

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: P399120

Luminaire Tested: **ARCH-L-PA3-100-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399120  
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-PA3-100-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA 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: 11166 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

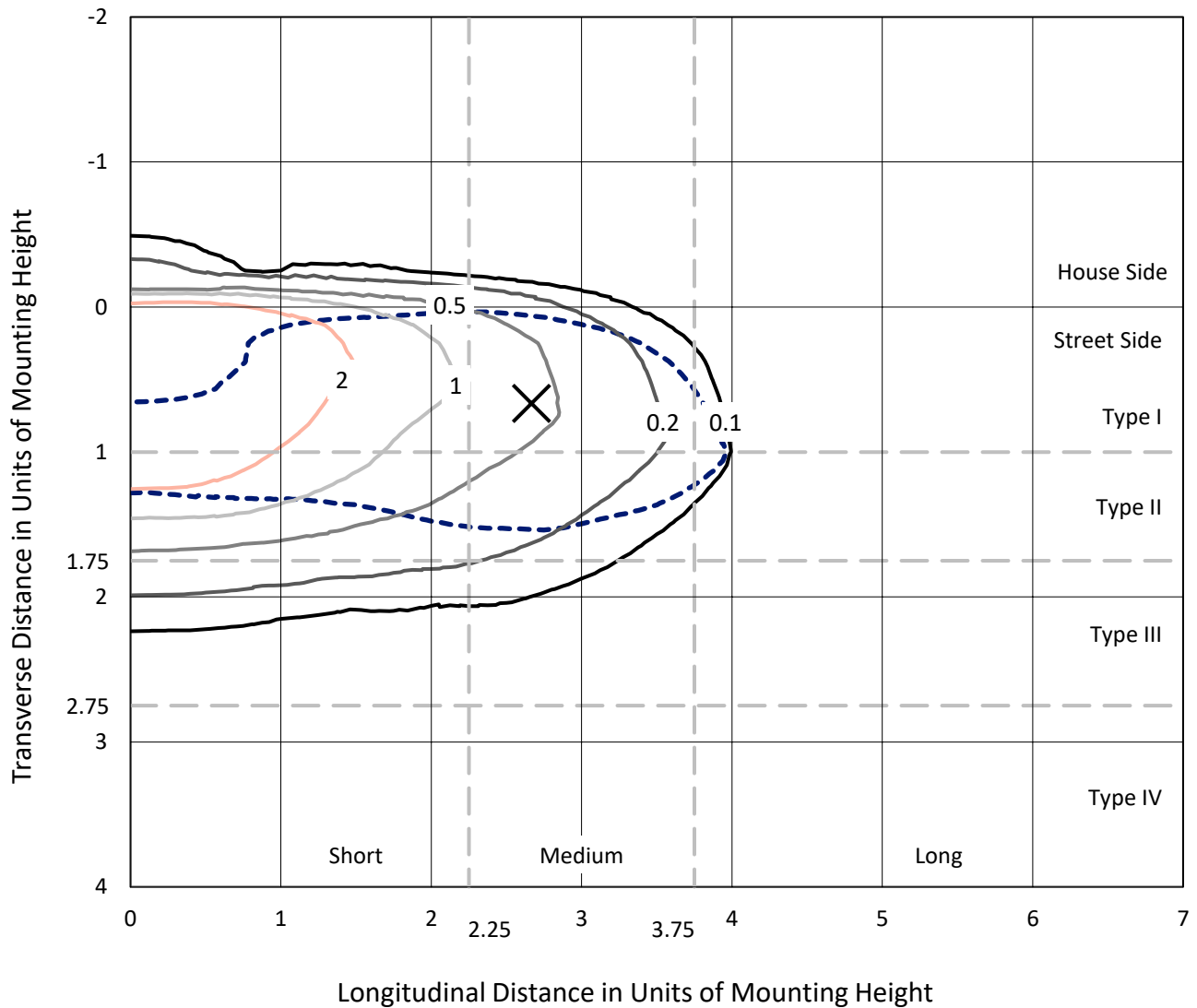
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

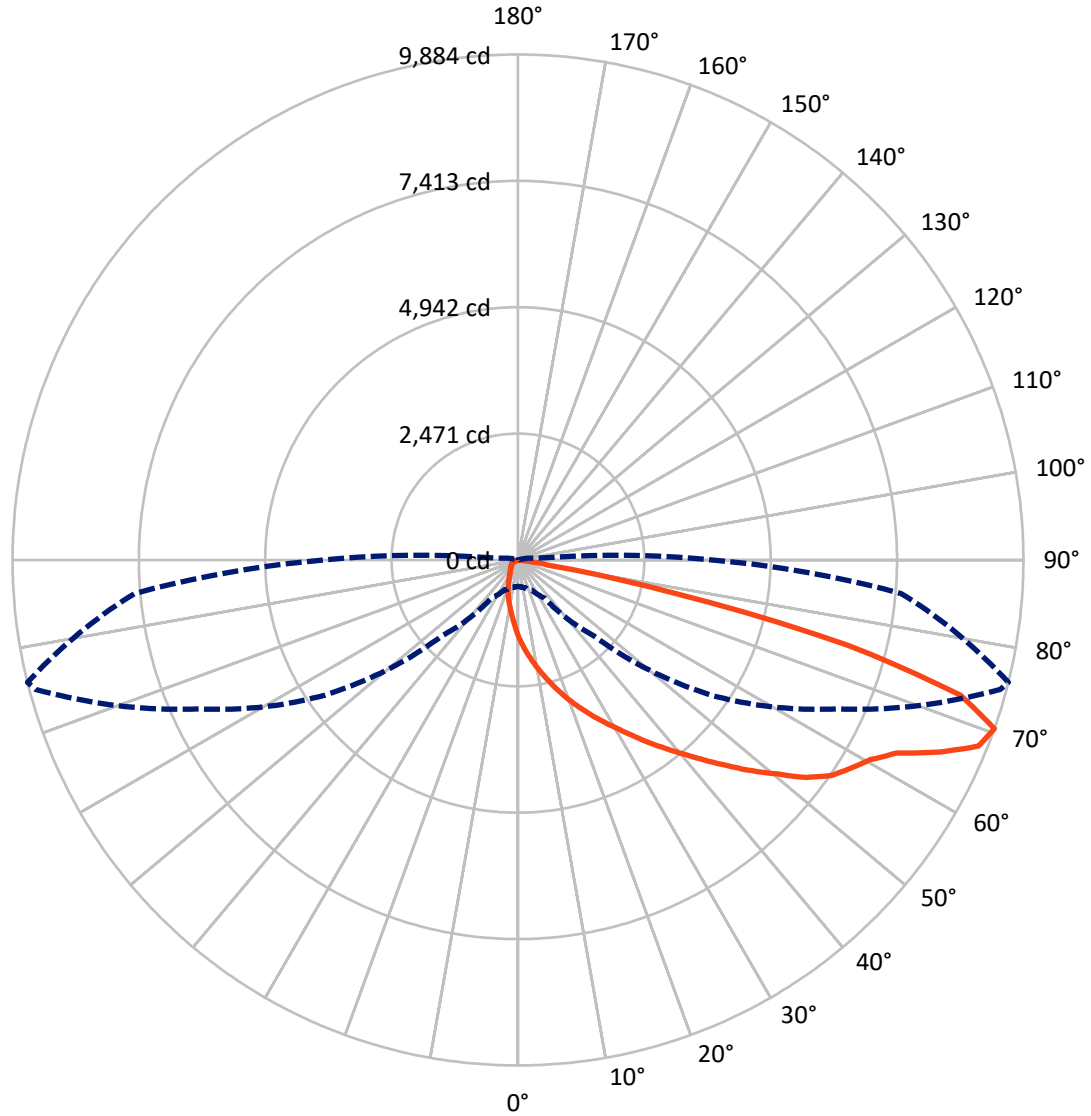
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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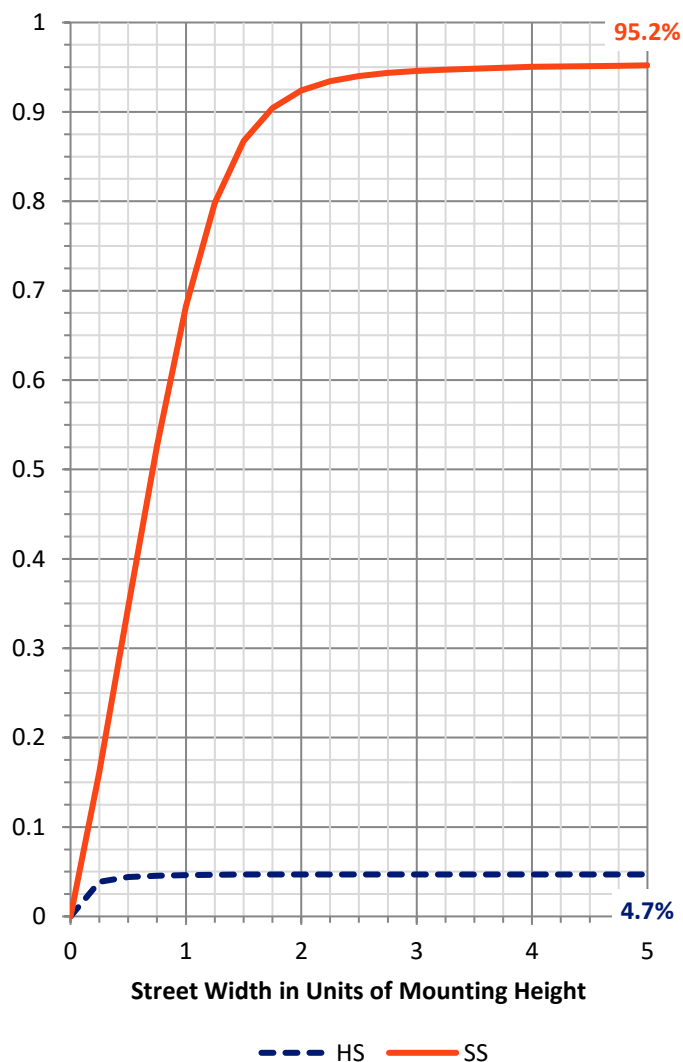
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	526.6	0.0	526.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	10639.4	0.0	10639.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	11166.0	0.0	11166.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	1.3
10°-20°	454.5	4.1
20°-30°	846.4	7.6
30°-40°	1497.0	13.4
40°-50°	2289.3	20.5
50°-60°	2595.5	23.2
60°-70°	2225.0	19.9
70°-80°	1077.7	9.7
80°-90°	40.0	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°	11166.0	100.0
