

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: P236983

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236983  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-100-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 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: 11236 lumens  
Efficiency: N/A  
Efficacy: 110.2 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

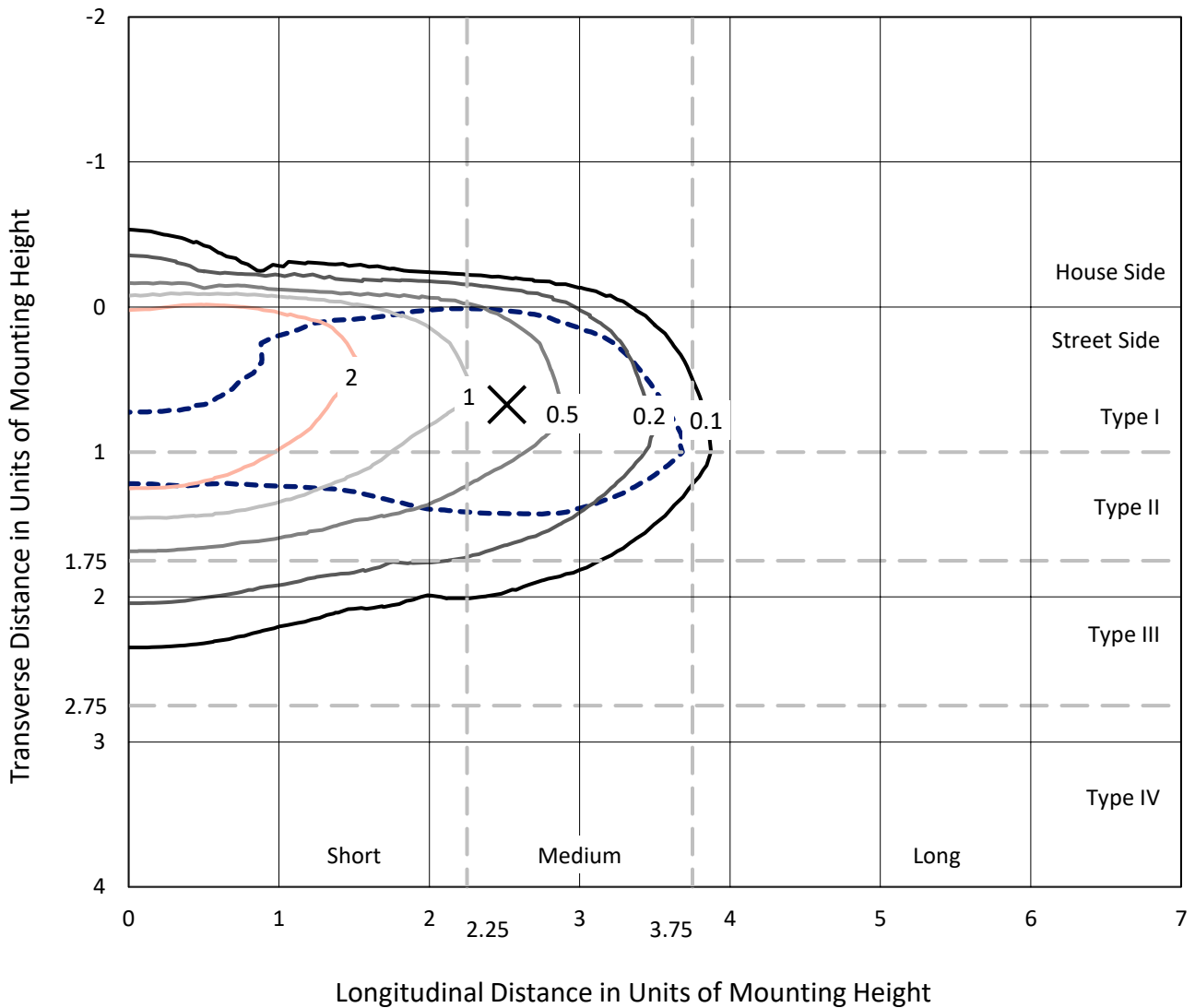
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

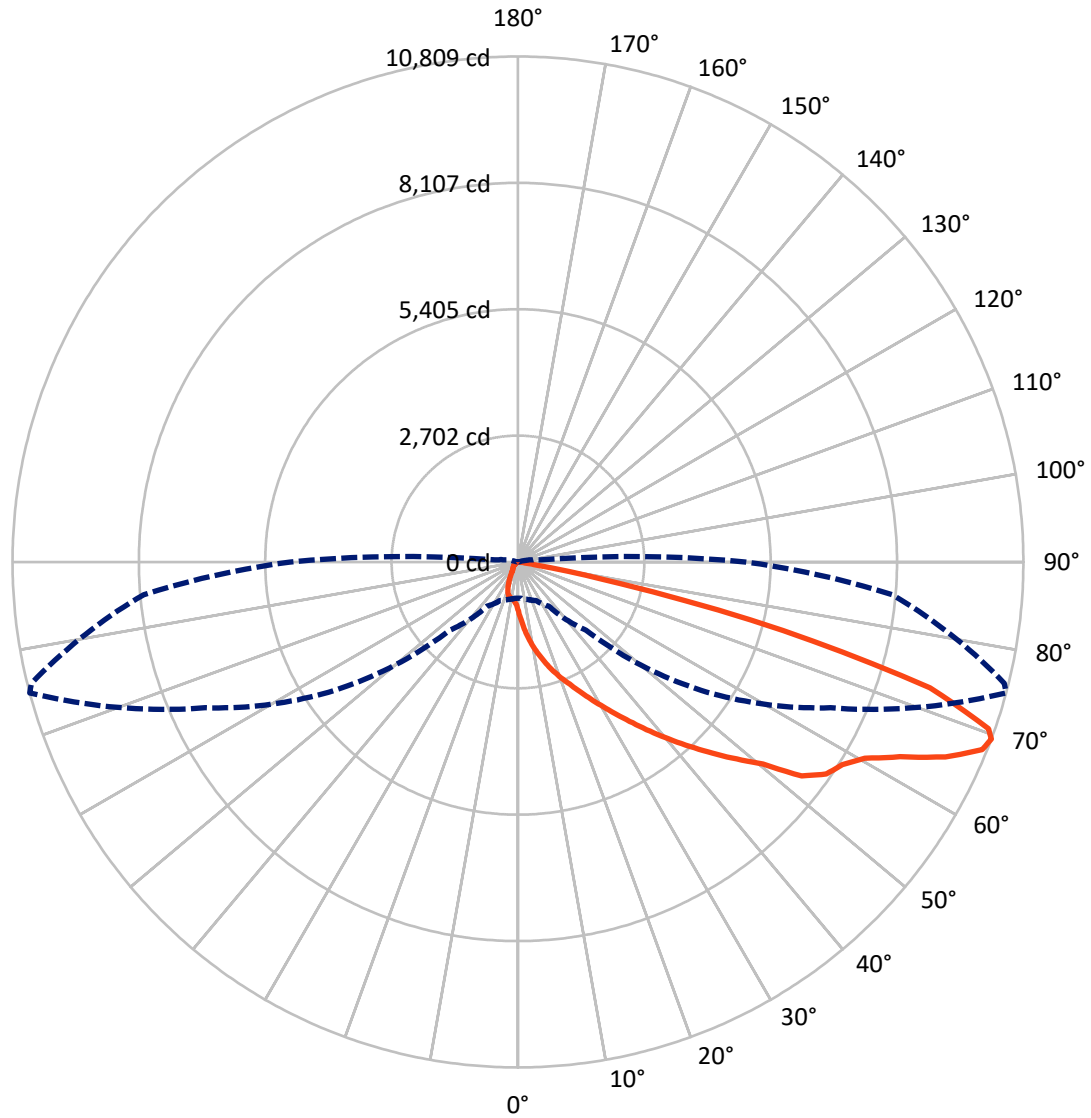
✕ Max cd  
 - - - 1/2 Max cd



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 75-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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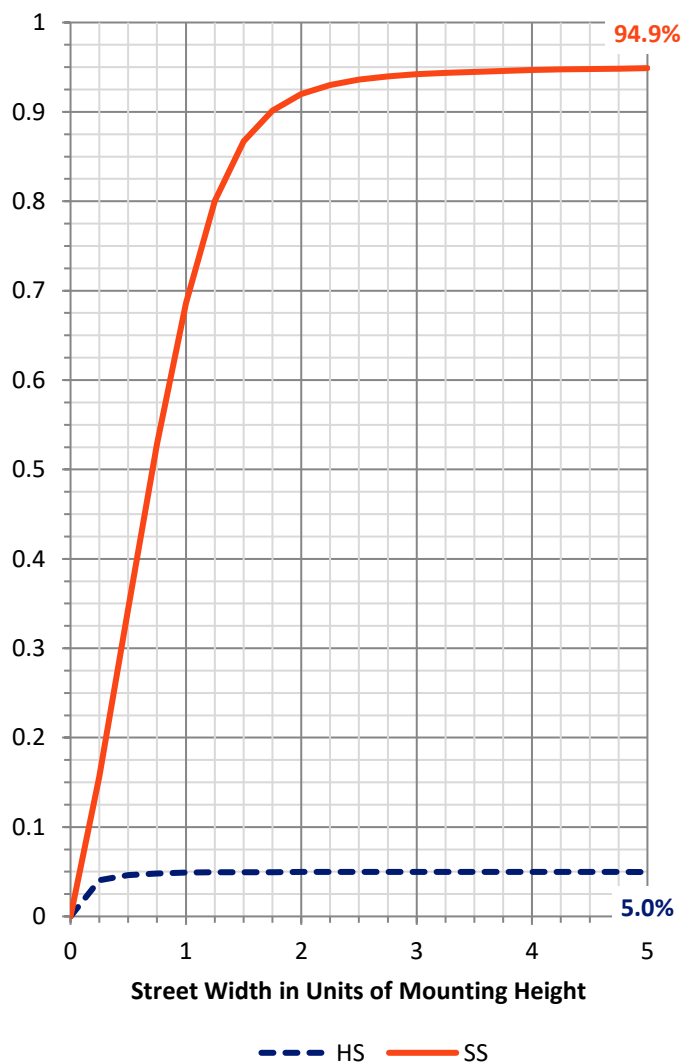
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	560.6	0.0	560.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	10675.4	0.0	10675.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	11236.0	0.0	11236.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.9	1.1
10°-20°	435.8	3.9
20°-30°	832.1	7.4
30°-40°	1492.5	13.3
40°-50°	2286.7	20.4
50°-60°	2657.7	23.7
60°-70°	2353.4	20.9
70°-80°	1015.1	9.0
