

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: P257977

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2U-7050**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257977  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-210-D-U-T2U-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25091 lumens  
Efficiency: N/A  
Efficacy: 118.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G4

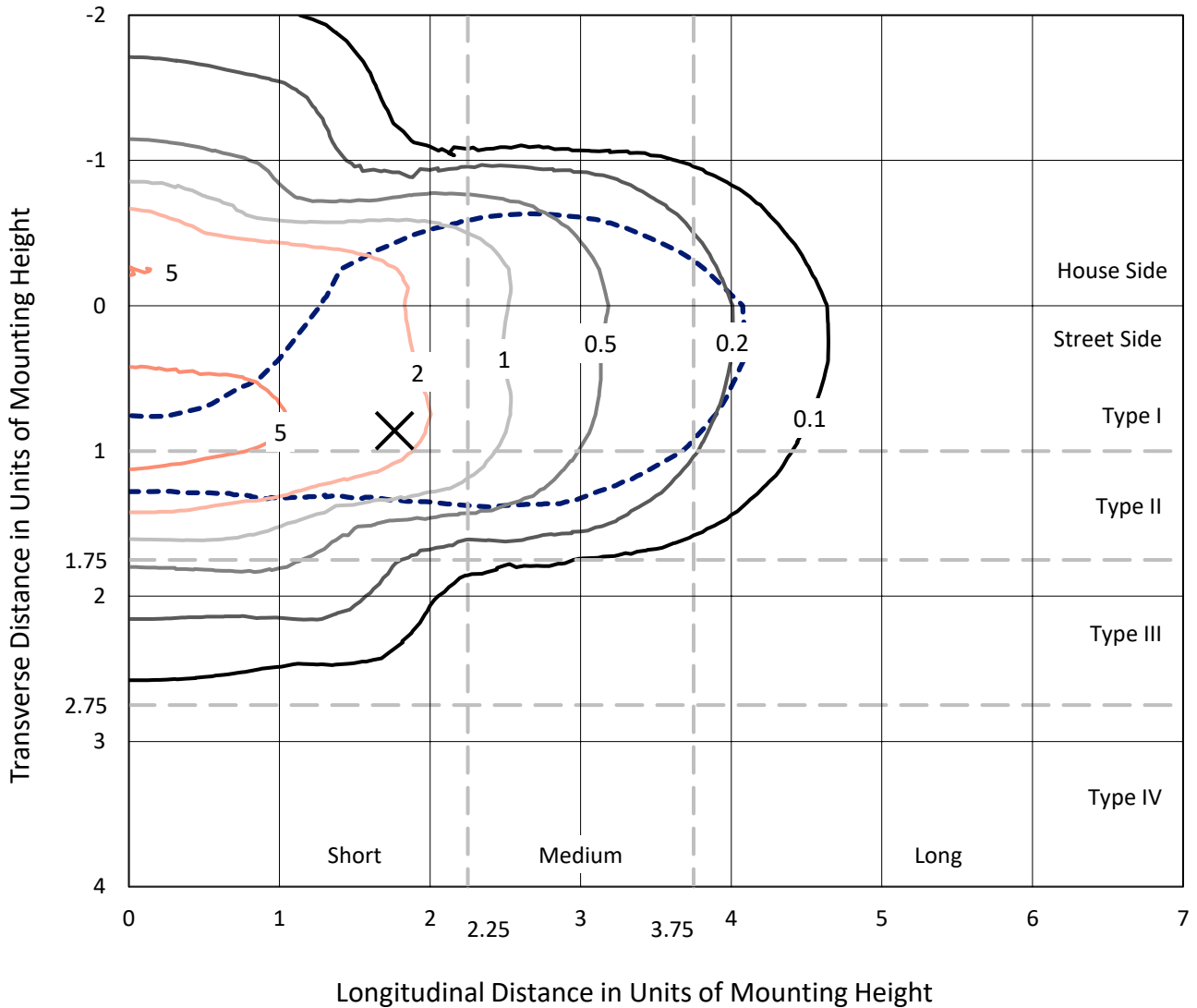
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

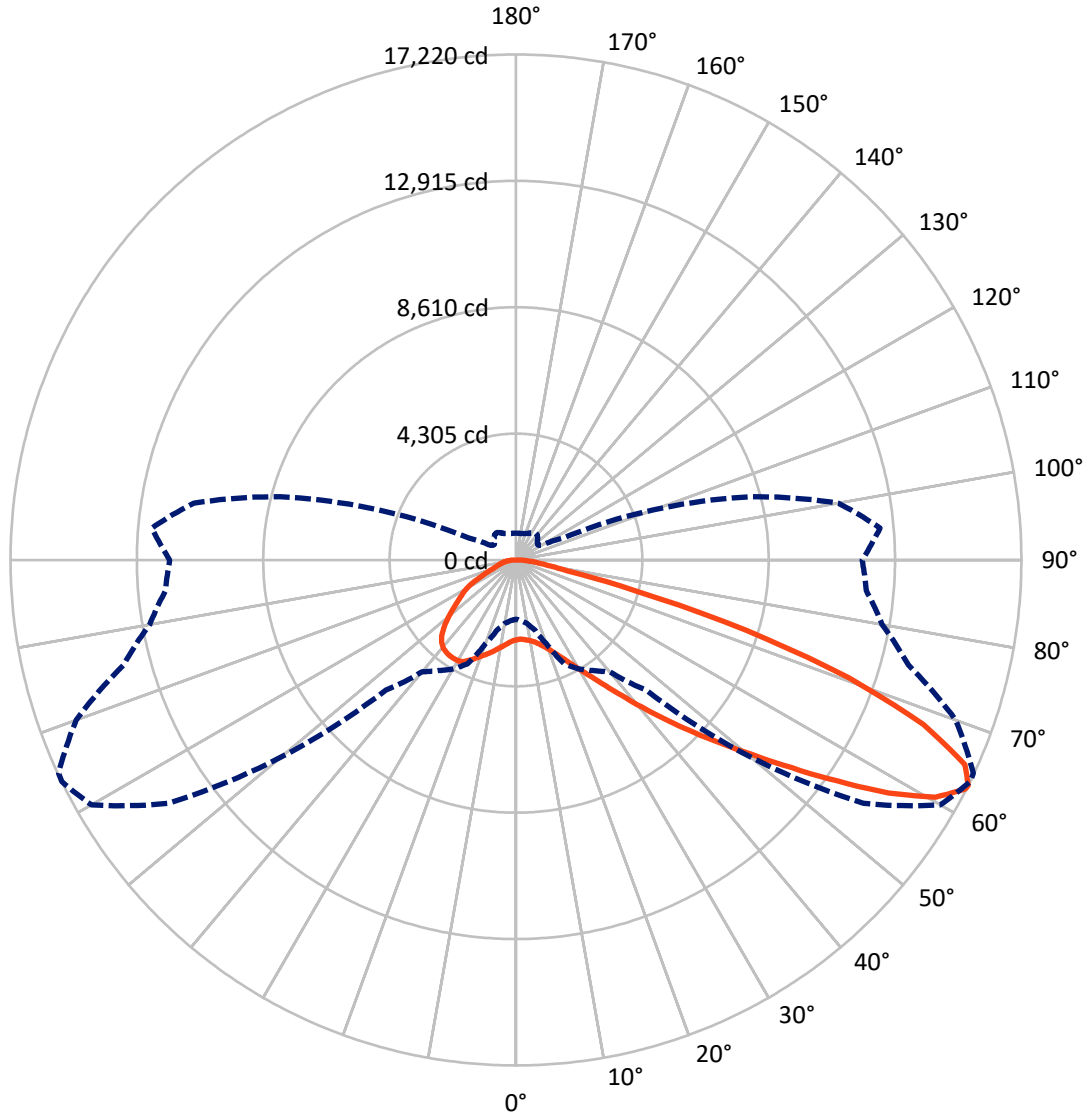
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 63-Deg Vertical

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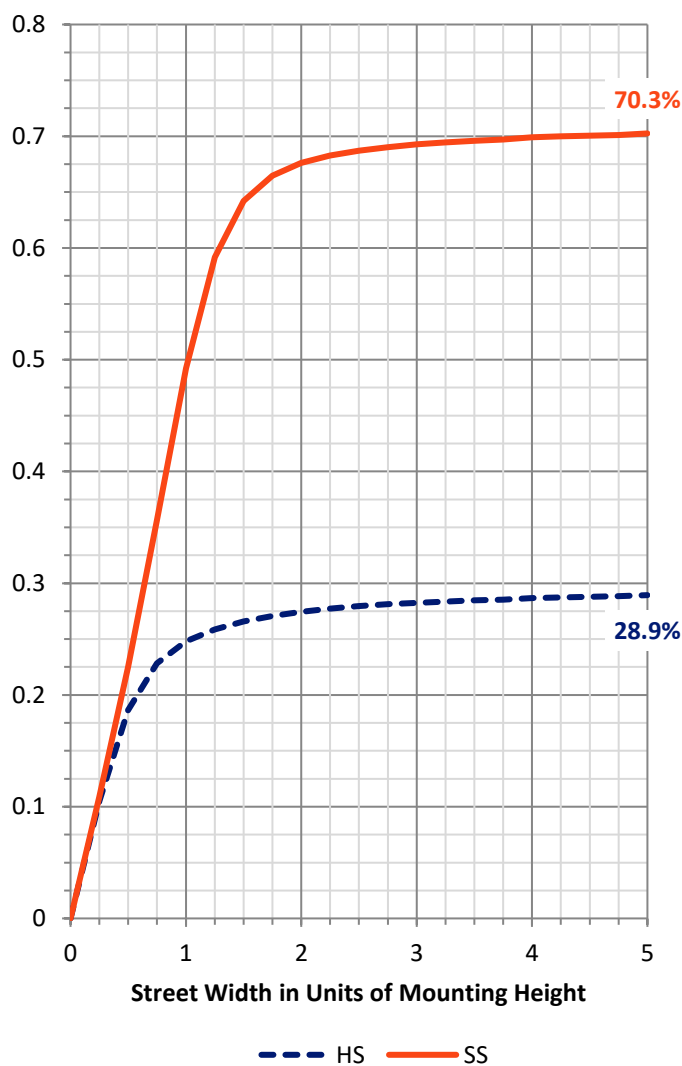
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7375.9	0.0	7375.9
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	17715.2	0.0	17715.2
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	25091.0	0.0	25091.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	271.3	1.1
10°-20°	903.6	3.6
20°-30°	1696.3	6.8
30°-40°	2843.1	11.3
40°-50°	4770.1	19.0
50°-60°	6047.1	24.1
60°-70°	5334.5	21.3
70°-80°	2753.8	11.0
80°-90°	471.2	1.9
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°	25091.0	100.0
0°-180°	25091.0	100.0

**Coefficient of Utilization**

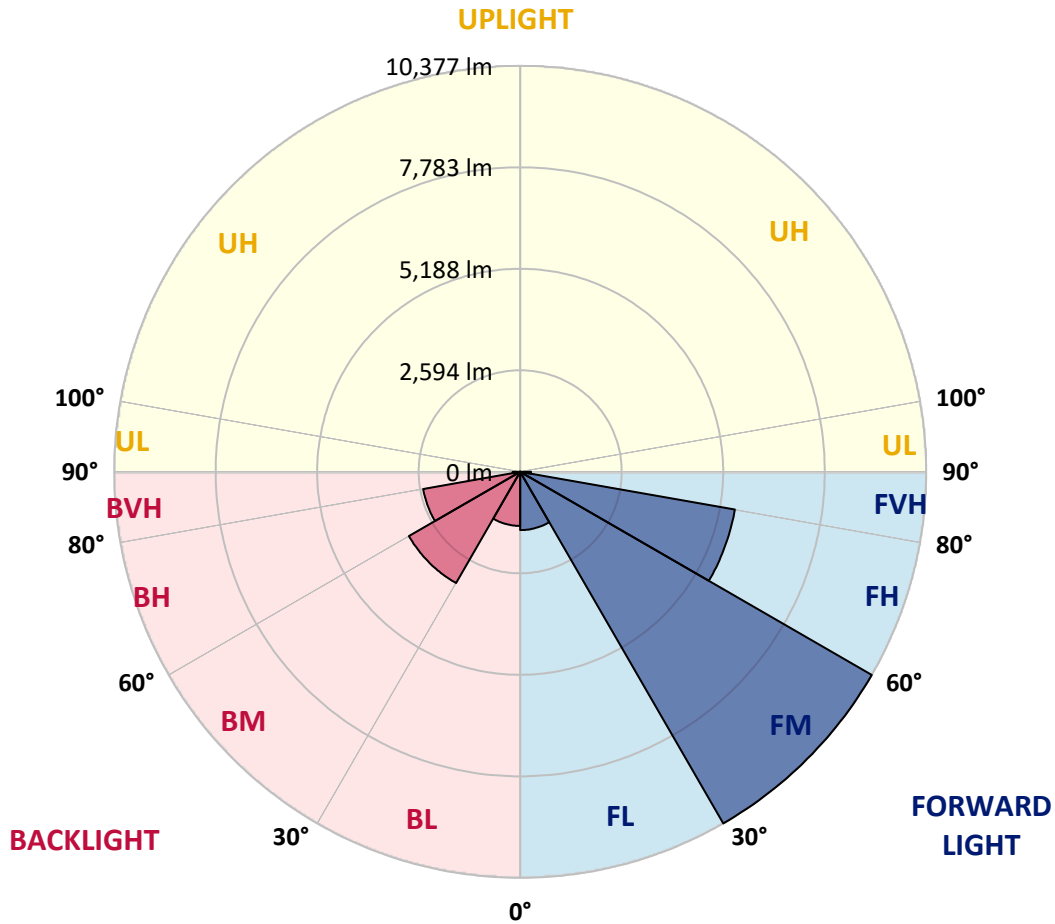


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1489.2	5.9			
FM (30°-60°)	10377.0	41.4			
FH (60°-80°)	5571.6	22.2			G3/7500
FVH (80°-90°)	277.3	1.1			G3/500
BL (0°-30°)	1382.0	5.5	B3/2500		
