

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: P257959

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257959  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-230-D-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27232 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 - Semi-Cutoff  
BUG Rating: B4 - U0 - G4

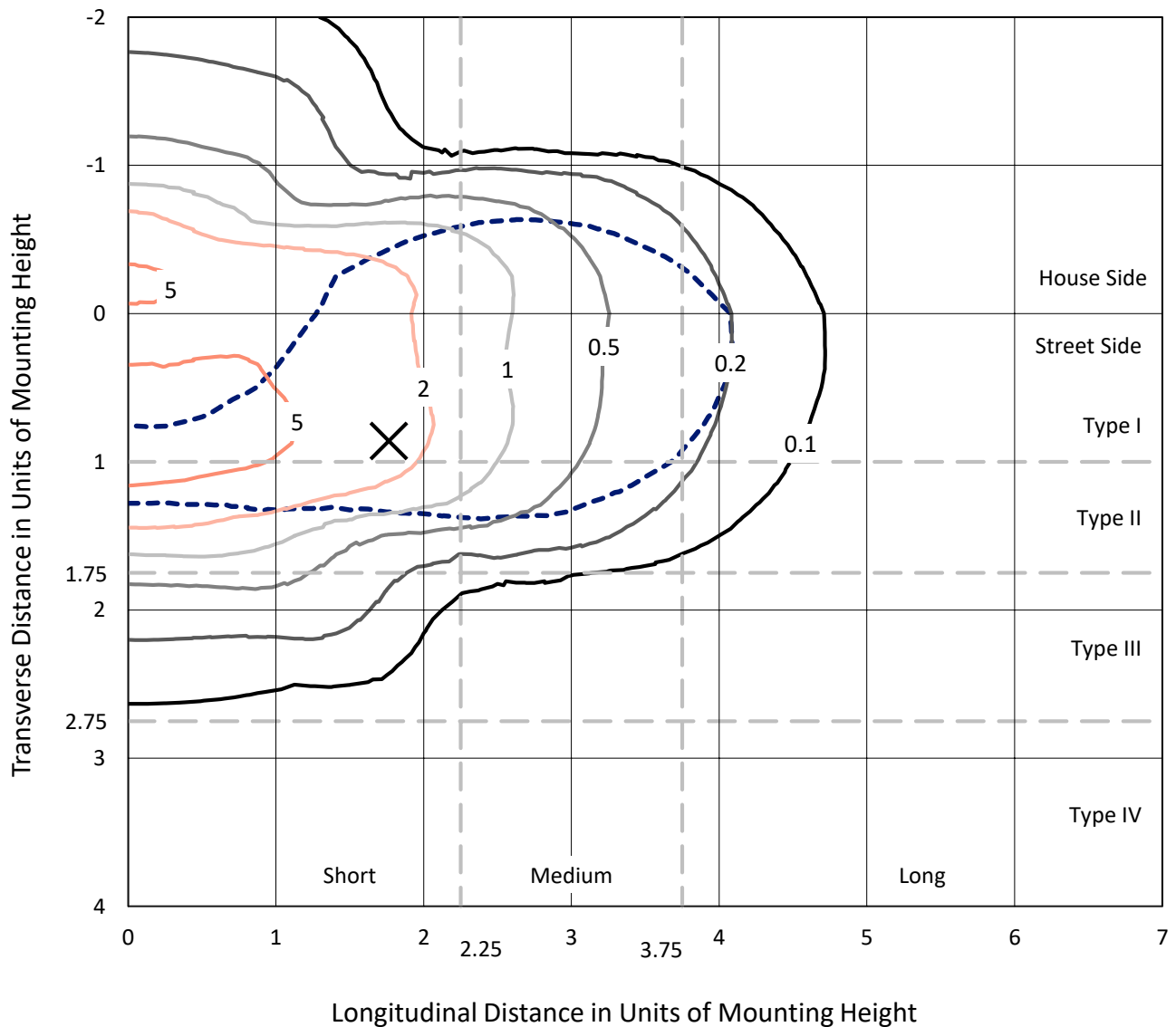
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

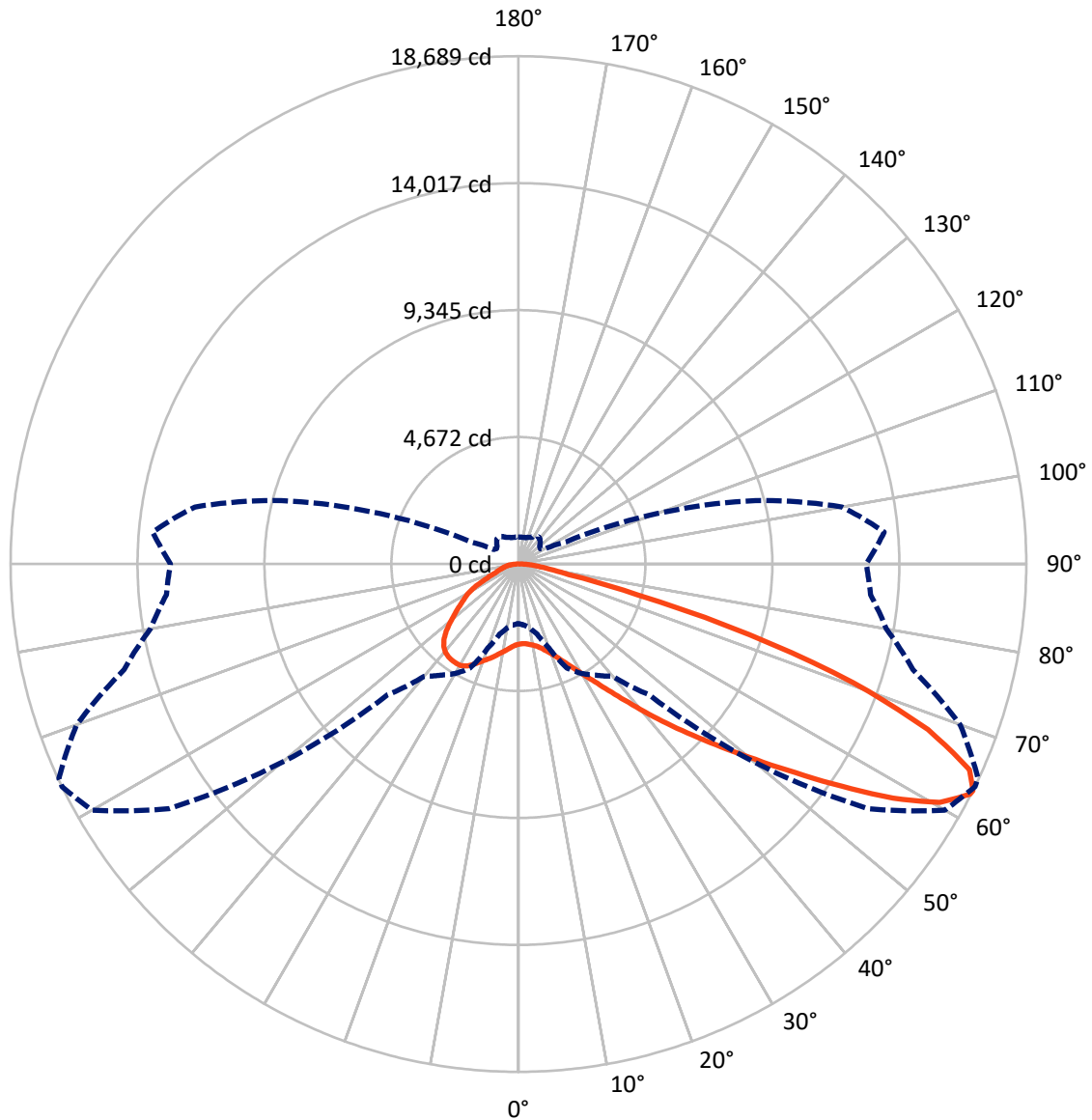


Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - Semi-Cutoff

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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	8005.2	0.0	8005.2
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	19226.8	0.0	19226.8
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	27232.0	0.0	27232.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	294.5	1.1
10°-20°	980.8	3.6
20°-30°	1841.0	6.8
30°-40°	3085.7	11.3
40°-50°	5177.2	19.0
50°-60°	6563.1	24.1
60°-70°	5789.6	21.3
70°-80°	2988.7	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°	27232.0	100.0
0°-180°	27232.0	100.0



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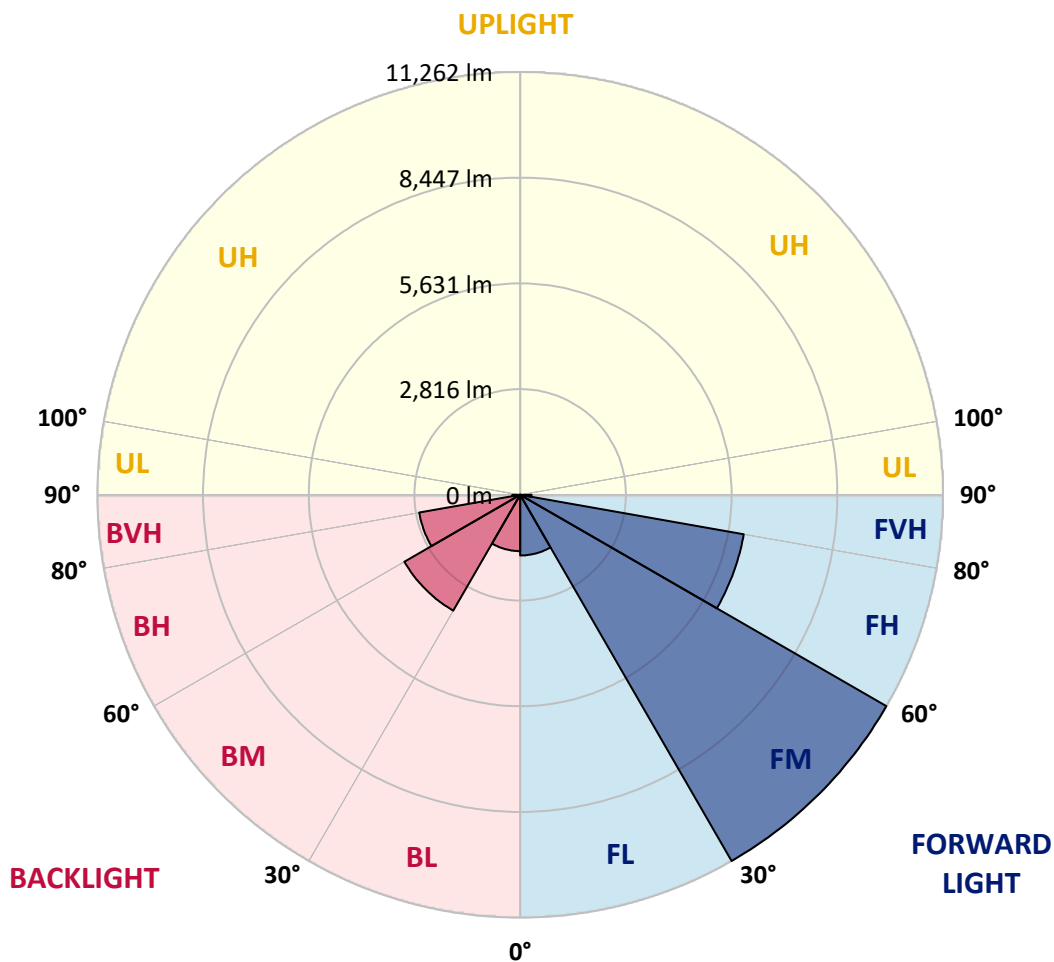
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1616.3	5.9			
FM	(30°-60°)	11262.4	41.4			
FH	(60°-80°)	6047.0	22.2			G3/7500
FVH	(80°-90°)	301.0	1.1			G3/500
BL	(0°-30°)	1499.9	5.5	B3/2500		
BM	(30°-60°)	3563.5	13.1	B3/5000		
