

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: P399543

Luminaire Tested: **ARCH-L-PA3-160-722-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399543  
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-PA3-160-722-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 705mA 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: 14622 lumens  
Efficiency: N/A  
Efficacy: 90.3 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

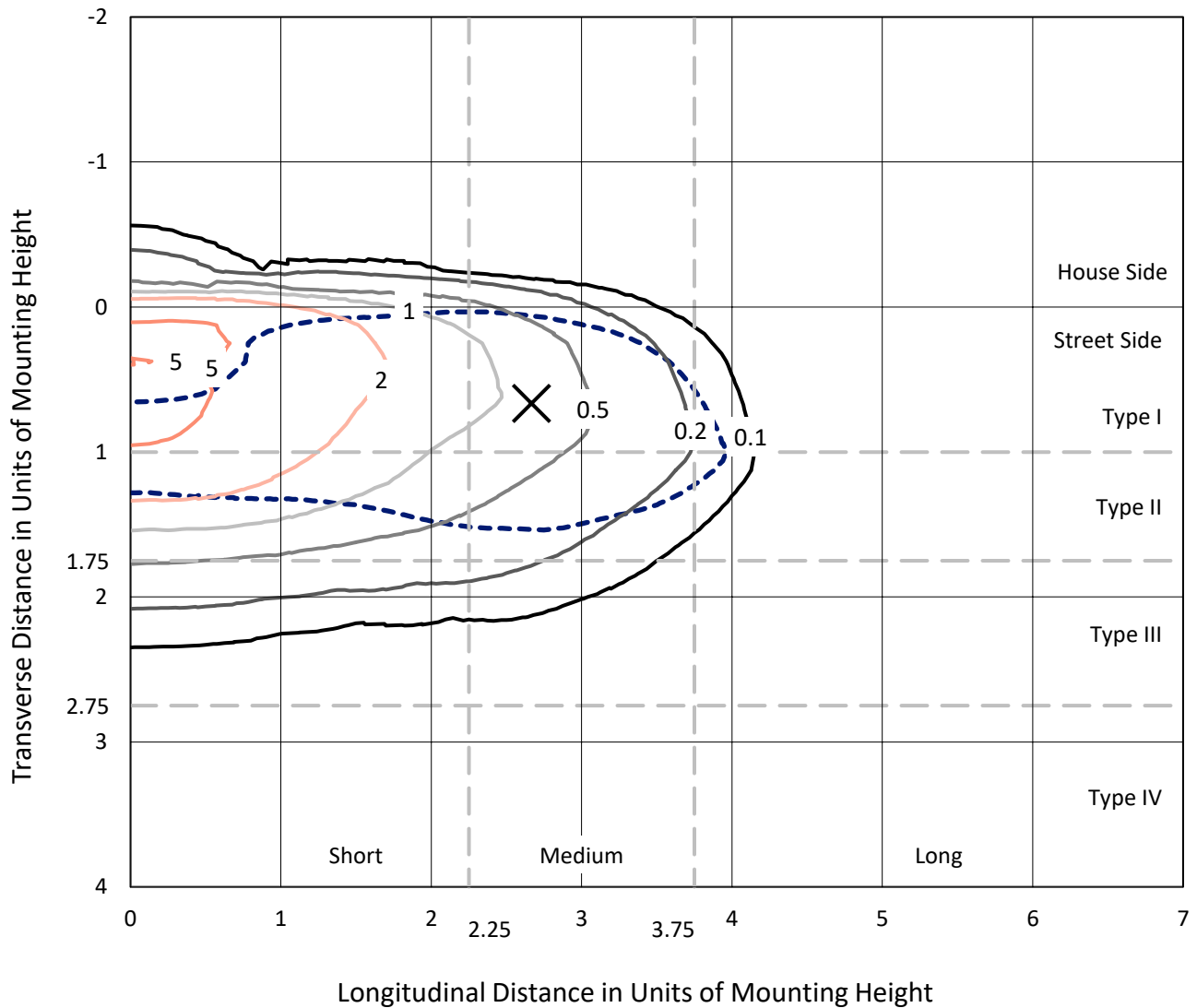
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

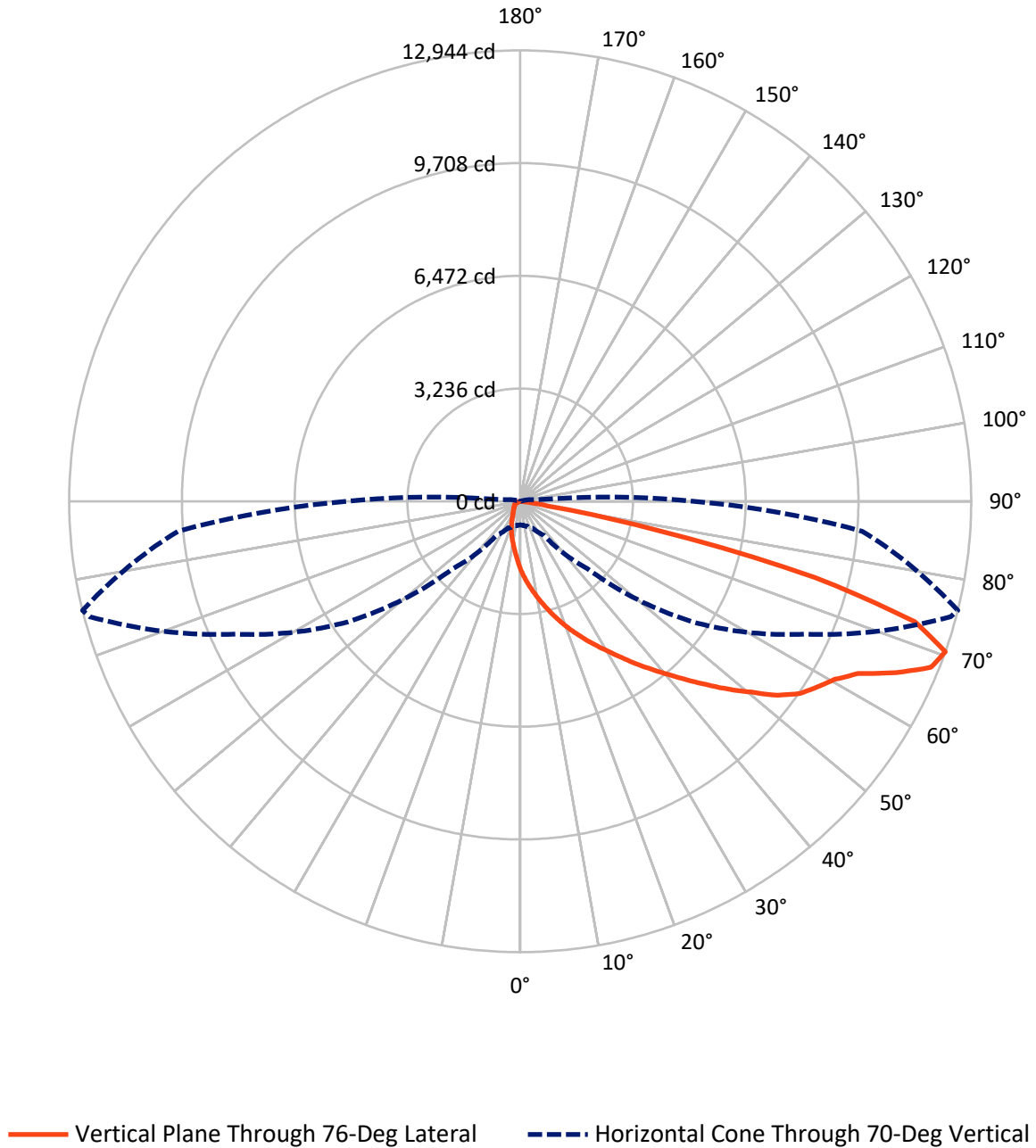
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	689.6	0.0	689.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	13932.4	0.0	13932.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	14622.0	0.0	14622.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.4	1.3
10°-20°	595.1	4.1
20°-30°	1108.3	7.6
30°-40°	1960.4	13.4
40°-50°	2997.8	20.5
50°-60°	3398.8	23.2
60°-70°	2913.6	19.9
70°-80°	1411.2	9.7
80°-90°	52.3	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°	14622.0	100.0
0°-180°	14622.0	100.0

**Coefficient of Utilization**



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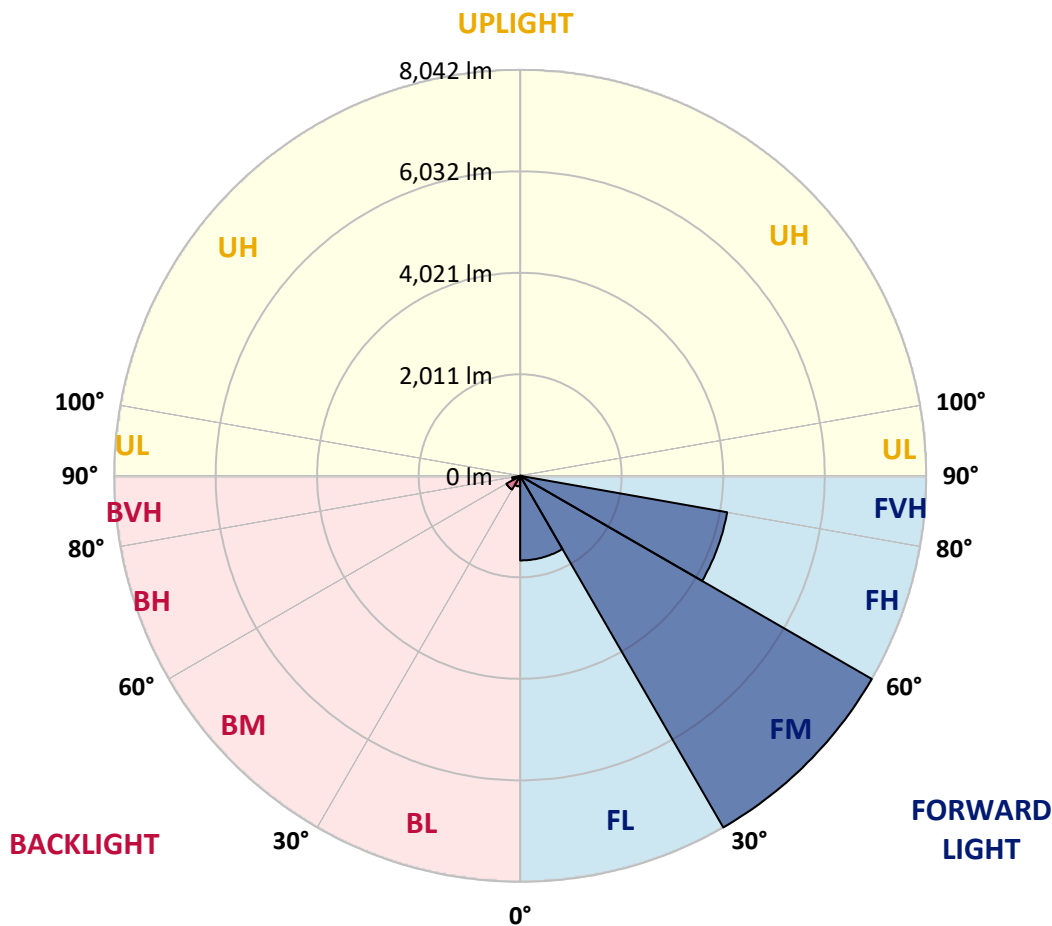
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1676.2	11.5			
FM (30°-60°)	8042.2	55.0			
FH (60°-80°)	4162.5	28.5			G2/5000
