

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: P399192

Luminaire Tested: **ARCH-L-PA3-110-727-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399192  
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-PA3-110-727-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 485mA 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: 12204 lumens  
Efficiency: N/A  
Efficacy: 108.0 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

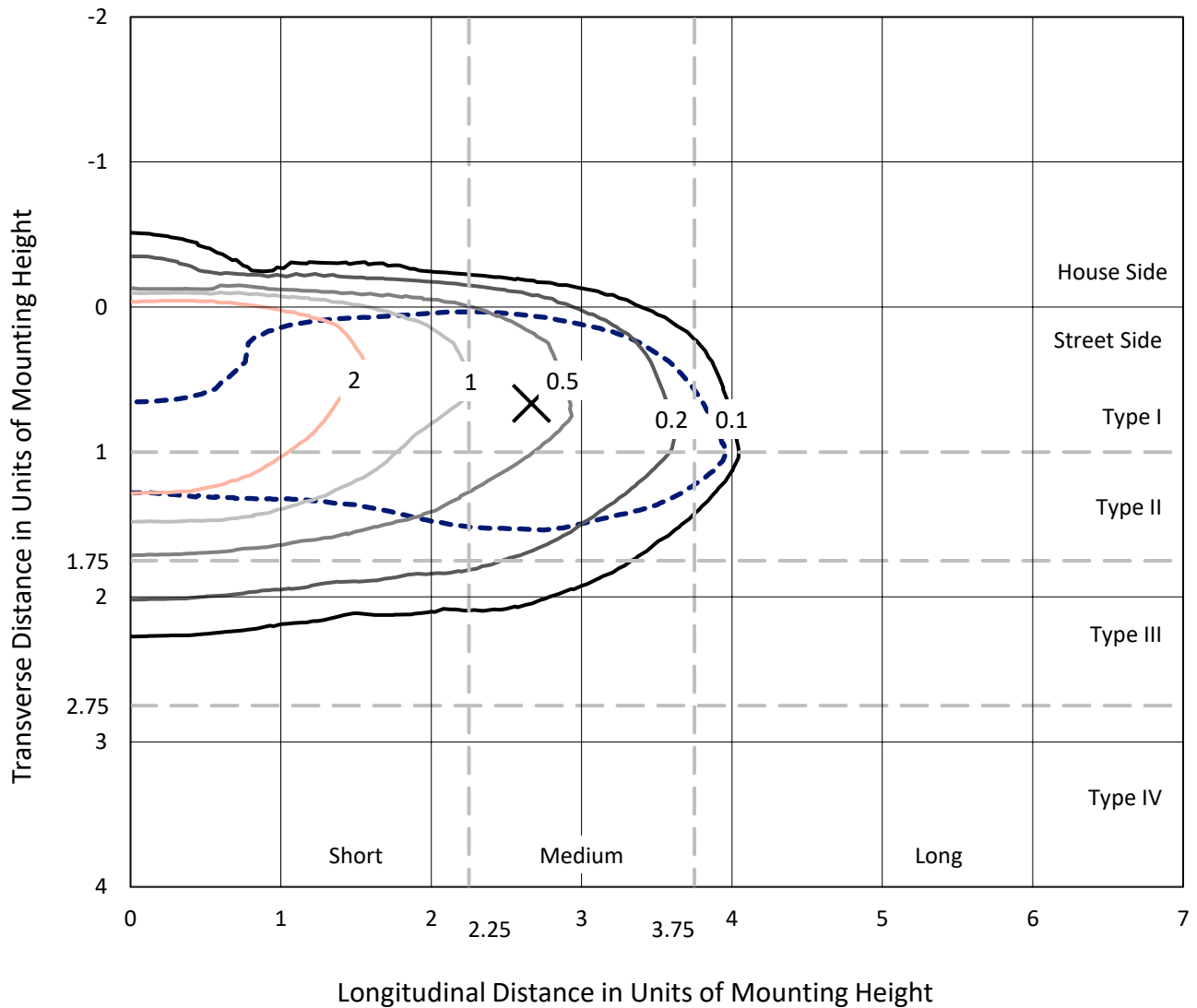
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

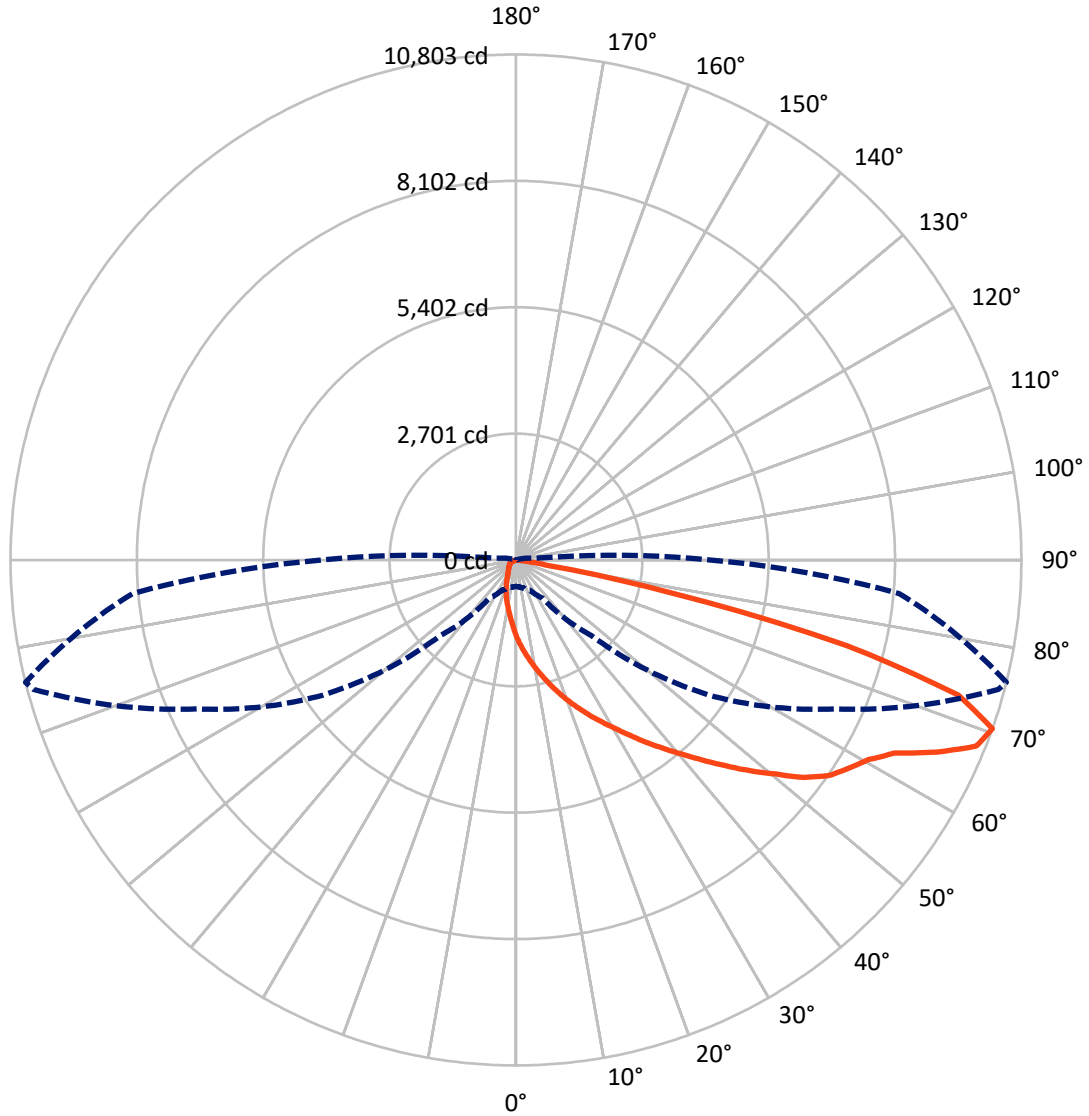
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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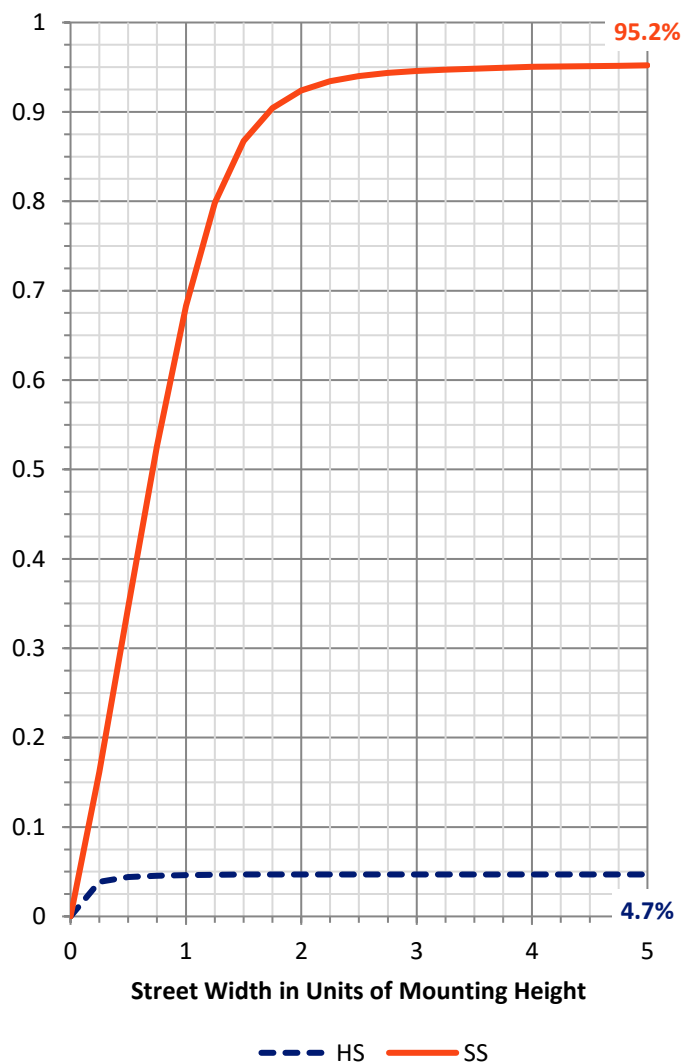
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	575.6	0.0	575.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	11628.4	0.0	11628.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	12204.0	0.0	12204.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.9	1.3
10°-20°	496.7	4.1
20°-30°	925.0	7.6
30°-40°	1636.2	13.4
40°-50°	2502.1	20.5
50°-60°	2836.8	23.2
60°-70°	2431.8	19.9
70°-80°	1177.8	9.7