0°-180°	11166.0	100.0

**Coefficient of Utilization**

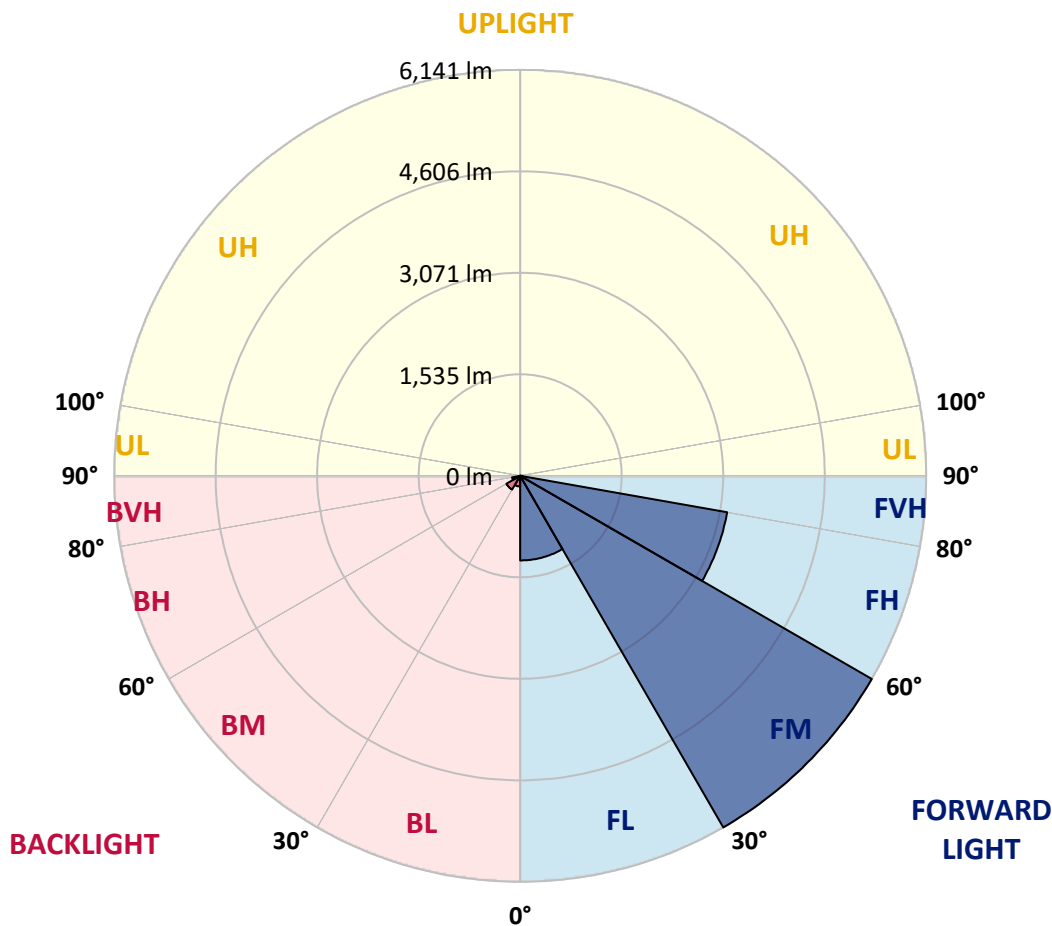


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1280.1	11.5			
FM (30°-60°)	6141.4	55.0			
FH (60°-80°)	3178.6	28.5			G2/5000
FVH (80°-90°)	39.3	0.4			G1/100
BL (0°-30°)	161.5	1.4	B1/500		
BM (30°-60°)	240.4	2.2	B1/1000		
BH (60°-80°)	124.0	1.1	B1/500		G1/500
BVH (80°-90°)	0.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6
2.5°	2043.0	2031.9	2020.7	1978.0	1938.9	1903.6	1836.7	1749.3	1671.2	1654.5	1563.4
5°	2400.0	2387.0	2370.2	2327.5	2277.3	2217.8	2119.3	1985.4	1847.9	1818.1	1648.9
7.5°	2641.6	2630.5	2606.3	2585.9	2535.7	2478.1	2368.4	2212.2	2022.6	1985.4	1747.5
10°	2807.1	2799.7	2795.9	2779.2	2742.0	2695.6	2585.9	2422.3	2199.2	2156.4	1851.6
12.5°	2866.6	2866.6	2885.2	2913.1	2918.6	2903.8	2803.4	2639.8	2385.1	2340.5	1974.3
15°	2786.6	2795.9	2836.8	2926.1	3019.0	3080.4	3017.2	2864.7	2589.6	2541.3	2119.3
17.5°	2764.3	2773.6	2801.5	2879.6	3004.2	3167.7	3199.3	3082.2	2782.9	2742.0	2268.0
20°	2827.5	2836.8	2861.0	2927.9	3022.7	3188.2	3320.2	3292.3	2987.4	2944.7	2418.6