FVH (80°-90°)	51.5	0.4			G1/100
BL (0°-30°)	211.5	1.4	B1/500		
BM (30°-60°)	314.8	2.2	B1/1000		
BH (60°-80°)	162.4	1.1	B1/500		G1/500
BVH (80°-90°)	0.9	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°	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2
2.5°	2675.4	2660.8	2646.2	2590.2	2539.1	2492.8	2405.2	2290.8	2188.5	2166.6	2047.3
5°	3142.8	3125.8	3103.8	3047.9	2982.1	2904.2	2775.2	2599.9	2419.8	2380.8	2159.3
7.5°	3459.3	3444.7	3413.0	3386.2	3320.5	3245.0	3101.4	2896.9	2648.6	2599.9	2288.3
10°	3675.9	3666.2	3661.3	3639.4	3590.7	3529.9	3386.2	3172.0	2879.9	2823.9	2424.7
12.5°	3753.8	3753.8	3778.2	3814.7	3822.0	3802.5	3671.1	3456.8	3123.3	3064.9	2585.3
15°	3649.1	3661.3	3714.9	3831.7	3953.4	4033.8	3951.0	3751.4	3391.1	3327.8	2775.2
17.5°	3619.9	3632.1	3668.6	3770.9	3934.0	4148.2	4189.6	4036.2	3644.3	3590.7	2970.0
20°	3702.7	3714.9	3746.5	3834.2	3958.3	4175.0	4347.8	4311.3	3912.1	3856.1	3167.1
22.5°	3899.9	3907.2	3907.2	3975.4	4084.9	4245.6	4447.6	4571.8	4187.1	4126.3	3361.9
25°	4323.5	4308.9	4250.4	4216.4	4287.0	4418.4	4574.2	4800.6	4493.9	4411.1	3571.2
27.5°	4878.5	4927.2	4786.0	4622.9	4569.3	4644.8	4751.9	5002.7	4790.9	4703.2	3761.1
30°	5630.7	5611.3	5426.3	5192.6	4961.3	4934.5	4971.0	5175.5	5087.9	5005.1	3972.9
32.5°	6249.1	6285.6	6090.8	5806.0	5460.3	5297.2	5258.3	5382.4	5404.3	5350.8	4223.7
35°	6884.5	6923.4	6733.5	6417.0	6005.6	5733.0	5621.0	5638.0	5796.3	5728.1	4486.6