80°-90°	40.7	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°	11236.0	100.0
0°-180°	11236.0	100.0

**Coefficient of Utilization**



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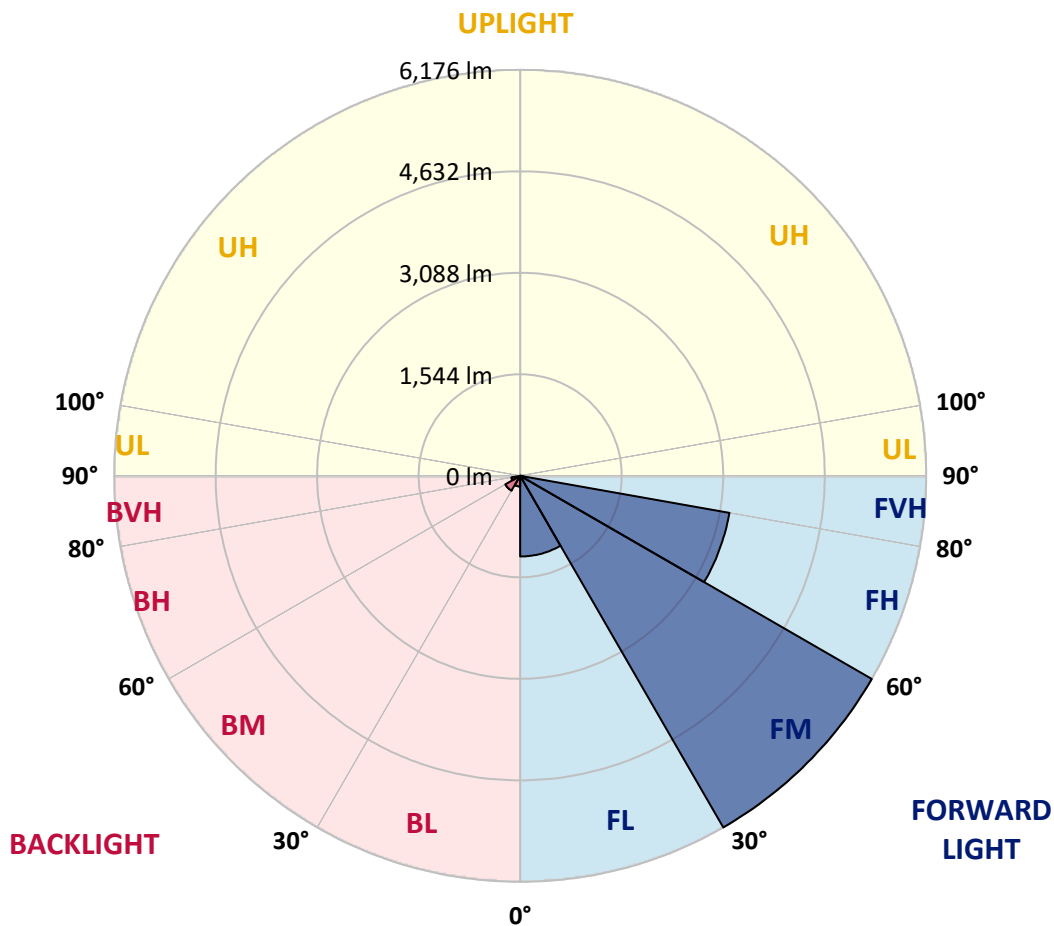
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1227.0	10.9			
FM (30°-60°)	6175.6	55.0			
FH (60°-80°)	3232.7	28.8			G2/5000
FVH (80°-90°)	40.1	0.4			G1/100
BL (0°-30°)	162.8	1.4	B1/500		
BM (30°-60°)	261.4	2.3	B1/1000		
BH (60°-80°)	135.8	1.2	B1/500		G1/500
BVH (80°-90°)	0.6	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°	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5
2.5°	1722.3	1705.3	1688.3	1668.9	1625.3	1550.1	1455.5	1353.6	1227.4	1205.6	1103.7
5°	2091.0	2083.7	2066.8	2040.1	1991.6	1909.1	1802.3	1651.9	1440.9	1404.5	1188.6
7.5°	2350.6	2345.7	2331.2	2299.6	2256.0	2173.5	2061.9	1899.4	1654.4	1613.1	1295.4
10°	2583.4	2581.0	2568.9	2539.8	2496.1	2406.4	2287.5	2117.7	1858.1	1812.0	1419.1
12.5°	2794.5	2796.9	2792.1	2777.5	2746.0	2661.1	2525.2	2340.9	2054.6	2003.7	1567.0
15°	2918.2	2925.5	2944.9	2974.0	2983.7	2915.8	2775.1	2571.3	2256.0	2212.3	1736.8
17.5°	2877.0	2884.2	2944.9	3044.3	3138.9	3148.6	3022.5	2789.6	2454.9	2411.2	1904.2
