

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: P399572

Luminaire Tested: **ARCH-L-PA3-160-740-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399572  
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-PA3-160-740-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 17222 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

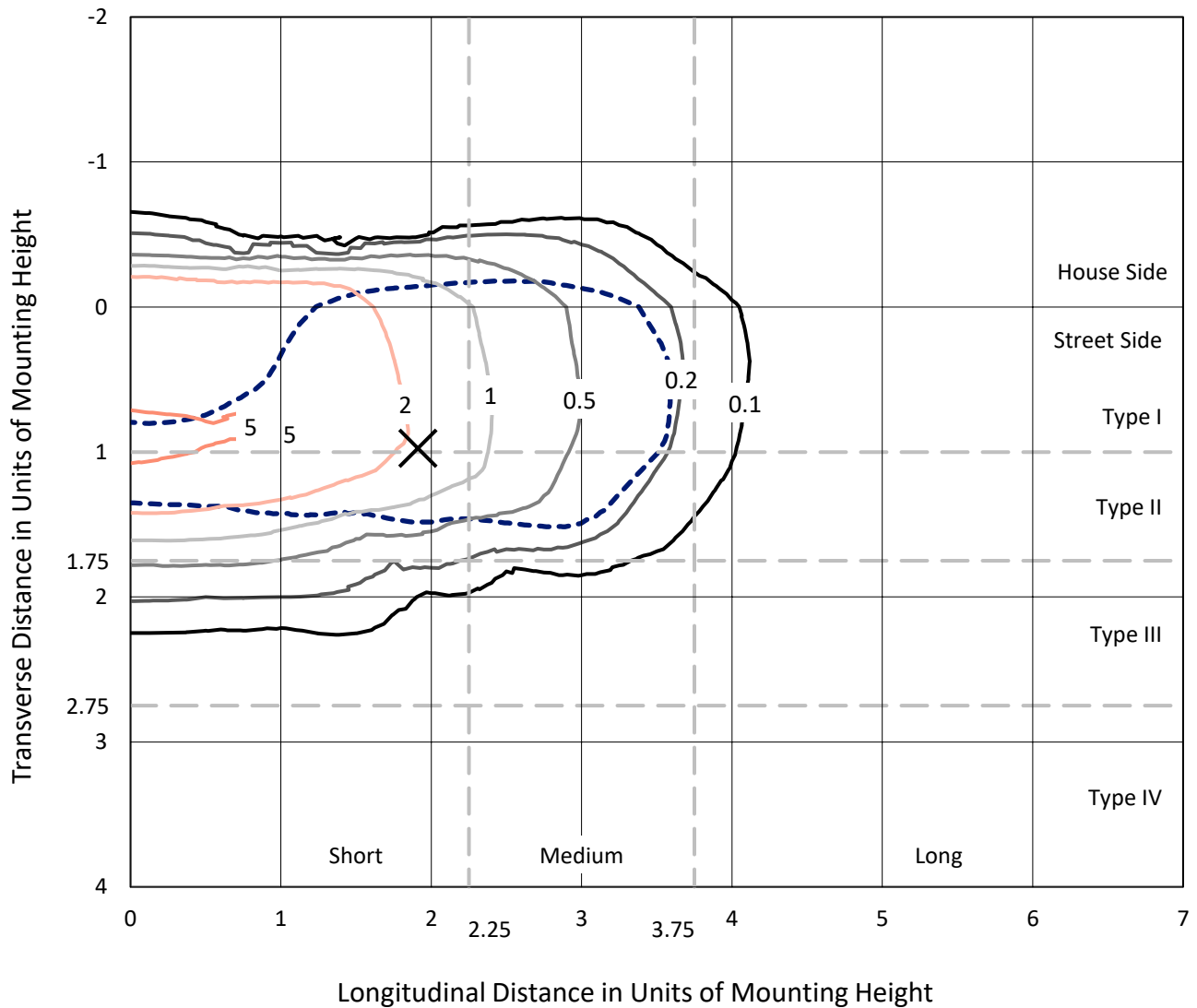
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399572  
 CATALOG NUMBER: ARCH-L-PA3-160-740-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

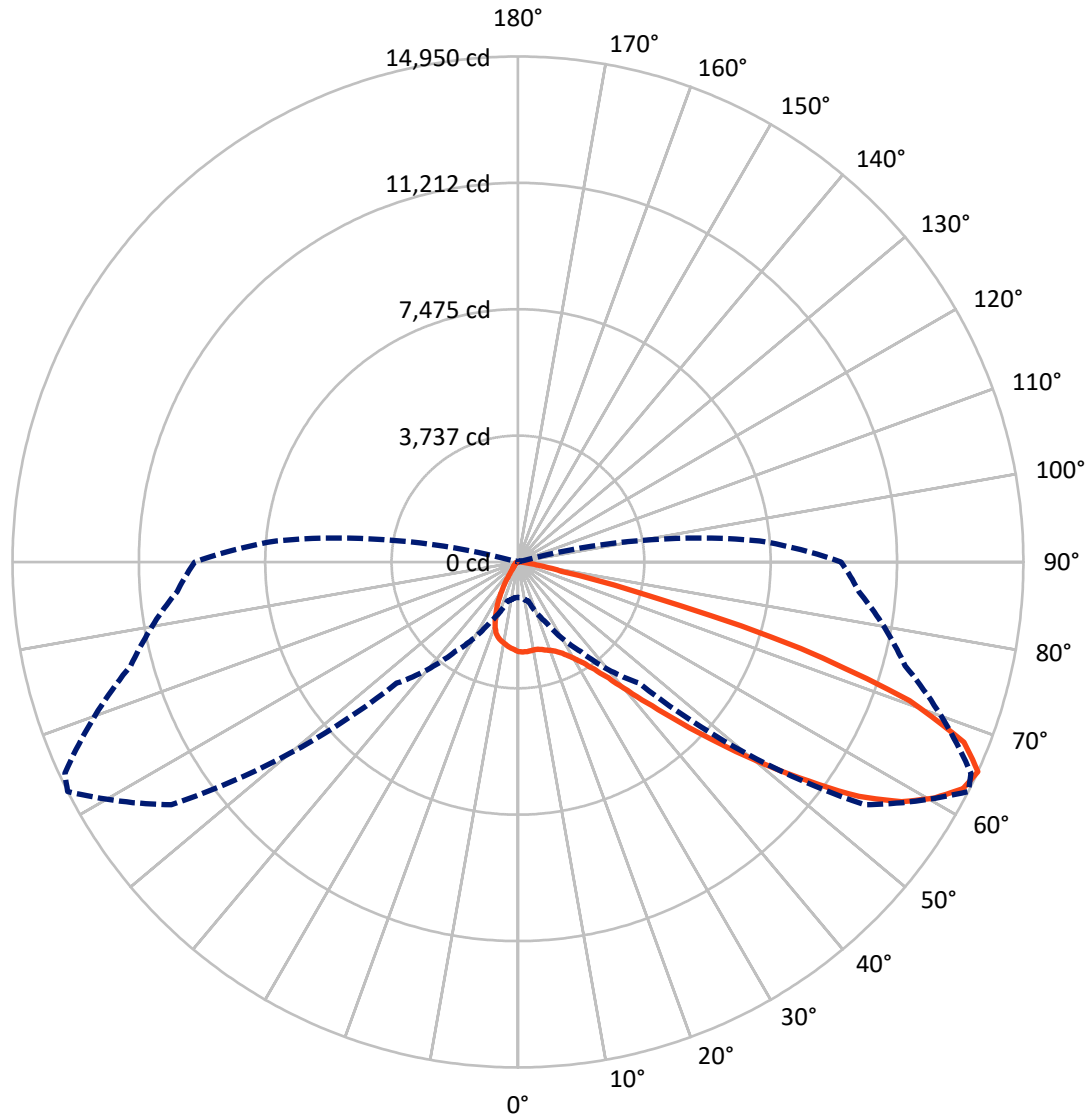
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P399572  
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### Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: ARCH-L-PA3-160-740-U-T2U-HSS

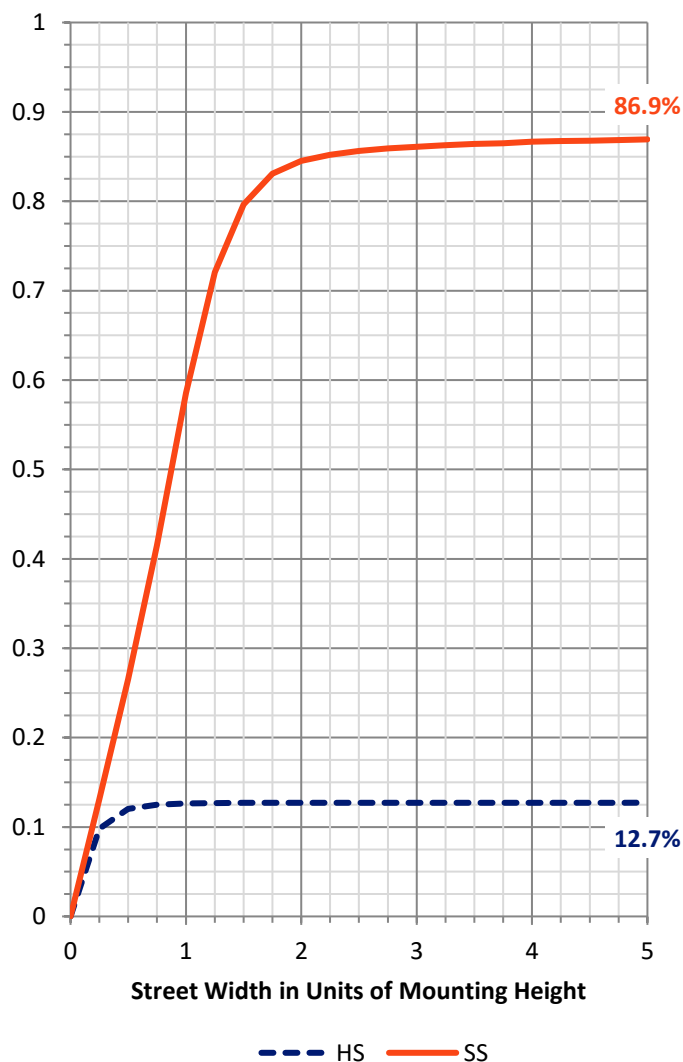
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2216.5	0.0	2216.5
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	15005.5	0.0	15005.5
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	17222.0	0.0	17222.0
	% 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°	885.2	5.1
30°-40°	1643.5	9.5
40°-50°	3481.7	20.2
