

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: P400128

Luminaire Tested: **ARCH-L-PA3-240-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400128  
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-PA3-240-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1030mA 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: 21892 lumens  
Efficiency: N/A  
Efficacy: 90.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

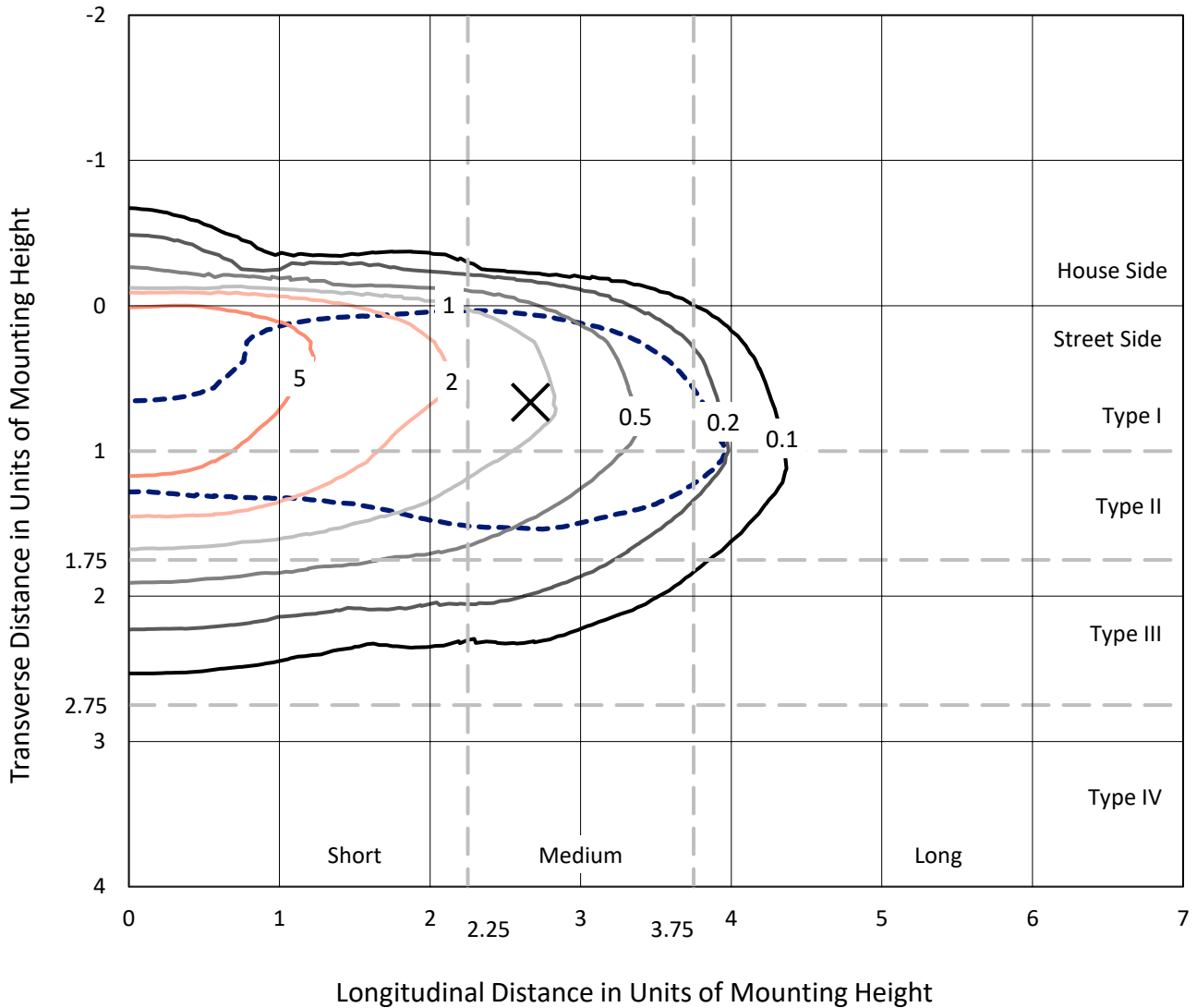
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

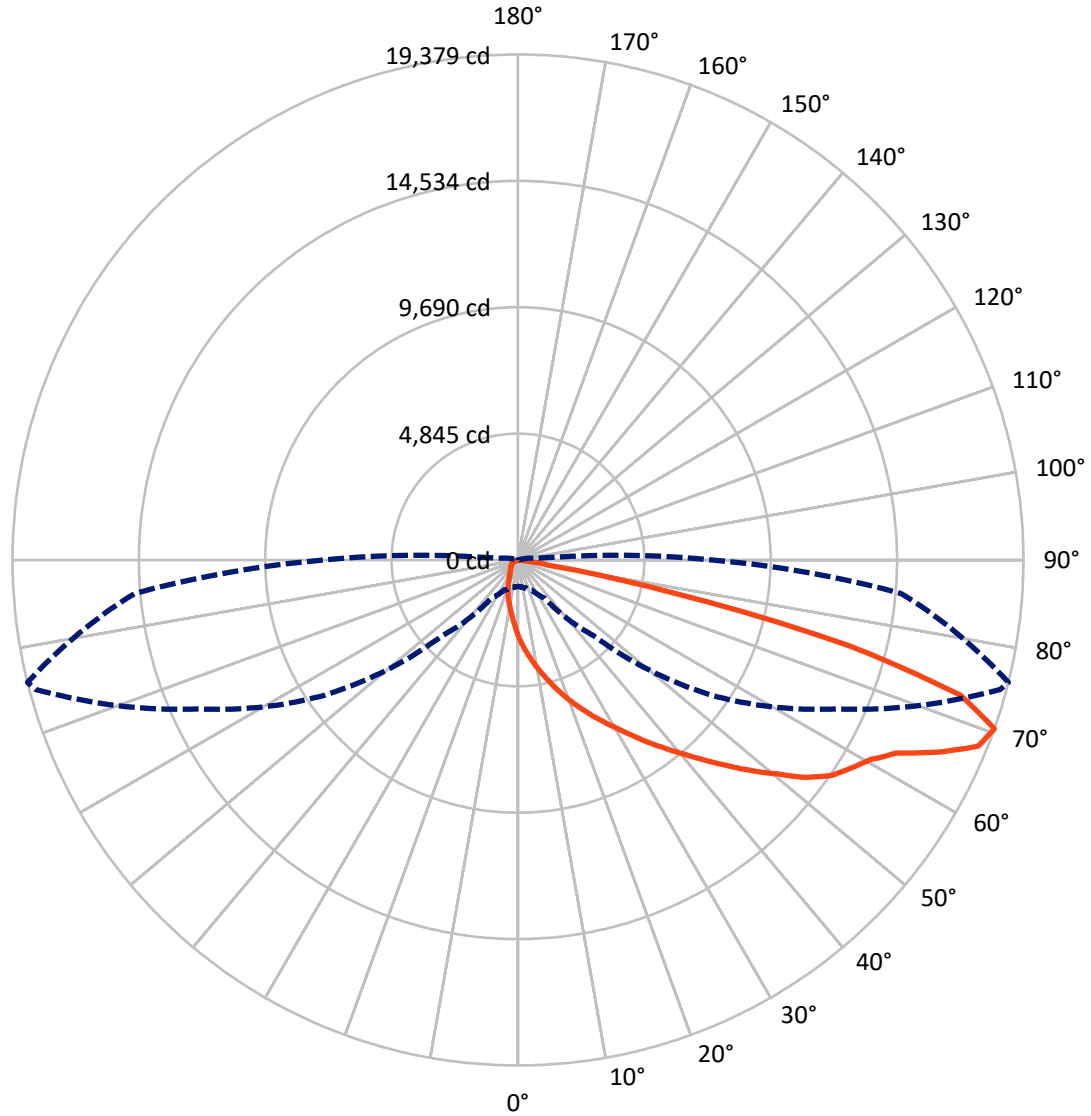
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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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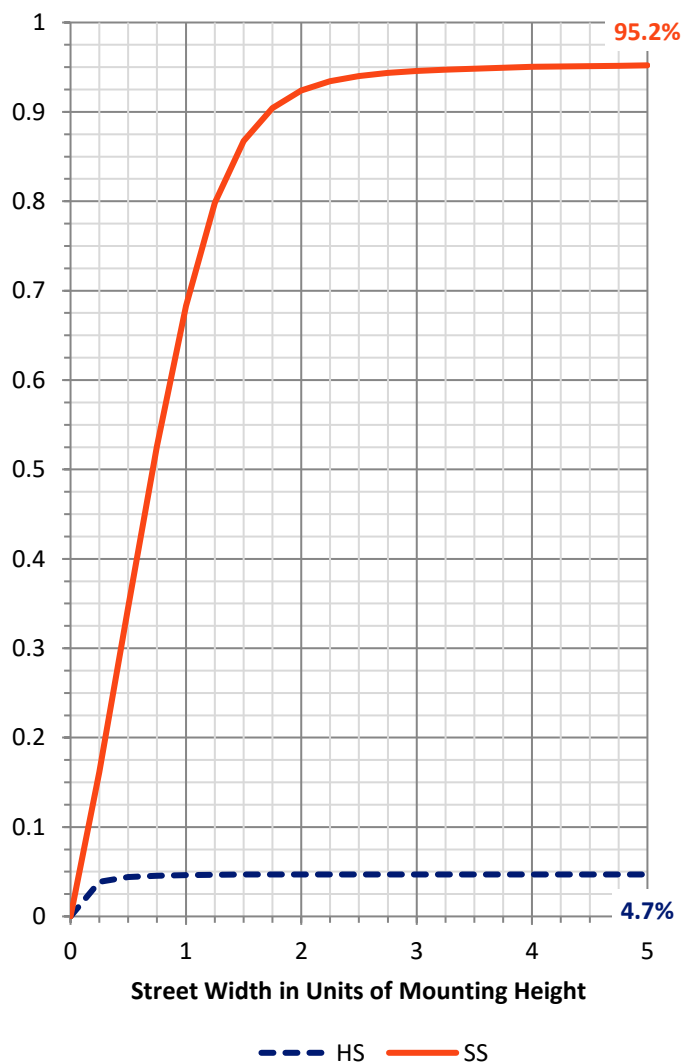
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1032.5	0.0	1032.5
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	20859.5	0.0	20859.5
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	21892.0	0.0	21892.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.1	1.3
10°-20°	891.0	4.1
20°-30°	1659.4	7.6
30°-40°	2935.0	13.4
40°-50°	4488.4	20.5
50°-60°	5088.7	23.2
60°-70°	4362.3	19.9
70°-80°	2112.8	9.7
