

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: P400146

Luminaire Tested: **ARCH-L-PA3-240-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400146  
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-PA3-240-740-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 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: 26178 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

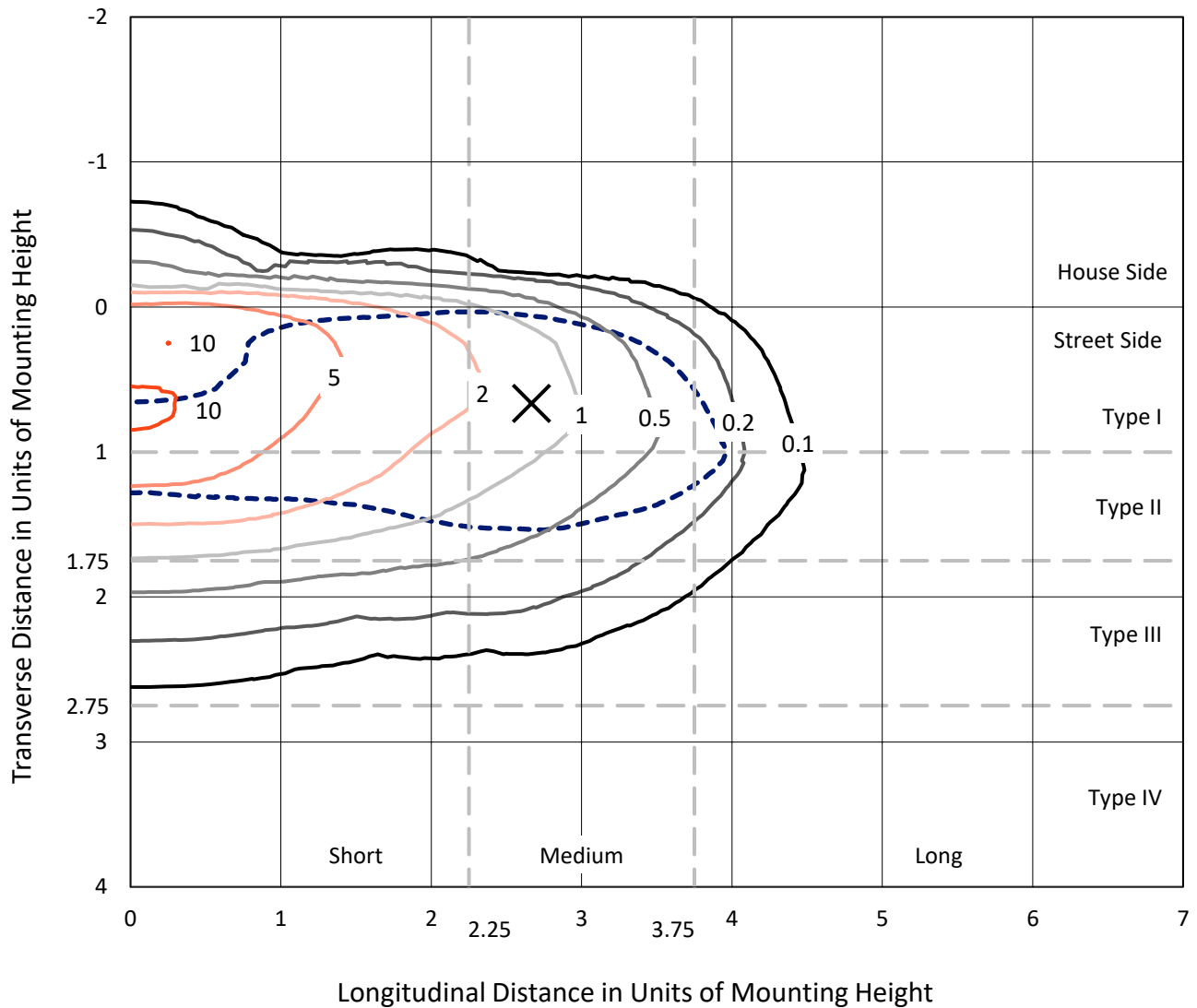
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

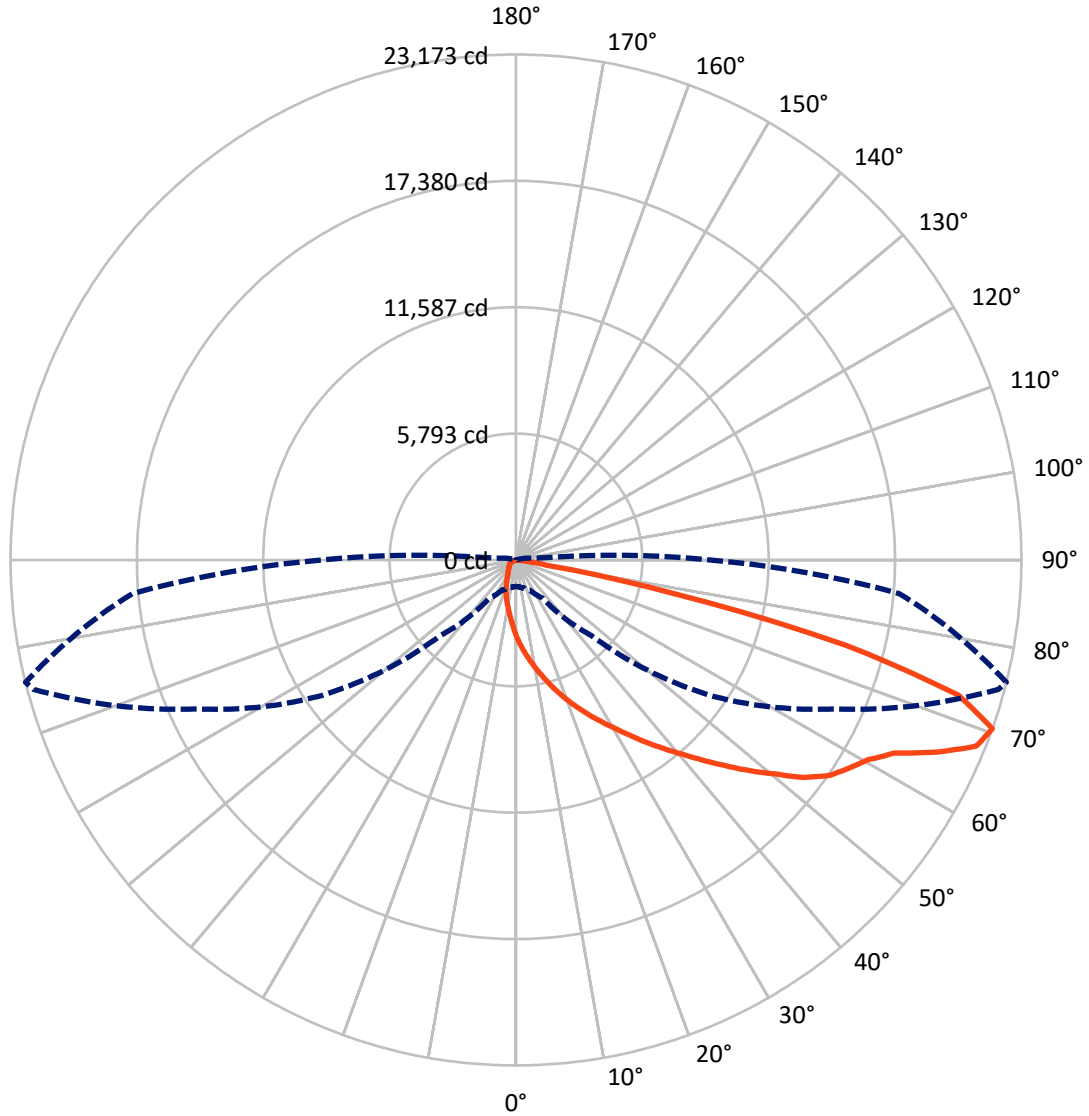
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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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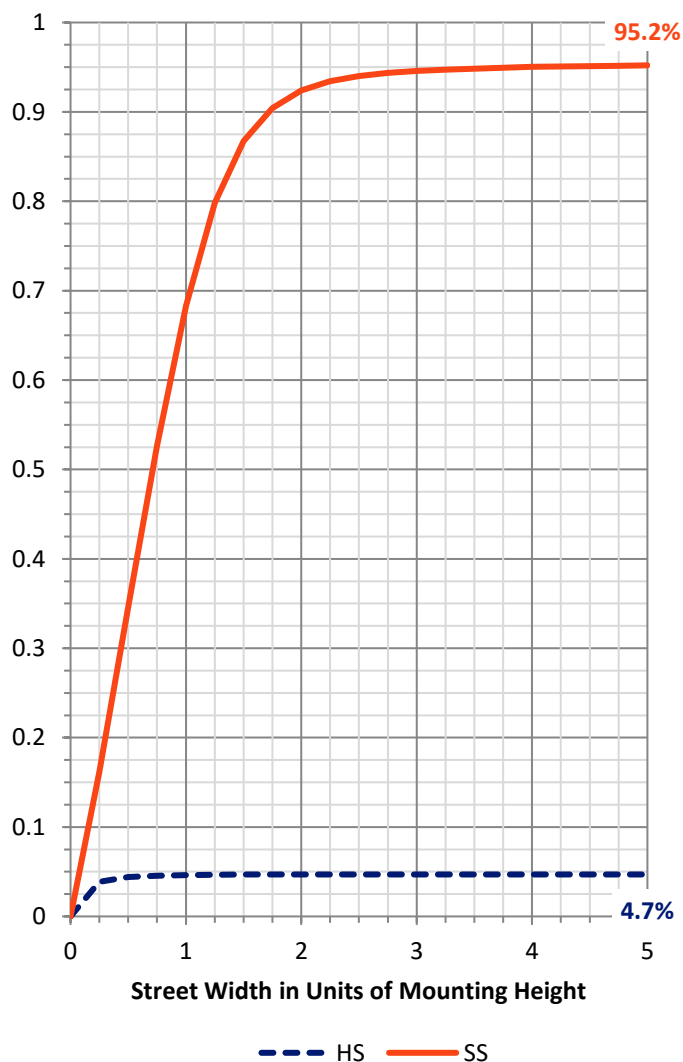
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1234.6	0.0	1234.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	24943.4	0.0	24943.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	26178.0	0.0	26178.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.1	1.3
10°-20°	1065.4	4.1
20°-30°	1984.2	7.6
30°-40°	3509.6	13.4
40°-50°	5367.1	20.5
50°-60°	6085.0	23.2
60°-70°	5216.3	19.9
70°-80°	2526.5	9.7
80°-90°	93.7	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°	26178.0	100.0
