

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: P400200

Luminaire Tested: **ARCH-L-PA3-250-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400200  
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-PA3-250-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 1070mA 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: 22394 lumens  
Efficiency: N/A  
Efficacy: 89.2 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

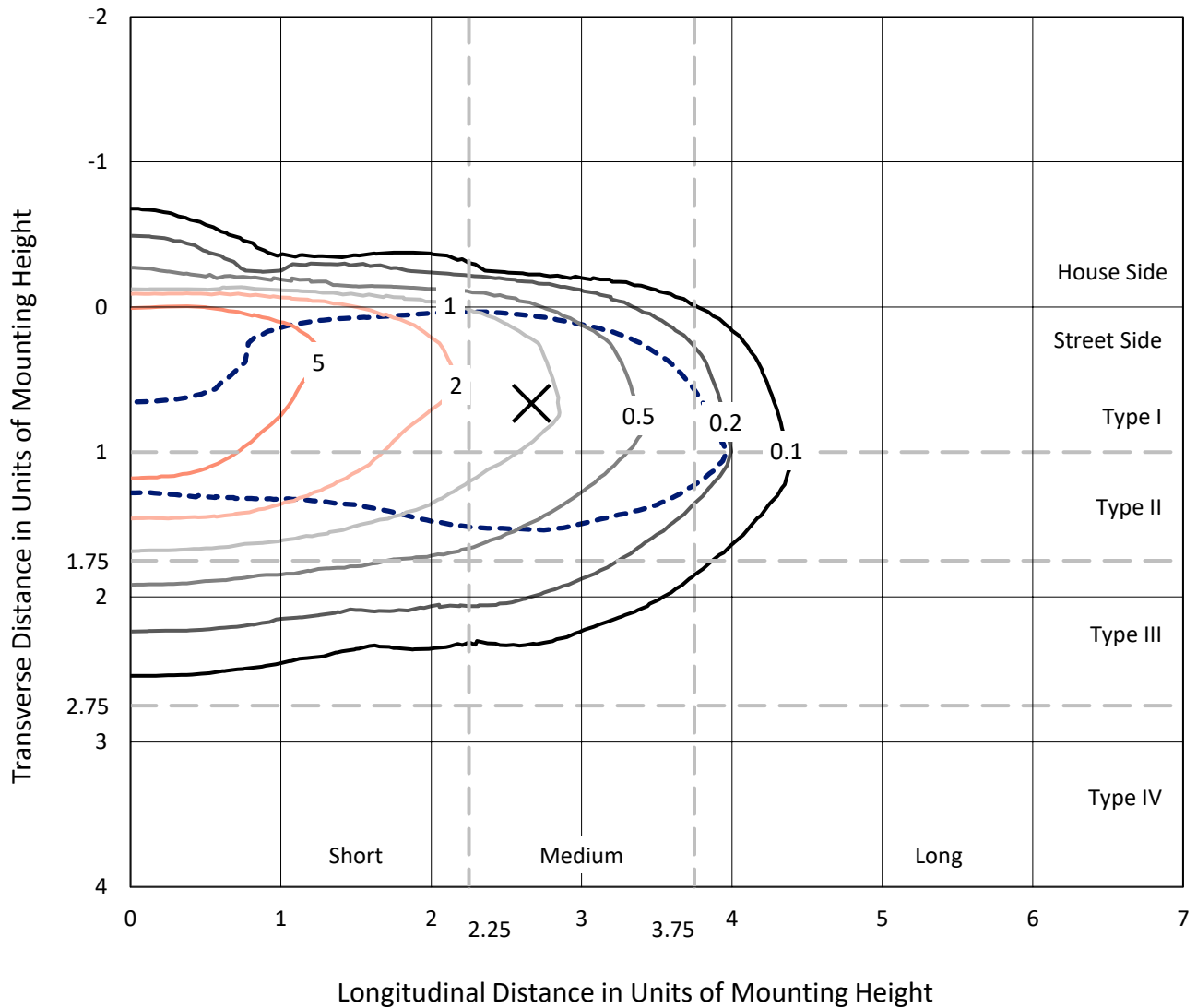
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

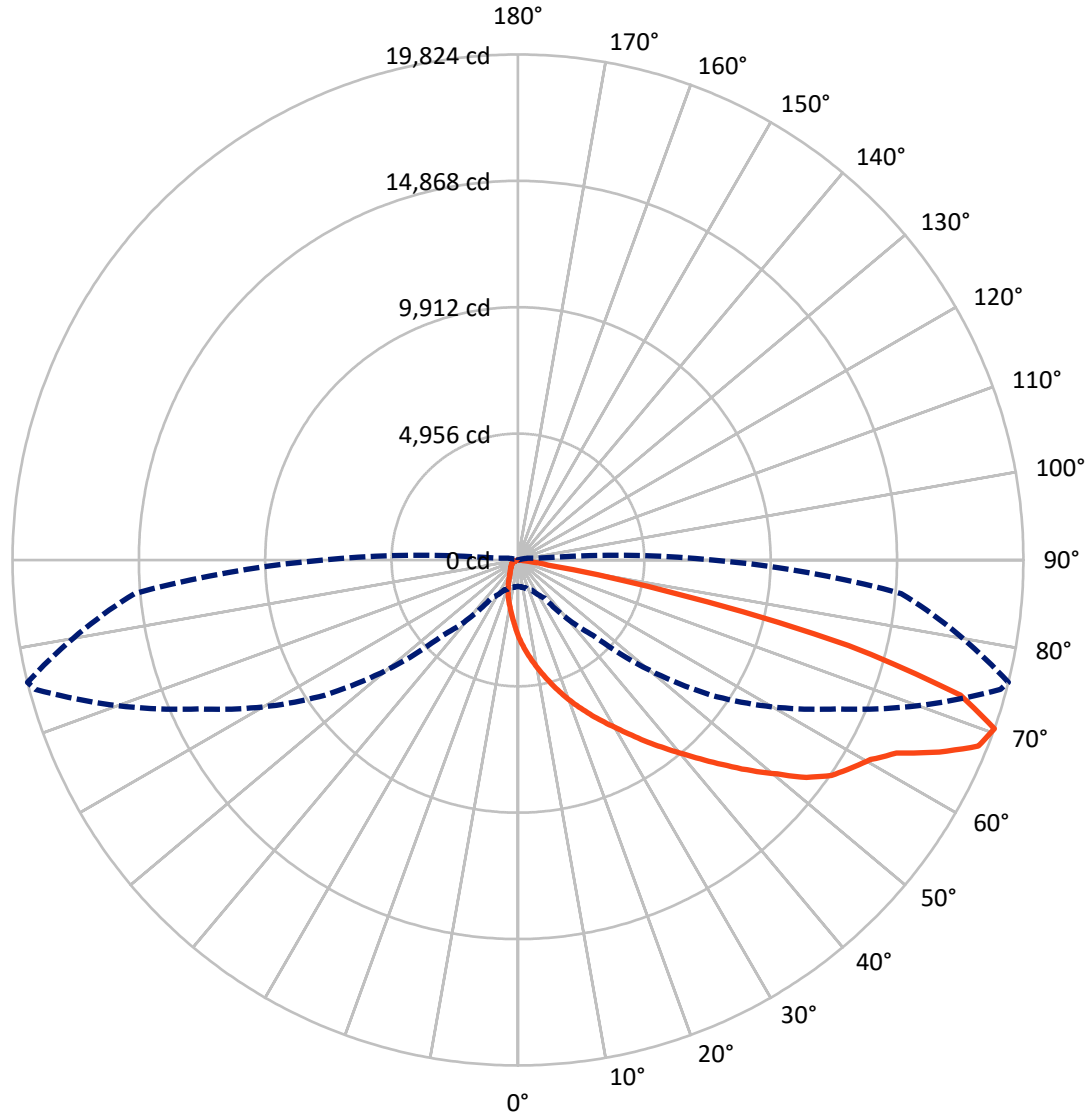
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 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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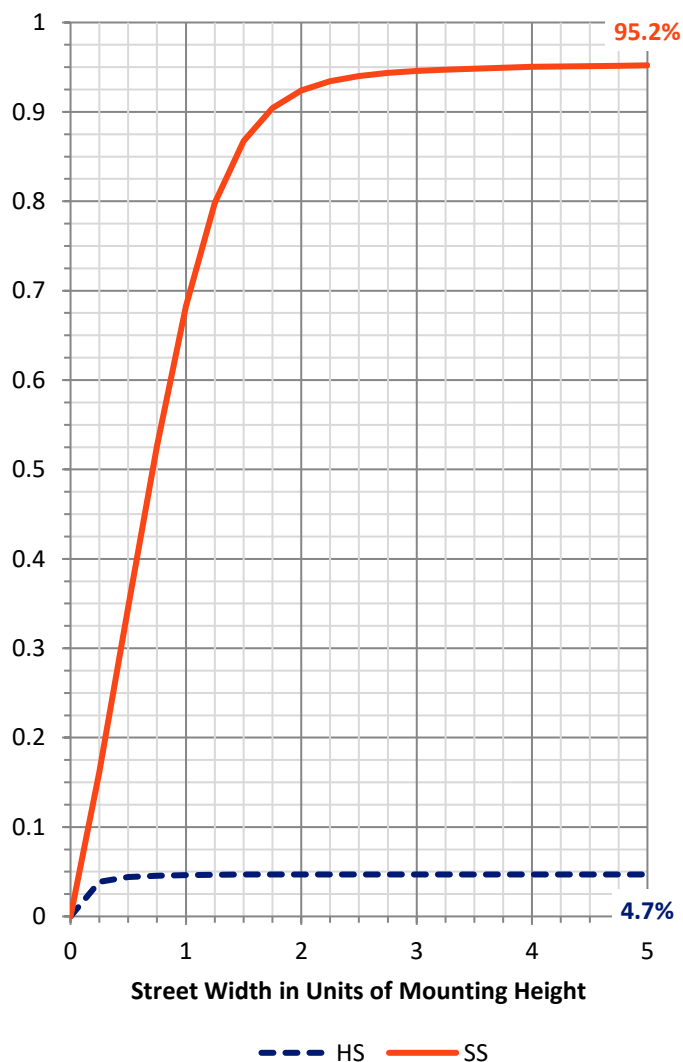
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1056.2	0.0	1056.2
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	21337.8	0.0	21337.8
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	22394.0	0.0	22394.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.4	1.3
10°-20°	911.4	4.1
20°-30°	1697.4	7.6
30°-40°	3002.3	13.4
40°-50°	4591.3	20.5
50°-60°	5205.4	23.2
60°-70°	4462.3	19.9
70°-80°	2161.3	9.7
