

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: P257941

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2U-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-250-D-U-T2U-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27229.6 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

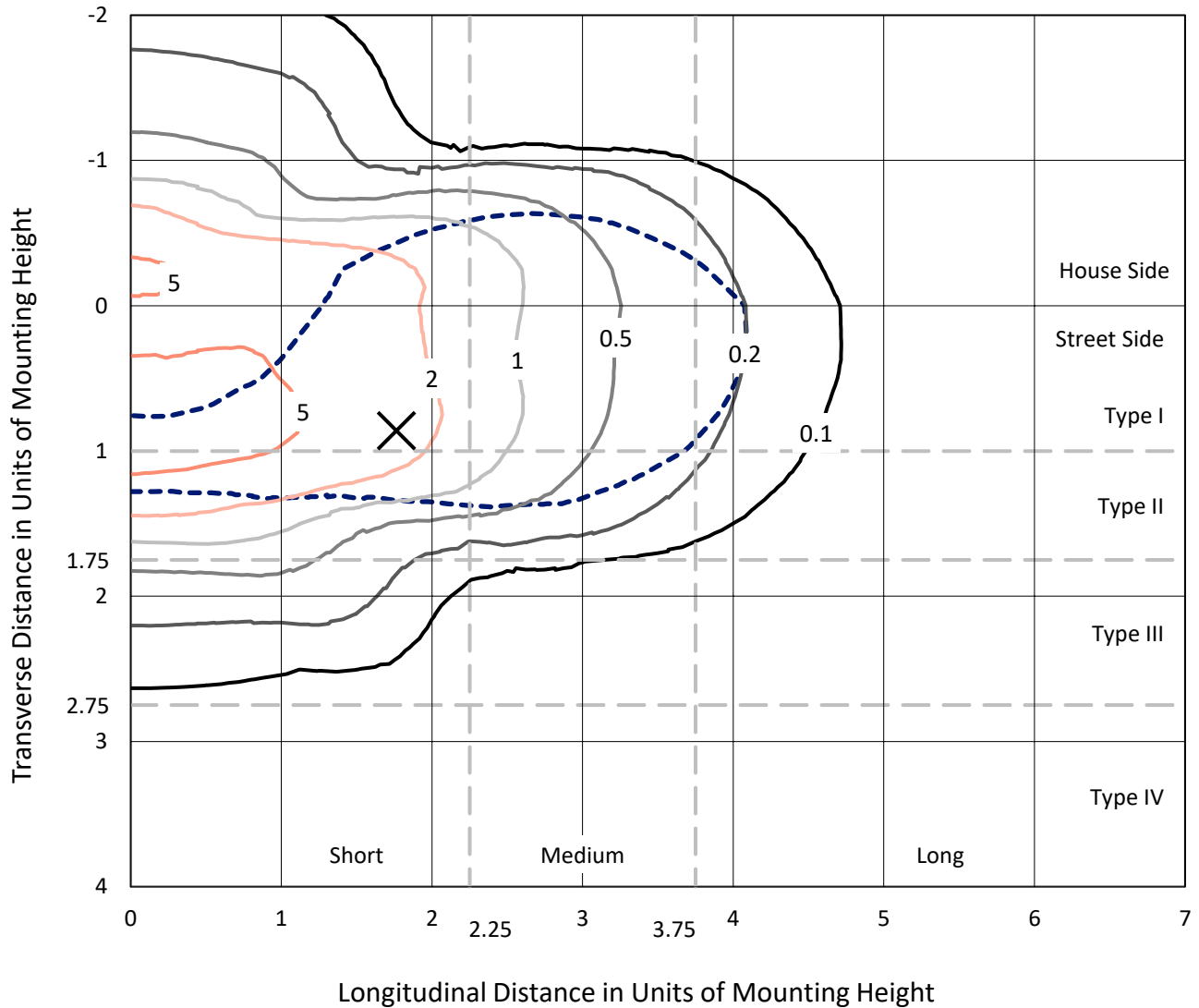
Input Watts (W): 251  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

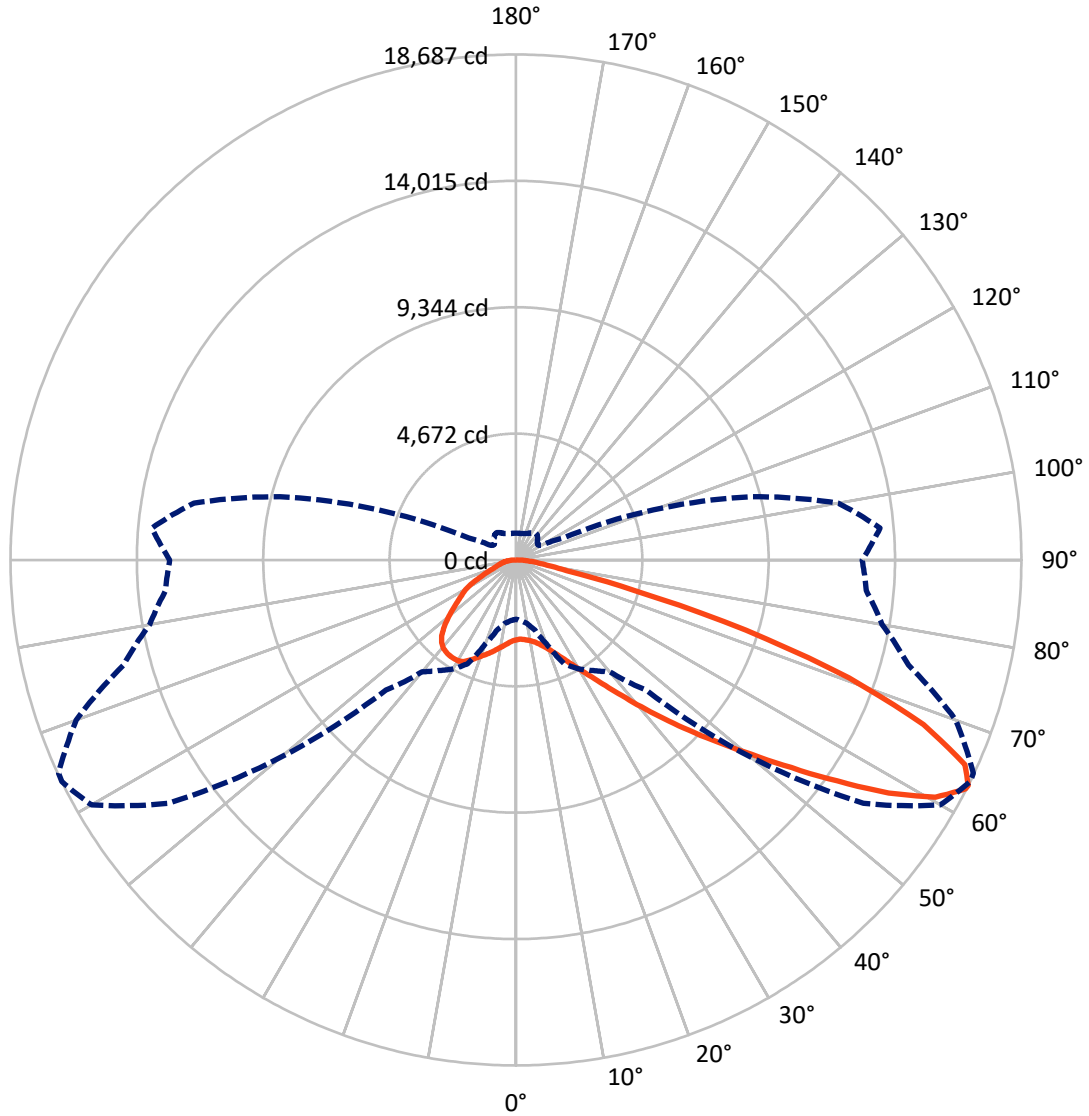
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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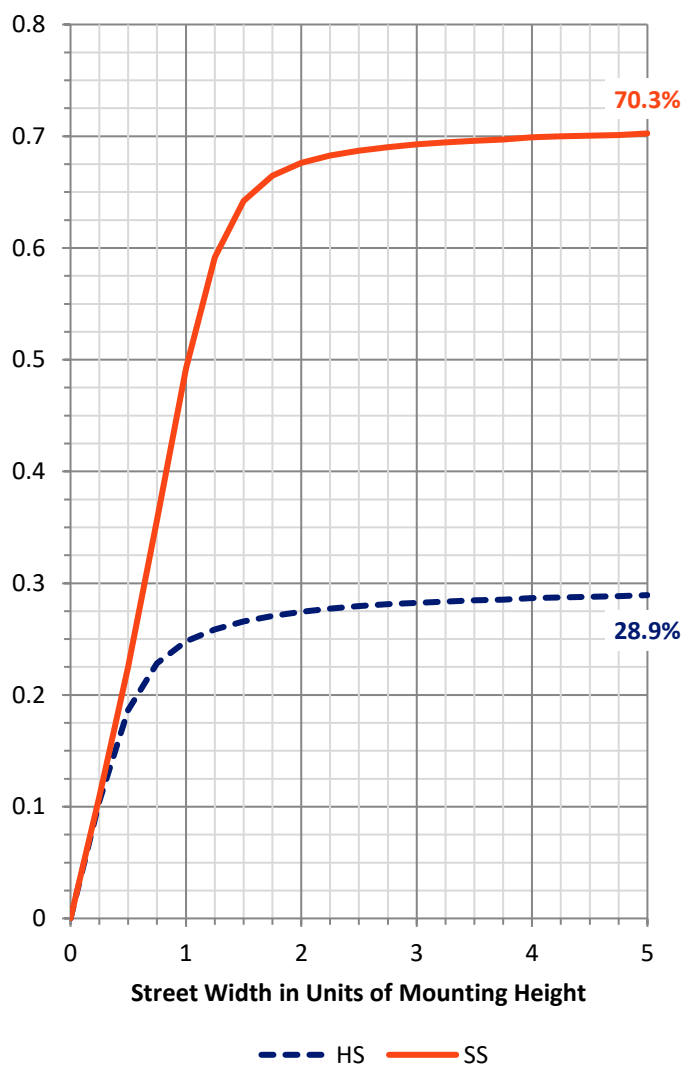
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8004.5	0.0	8004.5
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	19225.1	0.0	19225.1
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	27229.6	0.0	27229.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.4	1.1
10°-20°	980.7	3.6
20°-30°	1840.9	6.8
30°-40°	3085.5	11.3
40°-50°	5176.7	19.0
50°-60°	6562.5	24.1
60°-70°	5789.1	21.3
70°-80°	2988.5	11.0
80°-90°	511.4	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°	27229.6	100.0
0°-180°	27229.6	100.0

**Coefficient of Utilization**

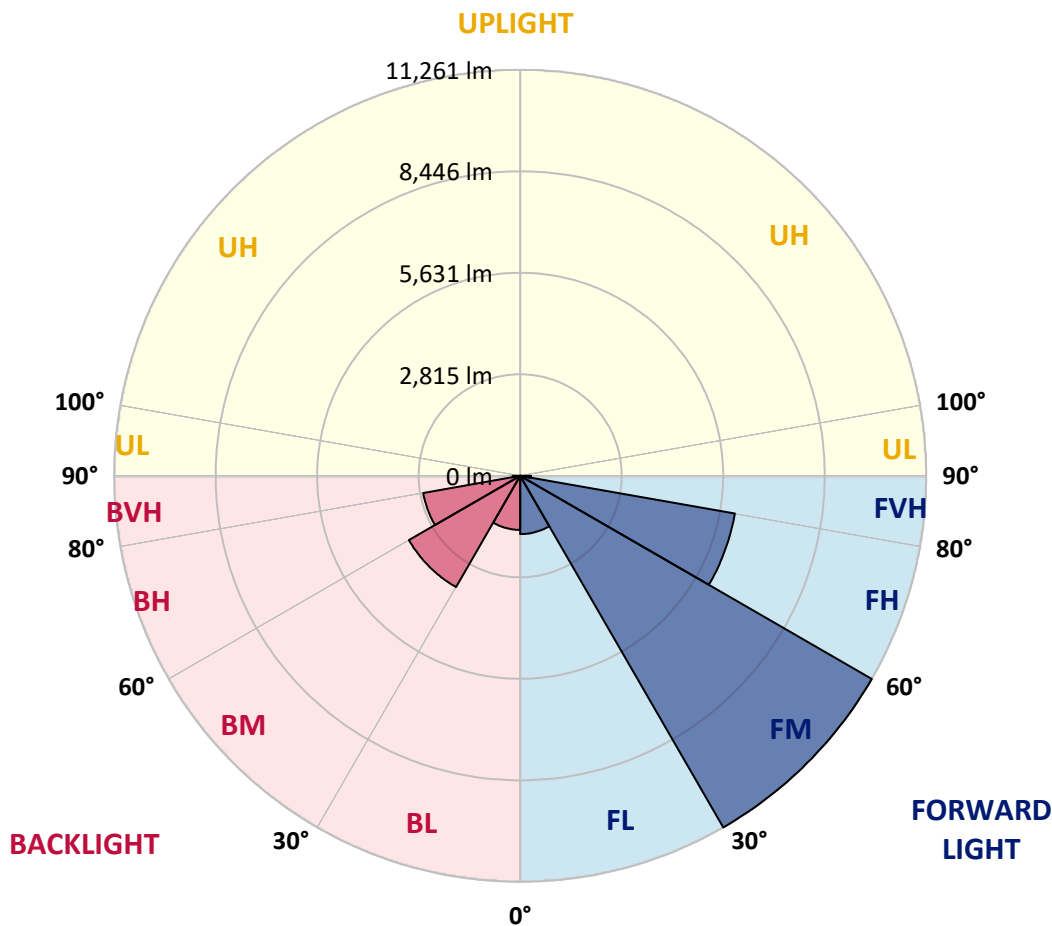


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1616.2	5.9			
FM (30°-60°)	11261.4	41.4			
FH (60°-80°)	6046.5	22.2			G3/7500
FVH (80°-90°)	300.9	1.1			G3/500
BL (0°-30°)	1499.8	5.5	B3/2500		
BM (30°-60°)	3563.2	13.1	B3/5000		
BH (60°-80°)	2731.1	10.0	B4/5000		G4/5000