BH	(60°-80°)	2731.3	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°	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	2931.0	2926.5	2926.5	2926.5	2926.5	2921.9	2926.5	2935.6	2931.0	2926.5	2935.6
5°	2940.1	2935.6	2935.6	2935.6	2940.1	2935.6	2940.1	2953.8	2944.7	2944.7	2953.8
7.5°	2962.9	2958.4	2962.9	2958.4	2958.4	2958.4	2962.9	2976.6	2972.0	2976.6	2990.2
10°	2990.2	2990.2	2990.2	2990.2	2990.2	2990.2	2999.4	3008.5	3013.0	3017.6	3035.8
12.5°	3072.3	3072.3	3072.3	3067.7	3067.7	3054.0	3072.3	3081.4	3090.5	3099.6	3113.4
15°	3245.5	3245.5	3240.9	3222.7	3222.7	3195.4	3199.9	3204.5	3204.5	3213.6	3222.7
17.5°	3473.4	3468.8	3459.7	3446.0	3427.8	3395.9	3386.8	3377.7	3364.0	3359.5	3359.5
20°	3792.5	3788.0	3769.7	3733.3	3710.4	3660.3	3623.8	3587.4	3573.7	3550.9	3546.4
22.5°	4248.3	4248.3	4211.9	4157.2	4139.0	4034.1	3929.3	3851.7	3824.4	3792.5	3792.5
25°	4799.9	4795.3	4745.2	4681.3	4603.9	4494.4	4366.9	4262.0	4193.6	4120.7	4093.3
27.5°	5460.8	5447.1	5378.8	5301.2	5155.5	5018.7	4868.2	4758.9	4640.3	4549.2	4467.1
30°	6235.7	6222.1	6103.5	5957.7	5807.3	5670.5	5451.7	5319.5	5132.7	5023.2	4932.1
32.5°	7133.8	7120.0	6905.8	6764.5	6605.0	6436.3	6176.5	5966.8	5729.8	5574.8	5447.1
35°	8277.8	8223.2	7917.7	7721.7	7471.0	7302.3	7028.9	6746.3	6468.2	6249.4	6062.5
37.5°	9513.1	9449.3	9180.4	8888.6	8642.5	8437.4	8049.9	7694.4	7366.2	7065.3	6832.9
40°	10803.2	10634.5	10347.4	10133.0	9964.5	9768.4	9362.8	8989.0	8473.8	8136.6	7785.6
42.5°	11696.5	11532.4	11331.9	11190.6	11108.5	10958.2	10730.2	10406.6	9946.2	9955.3	9030.0