80°-90°	78.4	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°	21892.0	100.0
0°-180°	21892.0	100.0

**Coefficient of Utilization**

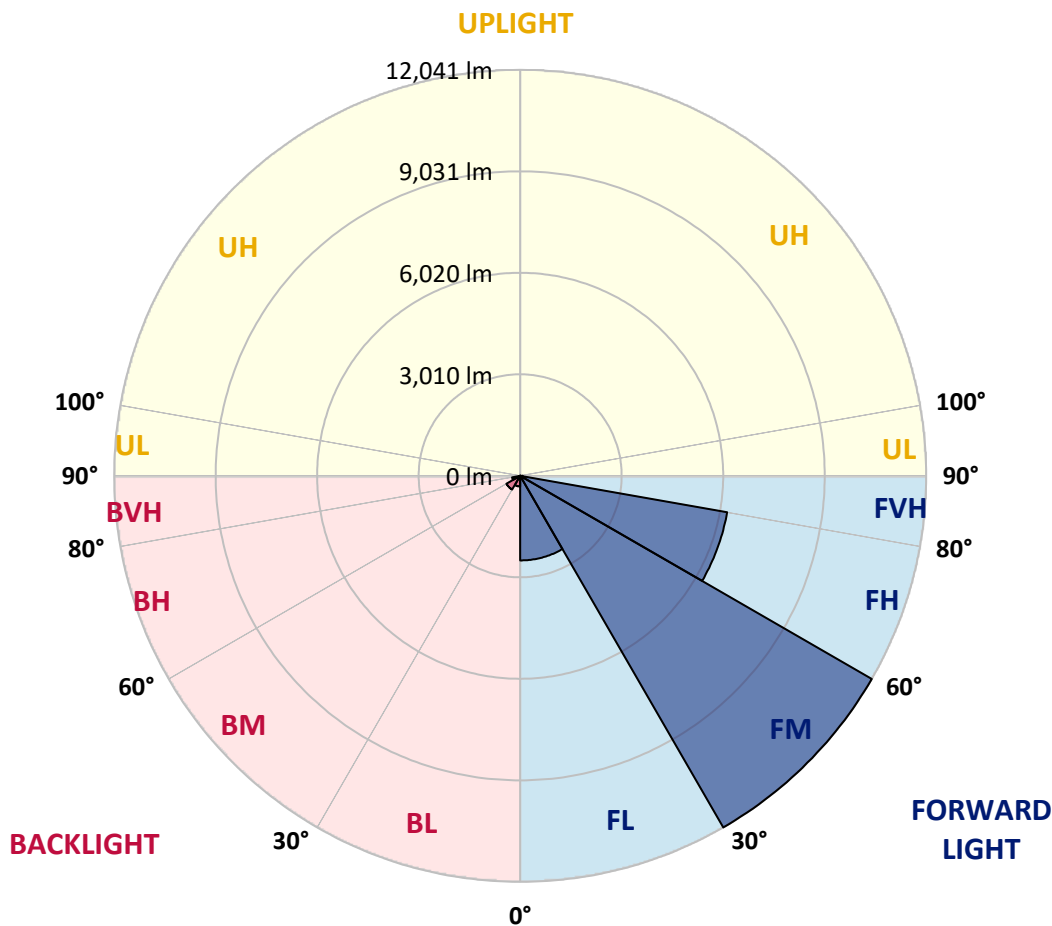


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2509.7	11.5			
FM (30°-60°)	12040.8	55.0			
FH (60°-80°)	6232.0	28.5			G3/7500
FVH (80°-90°)	77.0	0.4			G1/100
BL (0°-30°)	316.7	1.4	B1/500		
BM (30°-60°)	471.3	2.2	B1/1000		
BH (60°-80°)	243.1	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	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-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4
2.5°	4005.6	3983.7	3961.9	3878.0	3801.5	3732.2	3601.0	3429.7	3276.6	3243.8	3065.2
5°	4705.4	4679.9	4647.1	4563.2	4464.8	4348.2	4155.0	3892.6	3622.9	3564.6	3232.9
7.5°	5179.2	5157.3	5109.9	5069.9	4971.4	4858.5	4643.4	4337.3	3965.5	3892.6	3426.1
10°	5503.6	5489.0	5481.7	5448.9	5376.0	5284.9	5069.9	4749.1	4311.7	4227.9	3630.2
12.5°	5620.2	5620.2	5656.7	5711.3	5722.3	5693.1	5496.3	5175.6	4676.2	4588.7	3870.7
15°	5463.5	5481.7	5561.9	5736.8	5919.1	6039.4	5915.4	5616.6	5077.1	4982.4	4155.0
17.5°	5419.8	5438.0	5492.6	5645.7	5889.9	6210.7	6272.6	6043.0	5456.2	5376.0	4446.6
20°	5543.7	5561.9	5609.3	5740.5	5926.4	6250.8	6509.5	6454.9	5857.1	5773.3	4741.8