BVH (80°-90°)	210.4	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°	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9
2.5°	2930.8	2926.2	2926.2	2926.2	2926.2	2921.6	2926.2	2935.2	2930.8	2926.2	2935.2
5°	2939.8	2935.2	2935.2	2935.2	2939.8	2935.2	2939.8	2953.5	2944.4	2944.4	2953.5
7.5°	2962.7	2958.0	2962.7	2958.0	2958.0	2958.0	2962.7	2976.3	2971.8	2976.3	2990.0
10°	2990.0	2990.0	2990.0	2990.0	2990.0	2990.0	2999.0	3008.2	3012.8	3017.3	3035.5
12.5°	3072.1	3072.1	3072.1	3067.5	3067.5	3053.8	3072.1	3081.1	3090.3	3099.3	3113.1
15°	3245.2	3245.2	3240.6	3222.4	3222.4	3195.1	3199.6	3204.2	3204.2	3213.4	3222.4
17.5°	3473.2	3468.6	3459.4	3445.7	3427.6	3395.7	3386.5	3377.4	3363.8	3359.1	3359.1
20°	3792.2	3787.6	3769.3	3733.0	3710.1	3659.9	3623.5	3587.1	3573.5	3550.6	3546.0
22.5°	4248.0	4248.0	4211.5	4156.8	4138.5	4033.8	3928.9	3851.4	3824.1	3792.2	3792.2
25°	4799.4	4795.0	4744.8	4681.0	4603.4	4494.1	4366.4	4261.6	4193.3	4120.3	4093.0
27.5°	5460.3	5446.7	5378.3	5300.8	5155.0	5018.3	4867.8	4758.5	4639.9	4548.8	4466.7
30°	6235.2	6221.6	6103.0	5957.2	5806.8	5670.0	5451.3	5319.1	5132.2	5022.7	4931.6
32.5°	7133.1	7119.5	6905.1	6763.9	6604.4	6435.7	6176.0	5966.3	5729.2	5574.3	5446.7
35°	8277.2	8222.5	7917.0	7721.1	7470.4	7301.7	7028.2	6745.6	6467.6	6248.9	6062.0
37.5°	9512.3	9448.5	9179.6	8887.9	8641.8	8436.7	8049.2	7693.7	7365.5	7064.7	6832.3
40°	10802.3	10633.5	10346.5	10132.1	9963.6	9767.6	9361.9	8988.1	8473.2	8135.9	7784.8
42.5°	11695.5	11531.4	11330.9	11189.6	11107.7	10957.2	10729.3	10405.7	9945.4	9954.4	9029.1
45°	12283.5	12041.9	11905.2	11914.2	11946.2	11946.2	11905.2	11855.0	11654.4	11791.3	11016.4