45°	12284.6	12043.0	11906.2	11915.3	11947.2	11947.2	11906.2	11856.1	11655.5	11792.3	11017.4
47.5°	12074.9	11915.3	11828.8	12011.1	12239.0	12466.9	12731.3	13018.5	13346.6	13734.1	12781.5
50°	10844.2	10903.4	10944.4	11331.9	11819.7	12339.2	12945.5	13729.5	14645.8	14823.6	14363.2
52.5°	8879.5	9007.2	9144.0	9736.5	10379.3	11277.2	12339.2	13633.8	14864.6	15589.4	15543.7
55°	6896.7	7056.2	7348.0	7790.1	8300.6	9148.5	10461.3	12457.8	14376.9	15530.1	16232.1
57.5°	4909.2	5141.8	5524.7	6140.1	6591.3	7069.9	8040.8	10256.1	12357.6	14504.4	16118.1
60°	3263.7	3373.2	3623.8	4389.6	5150.9	5652.3	6340.6	7142.9	8861.3	11819.7	14942.0
62.5°	2315.7	2388.6	2543.6	2889.9	3578.3	4485.3	4900.1	5269.4	5820.9	7603.2	11997.4
63°	2188.0	2251.8	2379.4	2671.1	3291.0	4230.1	4654.0	4991.3	5392.5	6801.0	11350.2
65°	1814.2	1841.5	1910.0	2051.2	2384.0	3163.5	3856.3	4061.4	4129.9	4371.4	7110.9
67.5°	1531.6	1549.8	1572.6	1613.6	1745.9	2105.9	2876.2	3136.1	3058.6	2894.5	3514.4
70°	1331.1	1344.7	1381.2	1431.3	1476.8	1568.1	1978.3	2365.8	2279.1	2055.8	2151.5
72.5°	1062.1	1084.8	1125.9	1212.5	1303.6	1422.2	1522.5	1764.1	1709.4	1495.1	1518.0
75°	838.7	852.4	888.8	952.7	1039.3	1176.1	1372.1	1454.1	1303.6	1103.2	1103.2
77.5°	665.5	679.1	711.1	761.3	815.9	911.7	1048.4	1262.6	1171.5	829.6	825.0
80°	501.5	515.1	547.0	592.6	647.3	715.7	797.7	893.4	1075.7	774.9	619.9
82.5°	369.2	373.8	428.5	460.4	478.6	533.4	601.7	656.4	738.5	715.7	551.6
85°	278.0	273.5	310.0	332.8	337.3	351.0	392.0	446.7	483.1	464.9	428.5
87.5°	155.0	136.8	159.6	182.3	182.3	186.9	196.0	227.9	259.8	250.7	227.9
