

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: P236995

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236995  
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-AF72-220-D-U-T2R-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 945mA 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: 20788 lumens  
Efficiency: N/A  
Efficacy: 93.6 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

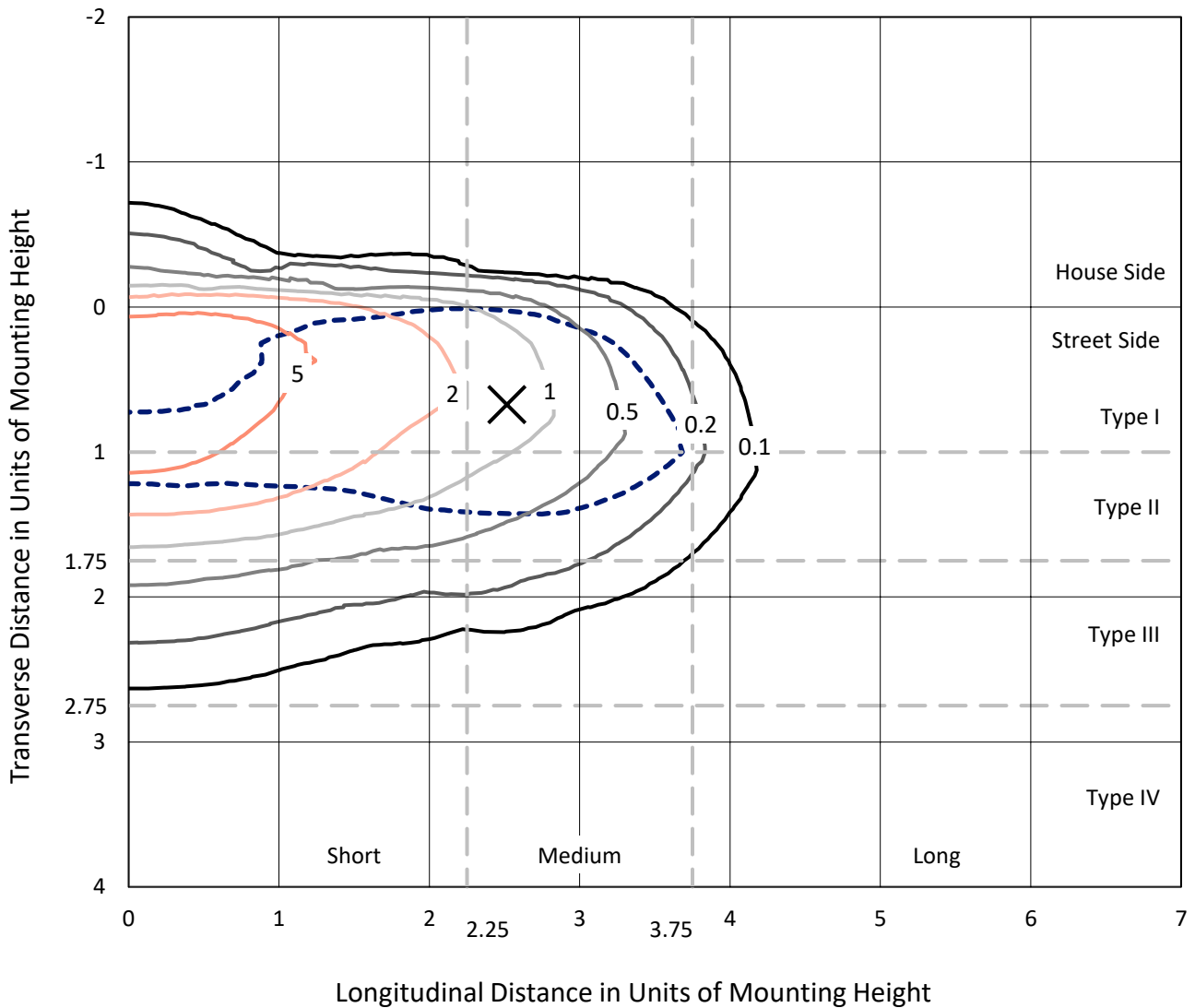
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

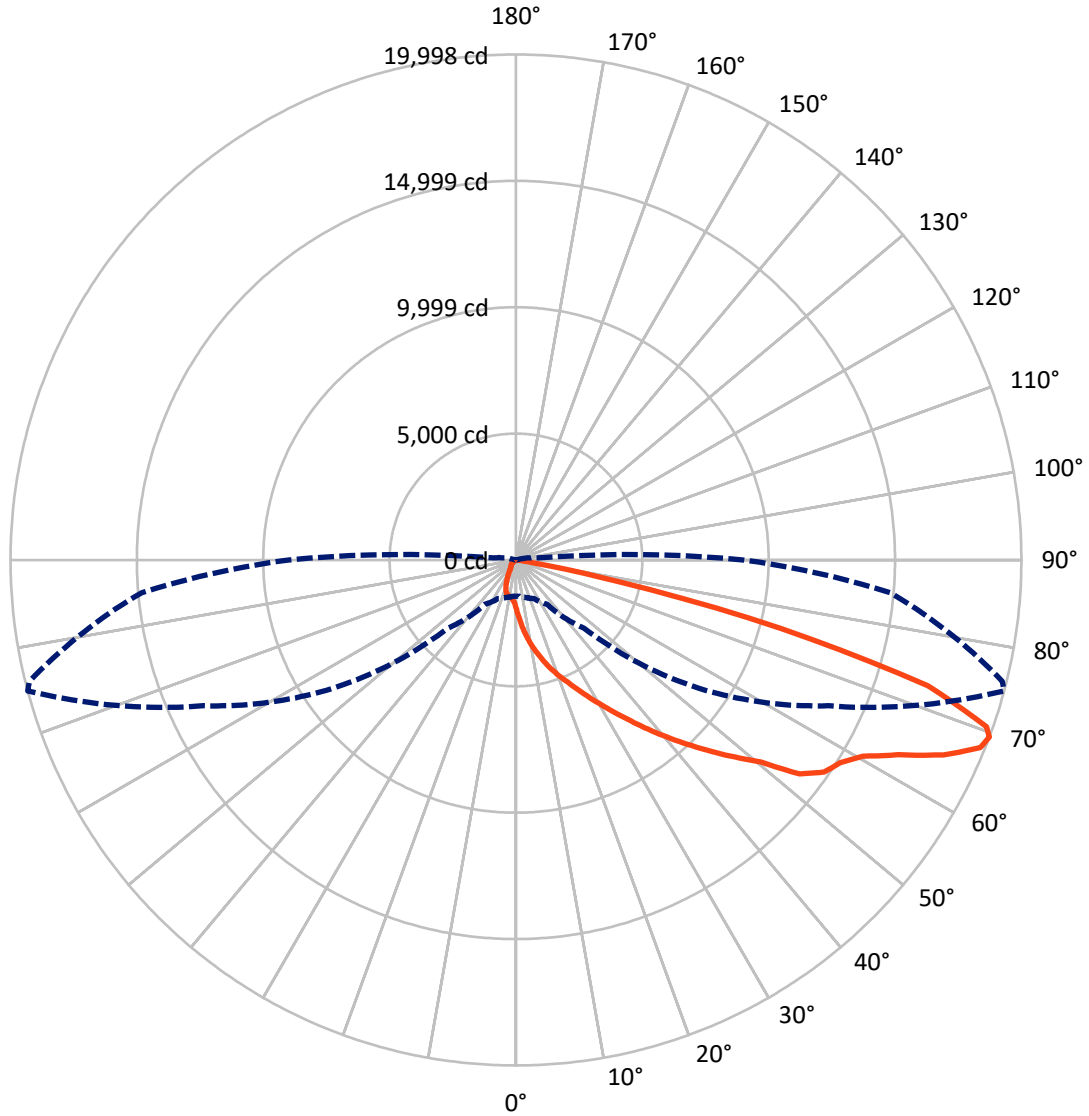
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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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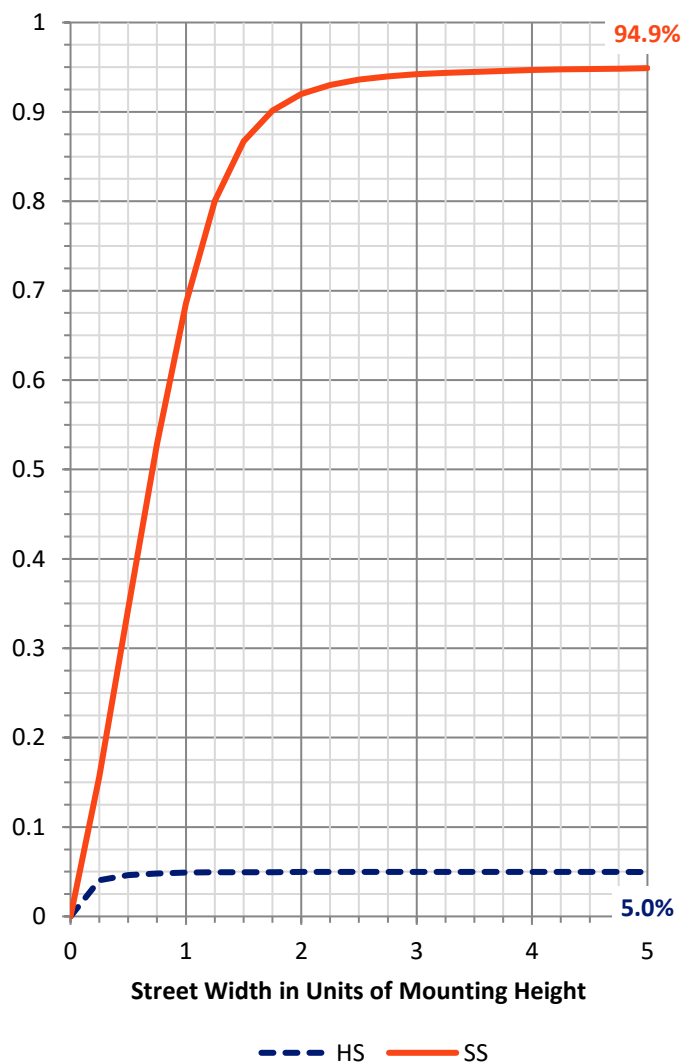
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1037.2	0.0	1037.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	19750.8	0.0	19750.8
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	20788.0	0.0	20788.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.6	1.1
10°-20°	806.4	3.9
20°-30°	1539.4	7.4
30°-40°	2761.4	13.3
40°-50°	4230.7	20.4
50°-60°	4917.1	23.7
60°-70°	4354.2	20.9
70°-80°	1878.1	9.0
80°-90°	75.2	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°	20788.0	100.0