50°-60°	4814.3	28.0
60°-70°	3854.0	22.4
70°-80°	1601.2	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°	17222.0	100.0
0°-180°	17222.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399572

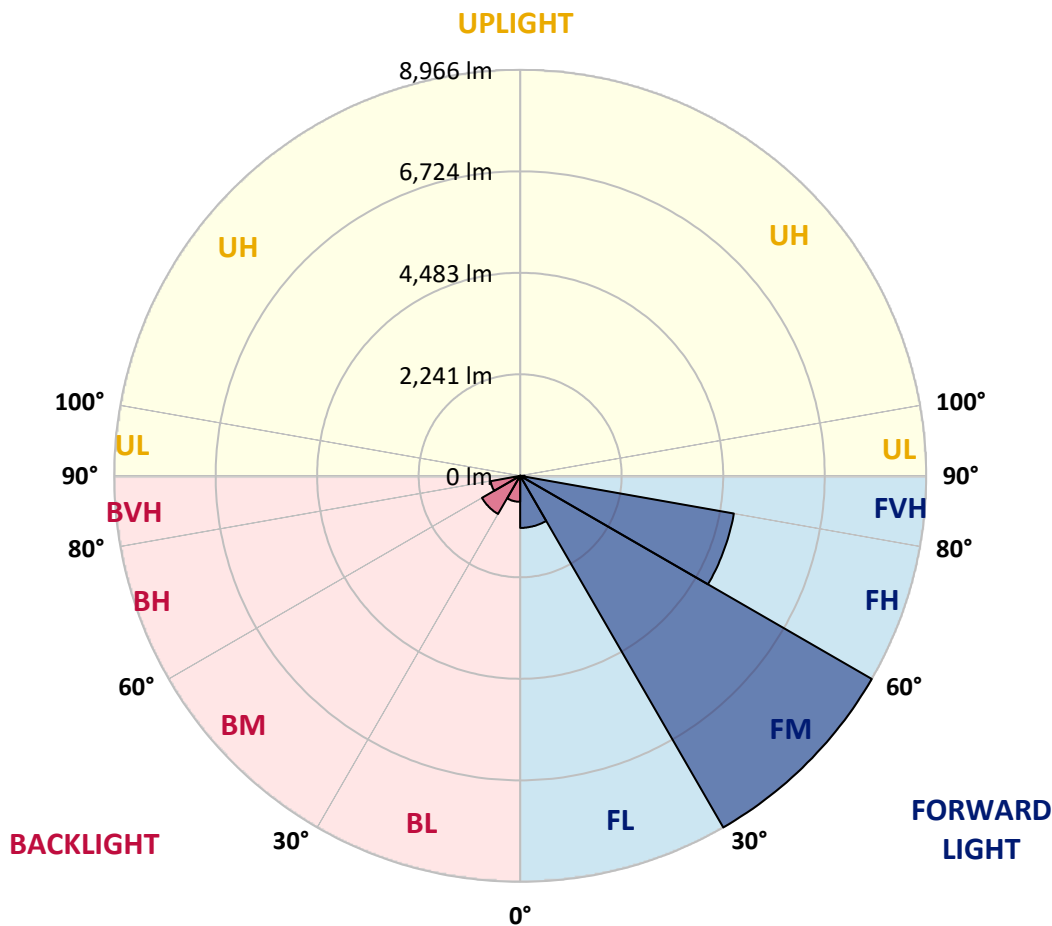
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1150.0	6.7			
FM (30°-60°)	8965.8	52.1			
FH (60°-80°)	4791.5	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°)	973.7	5.7	B1/1000		
BH (60°-80°)	663.7	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





REPORT NUMBER: P399572

CATALOG NUMBER: ARCH-L-PA3-160-740-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1
2.5°	2698.6	2692.1	2685.6	2682.3	2682.3	2679.1	2666.1	2662.8	2656.3	2649.8	2643.3
5°	2672.6	2662.8	2659.6	2662.8	2666.1	2672.6	2666.1	2666.1	2659.6	2653.1	2640.1
7.5°	2607.5	2601.0	2604.3	2614.0	2617.3	2640.1	2643.3	2653.1	2653.1	2646.6	2636.8
10°	2529.5	2526.3	2526.3	2542.5	2558.8	2591.3	2614.0	2640.1	2643.3	2643.3	2627.0
12.5°	2471.0	2467.7	2477.5	2497.0	2529.5	2571.8	2610.8	2649.8	2656.3	2659.6	2633.6
15°	2435.2	2435.2	2448.2	2487.2	2532.8	2591.3	2636.8	2688.8	2695.3	2692.1	2656.3
17.5°	2402.7	2406.0	2432.0	2497.0	2549.0	2627.0	2682.3	2740.8	2744.1	2740.8	2682.3