20°	2777.5	2787.2	2850.3	2986.1	3170.5	3299.0	3248.1	3027.4	2644.1	2590.7	2064.3
22.5°	2889.1	2889.1	2908.5	2991.0	3158.3	3359.7	3427.6	3265.1	2838.1	2772.7	2224.4
25°	3272.4	3265.1	3223.8	3189.9	3243.3	3422.8	3563.5	3507.7	3066.2	2991.0	2394.2
27.5°	3757.5	3791.5	3713.8	3590.1	3468.8	3546.5	3684.7	3747.8	3318.4	3240.8	2568.9
30°	4300.9	4315.4	4223.3	4058.3	3844.8	3769.6	3827.9	3954.0	3592.6	3507.7	2750.8
32.5°	4790.9	4778.8	4701.1	4528.9	4264.5	4102.0	4012.2	4119.0	3890.9	3793.9	2937.6
35°	5225.1	5234.8	5140.2	4941.3	4681.7	4509.5	4296.0	4305.7	4225.7	4114.1	3153.5
37.5°	5615.7	5598.7	5508.9	5310.0	5074.7	4887.9	4662.3	4499.8	4592.0	4475.5	3396.1
40°	5933.4	5916.4	5821.8	5627.8	5407.0	5254.2	5077.1	4759.4	4977.7	4844.3	3655.6
42.5°	6185.7	6166.3	6086.2	5899.5	5686.0	5550.2	5465.3	5079.6	5390.1	5256.6	3946.7
45°	6309.4	6292.4	6243.9	6103.2	5916.4	5797.6	5838.8	5448.3	5831.5	5720.0	4266.9
47.5°	6163.9	6156.6	6212.4	6188.1	6081.4	6018.3	6161.4	5851.0	6294.9	6185.7	4635.6
50°	5722.4	5734.5	5897.0	6098.4	6149.3	6224.5	6425.9	6275.5	6792.1	6675.7	5060.2
52.5°	4633.2	4715.7	5205.7	5690.8	6066.8	6350.7	6736.4	6881.9	7602.4	7488.3	5722.4