0°-180°	20788.0	100.0

**Coefficient of Utilization**



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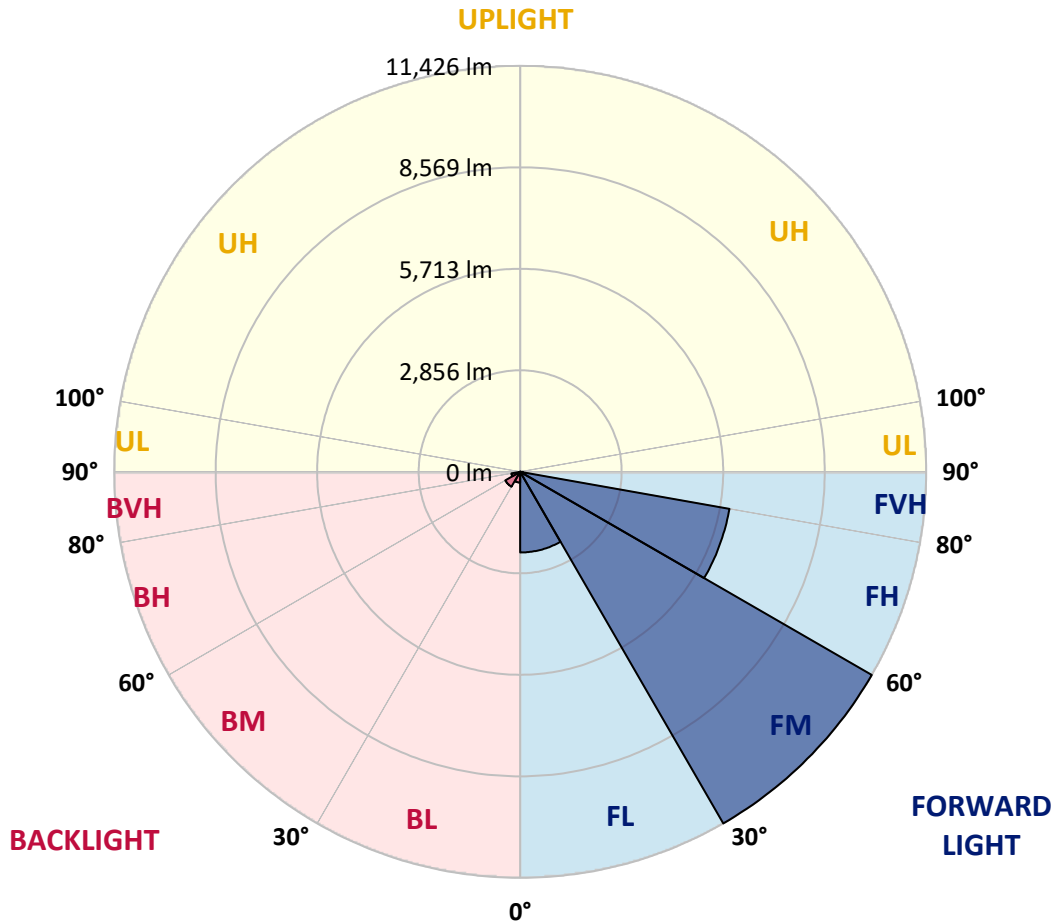
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2270.1	10.9			
FM (30°-60°)	11425.6	55.0			
FH (60°-80°)	5981.0	28.8			G3/7500
FVH (80°-90°)	74.1	0.4			G1/100
BL (0°-30°)	301.2	1.4	B1/500		
BM (30°-60°)	483.6	2.3	B1/1000		
BH (60°-80°)	251.3	1.2	B1/500		G1/500
BVH (80°-90°)	1.1	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°	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3
2.5°	3186.5	3155.0	3123.6	3087.7	3006.9	2867.8	2692.8	2504.3	2270.9	2230.5	2042.0
5°	3868.6	3855.2	3823.8	3774.4	3684.6	3532.0	3334.6	3056.3	2665.9	2598.5	2199.1
7.5°	4348.8	4339.9	4312.9	4254.6	4173.8	4021.2	3814.8	3514.1	3060.8	2984.5	2396.6
10°	4779.7	4775.2	4752.8	4698.9	4618.1	4452.1	4232.2	3918.0	3437.8	3352.5	2625.5
12.5°	5170.1	5174.6	5165.7	5138.7	5080.4	4923.3	4672.0	4330.9	3801.3	3707.1	2899.2
15°	5399.0	5412.5	5448.4	5502.3	5520.2	5394.5	5134.2	4757.2	4173.8	4093.0	3213.4
17.5°	5322.7	5336.2	5448.4	5632.4	5807.4	5825.4	5592.0	5161.2	4541.8	4461.0	3523.1
20°	5138.7	5156.7	5273.4	5524.7	5865.8	6103.6	6009.4	5601.0	4891.9	4793.2	3819.3