37.5°	7454.1	7488.2	7300.7	6977.0	6565.5	6232.0	6071.4	5939.9	6176.0	6115.2	4764.1
40°	7887.4	7892.3	7765.7	7476.0	7086.5	6740.8	6558.2	6300.2	6577.7	6536.3	5053.8
42.5°	8194.2	8203.9	8111.4	7863.1	7502.8	7181.4	7032.9	6726.2	7040.3	7003.7	5389.7
45°	8337.8	8354.8	8345.1	8116.3	7816.8	7539.3	7490.6	7179.0	7546.6	7512.5	5776.8
47.5°	8201.5	8201.5	8325.6	8294.0	8018.9	7833.9	7889.9	7651.3	8096.8	8065.1	6171.2
50°	7634.2	7641.5	7894.7	8257.4	8096.8	8055.4	8230.7	8113.8	8595.8	8615.3	6643.4
52.5°	6144.4	6132.2	6986.7	7682.9	8043.2	8155.2	8544.7	8586.1	9194.7	9253.1	7113.3
55°	4591.3	4584.0	5401.9	6665.4	7668.3	8104.1	8720.0	9007.2	9705.9	9742.4	7463.8
57.5°	3634.5	3615.1	4065.4	5372.7	6821.2	7875.2	8727.3	9087.6	9990.7	10054.0	7804.7
60°	2794.7	2777.6	3113.6	3997.3	5621.0	7266.7	8517.9	9092.4	10265.8	10377.8	8262.3
62.5°	1998.6	2018.1	2276.2	2867.7	4323.5	6407.3	8245.3	9160.6	10755.1	10881.7	8912.3
65°	1348.7	1338.9	1553.1	1952.4	3074.6	5251.0	7826.6	9304.2	11636.4	11857.9	9691.3
67.5°	937.2	944.5	1041.9	1270.8	1952.4	4031.3	7130.3	9384.6	12546.8	12719.7	10236.6
70°	676.8	686.5	740.1	854.5	1192.9	2733.8	6027.5	9017.0	12792.7	12943.6	9856.8
72.5°	445.5	465.0	545.3	606.2	762.0	1711.4	4440.3	7768.1	11733.8	11845.7	8269.6
75°	241.0	245.9	350.6	452.8	542.9	1066.3	2648.6	5238.8	8778.4	8741.9	5453.0