0°-180°	26178.0	100.0

**Coefficient of Utilization**

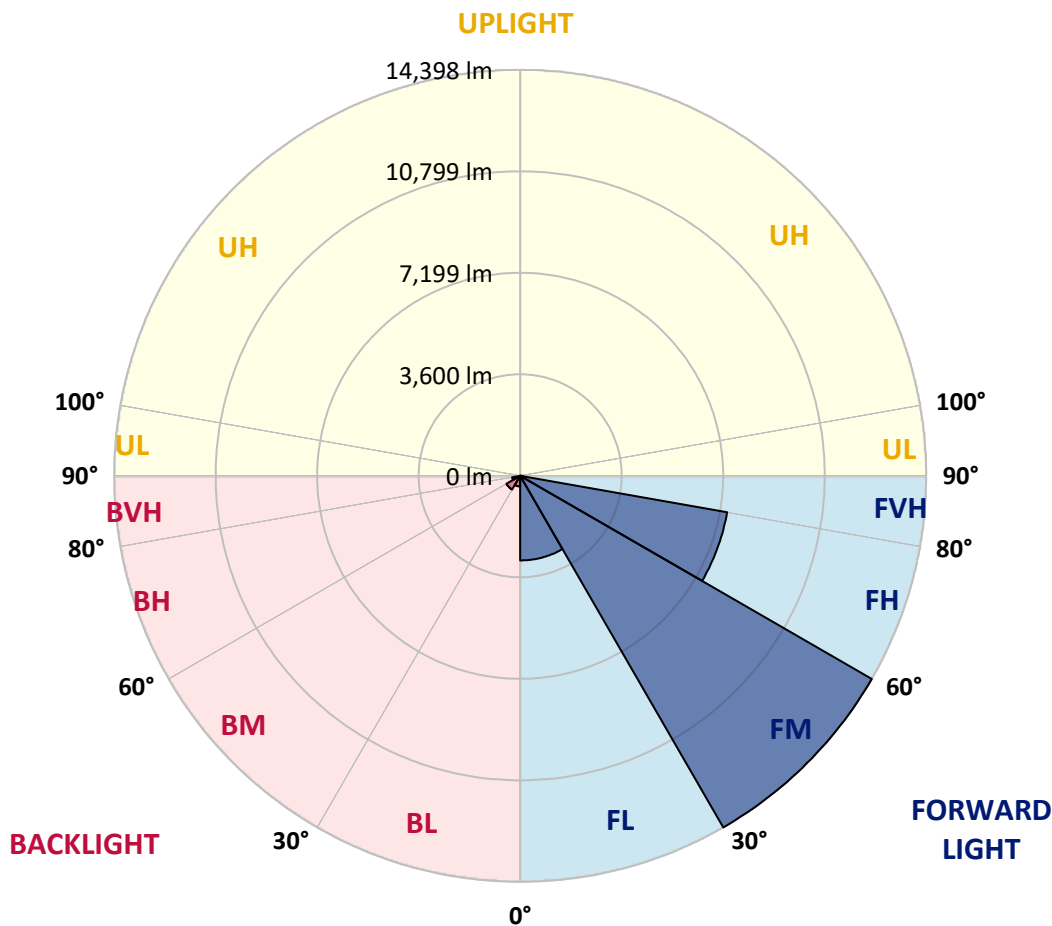


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3001.0	11.5			
FM (30°-60°)	14398.1	55.0			
FH (60°-80°)	7452.1	28.5			G3/7500
FVH (80°-90°)	92.1	0.4			G1/100
BL (0°-30°)	378.7	1.4	B1/500		
BM (30°-60°)	563.6	2.2	B1/1000		
BH (60°-80°)	290.7	1.1	B1/500		G1/500
BVH (80°-90°)	1.6	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-G3**  
 Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1
2.5°	4789.8	4763.6	4737.5	4637.3	4545.7	4462.9	4306.0	4101.2	3918.1	3878.9	3665.4
5°	5626.6	5596.1	5556.9	5456.6	5338.9	5199.5	4968.5	4654.7	4332.2	4262.4	3865.8
7.5°	6193.2	6167.0	6110.4	6062.4	5944.8	5809.6	5552.5	5186.4	4741.9	4654.7	4096.8
10°	6581.1	6563.6	6554.9	6515.7	6428.5	6319.6	6062.4	5678.9	5155.9	5055.7	4340.9
12.5°	6720.5	6720.5	6764.1	6829.5	6842.6	6807.7	6572.4	6188.8	5591.7	5487.1	4628.5
15°	6533.1	6554.9	6650.8	6860.0	7077.9	7221.7	7073.6	6716.2	6071.1	5957.8	4968.5
17.5°	6480.8	6502.6	6568.0	6751.0	7043.1	7426.6	7500.7	7226.1	6524.4	6428.5	5317.2
20°	6629.0	6650.8	6707.5	6864.4	7086.6	7474.5	7784.0	7718.6	7003.8	6903.6	5670.2