80°-90°	43.7	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°	12204.0	100.0
0°-180°	12204.0	100.0

**Coefficient of Utilization**

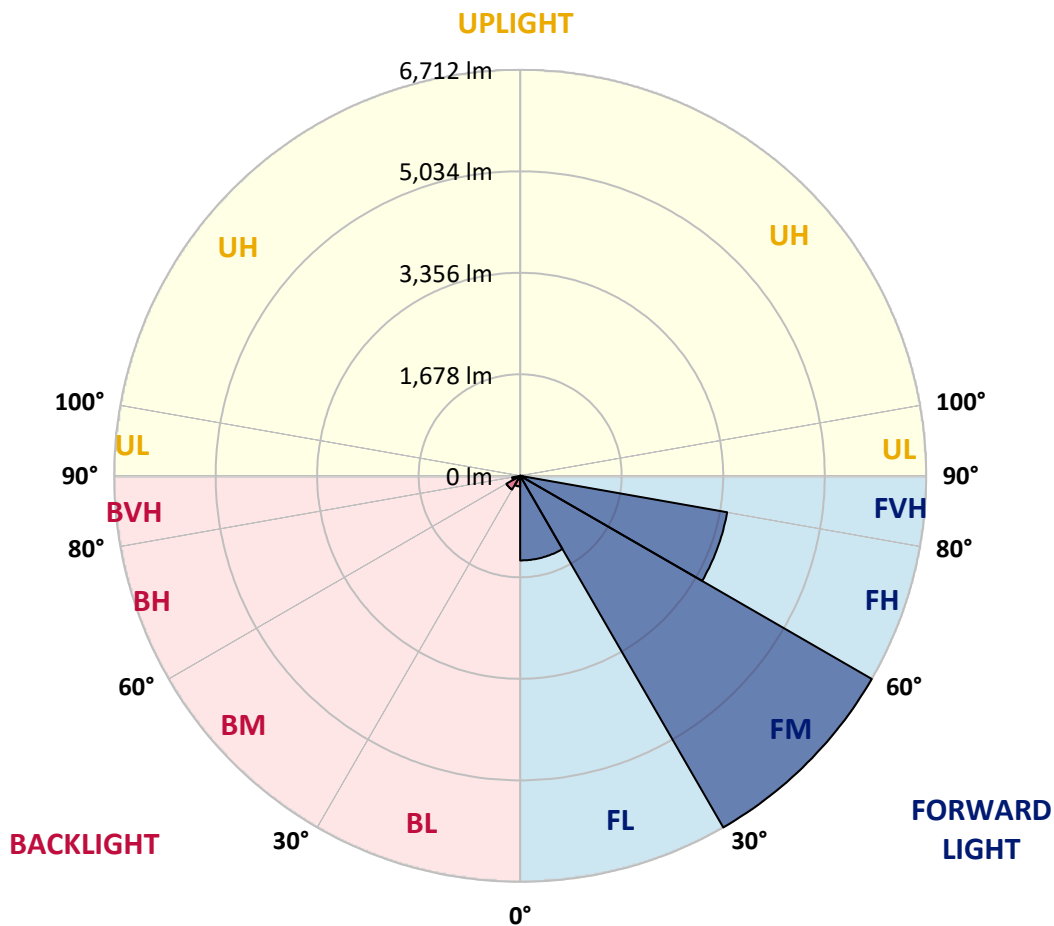


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1399.1	11.5			
FM (30°-60°)	6712.3	55.0			
FH (60°-80°)	3474.1	28.5			G2/5000
FVH (80°-90°)	42.9	0.4			G1/100
BL (0°-30°)	176.6	1.4	B1/500		
BM (30°-60°)	262.7	2.2	B1/1000		
BH (60°-80°)	135.5	1.1	B1/500		G1/500
BVH (80°-90°)	0.7	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°	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6
2.5°	2233.0	2220.8	2208.6	2161.9	2119.2	2080.6	2007.4	1911.9	1826.6	1808.3	1708.8
5°	2623.1	2608.9	2590.6	2543.8	2489.0	2424.0	2316.3	2170.0	2019.6	1987.1	1802.2
7.5°	2887.2	2875.0	2848.6	2826.3	2771.4	2708.4	2588.5	2417.9	2210.6	2170.0	1909.9
10°	3068.0	3059.9	3055.9	3037.6	2996.9	2946.1	2826.3	2647.5	2403.6	2356.9	2023.7
12.5°	3133.1	3133.1	3153.4	3183.9	3190.0	3173.7	3064.0	2885.2	2606.8	2558.1	2157.8
15°	3045.7	3055.9	3100.6	3198.1	3299.7	3366.7	3297.6	3131.0	2830.3	2777.5	2316.3
17.5°	3021.3	3031.5	3062.0	3147.3	3283.4	3462.2	3496.8	3368.8	3041.6	2996.9	2478.8