22.5°	5345.2	5345.2	5381.1	5533.7	5843.3	6215.8	6341.5	6040.8	5250.9	5129.8	4115.5
25°	6054.3	6040.8	5964.5	5901.7	6000.4	6332.5	6592.8	6489.6	5672.8	5533.7	4429.6
27.5°	6951.9	7014.7	6871.1	6642.2	6417.8	6561.4	6817.2	6933.9	6139.5	5995.9	4752.8
30°	7957.2	7984.1	7813.6	7508.4	7113.4	6974.3	7082.0	7315.4	6646.7	6489.6	5089.4
32.5°	8863.7	8841.3	8697.7	8379.0	7889.9	7589.2	7423.1	7620.6	7198.7	7019.2	5434.9
35°	9667.1	9685.0	9510.0	9142.0	8661.8	8343.1	7948.2	7966.1	7818.0	7611.6	5834.4
37.5°	10389.7	10358.2	10192.2	9824.2	9388.8	9043.3	8625.9	8325.2	8495.7	8280.3	6283.2
40°	10977.6	10946.2	10771.1	10412.1	10003.7	9720.9	9393.3	8805.4	9209.3	8962.5	6763.4
42.5°	11444.3	11408.4	11260.3	10914.7	10519.8	10268.5	10111.4	9397.8	9972.3	9725.4	7301.9
45°	11673.2	11641.8	11552.0	11291.7	10946.2	10726.3	10802.5	10080.0	10789.1	10582.6	7894.3
47.5°	11403.9	11390.5	11493.7	11448.8	11251.3	11134.7	11399.4	10825.0	11646.3	11444.3	8576.5
50°	10587.1	10609.6	10910.3	11282.8	11377.0	11516.1	11888.6	11610.4	12566.3	12350.9	9361.9
52.5°	8572.0	8724.6	9631.2	10528.8	11224.4	11749.5	12463.1	12732.4	14065.3	13854.4	10587.1
55°	6399.8	6462.7	7450.0	8984.9	10609.6	11731.6	12889.5	13392.1	14805.8	14590.4	10910.3