22.5°	5838.9	5849.8	5849.8	5951.9	6115.9	6356.5	6659.0	6844.9	6269.0	6177.9	5033.4
25°	6473.1	6451.2	6363.7	6312.7	6418.4	6615.2	6848.5	7187.5	6728.2	6604.3	5346.9
27.5°	7304.1	7377.0	7165.6	6921.4	6841.2	6954.2	7114.6	7490.0	7172.9	7041.7	5631.1
30°	8430.3	8401.2	8124.2	7774.3	7428.0	7387.9	7442.6	7748.8	7617.5	7493.6	5948.2
32.5°	9356.1	9410.8	9119.2	8692.7	8175.2	7931.0	7872.7	8058.6	8091.4	8011.2	6323.7
35°	10307.4	10365.7	10081.4	9607.6	8991.6	8583.4	8415.7	8441.3	8678.2	8576.1	6717.3
37.5°	11160.2	11211.3	10930.6	10445.9	9829.9	9330.6	9090.0	8893.2	9246.7	9155.6	7132.8
40°	11809.0	11816.3	11626.8	11193.0	10609.9	10092.3	9819.0	9432.6	9848.1	9786.2	7566.5
42.5°	12268.3	12282.8	12144.3	11772.6	11233.1	10752.0	10529.7	10070.5	10540.6	10486.0	8069.5
45°	12483.3	12508.8	12494.2	12151.6	11703.3	11287.8	11214.9	10748.4	11298.7	11247.7	8649.0
47.5°	12279.2	12279.2	12465.1	12417.7	12005.8	11728.8	11812.7	11455.5	12122.5	12075.1	9239.5
50°	11430.0	11440.9	11819.9	12363.0	12122.5	12060.5	12322.9	12148.0	12869.6	12898.8	9946.5
52.5°	9199.4	9181.1	10460.5	11502.9	12042.3	12209.9	12793.1	12855.1	13766.2	13853.7	10650.0
55°	6874.0	6863.1	8087.7	9979.3	11481.0	12133.4	13055.5	13485.6	14531.6	14586.3	11174.8