22.5°	6982.0	6995.1	6995.1	7117.1	7313.3	7600.9	7962.7	8184.9	7496.3	7387.4	6018.8
25°	7740.4	7714.2	7609.6	7548.6	7675.0	7910.4	8189.3	8594.6	8045.5	7897.3	6393.7
27.5°	8734.1	8821.3	8568.5	8276.5	8180.6	8315.7	8507.5	8956.4	8577.2	8420.3	6733.6
30°	10080.8	10045.9	9714.7	9296.3	8882.3	8834.3	8899.7	9265.8	9108.9	8960.7	7112.8
32.5°	11187.8	11253.2	10904.5	10394.6	9775.7	9483.7	9414.0	9636.3	9675.5	9579.6	7561.7
35°	12325.3	12395.1	12055.1	11488.5	10752.0	10263.9	10063.4	10093.9	10377.2	10255.1	8032.4
37.5°	13345.2	13406.2	13070.6	12491.0	11754.4	11157.3	10869.7	10634.3	11057.1	10948.1	8529.2
40°	14121.0	14129.7	13903.1	13384.4	12687.1	12068.2	11741.3	11279.3	11776.2	11702.1	9047.9
42.5°	14670.1	14687.6	14521.9	14077.4	13432.4	12857.1	12591.2	12042.1	12604.3	12538.9	9649.3
45°	14927.3	14957.8	14940.3	14530.7	13994.6	13497.7	13410.6	12852.7	13510.8	13449.8	10342.3
47.5°	14683.2	14683.2	14905.5	14848.8	14356.3	14025.1	14125.3	13698.2	14495.8	14439.1	11048.4
50°	13667.7	13680.8	14134.0	14783.4	14495.8	14421.7	14735.5	14526.3	15389.2	15424.1	11893.9
52.5°	11000.4	10978.6	12508.4	13754.9	14399.9	14600.4	15297.7	15371.8	16461.4	16566.0	12735.0
55°	8219.8	8206.7	9671.1	11933.1	13728.7	14508.9	15611.5	16125.8	17376.6	17442.0	13362.6