77.5°	187.4	194.8	216.7	323.8	365.2	586.7	1046.8	2366.2	4157.9	4046.0	1859.9
80°	114.4	119.3	150.9	192.3	255.6	340.8	306.7	642.7	844.7	791.2	272.7
82.5°	68.2	73.0	90.1	160.7	202.1	160.7	107.1	155.8	158.2	155.8	68.2
85°	12.2	12.2	63.3	112.0	107.1	46.3	63.3	51.1	46.3	48.7	14.6
87.5°	0.0	0.0	24.3	34.1	48.7	17.0	24.3	12.2	12.2	12.2	7.3
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°	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2	1957.2
2.5°	1974.3	1891.5	1721.1	1572.6	1424.1	1314.6	1231.8	1146.6	1117.4	1080.9	1061.4
5°	2008.4	1845.3	1506.9	1236.7	1007.8	832.6	720.6	652.4	608.6	577.0	569.6
7.5°	2059.5	1808.8	1334.0	968.9	718.1	542.9	450.4	404.1	379.8	365.2	360.3
10°	2120.4	1777.1	1163.6	754.7	506.4	382.2	331.1	311.6	301.9	297.0	294.6
12.5°	2205.6	1764.9	1020.0	581.8	382.2	314.0	287.3	275.1	267.8	260.5	258.0
15°	2317.5	1769.8	888.6	450.4	316.5	280.0	258.0	245.9	236.1	228.8	228.8
17.5°	2434.4	1777.1	759.5	365.2	287.3	255.6	231.3	214.2	206.9	199.6	197.2
20°	2543.9	1774.7	635.4	311.6	260.5	228.8	204.5	187.4	175.3	168.0	168.0
22.5°	2648.6	1760.1	518.5	280.0	238.6	202.1	175.3	158.2	148.5	141.2	141.2
25°	2760.6	1730.9	423.6	255.6	211.8	177.7	150.9	133.9	126.6	119.3	119.3
27.5°	2848.2	1682.2	345.7	233.7	187.4	153.4	129.0	114.4	107.1	102.2	102.2
30°	2943.2	1611.6	287.3	209.4	163.1	131.5	109.5	97.4	90.1	87.6	87.6
32.5°	3047.9	1533.7	245.9	185.0	138.8	112.0	92.5	85.2	77.9	75.5	75.5