20°	3090.4	3100.6	3127.0	3200.1	3303.7	3484.6	3628.8	3598.4	3265.1	3218.4	2643.4
22.5°	3255.0	3261.1	3261.1	3318.0	3409.4	3543.5	3712.1	3815.8	3494.7	3443.9	2805.9
25°	3608.5	3596.3	3547.6	3519.1	3578.0	3687.8	3817.8	4006.8	3750.7	3681.7	2980.7
27.5°	4071.8	4112.4	3994.6	3858.4	3813.7	3876.7	3966.1	4175.4	3998.6	3925.5	3139.2
30°	4699.6	4683.3	4528.9	4333.9	4140.9	4118.5	4149.0	4319.7	4246.5	4177.4	3315.9
32.5°	5215.7	5246.2	5083.6	4845.9	4557.4	4421.2	4388.7	4492.4	4510.6	4465.9	3525.2
35°	5746.0	5778.5	5620.0	5355.9	5012.5	4784.9	4691.5	4705.7	4837.8	4780.9	3744.6
37.5°	6221.4	6249.9	6093.4	5823.2	5479.8	5201.5	5067.4	4957.6	5154.7	5103.9	3976.3
40°	6583.1	6587.2	6481.5	6239.7	5914.6	5626.1	5473.7	5258.4	5490.0	5455.4	4218.1
42.5°	6839.1	6847.2	6770.0	6562.8	6262.1	5993.9	5869.9	5613.9	5876.0	5845.5	4498.5
45°	6959.0	6973.2	6965.1	6774.1	6524.2	6292.5	6251.9	5991.8	6298.6	6270.2	4821.5
47.5°	6845.2	6845.2	6948.8	6922.4	6692.8	6538.4	6585.1	6386.0	6757.8	6731.4	5150.7
50°	6371.8	6377.9	6589.2	6891.9	6757.8	6723.3	6869.6	6772.1	7174.4	7190.6	5544.8
52.5°	5128.3	5118.2	5831.3	6412.4	6713.1	6806.6	7131.7	7166.2	7674.2	7723.0	5937.0