22.5°	2978.1	2983.7	2983.7	3035.8	3119.4	3242.1	3396.4	3491.2	3197.5	3151.0	2567.3
25°	3301.6	3290.4	3245.8	3219.8	3273.7	3374.1	3493.1	3666.0	3431.7	3368.5	2727.2
27.5°	3725.4	3762.6	3654.8	3530.3	3489.4	3547.0	3628.8	3820.3	3658.5	3591.6	2872.2
30°	4299.9	4285.0	4143.7	3965.3	3788.7	3768.2	3796.1	3952.2	3885.3	3822.1	3033.9
32.5°	4772.1	4800.0	4651.2	4433.7	4169.8	4045.2	4015.5	4110.3	4127.0	4086.1	3225.4
35°	5257.3	5287.0	5142.0	4900.3	4586.2	4378.0	4292.4	4305.5	4426.3	4374.2	3426.1
37.5°	5692.3	5718.3	5575.2	5327.9	5013.7	4759.1	4636.4	4536.0	4716.3	4669.8	3638.1
40°	6023.2	6026.9	5930.2	5709.0	5411.6	5147.6	5008.2	4811.1	5023.0	4991.4	3859.3
42.5°	6257.4	6264.9	6194.2	6004.6	5729.5	5484.1	5370.7	5136.4	5376.2	5348.4	4115.8
45°	6367.1	6380.1	6372.7	6197.9	5969.3	5757.3	5720.2	5482.2	5762.9	5736.9	4411.4
47.5°	6263.0	6263.0	6357.8	6333.6	6123.6	5982.3	6025.0	5842.9	6183.1	6158.9	4712.6
50°	5829.8	5835.4	6028.8	6305.7	6183.1	6151.5	6285.3	6196.1	6564.2	6579.0	5073.2
52.5°	4692.1	4682.8	5335.3	5867.0	6142.2	6227.7	6525.1	6556.7	7021.5	7066.1	5432.0
55°	3506.1	3500.5	4125.1	5090.0	5855.9	6188.6	6659.0	6878.3	7411.9	7439.7	5699.7