80°-90°	80.2	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°	22394.0	100.0
0°-180°	22394.0	100.0

**Coefficient of Utilization**

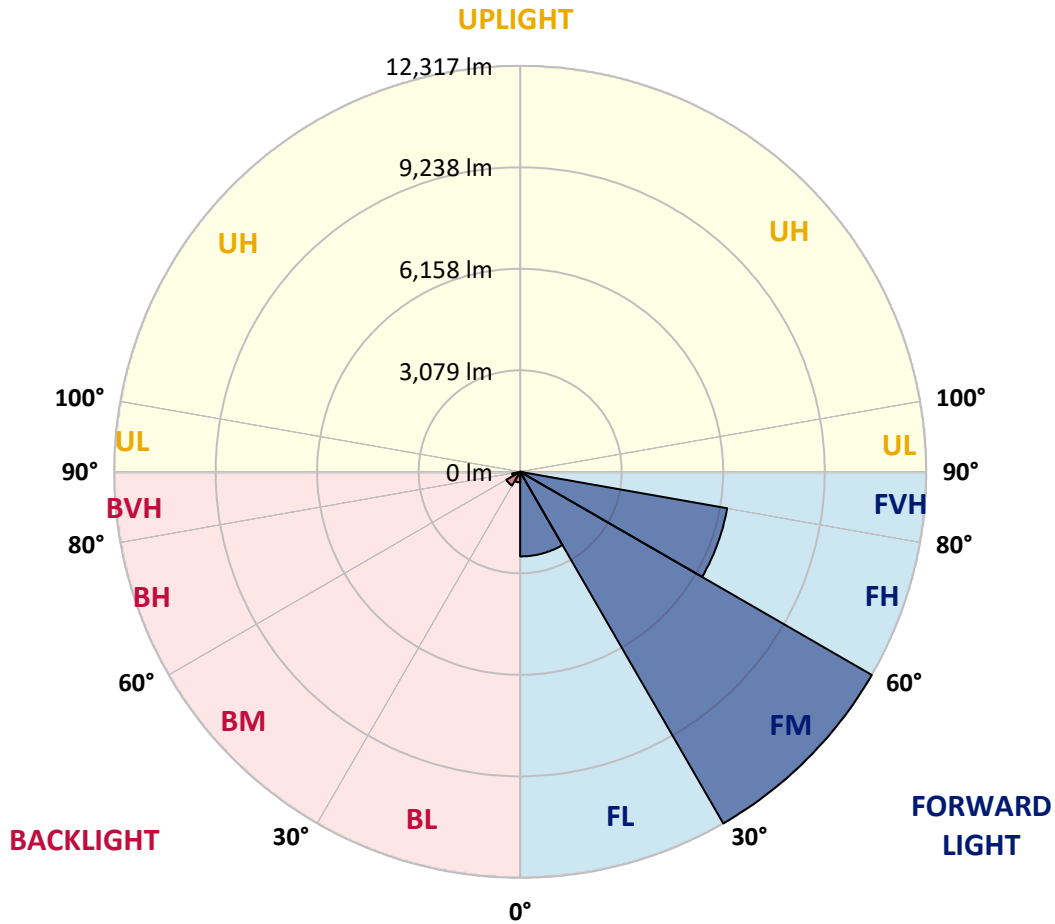


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2567.2	11.5			
FM (30°-60°)	12316.9	55.0			
FH (60°-80°)	6374.9	28.5			G3/7500
FVH (80°-90°)	78.8	0.4			G1/100
BL (0°-30°)	324.0	1.4	B1/500		
BM (30°-60°)	482.1	2.2	B1/1000		
BH (60°-80°)	248.7	1.1	B1/500		G1/500
BVH (80°-90°)	1.4	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°	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6
2.5°	4097.4	4075.1	4052.7	3966.9	3888.7	3817.8	3683.6	3508.4	3351.8	3318.2	3135.5
5°	4813.3	4787.2	4753.6	4667.9	4567.2	4447.9	4250.3	3981.9	3706.0	3646.3	3307.0
7.5°	5298.0	5275.6	5227.1	5186.1	5085.4	4969.9	4749.9	4436.7	4056.4	3981.9	3504.6
10°	5629.8	5614.9	5607.4	5573.9	5499.3	5406.1	5186.1	4858.0	4410.6	4324.9	3713.4
12.5°	5749.1	5749.1	5786.4	5842.3	5853.5	5823.7	5622.3	5294.2	4783.5	4694.0	3959.5
15°	5588.8	5607.4	5689.4	5868.4	6054.8	6177.8	6051.1	5745.4	5193.6	5096.6	4250.3
17.5°	5544.0	5562.7	5618.6	5775.2	6025.0	6353.1	6416.5	6181.6	5581.3	5499.3	4548.6
20°	5670.8	5689.4	5737.9	5872.1	6062.3	6394.1	6658.8	6602.9	5991.4	5905.7	4850.6
