

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: P399525

Luminaire Tested: **ARCH-L-PA3-150-827-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399525  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-150-827-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13969 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

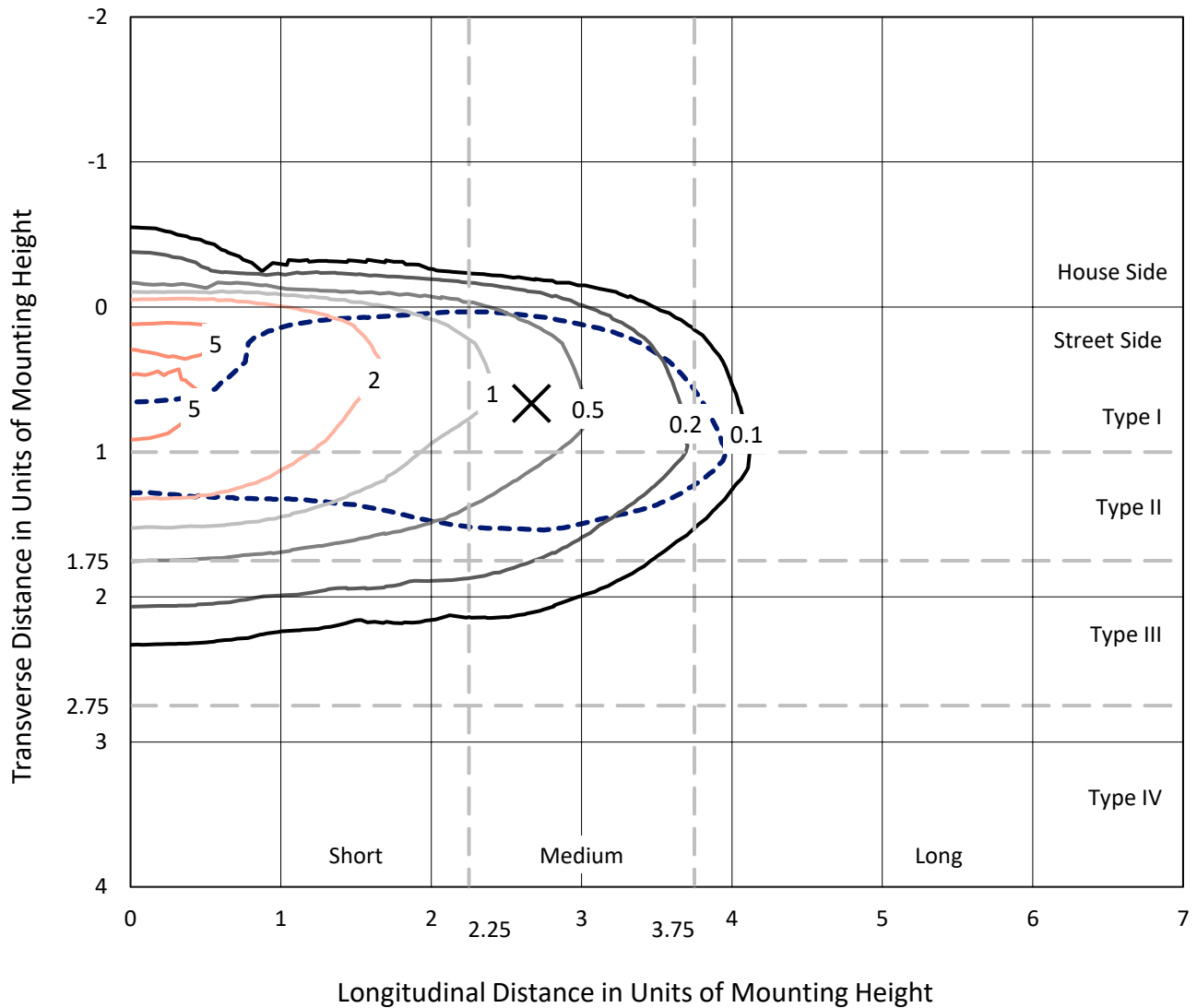
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

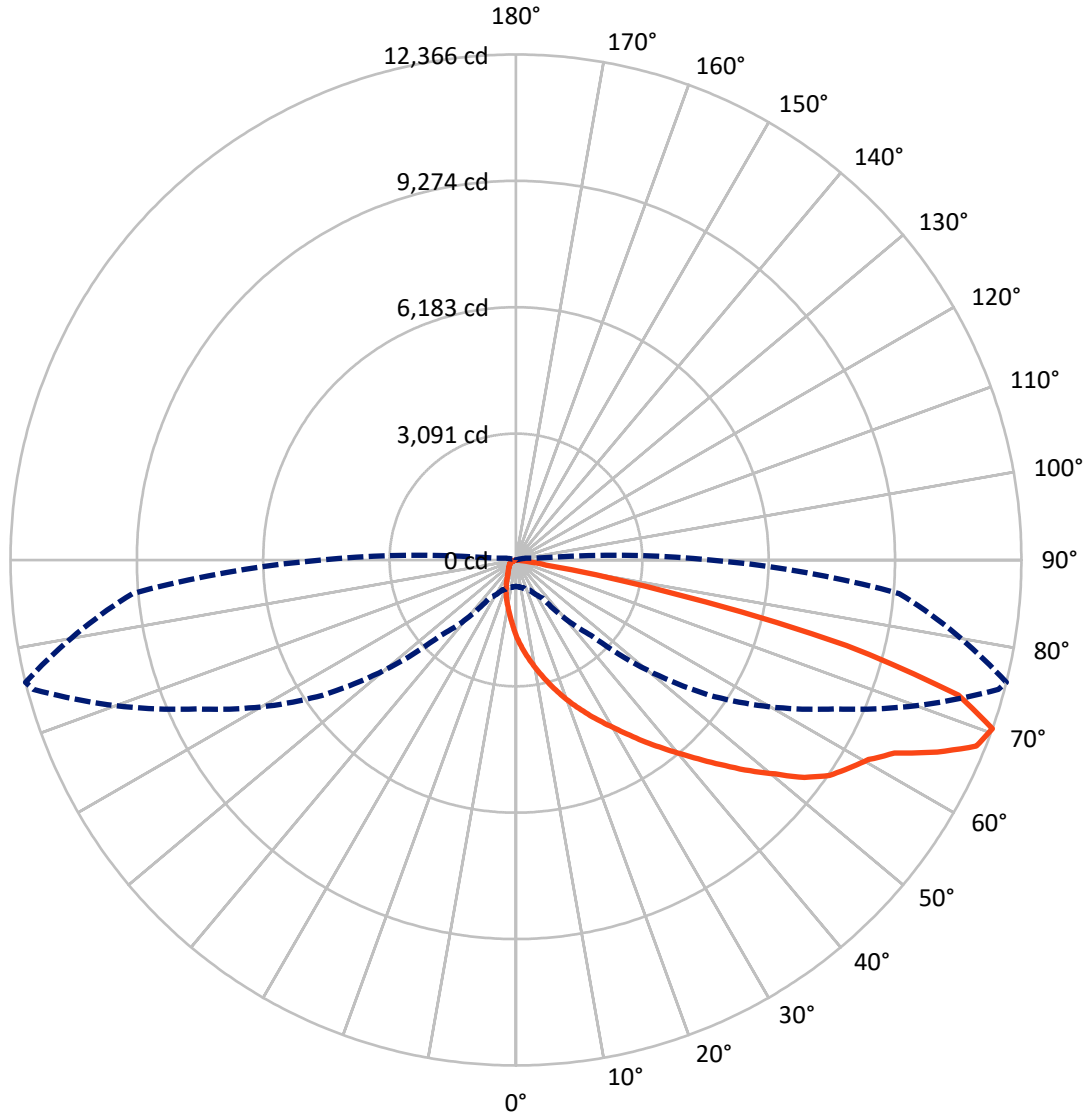
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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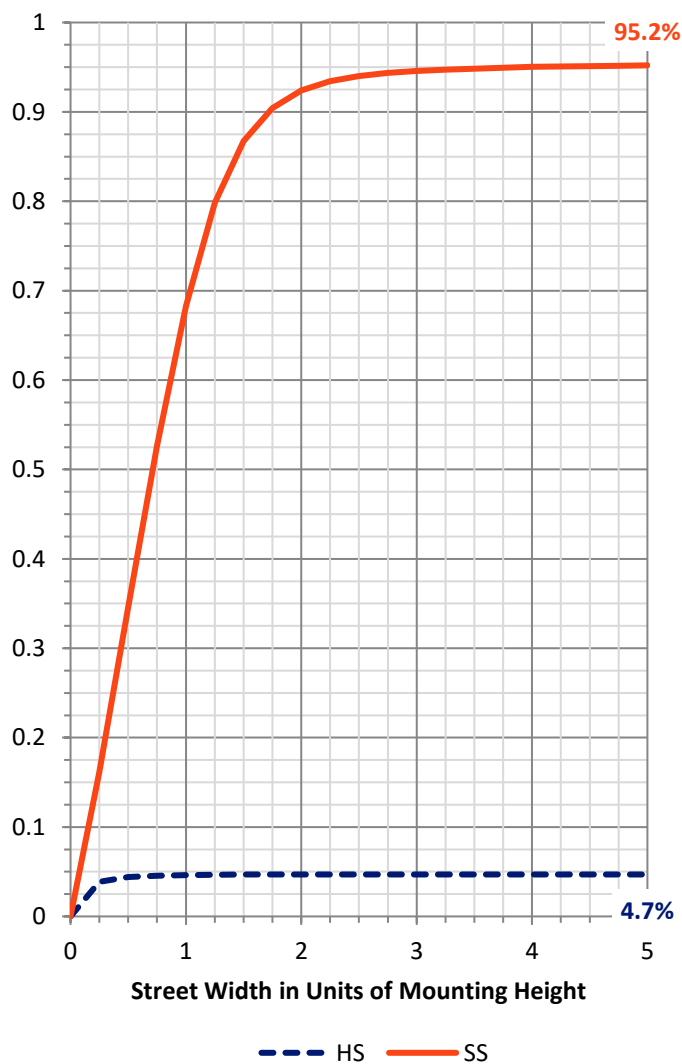
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	658.8	0.0	658.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	13310.2	0.0	13310.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	13969.0	0.0	13969.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	1.3
10°-20°	568.5	4.1
20°-30°	1058.8	7.6
30°-40°	1872.8	13.4
40°-50°	2864.0	20.5
50°-60°	3247.0	23.2
60°-70°	2783.5	19.9
70°-80°	1348.2	9.7
80°-90°	50.0	0.4
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°	13969.0	100.0