57.5°	2775.5	2760.6	3104.5	4102.8	5208.9	6013.9	6664.5	6939.7	7629.4	7677.7	5960.0
60°	2134.1	2121.1	2377.7	3052.5	4292.4	5549.1	6504.7	6943.4	7839.4	7924.9	6309.5
62.5°	1526.2	1541.1	1738.2	2189.9	3301.6	4892.9	6296.5	6995.4	8213.1	8309.8	6805.8
65°	1029.9	1022.5	1186.0	1490.9	2347.9	4009.9	5976.7	7105.1	8886.0	9055.2	7400.7
67.5°	715.7	721.3	795.7	970.4	1490.9	3078.5	5445.0	7166.5	9581.3	9713.3	7817.1
70°	516.8	524.2	565.1	652.5	910.9	2087.7	4602.9	6885.8	9769.1	9884.3	7527.1
72.5°	340.2	355.1	416.4	462.9	581.9	1306.9	3390.8	5932.1	8960.4	9045.9	6315.0
75°	184.0	187.8	267.7	345.8	414.6	814.2	2022.6	4000.6	6703.6	6675.7	4164.2
77.5°	143.1	148.7	165.5	247.2	278.9	448.0	799.4	1807.0	3175.2	3089.7	1420.3
80°	87.4	91.1	115.3	146.9	195.2	260.3	234.2	490.8	645.1	604.2	208.2
82.5°	52.1	55.8	68.8	122.7	154.3	122.7	81.8	119.0	120.8	119.0	52.1
85°	9.3	9.3	48.3	85.5	81.8	35.3	48.3	39.0	35.3	37.2	11.2
87.5°	0.0	0.0	18.6	26.0	37.2	13.0	18.6	9.3	9.3	9.3	5.6
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°	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6	1494.6
2.5°	1507.7	1444.4	1314.3	1200.9	1087.5	1003.9	940.7	875.6	853.3	825.4	810.5