57.5°	6507.0	6472.1	7278.4	9618.8	12212.0	14099.2	15624.6	16269.6	17886.6	17999.9	13972.8
60°	5003.4	4972.8	5574.3	7156.4	10063.4	13009.6	15249.8	16278.3	18379.1	18579.5	14792.2
62.5°	3578.2	3613.1	4075.0	5134.1	7740.4	11471.1	14761.6	16400.4	19255.1	19481.7	15955.8
65°	2414.5	2397.1	2780.6	3495.4	5504.6	9400.9	14012.0	16657.5	20832.8	21229.4	17350.5
67.5°	1678.0	1691.0	1865.4	2275.0	3495.4	7217.4	12765.5	16801.3	22462.8	22772.2	18326.8
70°	1211.6	1229.0	1324.9	1529.8	2135.6	4894.4	10791.2	16143.2	22903.0	23173.2	17646.9
72.5°	797.6	832.4	976.3	1085.2	1364.2	3063.9	7949.6	13907.4	21007.1	21207.6	14805.2
75°	431.5	440.2	627.6	810.6	971.9	1908.9	4741.9	9379.1	15716.1	15650.7	9762.6
77.5°	335.6	348.7	387.9	579.7	653.7	1050.4	1874.1	4236.3	7444.0	7243.5	3329.8
80°	204.8	213.6	270.2	344.3	457.6	610.2	549.1	1150.6	1512.3	1416.5	488.1
82.5°	122.0	130.7	161.3	287.6	361.7	287.6	191.8	278.9	283.3	278.9	122.0
85°	21.8	21.8	113.3	200.5	191.8	82.8	113.3	91.5	82.8	87.2	26.1
87.5°	0.0	0.0	43.6	61.0	87.2	30.5	43.6	21.8	21.8	21.8	13.1
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°	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1	3504.1