0°-180°	13969.0	100.0

**Coefficient of Utilization**

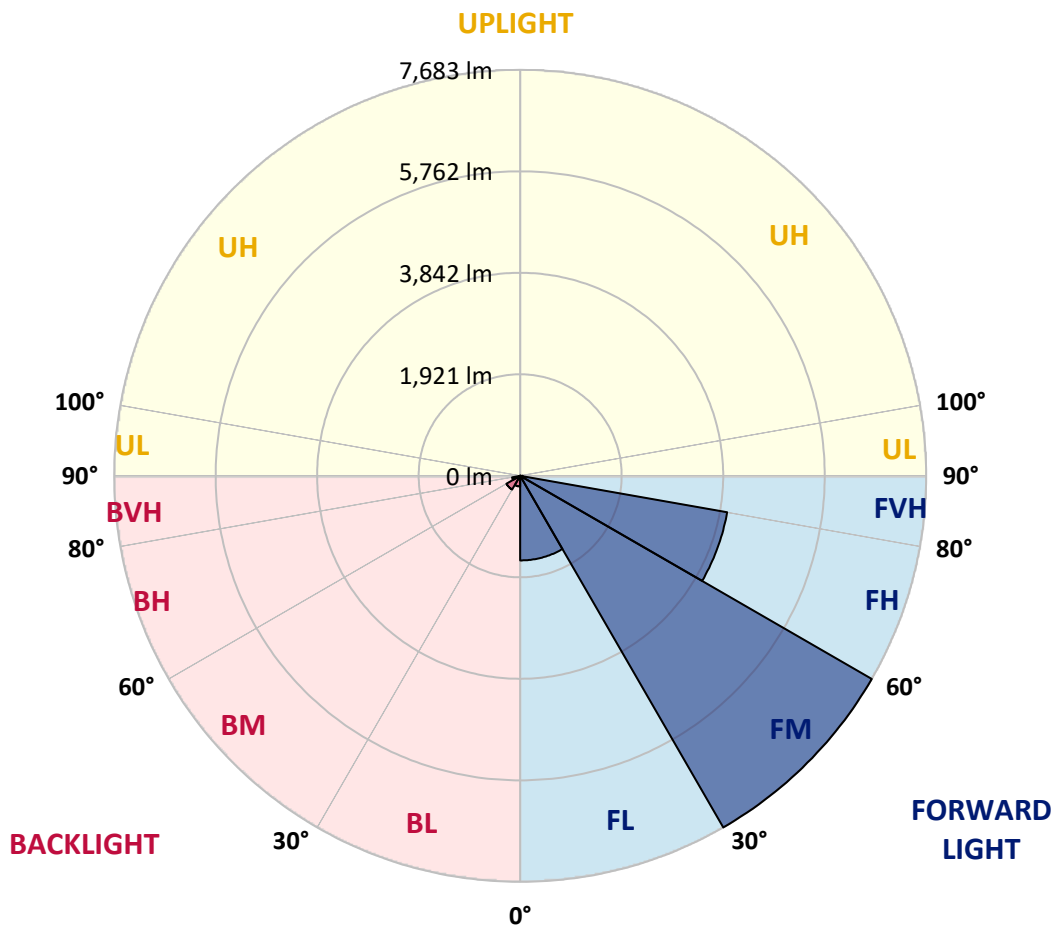


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1601.4	11.5			
FM (30°-60°)	7683.1	55.0			
FH (60°-80°)	3976.6	28.5			G2/5000
FVH (80°-90°)	49.2	0.4			G1/100
BL (0°-30°)	202.1	1.4	B1/500		
BM (30°-60°)	300.7	2.2	B1/1000		
BH (60°-80°)	155.1	1.1	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8
2.5°	2555.9	2542.0	2528.0	2474.5	2425.7	2381.5	2297.8	2188.5	2090.8	2069.8	1955.9
5°	3002.4	2986.2	2965.2	2911.7	2848.9	2774.5	2651.3	2483.8	2311.7	2274.5	2062.9
7.5°	3304.8	3290.8	3260.6	3235.0	3172.2	3100.1	2962.9	2767.5	2530.3	2483.8	2186.1
10°	3511.8	3502.5	3497.8	3476.9	3430.4	3372.2	3235.0	3030.4	2751.3	2697.8	2316.4
12.5°	3586.2	3586.2	3609.4	3644.3	3651.3	3632.7	3507.1	3302.5	2983.8	2928.0	2469.9
15°	3486.2	3497.8	3549.0	3660.6	3776.9	3853.6	3774.6	3583.9	3239.7	3179.2	2651.3
17.5°	3458.3	3469.9	3504.8	3602.5	3758.3	3962.9	4002.5	3856.0	3481.5	3430.4	2837.3
20°	3537.3	3549.0	3579.2	3662.9	3781.5	3988.5	4153.7	4118.8	3737.4	3683.9	3025.7
22.5°	3725.7	3732.7	3732.7	3797.8	3902.5	4056.0	4249.0	4367.6	4000.2	3942.0	3211.8