5°	1533.7	1409.1	1150.7	944.4	769.6	635.8	550.3	498.2	464.8	440.6	435.0
7.5°	1572.7	1381.2	1018.7	739.9	548.4	414.6	343.9	308.6	290.0	278.9	275.1
10°	1619.2	1357.1	888.6	576.3	386.7	291.9	252.8	238.0	230.5	226.8	224.9
12.5°	1684.3	1347.8	778.9	444.3	291.9	239.8	219.4	210.1	204.5	198.9	197.1
15°	1769.8	1351.5	678.5	343.9	241.7	213.8	197.1	187.8	180.3	174.7	174.7
17.5°	1859.0	1357.1	580.0	278.9	219.4	195.2	176.6	163.6	158.0	152.4	150.6
20°	1942.7	1355.2	485.2	238.0	198.9	174.7	156.2	143.1	133.8	128.3	128.3
22.5°	2022.6	1344.1	396.0	213.8	182.2	154.3	133.8	120.8	113.4	107.8	107.8
25°	2108.1	1321.8	323.5	195.2	161.7	135.7	115.3	102.2	96.7	91.1	91.1
27.5°	2175.0	1284.6	264.0	178.5	143.1	117.1	98.5	87.4	81.8	78.1	78.1
30°	2247.5	1230.7	219.4	159.9	124.6	100.4	83.7	74.4	68.8	66.9	66.9
32.5°	2327.5	1171.2	187.8	141.3	106.0	85.5	70.6	65.1	59.5	57.6	57.6
35°	2420.4	1119.1	169.2	122.7	93.0	72.5	61.3	55.8	52.1	52.1	52.1
37.5°	2526.4	1065.2	152.4	107.8	79.9	61.3	52.1	50.2	48.3	46.5	46.5
40°	2641.6	1007.6	137.6	94.8	68.8	52.1	44.6	44.6	42.8	42.8	42.8
42.5°	2771.8	957.4	124.6	83.7	59.5	44.6	39.0	39.0	37.2	37.2	37.2