35°	3169.6	1465.5	221.5	160.7	121.7	94.9	80.3	73.0	68.2	68.2	68.2
37.5°	3308.3	1394.9	199.6	141.2	104.7	80.3	68.2	65.7	63.3	60.9	60.9
40°	3459.3	1319.4	180.1	124.2	90.1	68.2	58.4	58.4	56.0	56.0	56.0
42.5°	3629.7	1253.7	163.1	109.5	77.9	58.4	51.1	51.1	48.7	48.7	48.7
45°	3814.7	1192.9	148.5	97.4	68.2	51.1	46.3	43.8	41.4	41.4	41.4
47.5°	4033.8	1158.8	136.3	85.2	58.4	43.8	39.0	36.5	34.1	31.6	31.6
50°	4313.7	1173.4	124.2	70.6	51.1	36.5	31.6	29.2	26.8	24.3	24.3
52.5°	4535.3	1166.1	107.1	60.9	41.4	29.2	24.3	21.9	19.5	17.0	17.0
55°	4695.9	1136.9	92.5	51.1	31.6	24.3	19.5	14.6	12.2	12.2	12.2
57.5°	4854.2	1107.6	77.9	41.4	24.3	17.0	12.2	9.7	9.7	9.7	9.7
60°	5100.0	1066.3	68.2	34.1	19.5	12.2	7.3	7.3	4.9	4.9	4.9
62.5°	5399.5	1015.1	56.0	29.2	14.6	9.7	4.9	4.9	0.0	0.0	0.0
65°	5728.1	925.1	46.3	21.9	12.2	7.3	4.9	0.0	0.0	0.0	0.0
67.5°	5652.7	742.5	39.0	14.6	9.7	4.9	2.4	0.0	0.0	0.0	0.0
70°	5000.2	501.5	31.6	12.2	7.3	4.9	2.4	0.0	0.0	0.0	0.0
72.5°	3916.9	297.0	21.9	9.7	4.9	2.4	0.0	0.0	0.0	0.0	0.0
75°	2507.4	148.5	14.6	7.3	4.9	2.4	0.0	0.0	0.0	0.0	0.0
77.5°	839.9	73.0	9.7	4.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	119.3	24.3	4.9	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.8	9.7	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.7	4.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.9	2.4	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)