57.5°	5075.9	5098.3	5587.5	7153.8	9344.0	11327.6	13113.9	13630.0	15129.0	14949.4	11390.5
60°	3985.3	4012.2	4366.8	5443.9	7562.2	10237.1	12790.7	13836.4	15761.8	15618.1	12229.7
62.5°	3101.2	3128.1	3343.5	3976.3	5672.8	8558.6	12140.0	14168.5	16964.5	16897.2	13603.0
65°	2401.1	2410.0	2558.1	2854.3	4007.8	6740.9	11345.6	14478.2	18589.2	18530.8	14716.1
67.5°	1772.7	1786.2	1889.4	2073.4	2706.2	4842.5	10044.1	14240.3	19814.4	19643.9	15120.0
69°	1431.7	1445.1	1534.9	1683.0	2136.3	3814.8	8854.8	13652.4	19998.4	19836.8	14864.2
70°	1225.2	1234.2	1324.0	1449.6	1822.1	3240.3	7912.3	13145.3	19756.0	19599.0	14280.7
72.5°	785.4	830.3	920.0	1000.8	1207.3	2145.3	5340.7	10901.3	17045.3	16776.0	11184.0
75°	435.3	448.8	610.4	709.1	803.3	1395.8	2971.0	6799.3	10842.9	10654.4	5982.5
77.5°	359.0	368.0	430.8	538.6	538.6	780.9	1122.0	2679.3	4124.4	3720.5	1620.2
80°	251.3	260.3	327.6	354.5	386.0	439.8	363.5	587.9	637.3	565.5	242.4
82.5°	175.0	184.0	224.4	291.7	309.7	206.4	134.6	175.0	184.0	184.0	94.2
85°	31.4	44.9	166.1	242.4	184.0	62.8	76.3	62.8	58.3	62.8	22.4
87.5°	0.0	0.0	103.2	116.7	98.7	26.9	31.4	22.4	13.5	18.0	9.0
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°	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3	1934.3