45°	2913.1	910.9	113.4	74.4	52.1	39.0	35.3	33.5	31.6	31.6	31.6
47.5°	3080.4	884.9	104.1	65.1	44.6	33.5	29.7	27.9	26.0	24.2	24.2
50°	3294.2	896.0	94.8	53.9	39.0	27.9	24.2	22.3	20.4	18.6	18.6
52.5°	3463.3	890.5	81.8	46.5	31.6	22.3	18.6	16.7	14.9	13.0	13.0
55°	3586.0	868.2	70.6	39.0	24.2	18.6	14.9	11.2	9.3	9.3	9.3
57.5°	3706.9	845.8	59.5	31.6	18.6	13.0	9.3	7.4	7.4	7.4	7.4
60°	3894.6	814.2	52.1	26.0	14.9	9.3	5.6	5.6	3.7	3.7	3.7
62.5°	4123.3	775.2	42.8	22.3	11.2	7.4	3.7	3.7	0.0	0.0	0.0
65°	4374.2	706.4	35.3	16.7	9.3	5.6	3.7	0.0	0.0	0.0	0.0
67.5°	4316.6	567.0	29.7	11.2	7.4	3.7	1.9	0.0	0.0	0.0	0.0
70°	3818.4	383.0	24.2	9.3	5.6	3.7	1.9	0.0	0.0	0.0	0.0
72.5°	2991.1	226.8	16.7	7.4	3.7	1.9	0.0	0.0	0.0	0.0	0.0
75°	1914.8	113.4	11.2	5.6	3.7	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	641.4	55.8	7.4	3.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.1	18.6	3.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.4	7.4	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.4	3.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	1.9	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)