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°	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	2935.6	2935.6	2931.0	2931.0	2935.6	2935.6	2931.0	2944.7	2953.8	2953.8	2958.4
5°	2949.2	2953.8	2949.2	2949.2	2953.8	2953.8	2958.4	2972.0	2985.7	2994.8	3008.5
7.5°	2990.2	2994.8	2990.2	2990.2	2994.8	2999.4	3008.5	3026.7	3035.8	3054.0	3076.8
10°	3035.8	3040.4	3035.8	3040.4	3044.9	3049.5	3063.1	3076.8	3090.5	3108.7	3145.3
12.5°	3117.9	3122.5	3113.4	3117.9	3131.6	3131.6	3140.7	3149.8	3172.6	3195.4	3231.8
15°	3231.8	3231.8	3222.7	3227.3	3240.9	3240.9	3245.5	3254.6	3281.9	3309.3	3345.8
17.5°	3364.0	3373.2	3368.6	3373.2	3382.3	3386.8	3386.8	3395.9	3414.2	3432.4	3468.8
20°	3541.8	3546.4	3537.3	3546.4	3555.5	3546.4	3537.3	3532.7	3541.8	3550.9	3591.9
22.5°	3783.4	3778.8	3756.1	3756.1	3756.1	3737.8	3715.1	3687.6	3687.6	3673.9	3705.8
25°	4070.5	4056.9	4025.0	4029.5	3997.6	3970.3	3929.3	3888.2	3851.7	3838.1	3842.6
27.5°	4407.9	4380.5	4348.6	4339.5	4307.5	4257.4	4189.1	4111.5	4052.3	4006.7	3997.6
30°	4831.8	4772.6	4717.8	4708.7	4658.5	4576.5	4467.1	4362.3	4262.0	4184.5	4157.2
32.5°	5333.2	5242.0	5155.5	5146.3	5064.2	4954.9	4822.7	4676.8	4531.0	4407.9	4348.6
35°	5921.2	5784.5	5702.4	5679.6	5561.1	5424.4	5278.5	5091.6	4886.5	4713.2	4603.9
37.5°	6636.9	6495.5	6354.3	6358.8	6194.7	6035.2	5839.2	5611.3	5351.5	5109.8	4954.9
40°	7521.1	7320.6	7138.3	7097.2	6956.0	6732.6	6518.3	6254.0	5934.9	5615.8	5392.5
42.5°	8592.4	8264.2	8013.5	7977.0	7790.1	7516.6	7256.8	6905.8	6582.2	6194.7	5925.7