47.5°	12073.8	11914.2	11827.8	12010.0	12237.9	12465.8	12730.3	13017.3	13345.5	13732.9	12780.3
50°	10843.2	10902.4	10943.5	11330.9	11818.6	12338.2	12944.4	13728.3	14644.4	14822.2	14361.9
52.5°	8878.7	9006.4	9143.2	9735.6	10378.3	11276.2	12338.2	13632.6	14863.3	15588.0	15542.3
55°	6896.1	7055.6	7347.3	7789.4	8299.9	9147.7	10460.4	12456.7	14375.6	15528.7	16230.7
57.5°	4908.8	5141.3	5524.1	6139.5	6590.7	7069.3	8040.1	10255.3	12356.4	14503.2	16116.8
60°	3263.5	3372.9	3623.5	4389.3	5150.4	5651.8	6340.0	7142.2	8860.5	11818.6	14940.7
62.5°	2315.4	2388.3	2543.3	2889.7	3577.9	4485.0	4899.7	5268.9	5820.5	7602.6	11996.3
63°	2187.8	2251.7	2379.2	2671.0	3290.8	4229.8	4653.6	4990.9	5392.0	6800.4	11349.1
65°	1814.0	1841.3	1909.8	2051.1	2383.8	3163.2	3856.0	4061.0	4129.5	4371.0	7110.3
67.5°	1531.5	1549.8	1572.5	1613.5	1745.6	2105.8	2876.0	3135.8	3058.3	2894.3	3514.1
70°	1330.9	1344.6	1381.0	1431.2	1476.7	1567.9	1978.1	2365.6	2278.9	2055.6	2151.4
72.5°	1062.0	1084.7	1125.8	1212.4	1303.6	1422.0	1522.3	1763.9	1709.3	1495.0	1517.8
75°	838.7	852.3	888.9	952.6	1039.2	1175.9	1372.0	1453.9	1303.6	1103.0	1103.0
77.5°	665.5	679.1	711.1	761.2	815.8	911.6	1048.4	1262.5	1171.4	829.5	825.0
80°	501.4	515.0	547.0	592.5	647.3	715.5	797.6	893.3	1075.6	774.8	619.8
82.5°	369.2	373.7	428.4	460.3	478.5	533.3	601.7	656.3	738.4	715.5	551.5
85°	278.1	273.4	310.0	332.7	337.3	350.9	392.0	446.7	483.2	464.9	428.4
87.5°	154.9	136.7	159.5	182.4	182.4	186.9	196.0	228.0	259.8	250.6	228.0