BM (30°-60°)	3283.4	13.1	B3/5000		
BH (60°-80°)	2516.6	10.0	B4/5000		G4/5000
BVH (80°-90°)	193.9	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3
2.5°	2700.5	2696.3	2696.3	2696.3	2696.3	2692.1	2696.3	2704.7	2700.5	2696.3	2704.7
5°	2708.9	2704.7	2704.7	2704.7	2708.9	2704.7	2708.9	2721.5	2713.1	2713.1	2721.5
7.5°	2729.9	2725.7	2729.9	2725.7	2725.7	2725.7	2729.9	2742.5	2738.3	2742.5	2755.1
10°	2755.1	2755.1	2755.1	2755.1	2755.1	2755.1	2763.5	2771.9	2776.1	2780.3	2797.1
12.5°	2830.7	2830.7	2830.7	2826.5	2826.5	2813.9	2830.7	2839.1	2847.5	2855.9	2868.5
15°	2990.3	2990.3	2986.1	2969.3	2969.3	2944.1	2948.3	2952.5	2952.5	2960.9	2969.3
17.5°	3200.3	3196.1	3187.7	3175.1	3158.3	3128.9	3120.5	3112.1	3099.5	3095.3	3095.3
20°	3494.3	3490.1	3473.3	3439.7	3418.7	3372.5	3338.9	3305.3	3292.7	3271.7	3267.5
22.5°	3914.3	3914.3	3880.7	3830.3	3813.5	3716.9	3620.3	3548.9	3523.7	3494.3	3494.3
25°	4422.5	4418.3	4372.1	4313.3	4241.9	4141.1	4023.5	3926.9	3863.9	3796.7	3771.5
27.5°	5031.5	5018.9	4955.9	4884.5	4750.1	4624.1	4485.5	4384.7	4275.5	4191.5	4115.9
30°	5745.5	5732.9	5623.7	5489.3	5350.7	5224.7	5023.1	4901.3	4729.1	4628.3	4544.3
32.5°	6572.9	6560.3	6362.9	6232.7	6085.7	5930.3	5690.9	5497.7	5279.3	5136.5	5018.9
35°	7627.0	7576.6	7295.3	7114.7	6883.7	6728.3	6476.3	6215.9	5959.7	5758.1	5585.9
37.5°	8765.2	8706.4	8458.6	8189.8	7963.0	7774.0	7417.0	7089.5	6787.1	6509.9	6295.7
40°	9953.8	9798.4	9533.8	9336.4	9181.0	9000.4	8626.6	8282.2	7807.6	7496.8	7173.5
42.5°	10777.0	10625.8	10441.0	10310.8	10235.2	10096.6	9886.6	9588.4	9164.2	9172.6	8320.0