55°	3832.0	3825.9	4508.6	5563.1	6400.2	6763.9	7278.0	7517.7	8100.9	8131.3	6229.6
57.5°	3033.5	3017.3	3393.1	4484.2	5693.2	6572.9	7284.1	7584.8	8338.6	8391.4	6514.0
60°	2332.5	2318.3	2598.7	3336.2	4691.5	6065.0	7109.3	7588.9	8568.2	8661.7	6896.0
62.5°	1668.1	1684.4	1899.8	2393.5	3608.5	5347.8	6881.8	7645.7	8976.6	9082.2	7438.5
65°	1125.6	1117.5	1296.3	1629.5	2566.2	4382.6	6532.3	7765.6	9712.1	9897.0	8088.7
67.5°	782.3	788.3	869.6	1060.6	1629.5	3364.7	5951.2	7832.7	10472.0	10616.3	8543.8
70°	564.8	573.0	617.7	713.2	995.6	2281.7	5030.8	7525.9	10677.2	10803.2	8226.8
72.5°	371.8	388.1	455.1	505.9	636.0	1428.4	3706.0	6483.5	9793.4	9886.8	6902.1
75°	201.2	205.2	292.6	377.9	453.1	889.9	2210.6	4372.5	7326.7	7296.3	4551.3
77.5°	156.5	162.5	180.8	270.2	304.8	489.7	873.7	1974.9	3470.3	3376.9	1552.3
80°	95.5	99.6	126.0	160.5	213.3	284.5	256.0	536.4	705.0	660.3	227.6
82.5°	56.9	61.0	75.2	134.1	168.6	134.1	89.4	130.0	132.1	130.0	56.9
85°	10.2	10.2	52.8	93.5	89.4	38.6	52.8	42.7	38.6	40.6	12.2
87.5°	0.0	0.0	20.3	28.4	40.6	14.2	20.3	10.2	10.2	10.2	6.1
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°	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6	1633.6