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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CATALOG NUMBER: ARCH-L-AF72-250-D-U-T2U-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9
2.5°	2935.2	2935.2	2930.8	2930.8	2935.2	2935.2	2930.8	2944.4	2953.5	2953.5	2958.0
5°	2948.9	2953.5	2948.9	2948.9	2953.5	2953.5	2958.0	2971.8	2985.4	2994.6	3008.2
7.5°	2990.0	2994.6	2990.0	2990.0	2994.6	2999.0	3008.2	3026.5	3035.5	3053.8	3076.5
10°	3035.5	3040.1	3035.5	3040.1	3044.6	3049.2	3062.9	3076.5	3090.3	3108.4	3144.9
12.5°	3117.6	3122.2	3113.1	3117.6	3131.3	3131.3	3140.4	3149.5	3172.4	3195.1	3231.6
15°	3231.6	3231.6	3222.4	3227.0	3240.6	3240.6	3245.2	3254.3	3281.7	3309.0	3345.5
17.5°	3363.8	3372.9	3368.3	3372.9	3381.9	3386.5	3386.5	3395.7	3413.8	3432.1	3468.6
20°	3541.5	3546.0	3536.9	3546.0	3555.2	3546.0	3536.9	3532.4	3541.5	3550.6	3591.6
22.5°	3783.0	3778.5	3755.7	3755.7	3755.7	3737.4	3714.7	3687.3	3687.3	3673.7	3705.5
25°	4070.2	4056.5	4024.6	4029.2	3997.2	3969.9	3928.9	3887.9	3851.4	3837.7	3842.3
27.5°	4407.5	4380.1	4348.2	4339.1	4307.2	4257.1	4188.7	4111.2	4052.0	4006.4	3997.2
30°	4831.3	4772.1	4717.4	4708.3	4658.2	4576.1	4466.7	4361.8	4261.6	4184.2	4156.8
32.5°	5332.7	5241.6	5155.0	5145.9	5063.8	4954.5	4822.2	4676.4	4530.6	4407.5	4348.2
35°	5920.6	5783.9	5701.9	5679.1	5560.6	5423.8	5278.0	5091.2	4886.1	4712.9	4603.4
37.5°	6636.3	6495.0	6353.7	6358.3	6194.1	6034.6	5838.7	5610.8	5351.0	5109.4	4954.5
40°	7520.6	7320.0	7137.7	7096.6	6955.3	6732.0	6517.8	6253.5	5934.4	5615.3	5392.0
42.5°	8591.6	8263.5	8012.7	7976.3	7789.4	7516.0	7256.1	6905.1	6581.6	6194.1	5925.2