2.5°	1947.8	1853.5	1692.0	1575.3	1476.5	1400.2	1368.8	1319.5	1283.6	1301.5	1279.1
5°	2001.6	1835.6	1575.3	1409.2	1292.5	1193.8	1113.0	1050.2	1000.8	991.8	982.9
7.5°	2086.9	1849.0	1508.0	1301.5	1126.5	973.9	848.2	754.0	682.2	682.2	655.2
10°	2203.6	1884.9	1467.6	1193.8	933.5	727.1	601.4	511.6	475.7	471.2	462.3
12.5°	2365.2	1952.3	1436.2	1054.7	727.1	529.6	453.3	421.9	408.4	403.9	399.4
15°	2585.1	2051.0	1400.2	884.1	552.0	435.3	403.9	377.0	363.5	359.0	354.5
17.5°	2796.0	2140.8	1324.0	709.1	448.8	394.9	359.0	336.6	318.6	314.2	314.2
20°	2993.5	2217.1	1193.8	552.0	403.9	354.5	318.6	291.7	273.8	269.3	269.3
22.5°	3199.9	2279.9	1032.2	448.8	368.0	314.2	278.3	251.3	233.4	228.9	224.4
25°	3419.8	2324.8	848.2	399.4	332.1	278.3	237.9	215.4	202.0	197.5	193.0
27.5°	3657.7	2342.7	673.2	363.5	291.7	242.4	206.4	184.0	175.0	170.5	170.5
30°	3873.1	2324.8	520.6	323.1	255.8	210.9	179.5	161.6	152.6	148.1	148.1
32.5°	4097.5	2279.9	417.4	287.2	224.4	179.5	152.6	139.1	134.6	130.2	130.2
35°	4335.4	2221.5	359.0	255.8	193.0	157.1	134.6	125.7	121.2	116.7	116.7
37.5°	4613.6	2149.7	327.6	228.9	170.5	139.1	116.7	112.2	107.7	107.7	107.7
40°	4927.8	2060.0	305.2	206.4	152.6	121.2	103.2	98.7	94.2	94.2	94.2