25°	4130.4	4116.4	4060.6	4028.1	4095.5	4221.1	4369.9	4586.2	4293.2	4214.1	3411.8
27.5°	4660.6	4707.2	4572.3	4416.5	4365.3	4437.4	4539.7	4779.3	4576.9	4493.2	3593.2
30°	5379.3	5360.7	5183.9	4960.7	4739.7	4714.1	4749.0	4944.4	4860.7	4781.6	3795.5
32.5°	5970.0	6004.9	5818.8	5546.7	5216.5	5060.7	5023.5	5142.1	5163.0	5111.8	4035.0
35°	6577.0	6614.2	6432.8	6130.5	5737.4	5477.0	5370.0	5386.3	5537.4	5472.3	4286.2
37.5°	7121.2	7153.8	6974.7	6665.4	6272.3	5953.7	5800.2	5674.6	5900.2	5842.1	4551.3
40°	7535.2	7539.8	7418.9	7142.1	6770.0	6439.8	6265.4	6018.8	6284.0	6244.4	4828.1
42.5°	7828.2	7837.5	7749.1	7511.9	7167.7	6860.7	6718.9	6425.8	6725.8	6691.0	5149.0
45°	7965.4	7981.7	7972.4	7753.8	7467.7	7202.6	7156.1	6858.4	7209.6	7177.0	5518.8
47.5°	7835.2	7835.2	7953.8	7923.6	7660.8	7484.0	7537.5	7309.6	7735.2	7705.0	5895.6
50°	7293.3	7300.3	7542.2	7888.7	7735.2	7695.6	7863.1	7751.5	8211.9	8230.6	6346.8
52.5°	5870.0	5858.4	6674.7	7339.8	7684.0	7791.0	8163.1	8202.6	8784.1	8839.9	6795.6
55°	4386.2	4379.2	5160.7	6367.7	7325.9	7742.2	8330.6	8605.0	9272.5	9307.3	7130.5