57.5°	5441.6	5412.5	6086.7	8044.0	10212.6	11790.8	13066.5	13605.9	14958.1	15052.8	11685.1
60°	4184.2	4158.7	4661.6	5984.7	8415.7	10879.6	12753.0	13613.2	15369.9	15537.6	12370.3
62.5°	2992.3	3021.5	3407.8	4293.5	6473.1	9593.0	12344.8	13715.2	16102.5	16292.1	13343.5
65°	2019.2	2004.6	2325.4	2923.1	4603.3	7861.7	11717.9	13930.3	17421.9	17753.6	14509.8
67.5°	1403.2	1414.2	1560.0	1902.6	2923.1	6035.7	10675.5	14050.5	18785.1	19043.9	15326.2
70°	1013.2	1027.8	1108.0	1279.3	1785.9	4093.1	9024.4	13500.2	19153.2	19379.2	14757.6
72.5°	667.0	696.1	816.4	907.5	1140.8	2562.3	6648.0	11630.4	17567.7	17735.4	12381.2
75°	360.8	368.1	524.8	677.9	812.8	1596.4	3965.5	7843.5	13143.0	13088.3	8164.3
77.5°	280.6	291.6	324.4	484.8	546.7	878.4	1567.2	3542.7	6225.2	6057.6	2784.6
80°	171.3	178.6	226.0	287.9	382.7	510.3	459.2	962.2	1264.7	1184.5	408.2
82.5°	102.1	109.3	134.9	240.6	302.5	240.6	160.4	233.3	236.9	233.3	102.1
85°	18.2	18.2	94.8	167.7	160.4	69.3	94.8	76.5	69.3	72.9	21.9
87.5°	0.0	0.0	36.4	51.0	72.9	25.5	36.4	18.2	18.2	18.2	10.9
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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CATALOG NUMBER: ARCH-L-PA3-240-727-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4	2930.4
