8	91.0	97.5	120.3	39.0
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°	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9	2652.9
2.5°	2639.9	2630.1	2617.1	2604.1	2591.1	2581.4	2571.6	2571.6	2565.1	2555.4	2548.9
5°	2633.4	2617.1	2587.9	2565.1	2529.4	2503.4	2483.8	2467.6	2457.8	2435.1	2431.8
7.5°	2623.6	2604.1	2561.9	2516.4	2457.8	2412.3	2366.8	2334.3	2301.8	2275.8	2269.3
10°	2607.4	2584.6	2522.9	2457.8	2376.6	2292.0	2184.7	2061.2	1947.4	1882.4	1862.9
12.5°	2607.4	2578.1	2496.9	2409.1	2292.0	2084.0	1810.9	1537.8	1326.5	1232.2	1206.2
15°	2623.6	2584.6	2477.3	2357.1	2139.2	1716.6	1274.4	913.6	682.7	611.2	595.0
17.5°	2639.9	2584.6	2448.1	2285.5	1859.6	1245.2	725.0	481.2	406.4	390.1	390.1
20°	2646.4	2578.1	2409.1	2152.2	1485.8	773.8	432.4	360.9	331.6	321.9	321.9
22.5°	2672.4	2581.4	2379.8	1960.4	1079.4	455.2	341.4	302.4	273.1	263.3	263.3
25°	2737.4	2620.4	2386.3	1716.6	692.5	344.6	289.3	250.3	221.1	208.1	208.1
27.5°	2841.5	2708.2	2422.1	1433.7	435.6	295.9	243.8	201.6	178.8	165.8	165.8
30°	2958.5	2805.7	2438.3	1108.6	325.1	250.3	198.3	159.3	143.0	133.3	130.0
32.5°	3163.3	2974.8	2425.3	760.8	266.6	211.3	159.3	126.8	113.8	110.5	110.5
35°	3491.7	3270.6	2399.3	477.9	221.1	169.1	126.8	104.0	94.3	91.0	87.8
37.5°	3937.1	3703.0	2321.3	315.4	182.1	133.3	104.0	87.8	78.0	74.8	74.8
40°	4480.0	4197.2	2171.7	240.6	156.1	107.3	87.8	74.8	68.3	65.0	65.0
42.5°	5101.0	4746.6	1934.4	208.1	130.0	91.0	74.8	61.8	58.5	55.3	55.3
45°	5780.5	5322.1	1606.0	185.3	110.5	74.8	61.8	55.3	48.8	48.8	45.5
47.5°	6502.2	5900.8	1235.4	162.6	94.3	65.0	55.3	45.5	42.3	39.0	39.0
50°	7198.0	6417.7	868.0	139.8	78.0	55.3	45.5	39.0	35.8	32.5	32.5
52.5°	7688.9	6729.8	614.5	120.3	65.0	48.8	35.8	29.3	26.0	26.0	26.0
55°	8082.3	6924.9	429.1	100.8	55.3	42.3	29.3	22.8	22.8	19.5	19.5
57.5°	8452.9	7051.7	315.4	84.5	45.5	32.5	22.8	16.3	16.3	13.0	13.0
60°	8836.5	7119.9	240.6	68.3	39.0	26.0	16.3	13.0	9.8	9.8	9.8
62.5°	9223.4	7162.2	185.3	55.3	32.5	19.5	13.0	9.8	6.5	3.3	3.3
65°	9561.5	7175.2	143.0	42.3	26.0	13.0	9.8	3.3	0.0	0.0	0.0
67.5°	9662.3	7025.6	110.5	32.5	19.5	9.8	6.5	0.0	0.0	0.0	0.0
70°	9389.2	6629.0	84.5	26.0	16.3	6.5	3.3	0.0	0.0	0.0	0.0
72.5°	8332.6	5559.4	65.0	16.3	13.0	6.5	3.3	0.0	0.0	0.0	0.0
75°	5962.5	2965.0	45.5	13.0	9.8	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	2743.9	1147.6	32.5	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0
80°	536.4	286.1	13.0	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	123.5	48.8	6.5	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	42.3	16.3	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.3	6.5	3.3	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)