45°	9809.4	9285.2	8984.4	8929.6	8628.8	8350.8	8036.3	7662.5	7265.9	6828.3	6509.2
47.5°	11322.7	10575.3	10064.7	9973.6	9558.8	9194.1	8865.9	8451.1	7977.0	7489.2	7138.3
50°	13086.8	11983.8	11295.4	11154.2	10598.0	10169.6	9750.2	9230.5	8724.5	8214.0	7808.4
52.5°	14855.5	13670.3	12754.0	12580.9	11760.4	11186.1	10634.5	10114.8	9517.7	9011.7	8551.4
55°	16277.6	15489.0	14427.0	14185.4	13009.4	12229.9	11505.1	10912.5	10319.9	9918.8	9376.4
57.5°	17134.6	17093.6	16254.9	15922.1	14313.0	13159.8	12352.9	11678.3	11104.0	10935.3	10215.1
60°	17111.8	18173.8	17813.8	17563.0	15630.4	14112.4	13064.0	12334.7	11860.7	12052.1	11058.4
62.5°	16068.0	18219.5	18652.5	18584.2	17034.3	14878.2	13647.5	12895.4	12644.7	13214.5	11933.6
63°	15689.6	18114.6	18689.0	18661.6	17303.2	15024.1	13747.7	13004.8	12799.7	13510.7	12093.1
65°	13260.1	17198.5	18246.8	18369.8	17882.2	15525.5	13980.3	13282.8	13260.1	14171.8	12471.5
67.5°	8081.8	14531.8	16254.9	16491.9	17066.2	15685.1	13848.1	13187.2	13515.3	14267.4	12357.6
70°	3455.2	9590.7	13064.0	13447.0	14850.9	14891.9	13469.7	12795.1	13456.1	13519.8	11546.1
72.5°	2046.7	4521.9	8893.2	9727.3	11751.2	12813.4	12603.7	12111.3	12676.6	11874.3	9832.2
75°	1449.5	2115.1	4517.2	5406.1	8182.2	9782.1	10588.9	10816.8	10794.0	9417.4	7379.9
77.5°	1039.3	1358.4	1905.3	2247.2	4567.4	6281.3	7265.9	7931.4	7717.1	6304.1	4549.2
80°	724.8	939.0	1166.9	1239.8	2119.6	3227.3	3829.0	4120.7	3993.1	3149.8	2037.5
82.5°	524.2	615.4	752.1	797.7	1066.6	1490.5	1773.2	1563.5	1499.6	1162.4	879.7