2.5°	2955.9	2832.0	2576.8	2354.5	2132.2	1968.2	1844.2	1716.7	1672.9	1618.3	1589.1
5°	3006.9	2762.7	2256.1	1851.5	1508.9	1246.5	1078.8	976.8	911.2	863.8	852.9
7.5°	3083.5	2708.1	1997.3	1450.6	1075.2	812.8	674.3	605.0	568.6	546.7	539.4
10°	3174.6	2660.7	1742.2	1129.9	758.1	572.2	495.7	466.5	451.9	444.7	441.0
12.5°	3302.2	2642.4	1527.2	871.1	572.2	470.2	430.1	411.9	400.9	390.0	386.3
15°	3469.8	2649.7	1330.3	674.3	473.8	419.1	386.3	368.1	353.5	342.6	342.6
17.5°	3644.8	2660.7	1137.2	546.7	430.1	382.7	346.3	320.7	309.8	298.9	295.2
20°	3808.8	2657.0	951.3	466.5	390.0	342.6	306.2	280.6	262.4	251.5	251.5
22.5°	3965.5	2635.2	776.3	419.1	357.2	302.5	262.4	236.9	222.3	211.4	211.4
25°	4133.2	2591.4	634.2	382.7	317.1	266.1	226.0	200.5	189.5	178.6	178.6
27.5°	4264.4	2518.5	517.6	349.9	280.6	229.6	193.2	171.3	160.4	153.1	153.1
30°	4406.5	2412.8	430.1	313.4	244.2	196.8	164.0	145.8	134.9	131.2	131.2
32.5°	4563.2	2296.2	368.1	277.0	207.8	167.7	138.5	127.6	116.6	113.0	113.0
35°	4745.5	2194.1	331.7	240.6	182.2	142.1	120.3	109.3	102.1	102.1	102.1
37.5°	4953.2	2088.4	298.9	211.4	156.7	120.3	102.1	98.4	94.8	91.1	91.1
40°	5179.2	1975.5	269.7	185.9	134.9	102.1	87.5	87.5	83.8	83.8	83.8