2.5°	3534.6	3386.4	3081.3	2815.5	2549.6	2353.5	2205.3	2052.8	2000.5	1935.1	1900.2
5°	3595.6	3303.6	2697.8	2214.0	1804.3	1490.5	1290.1	1168.0	1089.6	1032.9	1019.8
7.5°	3687.1	3238.2	2388.4	1734.6	1285.7	971.9	806.3	723.5	679.9	653.7	645.0
10°	3796.1	3181.6	2083.3	1351.1	906.5	684.3	592.7	557.9	540.4	531.7	527.4
12.5°	3948.6	3159.8	1826.1	1041.6	684.3	562.2	514.3	492.5	479.4	466.3	462.0
15°	4149.1	3168.5	1590.8	806.3	566.6	501.2	462.0	440.2	422.8	409.7	409.7
17.5°	4358.3	3181.6	1359.8	653.7	514.3	457.6	414.0	383.5	370.5	357.4	353.0
20°	4554.4	3177.2	1137.5	557.9	466.3	409.7	366.1	335.6	313.8	300.7	300.7
22.5°	4741.9	3151.1	928.3	501.2	427.1	361.7	313.8	283.3	265.9	252.8	252.8
25°	4942.3	3098.8	758.3	457.6	379.2	318.2	270.2	239.7	226.6	213.6	213.6
27.5°	5099.2	3011.6	618.9	418.4	335.6	274.6	231.0	204.8	191.8	183.0	183.0
30°	5269.2	2885.2	514.3	374.8	292.0	235.3	196.1	174.3	161.3	156.9	156.9
32.5°	5456.6	2745.7	440.2	331.2	248.4	200.5	165.6	152.5	139.5	135.1	135.1
35°	5674.5	2623.7	396.6	287.6	217.9	170.0	143.8	130.7	122.0	122.0	122.0
37.5°	5923.0	2497.3	357.4	252.8	187.4	143.8	122.0	117.7	113.3	109.0	109.0
40°	6193.2	2362.2	322.5	222.3	161.3	122.0	104.6	104.6	100.2	100.2	100.2