22.5°	5972.8	5984.0	5984.0	6088.4	6256.1	6502.2	6811.7	7001.8	6412.7	6319.5	5148.8
25°	6621.5	6599.2	6509.7	6457.5	6565.6	6766.9	7005.5	7352.3	6882.5	6755.7	5469.5
27.5°	7471.6	7546.1	7329.9	7080.1	6998.1	7113.7	7277.7	7661.7	7337.4	7203.1	5760.3
30°	8623.6	8593.8	8310.5	7952.5	7598.3	7557.3	7613.3	7926.4	7792.2	7665.5	6084.6
32.5°	9570.6	9626.6	9328.3	8892.1	8362.7	8112.9	8053.2	8243.3	8276.9	8194.9	6468.7
35°	10543.7	10603.4	10312.6	9827.9	9197.8	8780.2	8608.7	8634.8	8877.2	8772.8	6871.3
37.5°	11416.2	11468.4	11181.3	10685.4	10055.3	9544.5	9298.5	9097.1	9458.8	9365.6	7296.4
40°	12079.8	12087.3	11893.4	11449.7	10853.2	10323.8	10044.1	9648.9	10074.0	10010.6	7740.0
42.5°	12549.6	12564.5	12422.8	12042.5	11490.7	10998.6	10771.2	10301.4	10782.3	10726.4	8254.5
45°	12769.5	12795.6	12780.7	12430.3	11971.7	11546.7	11472.1	10994.9	11557.8	11505.6	8847.3
47.5°	12560.8	12560.8	12750.9	12702.4	12281.1	11997.8	12083.5	11718.2	12400.4	12352.0	9451.3
50°	11692.1	11703.2	12091.0	12646.5	12400.4	12337.1	12605.5	12426.5	13164.7	13194.6	10174.6
52.5°	9410.3	9391.7	10700.3	11766.6	12318.4	12489.9	13086.5	13149.8	14081.9	14171.4	10894.2