45°	9808.5	9284.5	8983.7	8928.8	8628.1	8350.0	8035.6	7661.8	7265.3	6827.7	6508.7
47.5°	11321.8	10574.3	10063.9	9972.6	9557.9	9193.3	8865.1	8450.3	7976.3	7488.6	7137.7
50°	13085.7	11982.7	11294.4	11153.1	10597.0	10168.6	9749.3	9229.6	8723.8	8213.3	7807.6
52.5°	14854.2	13669.1	12753.0	12579.8	11759.3	11185.1	10633.5	10113.9	9516.9	9010.9	8550.6
55°	16276.3	15487.7	14425.7	14184.1	13008.2	12228.9	11504.1	10911.6	10319.1	9918.0	9375.5
57.5°	17133.1	17092.1	16253.4	15920.7	14311.8	13158.6	12351.9	11677.3	11103.0	10934.3	10214.2
60°	17110.3	18172.3	17812.2	17561.6	15629.0	14111.3	13062.9	12333.6	11859.6	12051.1	11057.5
62.5°	16066.6	18217.9	18650.9	18582.5	17032.9	14877.0	13646.3	12894.2	12643.6	13213.3	11932.5
63°	15688.2	18113.0	18687.3	18660.0	17301.8	15022.8	13746.6	13003.6	12798.5	13509.6	12092.0
65°	13258.9	17196.9	18245.2	18368.3	17880.6	15524.2	13979.0	13281.7	13258.9	14170.5	12470.5
67.5°	8081.2	14530.5	16253.4	16490.4	17064.7	15683.7	13846.9	13186.0	13514.2	14266.2	12356.4
70°	3454.9	9589.8	13062.9	13445.8	14849.7	14890.6	13468.6	12794.0	13454.8	13518.6	11545.1
72.5°	2046.5	4521.4	8892.4	9726.6	11750.3	12812.2	12602.5	12110.3	12675.5	11873.3	9831.3
75°	1449.5	2114.8	4516.9	5405.6	8181.5	9781.2	10588.0	10815.9	10793.0	9416.6	7379.3
77.5°	1039.2	1358.2	1905.2	2247.0	4567.0	6280.8	7265.3	7930.7	7716.6	6303.6	4548.8
80°	724.7	939.0	1166.8	1239.8	2119.4	3227.0	3828.7	4120.3	3992.7	3149.5	2037.3
82.5°	524.1	615.3	752.0	797.6	1066.6	1490.4	1773.1	1563.4	1499.6	1162.3	879.6