42.5°	6498.3	2244.5	292.0	196.1	139.5	104.6	91.5	91.5	87.2	87.2	87.2
45°	6829.5	2135.6	265.9	174.3	122.0	91.5	82.8	78.4	74.1	74.1	74.1
47.5°	7221.7	2074.6	244.1	152.5	104.6	78.4	69.7	65.4	61.0	56.7	56.7
50°	7723.0	2100.7	222.3	126.4	91.5	65.4	56.7	52.3	47.9	43.6	43.6
52.5°	8119.6	2087.6	191.8	109.0	74.1	52.3	43.6	39.2	34.9	30.5	30.5
55°	8407.2	2035.3	165.6	91.5	56.7	43.6	34.9	26.1	21.8	21.8	21.8
57.5°	8690.5	1983.0	139.5	74.1	43.6	30.5	21.8	17.4	17.4	17.4	17.4
60°	9130.7	1908.9	122.0	61.0	34.9	21.8	13.1	13.1	8.7	8.7	8.7
62.5°	9666.8	1817.4	100.2	52.3	26.1	17.4	8.7	8.7	0.0	0.0	0.0
65°	10255.1	1656.2	82.8	39.2	21.8	13.1	8.7	0.0	0.0	0.0	0.0
67.5°	10120.0	1329.3	69.7	26.1	17.4	8.7	4.4	0.0	0.0	0.0	0.0
70°	8952.0	897.8	56.7	21.8	13.1	8.7	4.4	0.0	0.0	0.0	0.0
72.5°	7012.5	531.7	39.2	17.4	8.7	4.4	0.0	0.0	0.0	0.0	0.0
75°	4489.1	265.9	26.1	13.1	8.7	4.4	0.0	0.0	0.0	0.0	0.0
77.5°	1503.6	130.7	17.4	8.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	213.6	43.6	8.7	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	47.9	17.4	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.4	8.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	4.4	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)