2.5°	1647.8	1578.7	1436.5	1312.6	1188.6	1097.2	1028.1	957.0	932.6	902.1	885.9
5°	1676.3	1540.1	1257.7	1032.2	841.2	694.9	601.4	544.5	508.0	481.5	475.4
7.5°	1718.9	1509.6	1113.4	808.7	599.4	453.1	375.9	337.3	317.0	304.8	300.7
10°	1769.7	1483.2	971.2	629.9	422.6	319.0	276.3	260.1	251.9	247.9	245.9
12.5°	1840.8	1473.1	851.3	485.6	319.0	262.1	239.8	229.6	223.5	217.4	215.4
15°	1934.3	1477.1	741.6	375.9	264.1	233.7	215.4	205.2	197.1	191.0	191.0
17.5°	2031.8	1483.2	633.9	304.8	239.8	213.3	193.0	178.8	172.7	166.6	164.6
20°	2123.3	1481.2	530.3	260.1	217.4	191.0	170.7	156.5	146.3	140.2	140.2
22.5°	2210.6	1469.0	432.8	233.7	199.1	168.6	146.3	132.1	123.9	117.8	117.8
25°	2304.1	1444.6	353.5	213.3	176.8	148.3	126.0	111.8	105.7	99.6	99.6
27.5°	2377.2	1404.0	288.5	195.1	156.5	128.0	107.7	95.5	89.4	85.3	85.3
30°	2456.5	1345.1	239.8	174.7	136.1	109.7	91.4	81.3	75.2	73.1	73.1
32.5°	2543.8	1280.0	205.2	154.4	115.8	93.5	77.2	71.1	65.0	63.0	63.0
35°	2645.4	1223.2	184.9	134.1	101.6	79.2	67.1	61.0	56.9	56.9	56.9
37.5°	2761.2	1164.2	166.6	117.8	87.4	67.1	56.9	54.9	52.8	50.8	50.8
40°	2887.2	1101.2	150.4	103.6	75.2	56.9	48.8	48.8	46.7	46.7	46.7