45°	11318.8	11096.2	10970.2	10978.6	11008.0	11008.0	10970.2	10924.0	10739.2	10865.2	10151.2
47.5°	11125.6	10978.6	10898.8	11066.8	11276.8	11486.8	11730.4	11995.0	12297.4	12654.3	11776.6
50°	9991.6	10046.2	10084.0	10441.0	10890.4	11369.2	11927.8	12650.1	13494.3	13658.1	13233.9
52.5°	8181.4	8299.0	8425.0	8971.0	9563.2	10390.6	11369.2	12561.9	13695.9	14363.7	14321.7
55°	6354.5	6501.5	6770.3	7177.7	7648.0	8429.2	9638.8	11478.4	13246.5	14309.1	14955.9
57.5°	4523.3	4737.5	5090.3	5657.3	6073.1	6514.1	7408.6	9449.8	11386.0	13364.1	14850.9
60°	3007.1	3107.9	3338.9	4044.5	4745.9	5207.9	5842.1	6581.3	8164.6	10890.4	13767.3
62.5°	2133.6	2200.8	2343.6	2662.7	3296.9	4132.7	4514.9	4855.1	5363.3	7005.5	11054.2
63°	2016.0	2074.8	2192.4	2461.1	3032.3	3897.5	4288.1	4598.9	4968.5	6266.3	10457.8
65°	1671.6	1696.8	1759.8	1890.0	2196.6	2914.7	3553.1	3742.1	3805.1	4027.7	6551.9
67.5°	1411.2	1428.0	1449.0	1486.8	1608.6	1940.4	2650.1	2889.5	2818.1	2666.9	3238.1
70°	1226.4	1239.0	1272.6	1318.8	1360.8	1444.8	1822.8	2179.8	2100.0	1894.2	1982.4
72.5°	978.6	999.6	1037.4	1117.2	1201.2	1310.4	1402.8	1625.4	1575.0	1377.6	1398.6
75°	772.8	785.4	819.0	877.8	957.6	1083.6	1264.2	1339.8	1201.2	1016.4	1016.4
77.5°	613.2	625.8	655.2	701.4	751.8	840.0	966.0	1163.4	1079.4	764.4	760.2
80°	462.0	474.6	504.0	546.0	596.4	659.4	735.0	823.2	991.2	714.0	571.2
82.5°	340.2	344.4	394.8	424.2	441.0	491.4	554.4	604.8	680.4	659.4	508.2
85°	256.2	252.0	285.6	306.6	310.8	323.4	361.2	411.6	445.2	428.4	394.8