85°	405.7	396.5	469.5	487.8	624.4	779.3	797.6	619.8	542.4	483.2	492.2
87.5°	287.2	246.2	250.6	259.8	323.6	414.7	405.7	255.2	218.7	232.5	264.4
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°	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9	2948.9
2.5°	2967.2	2971.8	2980.8	2985.4	2994.6	2994.6	3003.6	3008.2	3017.3	3026.5	3031.0
5°	3021.9	3035.5	3053.8	3062.9	3081.1	3094.8	3113.1	3122.2	3140.4	3154.1	3172.4
7.5°	3103.9	3126.7	3149.5	3176.8	3204.2	3227.0	3245.2	3268.1	3299.9	3322.7	3336.3
10°	3181.4	3213.4	3254.3	3286.2	3327.3	3359.1	3386.5	3427.6	3463.9	3495.9	3514.1
12.5°	3281.7	3322.7	3363.8	3413.8	3468.6	3509.6	3550.6	3605.3	3655.4	3691.9	3710.1
15°	3400.1	3450.3	3495.9	3555.2	3619.0	3673.7	3733.0	3792.2	3828.7	3828.7	3819.4
17.5°	3523.3	3564.2	3619.0	3687.3	3774.0	3842.3	3874.3	3883.3	3869.6	3837.7	3815.0
20°	3646.3	3682.8	3742.0	3824.1	3915.2	3928.9	3897.0	3856.0	3815.0	3760.2	3723.8
22.5°	3746.6	3796.8	3887.9	3983.6	3988.2	3910.7	3824.1	3755.7	3691.9	3628.1	3559.6
25°	3865.0	3933.5	4056.5	4093.0	3974.6	3828.7	3705.5	3605.3	3500.4	3395.7	3318.1
27.5°	4010.9	4111.2	4234.3	4129.5	3897.0	3691.9	3523.3	3372.9	3236.2	3090.3	3003.6
30°	4165.9	4320.8	4348.2	4074.8	3764.8	3500.4	3272.6	3044.6	2871.5	2739.2	2689.2
32.5°	4352.8	4553.4	4389.3	3979.0	3587.1	3240.6	2935.2	2661.8	2515.9	2433.9	2411.2
35°	4635.4	4799.4	4412.0	3878.8	3381.9	2930.8	2547.8	2329.1	2237.9	2183.2	2155.9
37.5°	5041.0	5036.5	4407.5	3755.7	3144.9	2593.5	2237.9	2082.9	2010.1	1964.5	1914.3
40°	5515.1	5218.8	4380.1	3577.9	2825.9	2269.9	2023.7	1877.8	1809.5	1754.8	1695.4