20°	2389.7	2396.2	2435.2	2519.8	2578.3	2666.1	2737.6	2796.1	2799.4	2786.4	2708.3
22.5°	2425.5	2428.7	2477.5	2568.5	2623.8	2721.3	2812.4	2867.6	2870.9	2851.4	2747.3
25°	2549.0	2549.0	2591.3	2669.3	2718.1	2815.6	2913.2	2978.2	2978.2	2955.4	2835.1
27.5°	2838.4	2812.4	2802.6	2825.4	2841.6	2945.7	3049.7	3131.0	3127.7	3095.2	2948.9
30°	3397.6	3332.6	3228.5	3111.5	3053.0	3124.5	3222.0	3326.1	3322.8	3270.8	3088.7
32.5°	4337.2	4242.9	3995.8	3687.0	3436.6	3355.3	3446.4	3560.2	3563.4	3501.6	3313.1
35°	5654.0	5504.4	5062.3	4633.1	4060.9	3752.0	3778.0	3901.6	3940.6	3908.1	3690.2
37.5°	6922.0	6785.5	6362.8	5767.8	4990.7	4360.0	4249.4	4356.7	4402.3	4402.3	4171.4
40°	8199.8	8040.5	7666.6	7068.3	6249.0	5309.4	4912.7	5000.5	5049.3	5059.0	4756.6
42.5°	9223.9	9119.9	8833.8	8368.8	7601.5	6974.0	5868.6	5819.8	5865.3	5829.6	5436.2
45°	9932.7	9851.4	9653.1	9477.5	9103.6	8788.3	7146.4	6818.0	6847.2	6723.7	6200.2
47.5°	10079.0	9988.0	9945.7	10189.6	10456.2	10534.2	8716.7	8004.7	7975.4	7702.3	6993.5
50°	9441.8	9451.5	9607.6	10303.4	11415.3	12117.6	10537.5	9344.2	9236.9	8628.9	7731.6