42.5°	5434.3	1877.0	244.2	164.0	116.6	87.5	76.5	76.5	72.9	72.9	72.9
45°	5711.3	1785.9	222.3	145.8	102.1	76.5	69.3	65.6	62.0	62.0	62.0
47.5°	6039.4	1734.9	204.1	127.6	87.5	65.6	58.3	54.7	51.0	47.4	47.4
50°	6458.5	1756.8	185.9	105.7	76.5	54.7	47.4	43.7	40.1	36.4	36.4
52.5°	6790.2	1745.8	160.4	91.1	62.0	43.7	36.4	32.8	29.2	25.5	25.5
55°	7030.7	1702.1	138.5	76.5	47.4	36.4	29.2	21.9	18.2	18.2	18.2
57.5°	7267.6	1658.4	116.6	62.0	36.4	25.5	18.2	14.6	14.6	14.6	14.6
60°	7635.8	1596.4	102.1	51.0	29.2	18.2	10.9	10.9	7.3	7.3	7.3
62.5°	8084.1	1519.9	83.8	43.7	21.9	14.6	7.3	7.3	0.0	0.0	0.0
65°	8576.1	1385.0	69.3	32.8	18.2	10.9	7.3	0.0	0.0	0.0	0.0
67.5°	8463.1	1111.7	58.3	21.9	14.6	7.3	3.6	0.0	0.0	0.0	0.0
70°	7486.3	750.8	47.4	18.2	10.9	7.3	3.6	0.0	0.0	0.0	0.0
72.5°	5864.4	444.7	32.8	14.6	7.3	3.6	0.0	0.0	0.0	0.0	0.0
75°	3754.1	222.3	21.9	10.9	7.3	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	1257.4	109.3	14.6	7.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	178.6	36.4	7.3	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.1	14.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.6	7.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.3	3.6	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)