42.5°	5984.4	5341.8	4302.6	3313.7	2429.4	2037.3	1868.8	1736.5	1663.6	1604.4	1522.3
45°	6390.1	5392.0	4152.3	2948.9	2073.8	1855.1	1768.5	1654.5	1567.9	1476.7	1412.9
47.5°	6709.2	5382.8	3910.7	2520.5	1836.8	1727.4	1686.4	1609.0	1504.1	1390.1	1308.2
50°	6978.2	5314.5	3582.5	2142.2	1677.3	1613.5	1599.8	1577.0	1408.4	1312.6	1262.5
52.5°	7224.2	5214.2	3231.6	1887.0	1540.5	1485.9	1513.2	1490.4	1372.0	1290.0	1239.8
55°	7561.5	5145.9	2885.1	1691.0	1381.0	1367.4	1390.1	1422.0	1349.2	1271.7	1216.9
57.5°	7958.1	5182.2	2620.8	1472.2	1230.6	1239.8	1317.2	1362.8	1326.3	1244.4	1189.7
60°	8413.8	5291.8	2388.3	1262.5	1107.6	1130.4	1244.4	1308.2	1303.6	1207.9	1144.1
62.5°	8924.3	5405.6	2019.1	1103.0	1002.8	1039.2	1157.7	1239.8	1253.4	1171.4	1093.9
63°	9024.6	5414.8	1923.4	1071.1	984.5	1025.5	1134.8	1221.5	1239.8	1162.3	1084.7
65°	9270.7	5332.7	1549.8	984.5	911.6	957.1	1066.6	1144.1	1180.5	1112.1	1048.4
67.5°	9065.7	4662.7	1166.8	879.6	852.3	884.2	979.9	1052.8	1084.7	1052.8	989.1
70°	8290.8	3391.1	911.6	783.9	788.6	811.2	884.2	952.6	989.1	979.9	920.7
72.5°	6677.3	1923.4	761.2	701.9	715.5	743.0	793.1	856.9	888.9	884.2	843.3
75°	4398.3	984.5	642.7	629.0	638.1	660.9	697.4	747.5	783.9	779.3	761.2
77.5°	2178.6	683.6	551.5	556.0	560.6	578.8	606.2	651.7	674.5	679.1	674.5
80°	897.9	533.3	473.9	478.5	483.2	496.8	515.0	556.0	569.8	578.8	583.5
82.5°	537.9	405.7	378.2	387.5	392.0	405.7	419.3	455.8	469.5	483.2	483.2
85°	355.5	282.6	273.4	282.6	291.7	300.8	305.4	328.3	350.9	369.2	378.2
87.5°	191.4	168.7	164.1	168.7	168.7	177.8	186.9	209.7	237.0	255.2	264.4