52.5°	8066.5	8222.5	8615.9	9744.1	11707.9	13268.5	12358.2	10765.0	10599.2	9529.6	8284.3
55°	6310.8	6512.3	7159.4	8456.6	11096.7	13782.2	13892.8	12241.1	11864.0	10205.8	8713.5
57.5°	4691.6	4753.4	5507.7	6691.2	9649.8	13278.3	14679.6	13379.1	12894.6	10745.5	9139.4
60°	2922.9	2961.9	3758.5	5094.8	7308.9	11415.3	14679.6	14162.6	13701.0	11230.0	9529.6
62.5°	1817.5	1830.5	2129.6	3491.9	4968.0	8466.4	14071.6	14770.6	14400.0	11577.9	9864.4
65°	1046.9	1059.9	1199.7	1973.5	3231.8	5068.8	12517.5	14949.5	14783.6	11854.2	10124.5
67.5°	764.1	770.6	825.8	1108.7	2113.3	2604.3	9402.8	14230.9	14439.0	11990.8	10118.0
70°	663.3	673.0	744.5	864.8	1524.9	1599.6	4785.9	12289.9	12871.9	11795.7	9815.7
72.5°	510.5	523.5	630.8	812.8	1118.4	1151.0	1732.9	8746.0	9627.1	10576.5	8986.6
75°	351.1	364.1	471.4	669.8	923.4	861.6	952.6	4025.1	5078.5	7094.3	6840.7
77.5°	224.3	227.6	295.9	487.7	796.6	611.2	653.5	1313.5	1843.5	3209.0	3228.5
80°	149.6	152.8	182.1	315.4	546.2	565.7	403.2	608.0	666.5	936.4	650.3
82.5°	91.0	91.0	123.5	198.3	331.6	468.2	263.4	318.6	341.4	360.9	169.1
85°	35.8	35.8	74.8	130.1	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



REPORT NUMBER: P399572