57.5°	3472.2	3453.6	3883.9	5132.8	6516.5	7523.5	8337.5	8681.7	9544.6	9605.0	7456.1
60°	2669.9	2653.6	2974.5	3818.8	5370.0	6942.1	8137.5	8686.4	9807.4	9914.3	7893.3
62.5°	1909.4	1928.0	2174.5	2739.6	4130.4	6121.2	7877.1	8751.5	10274.8	10395.8	8514.3
65°	1288.4	1279.1	1483.8	1865.2	2937.3	5016.5	7477.0	8888.7	11116.7	11328.3	9258.5
67.5°	895.4	902.4	995.4	1214.0	1865.2	3851.3	6811.9	8965.5	11986.5	12151.6	9779.5
70°	646.5	655.8	707.0	816.3	1139.6	2611.7	5758.4	8614.3	12221.4	12365.6	9416.6
72.5°	425.6	444.2	521.0	579.1	727.9	1634.9	4242.0	7421.2	11209.7	11316.7	7900.3
75°	230.2	234.9	334.9	432.6	518.6	1018.6	2530.3	5004.8	8386.4	8351.5	5209.5
77.5°	179.1	186.1	207.0	309.3	348.9	560.5	1000.0	2260.6	3972.2	3865.3	1776.8
80°	109.3	114.0	144.2	183.7	244.2	325.6	293.0	614.0	807.0	755.8	260.5
82.5°	65.1	69.8	86.0	153.5	193.0	153.5	102.3	148.8	151.2	148.8	65.1
85°	11.6	11.6	60.5	107.0	102.3	44.2	60.5	48.8	44.2	46.5	14.0
87.5°	0.0	0.0	23.3	32.6	46.5	16.3	23.3	11.6	11.6	11.6	7.0
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°	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8	1869.8
2.5°	1886.1	1807.0	1644.3	1502.4	1360.5	1255.9	1176.8	1095.4	1067.5	1032.6	1014.0