55°	7031.6	7020.5	8273.2	10208.2	11744.3	12411.6	13354.9	13794.8	14864.9	14920.8	11431.1
57.5°	5566.4	5536.6	6226.3	8228.4	10446.8	12061.2	13366.1	13917.9	15301.1	15398.0	11953.0
60°	4280.1	4254.0	4768.5	6121.9	8608.7	11129.1	13045.4	13925.3	15722.4	15893.9	12654.0
62.5°	3061.0	3090.8	3486.0	4392.0	6621.5	9813.0	12627.9	14029.7	16471.8	16665.7	13649.4
65°	2065.5	2050.6	2378.7	2990.1	4708.9	8042.0	11986.6	14249.7	17821.4	18160.7	14842.5
67.5°	1435.4	1446.6	1595.7	1946.2	2990.1	6174.1	10920.3	14372.7	19215.8	19480.5	15677.6
70°	1036.5	1051.4	1133.4	1308.6	1826.9	4186.9	9231.4	13809.7	19592.4	19823.6	15096.0
72.5°	682.3	712.1	835.1	928.4	1167.0	2621.0	6800.5	11897.1	17970.6	18142.1	12665.2
75°	369.1	376.6	536.9	693.5	831.4	1633.0	4056.4	8023.4	13444.4	13388.4	8351.5
77.5°	287.1	298.3	331.8	495.9	559.3	898.5	1603.2	3623.9	6368.0	6196.5	2848.4
80°	175.2	182.7	231.2	294.5	391.5	522.0	469.8	984.3	1293.7	1211.7	417.6
82.5°	104.4	111.9	137.9	246.1	309.5	246.1	164.0	238.6	242.3	238.6	104.4
85°	18.6	18.6	96.9	171.5	164.0	70.8	96.9	78.3	70.8	74.6	22.4
87.5°	0.0	0.0	37.3	52.2	74.6	26.1	37.3	18.6	18.6	18.6	11.2
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°	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6	2997.6