87.5°	142.8	126.0	147.0	168.0	168.0	172.2	180.6	210.0	239.4	231.0	210.0
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):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3
2.5°	2704.7	2704.7	2700.5	2700.5	2704.7	2704.7	2700.5	2713.1	2721.5	2721.5	2725.7
5°	2717.3	2721.5	2717.3	2717.3	2721.5	2721.5	2725.7	2738.3	2750.9	2759.3	2771.9
7.5°	2755.1	2759.3	2755.1	2755.1	2759.3	2763.5	2771.9	2788.7	2797.1	2813.9	2834.9
10°	2797.1	2801.3	2797.1	2801.3	2805.5	2809.7	2822.3	2834.9	2847.5	2864.3	2897.9
12.5°	2872.7	2876.9	2868.5	2872.7	2885.3	2885.3	2893.7	2902.1	2923.1	2944.1	2977.7
15°	2977.7	2977.7	2969.3	2973.5	2986.1	2986.1	2990.3	2998.7	3023.9	3049.1	3082.7
17.5°	3099.5	3107.9	3103.7	3107.9	3116.3	3120.5	3120.5	3128.9	3145.7	3162.5	3196.1
20°	3263.3	3267.5	3259.1	3267.5	3275.9	3267.5	3259.1	3254.9	3263.3	3271.7	3309.5
22.5°	3485.9	3481.7	3460.7	3460.7	3460.7	3443.9	3422.9	3397.7	3397.7	3385.1	3414.5
25°	3750.5	3737.9	3708.5	3712.7	3683.3	3658.1	3620.3	3582.5	3548.9	3536.3	3540.5
27.5°	4061.3	4036.1	4006.7	3998.3	3968.9	3922.7	3859.7	3788.3	3733.7	3691.7	3683.3
30°	4451.9	4397.3	4346.9	4338.5	4292.3	4216.7	4115.9	4019.3	3926.9	3855.5	3830.3
32.5°	4913.9	4829.9	4750.1	4741.7	4666.1	4565.3	4443.5	4309.1	4174.7	4061.3	4006.7
35°	5455.7	5329.7	5254.1	5233.1	5123.9	4997.9	4863.5	4691.3	4502.3	4342.7	4241.9
37.5°	6115.1	5984.9	5854.7	5858.9	5707.7	5560.7	5380.1	5170.1	4930.7	4708.1	4565.3
40°	6929.9	6745.1	6577.1	6539.3	6409.1	6203.3	6005.9	5762.3	5468.3	5174.3	4968.5
42.5°	7916.8	7614.4	7383.4	7349.9	7177.7	6925.7	6686.3	6362.9	6064.7	5707.7	5459.9