42.5°	5259.9	1956.8	282.7	184.0	134.6	103.2	89.8	89.8	85.3	85.3	80.8
45°	5632.4	1853.5	260.3	161.6	116.7	89.8	76.3	71.8	71.8	67.3	67.3
47.5°	6072.2	1759.3	237.9	143.6	103.2	76.3	67.3	62.8	58.3	53.9	53.9
50°	6691.6	1750.3	210.9	125.7	94.2	62.8	53.9	49.4	44.9	40.4	40.4
52.5°	7306.4	1669.5	179.5	103.2	76.3	53.9	40.4	35.9	31.4	31.4	26.9
55°	7445.5	1534.9	157.1	89.8	58.3	40.4	31.4	22.4	22.4	18.0	18.0
57.5°	7750.7	1472.1	134.6	71.8	44.9	31.4	18.0	13.5	13.5	13.5	13.5
60°	8352.1	1454.1	116.7	62.8	31.4	22.4	13.5	9.0	9.0	4.5	4.5
62.5°	9182.4	1436.2	98.7	53.9	22.4	13.5	9.0	4.5	0.0	0.0	0.0
65°	9640.2	1315.0	80.8	40.4	18.0	13.5	4.5	0.0	0.0	0.0	0.0
67.5°	9519.0	1086.1	71.8	26.9	13.5	9.0	4.5	0.0	0.0	0.0	0.0
69°	9011.8	915.5	58.3	22.4	13.5	9.0	4.5	0.0	0.0	0.0	0.0
70°	8401.5	789.9	53.9	18.0	9.0	4.5	4.5	0.0	0.0	0.0	0.0
72.5°	5964.5	412.9	35.9	13.5	9.0	4.5	0.0	0.0	0.0	0.0	0.0
75°	2787.0	184.0	22.4	9.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0
77.5°	614.9	85.3	13.5	9.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	116.7	31.4	9.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.4	13.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	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)