2.5°	3023.7	2896.9	2635.9	2408.5	2181.1	2013.3	1886.5	1756.0	1711.3	1655.4	1625.6
5°	3075.9	2826.1	2307.8	1894.0	1543.5	1275.1	1103.6	999.2	932.1	883.6	872.4
7.5°	3154.2	2770.2	2043.1	1483.9	1099.9	831.4	689.7	618.9	581.6	559.3	551.8
10°	3247.4	2721.7	1782.1	1155.8	775.5	585.3	507.1	477.2	462.3	454.9	451.1
12.5°	3377.9	2703.0	1562.2	891.1	585.3	481.0	439.9	421.3	410.1	398.9	395.2
15°	3549.4	2710.5	1360.8	689.7	484.7	428.8	395.2	376.6	361.6	350.5	350.5
17.5°	3728.3	2721.7	1163.2	559.3	439.9	391.5	354.2	328.1	316.9	305.7	302.0
20°	3896.1	2718.0	973.1	477.2	398.9	350.5	313.2	287.1	268.4	257.3	257.3
22.5°	4056.4	2695.6	794.1	428.8	365.4	309.5	268.4	242.3	227.4	216.2	216.2
25°	4227.9	2650.8	648.7	391.5	324.4	272.2	231.2	205.1	193.9	182.7	182.7
27.5°	4362.2	2576.3	529.4	357.9	287.1	234.9	197.6	175.2	164.0	156.6	156.6
30°	4507.6	2468.2	439.9	320.6	249.8	201.3	167.8	149.1	137.9	134.2	134.2
32.5°	4667.9	2348.9	376.6	283.4	212.5	171.5	141.7	130.5	119.3	115.6	115.6
35°	4854.3	2244.5	339.3	246.1	186.4	145.4	123.0	111.9	104.4	104.4	104.4
37.5°	5066.8	2136.3	305.7	216.2	160.3	123.0	104.4	100.7	96.9	93.2	93.2
40°	5298.0	2020.8	275.9	190.1	137.9	104.4	89.5	89.5	85.8	85.8	85.8