45°	9038.2	8555.2	8278.0	8227.6	7950.4	7694.2	7404.4	7060.1	6694.7	6291.5	5997.5
47.5°	10432.6	9743.8	9273.4	9189.4	8807.2	8471.2	8168.8	7786.6	7349.9	6900.5	6577.1
50°	12058.0	11041.6	10407.4	10277.2	9764.8	9370.0	8983.6	8504.8	8038.6	7568.2	7194.5
52.5°	13687.5	12595.5	11751.4	11591.8	10835.8	10306.6	9798.4	9319.6	8769.4	8303.2	7879.0
55°	14997.9	14271.3	13292.7	13070.1	11986.6	11268.4	10600.6	10054.6	9508.6	9139.0	8639.2
57.5°	15787.5	15749.7	14976.9	14670.3	13187.7	12125.2	11381.8	10760.2	10231.0	10075.6	9412.0
60°	15766.5	16745.1	16413.3	16182.3	14401.5	13002.9	12037.0	11365.0	10928.2	11104.6	10189.0
62.5°	14804.7	16787.1	17186.1	17123.1	15695.1	13708.5	12574.5	11881.6	11650.6	12175.6	10995.4
63°	14456.1	16690.5	17219.7	17194.5	15942.9	13842.9	12666.9	11982.4	11793.4	12448.5	11142.4
65°	12217.6	15846.3	16812.3	16925.7	16476.3	14304.9	12881.1	12238.6	12217.6	13057.5	11491.0
67.5°	7446.4	13389.3	14976.9	15195.3	15724.5	14451.9	12759.3	12150.4	12452.7	13145.7	11386.0
70°	3183.5	8836.6	12037.0	12389.7	13683.3	13721.1	12410.7	11789.2	12398.1	12456.9	10638.4
72.5°	1885.8	4166.3	8194.0	8962.6	10827.4	11806.0	11612.8	11159.2	11680.0	10940.8	9059.2
75°	1335.6	1948.8	4162.1	4981.1	7538.8	9013.0	9756.4	9966.4	9945.4	8677.0	6799.7
77.5°	957.6	1251.6	1755.6	2070.6	4208.3	5787.5	6694.7	7307.9	7110.5	5808.5	4191.5
80°	667.8	865.2	1075.2	1142.4	1953.0	2973.5	3527.9	3796.7	3679.1	2902.1	1877.4
82.5°	483.0	567.0	693.0	735.0	982.8	1373.4	1633.8	1440.6	1381.8	1071.0	810.6