CATALOG NUMBER: ARCH-L-PA3-160-740-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1	2653.1
2.5°	2640.1	2630.3	2617.3	2604.3	2591.3	2581.5	2571.8	2571.8	2565.3	2555.5	2549.0
5°	2633.6	2617.3	2588.0	2565.3	2529.5	2503.5	2484.0	2467.7	2458.0	2435.2	2432.0
7.5°	2623.8	2604.3	2562.0	2516.5	2458.0	2412.5	2366.9	2334.4	2301.9	2275.9	2269.4
10°	2607.5	2584.8	2523.0	2458.0	2376.7	2292.2	2184.9	2061.3	1947.5	1882.5	1863.0
12.5°	2607.5	2578.3	2497.0	2409.2	2292.2	2084.1	1811.0	1537.9	1326.5	1232.2	1206.2
15°	2623.8	2584.8	2477.5	2357.2	2139.4	1716.7	1274.5	913.6	682.8	611.2	595.0
17.5°	2640.1	2584.8	2448.2	2285.7	1859.7	1245.2	725.0	481.2	406.4	390.2	390.2
20°	2646.6	2578.3	2409.2	2152.4	1485.8	773.8	432.4	360.9	331.6	321.9	321.9
22.5°	2672.6	2581.5	2379.9	1960.5	1079.4	455.2	341.4	302.4	273.1	263.4	263.4
25°	2737.6	2620.5	2386.5	1716.7	692.5	344.6	289.4	250.3	221.1	208.1	208.1
27.5°	2841.6	2708.3	2422.2	1433.8	435.7	295.9	243.8	201.6	178.8	165.8	165.8
30°	2958.7	2805.9	2438.5	1108.7	325.1	250.3	198.3	159.3	143.1	133.3	130.1
32.5°	3163.5	2974.9	2425.5	760.8	266.6	211.3	159.3	126.8	113.8	110.5	110.5
35°	3491.9	3270.8	2399.5	477.9	221.1	169.1	126.8	104.0	94.3	91.0	87.8