55°	3459.1	3493.1	4026.8	4856.4	5734.5	6341.0	6966.8	7238.5	8002.6	7886.2	5897.0
57.5°	2743.5	2755.7	3020.1	3866.7	5050.4	6122.6	7088.1	7367.1	8177.3	8080.2	6156.6
60°	2154.1	2168.6	2360.3	2942.5	4087.4	5533.2	6913.4	7478.6	8519.3	8441.7	6610.2
62.5°	1676.2	1690.8	1807.2	2149.2	3066.2	4625.9	6561.7	7658.1	9169.4	9133.0	7352.5
65°	1297.8	1302.6	1382.7	1542.8	2166.2	3643.5	6132.3	7825.5	10047.5	10016.0	7954.1
67.5°	958.2	965.5	1021.2	1120.7	1462.7	2617.4	5428.9	7697.0	10709.8	10617.6	8172.4
69°	773.8	781.1	829.6	909.7	1154.7	2061.9	4786.0	7379.2	10809.2	10721.9	8034.1
70°	662.2	667.1	715.6	783.5	984.9	1751.4	4276.6	7105.1	10678.2	10593.3	7718.8
72.5°	424.5	448.8	497.3	540.9	652.5	1159.5	2886.7	5892.2	9213.1	9067.5	6045.0
75°	235.3	242.6	329.9	383.3	434.2	754.4	1605.9	3675.0	5860.7	5758.8	3233.5
77.5°	194.1	198.9	232.9	291.1	291.1	422.1	606.4	1448.2	2229.3	2011.0	875.7
80°	135.8	140.7	177.1	191.6	208.6	237.7	196.5	317.8	344.5	305.6	131.0
82.5°	94.6	99.5	121.3	157.7	167.4	111.6	72.8	94.6	99.5	99.5	50.9
85°	17.0	24.3	89.8	131.0	99.5	34.0	41.2	34.0	31.5	34.0	12.1
87.5°	0.0	0.0	55.8	63.1	53.4	14.6	17.0	12.1	7.3	9.7	4.9
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5	1045.5