85°	405.7	396.6	469.5	487.7	624.5	779.5	797.7	619.9	542.5	483.1	492.2
87.5°	287.1	246.1	250.7	259.8	323.7	414.8	405.7	255.2	218.8	232.5	264.3
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	2967.5	2972.0	2981.1	2985.7	2994.8	2994.8	3003.9	3008.5	3017.6	3026.7	3031.3
5°	3022.1	3035.8	3054.0	3063.1	3081.4	3095.0	3113.4	3122.5	3140.7	3154.4	3172.6
7.5°	3104.1	3127.0	3149.8	3177.1	3204.5	3227.3	3245.5	3268.3	3300.2	3323.0	3336.7
10°	3181.7	3213.6	3254.6	3286.5	3327.6	3359.5	3386.8	3427.8	3464.3	3496.2	3514.4
12.5°	3281.9	3323.0	3364.0	3414.2	3468.8	3509.8	3550.9	3605.6	3655.7	3692.2	3710.4
15°	3400.5	3450.6	3496.2	3555.5	3619.3	3673.9	3733.3	3792.5	3829.0	3829.0	3819.8
17.5°	3523.6	3564.6	3619.3	3687.6	3774.3	3842.6	3874.5	3883.6	3870.0	3838.1	3815.3
20°	3646.6	3683.1	3742.4	3824.4	3915.5	3929.3	3897.3	3856.3	3815.3	3760.6	3724.2
22.5°	3746.9	3797.1	3888.2	3984.0	3988.5	3911.0	3824.4	3756.1	3692.2	3628.4	3560.0
25°	3865.4	3933.8	4056.9	4093.3	3974.8	3829.0	3705.8	3605.6	3500.7	3395.9	3318.5
27.5°	4011.3	4111.5	4234.6	4129.9	3897.3	3692.2	3523.6	3373.2	3236.4	3090.5	3003.9
30°	4166.3	4321.3	4348.6	4075.1	3765.2	3500.7	3272.8	3044.9	2871.7	2739.6	2689.4
32.5°	4353.2	4553.8	4389.6	3979.4	3587.4	3240.9	2935.6	2662.0	2516.2	2434.1	2411.3
35°	4635.8	4799.9	4412.4	3879.1	3382.3	2931.0	2548.1	2329.3	2238.1	2183.4	2156.1
37.5°	5041.5	5036.9	4407.9	3756.1	3145.3	2593.7	2238.1	2083.1	2010.2	1964.6	1914.5
40°	5515.5	5219.2	4380.5	3578.3	2826.1	2270.0	2023.9	1878.0	1809.6	1755.0	1695.6