85°	373.8	365.4	432.6	449.4	575.4	718.2	735.0	571.2	499.8	445.2	453.6
87.5°	264.6	226.8	231.0	239.4	298.2	382.2	373.8	235.2	201.6	214.2	243.6
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3	2717.3
2.5°	2734.1	2738.3	2746.7	2750.9	2759.3	2759.3	2767.7	2771.9	2780.3	2788.7	2792.9
5°	2784.5	2797.1	2813.9	2822.3	2839.1	2851.7	2868.5	2876.9	2893.7	2906.3	2923.1
7.5°	2860.1	2881.1	2902.1	2927.3	2952.5	2973.5	2990.3	3011.3	3040.7	3061.7	3074.3
10°	2931.5	2960.9	2998.7	3028.1	3065.9	3095.3	3120.5	3158.3	3191.9	3221.3	3238.1
12.5°	3023.9	3061.7	3099.5	3145.7	3196.1	3233.9	3271.7	3322.1	3368.3	3401.9	3418.7
15°	3133.1	3179.3	3221.3	3275.9	3334.7	3385.1	3439.7	3494.3	3527.9	3527.9	3519.5
17.5°	3246.5	3284.3	3334.7	3397.7	3477.5	3540.5	3569.9	3578.3	3565.7	3536.3	3515.3
20°	3359.9	3393.5	3448.1	3523.7	3607.7	3620.3	3590.9	3553.1	3515.3	3464.9	3431.3
22.5°	3452.3	3498.5	3582.5	3670.7	3674.9	3603.5	3523.7	3460.7	3401.9	3343.1	3280.1
25°	3561.5	3624.5	3737.9	3771.5	3662.3	3527.9	3414.5	3322.1	3225.5	3128.9	3057.5
27.5°	3695.9	3788.3	3901.7	3805.1	3590.9	3401.9	3246.5	3107.9	2981.9	2847.5	2767.7
30°	3838.7	3981.5	4006.7	3754.7	3469.1	3225.5	3015.5	2805.5	2645.9	2524.1	2477.9
32.5°	4010.9	4195.7	4044.5	3666.5	3305.3	2986.1	2704.7	2452.8	2318.4	2242.8	2221.8
35°	4271.3	4422.5	4065.5	3574.1	3116.3	2700.5	2347.8	2146.2	2062.2	2011.8	1986.6
37.5°	4645.1	4640.9	4061.3	3460.7	2897.9	2389.8	2062.2	1919.4	1852.2	1810.2	1764.0
40°	5081.9	4808.9	4036.1	3296.9	2603.9	2091.6	1864.8	1730.4	1667.4	1617.0	1562.4