5°	1918.7	1762.9	1439.6	1181.4	962.8	795.4	688.4	623.3	581.4	551.2	544.2
7.5°	1967.5	1728.0	1274.5	925.6	686.1	518.6	430.2	386.1	362.8	348.9	344.2
10°	2025.7	1697.7	1111.7	721.0	483.7	365.1	316.3	297.7	288.4	283.7	281.4
12.5°	2107.1	1686.1	974.5	555.8	365.1	300.0	274.4	262.8	255.8	248.8	246.5
15°	2214.0	1690.8	848.9	430.2	302.3	267.5	246.5	234.9	225.6	218.6	218.6
17.5°	2325.7	1697.7	725.6	348.9	274.4	244.2	220.9	204.7	197.7	190.7	188.4
20°	2430.3	1695.4	607.0	297.7	248.8	218.6	195.4	179.1	167.4	160.5	160.5
22.5°	2530.3	1681.5	495.4	267.5	227.9	193.0	167.4	151.2	141.9	134.9	134.9
25°	2637.3	1653.6	404.7	244.2	202.3	169.8	144.2	127.9	120.9	114.0	114.0
27.5°	2721.0	1607.0	330.2	223.3	179.1	146.5	123.3	109.3	102.3	97.7	97.7
30°	2811.7	1539.6	274.4	200.0	155.8	125.6	104.7	93.0	86.0	83.7	83.7
32.5°	2911.7	1465.2	234.9	176.8	132.6	107.0	88.4	81.4	74.4	72.1	72.1
35°	3028.0	1400.1	211.6	153.5	116.3	90.7	76.7	69.8	65.1	65.1	65.1
37.5°	3160.6	1332.6	190.7	134.9	100.0	76.7	65.1	62.8	60.5	58.1	58.1
40°	3304.8	1260.5	172.1	118.6	86.0	65.1	55.8	55.8	53.5	53.5	53.5