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°	2948.9	2948.9	2948.9	2948.9	2948.9
2.5°	3021.9	3026.5	3021.9	3026.5	3031.0
5°	3172.4	3181.4	3176.8	3176.8	3195.1
7.5°	3345.5	3363.8	3363.8	3372.9	3381.9
10°	3532.4	3550.6	3564.2	3564.2	3577.9
12.5°	3719.1	3728.4	3742.0	3742.0	3742.0
15°	3815.0	3810.4	3805.8	3801.2	3801.2
17.5°	3801.2	3783.0	3774.0	3764.8	3769.3
20°	3701.0	3669.2	3659.9	3646.3	3655.4
22.5°	3527.8	3482.2	3463.9	3441.2	3450.3
25°	3268.1	3213.4	3204.2	3176.8	3190.5
27.5°	2967.2	2939.8	2935.2	2930.8	2953.5
30°	2684.6	2693.7	2698.2	2707.3	2730.2
32.5°	2424.8	2443.0	2447.6	2452.1	2484.0
35°	2169.6	2146.7	2169.6	2160.5	2187.8
37.5°	1891.5	1873.2	1855.1	1832.3	1850.6
40°	1659.1	1627.2	1572.5	1545.2	1549.8
42.5°	1476.7	1435.7	1390.1	1362.8	1362.8
45°	1358.2	1308.2	1267.1	1248.9	1248.9
47.5°	1267.1	1244.4	1221.5	1207.9	1207.9
50°	1230.6	1203.3	1189.7	1180.5	1180.5
52.5°	1203.3	1175.9	1162.3	1153.1	1144.1
55°	1180.5	1139.5	1125.8	1121.2	1121.2
57.5°	1148.6	1112.1	1093.9	1089.4	1089.4
60°	1098.5	1071.1	1052.8	1048.4	1048.4
62.5°	1048.4	1020.9	1002.8	1002.8	1002.8
63°	1039.2	1007.3	993.6	993.6	993.6
65°	998.2	966.3	952.6	952.6	948.1
67.5°	943.5	911.6	902.5	902.5	893.3
70°	879.6	852.3	843.3	847.8	829.5
72.5°	815.8	788.6	774.8	774.8	756.6
75°	743.0	715.5	697.4	692.8	674.5
77.5°	660.9	638.1	619.8	601.7	592.5
80°	574.2	556.0	533.3	519.6	506.0
82.5°	483.2	464.9	451.2	469.5	401.1
85°	378.2	360.1	341.9	369.2	287.2
87.5°	278.1	268.9	250.6	218.7	191.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)