37.5°	3937.3	3703.2	2321.4	315.4	182.1	133.3	104.0	87.8	78.0	74.8	74.8
40°	4480.3	4197.4	2171.9	240.6	156.1	107.3	87.8	74.8	68.3	65.0	65.0
42.5°	5101.3	4746.9	1934.5	208.1	130.1	91.0	74.8	61.8	58.5	55.3	55.3
45°	5780.8	5322.4	1606.1	185.3	110.5	74.8	61.8	55.3	48.8	48.8	45.5
47.5°	6502.6	5901.1	1235.5	162.6	94.3	65.0	55.3	45.5	42.3	39.0	39.0
50°	7198.4	6418.1	868.1	139.8	78.0	55.3	45.5	39.0	35.8	32.5	32.5
52.5°	7689.3	6730.2	614.5	120.3	65.0	48.8	35.8	29.3	26.0	26.0	26.0
55°	8082.7	6925.3	429.2	100.8	55.3	42.3	29.3	22.8	22.8	19.5	19.5
57.5°	8453.4	7052.1	315.4	84.5	45.5	32.5	22.8	16.3	16.3	13.0	13.0
60°	8837.0	7120.3	240.6	68.3	39.0	26.0	16.3	13.0	9.8	9.8	9.8
62.5°	9223.9	7162.6	185.3	55.3	32.5	19.5	13.0	9.8	6.5	3.3	3.3
65°	9562.1	7175.6	143.1	42.3	26.0	13.0	9.8	3.3	0.0	0.0	0.0
67.5°	9662.9	7026.1	110.5	32.5	19.5	9.8	6.5	0.0	0.0	0.0	0.0
70°	9389.7	6629.4	84.5	26.0	16.3	6.5	3.3	0.0	0.0	0.0	0.0
72.5°	8333.1	5559.7	65.0	16.3	13.0	6.5	3.3	0.0	0.0	0.0	0.0
75°	5962.9	2965.2	45.5	13.0	9.8	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	2744.1	1147.7	32.5	9.8	6.5	3.3	0.0	0.0	0.0	0.0	0.0
80°	536.5	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)