2.5°	1052.8	1001.8	914.5	851.4	798.1	756.8	739.9	713.2	693.8	703.5	691.3
5°	1081.9	992.1	851.4	761.7	698.6	645.3	601.6	567.6	540.9	536.1	531.2
7.5°	1128.0	999.4	815.1	703.5	608.9	526.4	458.5	407.5	368.7	368.7	354.2
10°	1191.1	1018.8	793.2	645.3	504.6	393.0	325.1	276.5	257.1	254.7	249.9
12.5°	1278.4	1055.2	776.2	570.1	393.0	286.2	245.0	228.0	220.7	218.3	215.9
15°	1397.2	1108.6	756.8	477.9	298.4	235.3	218.3	203.8	196.5	194.1	191.6
17.5°	1511.3	1157.1	715.6	383.3	242.6	213.5	194.1	181.9	172.2	169.8	169.8
20°	1618.0	1198.3	645.3	298.4	218.3	191.6	172.2	157.7	148.0	145.5	145.5
22.5°	1729.6	1232.3	557.9	242.6	198.9	169.8	150.4	135.8	126.1	123.7	121.3
25°	1848.4	1256.5	458.5	215.9	179.5	150.4	128.6	116.4	109.2	106.7	104.3
27.5°	1977.0	1266.3	363.9	196.5	157.7	131.0	111.6	99.5	94.6	92.2	92.2
30°	2093.4	1256.5	281.4	174.7	138.3	114.0	97.0	87.3	82.5	80.1	80.1
32.5°	2214.7	1232.3	225.6	155.2	121.3	97.0	82.5	75.2	72.8	70.3	70.3
35°	2343.3	1200.8	194.1	138.3	104.3	84.9	72.8	67.9	65.5	63.1	63.1
37.5°	2493.7	1161.9	177.1	123.7	92.2	75.2	63.1	60.6	58.2	58.2	58.2
40°	2663.5	1113.4	165.0	111.6	82.5	65.5	55.8	53.4	50.9	50.9	50.9