42.5°	3029.4	1046.4	136.1	91.4	65.0	48.8	42.7	42.7	40.6	40.6	40.6
45°	3183.9	995.6	123.9	81.3	56.9	42.7	38.6	36.6	34.5	34.5	34.5
47.5°	3366.7	967.1	113.8	71.1	48.8	36.6	32.5	30.5	28.4	26.4	26.4
50°	3600.4	979.3	103.6	58.9	42.7	30.5	26.4	24.4	22.4	20.3	20.3
52.5°	3785.3	973.2	89.4	50.8	34.5	24.4	20.3	18.3	16.3	14.2	14.2
55°	3919.4	948.9	77.2	42.7	26.4	20.3	16.3	12.2	10.2	10.2	10.2
57.5°	4051.5	924.5	65.0	34.5	20.3	14.2	10.2	8.1	8.1	8.1	8.1
60°	4256.7	889.9	56.9	28.4	16.3	10.2	6.1	6.1	4.1	4.1	4.1
62.5°	4506.6	847.3	46.7	24.4	12.2	8.1	4.1	4.1	0.0	0.0	0.0
65°	4780.9	772.1	38.6	18.3	10.2	6.1	4.1	0.0	0.0	0.0	0.0
67.5°	4717.9	619.7	32.5	12.2	8.1	4.1	2.0	0.0	0.0	0.0	0.0
70°	4173.4	418.6	26.4	10.2	6.1	4.1	2.0	0.0	0.0	0.0	0.0
72.5°	3269.2	247.9	18.3	8.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0
75°	2092.8	123.9	12.2	6.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0
77.5°	701.0	61.0	8.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	99.6	20.3	4.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	22.4	8.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	2.0	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)