42.5°	5558.9	1920.1	249.8	167.8	119.3	89.5	78.3	78.3	74.6	74.6	74.6
45°	5842.3	1826.9	227.4	149.1	104.4	78.3	70.8	67.1	63.4	63.4	63.4
47.5°	6177.8	1774.7	208.8	130.5	89.5	67.1	59.7	55.9	52.2	48.5	48.5
50°	6606.6	1797.1	190.1	108.1	78.3	55.9	48.5	44.7	41.0	37.3	37.3
52.5°	6945.9	1785.9	164.0	93.2	63.4	44.7	37.3	33.6	29.8	26.1	26.1
55°	7192.0	1741.1	141.7	78.3	48.5	37.3	29.8	22.4	18.6	18.6	18.6
57.5°	7434.3	1696.4	119.3	63.4	37.3	26.1	18.6	14.9	14.9	14.9	14.9
60°	7810.9	1633.0	104.4	52.2	29.8	18.6	11.2	11.2	7.5	7.5	7.5
62.5°	8269.4	1554.7	85.8	44.7	22.4	14.9	7.5	7.5	0.0	0.0	0.0
65°	8772.8	1416.8	70.8	33.6	18.6	11.2	7.5	0.0	0.0	0.0	0.0
67.5°	8657.2	1137.1	59.7	22.4	14.9	7.5	3.7	0.0	0.0	0.0	0.0
70°	7658.0	768.0	48.5	18.6	11.2	7.5	3.7	0.0	0.0	0.0	0.0
72.5°	5998.9	454.9	33.6	14.9	7.5	3.7	0.0	0.0	0.0	0.0	0.0
75°	3840.2	227.4	22.4	11.2	7.5	3.7	0.0	0.0	0.0	0.0	0.0
77.5°	1286.3	111.9	14.9	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	182.7	37.3	7.5	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.0	14.9	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.9	7.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.5	3.7	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)