42.5°	2843.0	1057.6	152.8	99.5	72.8	55.8	48.5	48.5	46.1	46.1	43.7
45°	3044.3	1001.8	140.7	87.3	63.1	48.5	41.2	38.8	38.8	36.4	36.4
47.5°	3282.1	950.9	128.6	77.6	55.8	41.2	36.4	34.0	31.5	29.1	29.1
50°	3616.8	946.0	114.0	67.9	50.9	34.0	29.1	26.7	24.3	21.8	21.8
52.5°	3949.1	902.4	97.0	55.8	41.2	29.1	21.8	19.4	17.0	17.0	14.6
55°	4024.3	829.6	84.9	48.5	31.5	21.8	17.0	12.1	12.1	9.7	9.7
57.5°	4189.3	795.7	72.8	38.8	24.3	17.0	9.7	7.3	7.3	7.3	7.3
60°	4514.4	785.9	63.1	34.0	17.0	12.1	7.3	4.9	4.9	2.4	2.4
62.5°	4963.1	776.2	53.4	29.1	12.1	7.3	4.9	2.4	0.0	0.0	0.0
65°	5210.5	710.7	43.7	21.8	9.7	7.3	2.4	0.0	0.0	0.0	0.0
67.5°	5145.1	587.0	38.8	14.6	7.3	4.9	2.4	0.0	0.0	0.0	0.0
69°	4870.9	494.9	31.5	12.1	7.3	4.9	2.4	0.0	0.0	0.0	0.0
70°	4541.0	426.9	29.1	9.7	4.9	2.4	2.4	0.0	0.0	0.0	0.0
72.5°	3223.8	223.2	19.4	7.3	4.9	2.4	0.0	0.0	0.0	0.0	0.0
75°	1506.4	99.5	12.1	4.9	2.4	2.4	0.0	0.0	0.0	0.0	0.0
77.5°	332.3	46.1	7.3	4.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	63.1	17.0	4.9	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.8	7.3	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.3	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	0.0	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)