42.5°	5514.5	4922.3	3964.7	3053.3	2238.6	1877.4	1722.0	1600.2	1533.0	1478.4	1402.8
45°	5888.3	4968.5	3826.1	2717.3	1911.0	1709.4	1629.6	1524.6	1444.8	1360.8	1302.0
47.5°	6182.3	4960.1	3603.5	2322.6	1692.6	1591.8	1554.0	1482.6	1386.0	1281.0	1205.4
50°	6430.1	4897.1	3301.1	1974.0	1545.6	1486.8	1474.2	1453.2	1297.8	1209.6	1163.4
52.5°	6656.9	4804.7	2977.7	1738.8	1419.6	1369.2	1394.4	1373.4	1264.2	1188.6	1142.4
55°	6967.7	4741.7	2658.5	1558.2	1272.6	1260.0	1281.0	1310.4	1243.2	1171.8	1121.4
57.5°	7333.1	4775.3	2415.0	1356.6	1134.0	1142.4	1213.8	1255.8	1222.2	1146.6	1096.2
60°	7753.0	4876.1	2200.8	1163.4	1020.6	1041.6	1146.6	1205.4	1201.2	1113.0	1054.2
62.5°	8223.4	4981.1	1860.6	1016.4	924.0	957.6	1066.8	1142.4	1155.0	1079.4	1008.0
63°	8315.8	4989.5	1772.4	987.0	907.2	945.0	1045.8	1125.6	1142.4	1071.0	999.6
65°	8542.6	4913.9	1428.0	907.2	840.0	882.0	982.8	1054.2	1087.8	1024.8	966.0
67.5°	8353.6	4296.5	1075.2	810.6	785.4	814.8	903.0	970.2	999.6	970.2	911.4
70°	7639.6	3124.7	840.0	722.4	726.6	747.6	814.8	877.8	911.4	903.0	848.4
72.5°	6152.9	1772.4	701.4	646.8	659.4	684.6	730.8	789.6	819.0	814.8	777.0
75°	4052.9	907.2	592.2	579.6	588.0	609.0	642.6	688.8	722.4	718.2	701.4
77.5°	2007.6	630.0	508.2	512.4	516.6	533.4	558.6	600.6	621.6	625.8	621.6
80°	827.4	491.4	436.8	441.0	445.2	457.8	474.6	512.4	525.0	533.4	537.6
82.5°	495.6	373.8	348.6	357.0	361.2	373.8	386.4	420.0	432.6	445.2	445.2
85°	327.6	260.4	252.0	260.4	268.8	277.2	281.4	302.4	323.4	340.2	348.6
87.5°	176.4	155.4	151.2	155.4	155.4	163.8	172.2	193.2	218.4	235.2	243.6