42.5°	3467.6	1197.7	155.8	104.7	74.4	55.8	48.8	48.8	46.5	46.5	46.5
45°	3644.3	1139.6	141.9	93.0	65.1	48.8	44.2	41.9	39.5	39.5	39.5
47.5°	3853.6	1107.0	130.2	81.4	55.8	41.9	37.2	34.9	32.6	30.2	30.2
50°	4121.1	1121.0	118.6	67.4	48.8	34.9	30.2	27.9	25.6	23.3	23.3
52.5°	4332.7	1114.0	102.3	58.1	39.5	27.9	23.3	20.9	18.6	16.3	16.3
55°	4486.2	1086.1	88.4	48.8	30.2	23.3	18.6	14.0	11.6	11.6	11.6
57.5°	4637.4	1058.2	74.4	39.5	23.3	16.3	11.6	9.3	9.3	9.3	9.3
60°	4872.3	1018.6	65.1	32.6	18.6	11.6	7.0	7.0	4.7	4.7	4.7
62.5°	5158.3	969.8	53.5	27.9	14.0	9.3	4.7	4.7	0.0	0.0	0.0
65°	5472.3	883.8	44.2	20.9	11.6	7.0	4.7	0.0	0.0	0.0	0.0
67.5°	5400.2	709.3	37.2	14.0	9.3	4.7	2.3	0.0	0.0	0.0	0.0
70°	4776.9	479.1	30.2	11.6	7.0	4.7	2.3	0.0	0.0	0.0	0.0
72.5°	3742.0	283.7	20.9	9.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0
75°	2395.4	141.9	14.0	7.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	802.4	69.8	9.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	114.0	23.3	4.7	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.6	9.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	2.3	0.0	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)