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):**

	160°	165°	170°	175°	180°
0°	2717.3	2717.3	2717.3	2717.3	2717.3
2.5°	2784.5	2788.7	2784.5	2788.7	2792.9
5°	2923.1	2931.5	2927.3	2927.3	2944.1
7.5°	3082.7	3099.5	3099.5	3107.9	3116.3
10°	3254.9	3271.7	3284.3	3284.3	3296.9
12.5°	3427.1	3435.5	3448.1	3448.1	3448.1
15°	3515.3	3511.1	3506.9	3502.7	3502.7
17.5°	3502.7	3485.9	3477.5	3469.1	3473.3
20°	3410.3	3380.9	3372.5	3359.9	3368.3
22.5°	3250.7	3208.7	3191.9	3170.9	3179.3
25°	3011.3	2960.9	2952.5	2927.3	2939.9
27.5°	2734.1	2708.9	2704.7	2700.5	2721.5
30°	2473.7	2482.1	2486.3	2494.7	2515.7
32.5°	2234.4	2251.2	2255.4	2259.6	2289.0
35°	1999.2	1978.2	1999.2	1990.8	2016.0
37.5°	1743.0	1726.2	1709.4	1688.4	1705.2
40°	1528.8	1499.4	1449.0	1423.8	1428.0
42.5°	1360.8	1323.0	1281.0	1255.8	1255.8
45°	1251.6	1205.4	1167.6	1150.8	1150.8
47.5°	1167.6	1146.6	1125.6	1113.0	1113.0
50°	1134.0	1108.8	1096.2	1087.8	1087.8
52.5°	1108.8	1083.6	1071.0	1062.6	1054.2
55°	1087.8	1050.0	1037.4	1033.2	1033.2
57.5°	1058.4	1024.8	1008.0	1003.8	1003.8
60°	1012.2	987.0	970.2	966.0	966.0
62.5°	966.0	940.8	924.0	924.0	924.0
63°	957.6	928.2	915.6	915.6	915.6
65°	919.8	890.4	877.8	877.8	873.6
67.5°	869.4	840.0	831.6	831.6	823.2
70°	810.6	785.4	777.0	781.2	764.4
72.5°	751.8	726.6	714.0	714.0	697.2
75°	684.6	659.4	642.6	638.4	621.6
77.5°	609.0	588.0	571.2	554.4	546.0
80°	529.2	512.4	491.4	478.8	466.2
82.5°	445.2	428.4	415.8	432.6	369.6
85°	348.6	331.8	315.0	340.2	264.6
87.5°	256.2	247.8	231.0	201.6	176.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)