42.5°	5985.1	5342.4	4303.0	3313.8	2429.6	2037.5	1868.9	1736.7	1663.7	1604.5	1522.5
45°	6390.7	5392.5	4152.6	2949.2	2074.0	1855.2	1768.6	1654.6	1568.1	1476.8	1413.1
47.5°	6709.8	5383.4	3911.0	2520.8	1837.0	1727.6	1686.5	1609.1	1504.2	1390.3	1308.3
50°	6978.8	5314.9	3582.8	2142.4	1677.4	1613.6	1600.0	1577.2	1408.5	1312.8	1262.6
52.5°	7224.9	5214.7	3231.8	1887.1	1540.7	1486.0	1513.4	1490.5	1372.1	1290.0	1239.8
55°	7562.2	5146.3	2885.4	1691.1	1381.2	1367.5	1390.3	1422.2	1349.3	1271.7	1217.1
57.5°	7958.8	5182.8	2621.0	1472.3	1230.7	1239.8	1317.4	1362.9	1326.5	1244.4	1189.7
60°	8414.6	5292.1	2388.6	1262.6	1107.7	1130.5	1244.4	1308.3	1303.6	1207.9	1144.2
62.5°	8925.1	5406.1	2019.3	1103.2	1002.8	1039.3	1157.8	1239.8	1253.5	1171.5	1093.9
63°	9025.4	5415.2	1923.6	1071.2	984.6	1025.6	1135.0	1221.6	1239.8	1162.4	1084.8
65°	9271.5	5333.2	1549.8	984.6	911.7	957.3	1066.6	1144.2	1180.6	1112.3	1048.4
67.5°	9066.4	4663.1	1166.9	879.7	852.4	884.3	980.0	1052.9	1084.8	1052.9	989.2
70°	8291.5	3391.4	911.7	784.0	788.6	811.4	884.3	952.7	989.2	980.0	920.8
72.5°	6677.9	1923.6	761.3	701.9	715.7	743.0	793.1	856.9	888.8	884.3	843.3
75°	4398.8	984.6	642.7	629.0	638.1	660.9	697.4	747.6	784.0	779.5	761.3
77.5°	2178.9	683.7	551.6	556.1	560.7	578.9	606.3	651.8	674.6	679.1	674.6
80°	897.9	533.4	474.0	478.6	483.1	496.8	515.1	556.1	569.8	578.9	583.5
82.5°	537.9	405.7	378.3	387.5	392.0	405.7	419.4	455.8	469.5	483.1	483.1
85°	355.6	282.6	273.5	282.6	291.7	300.8	305.5	328.2	351.0	369.2	378.3
87.5°	191.5	168.7	164.1	168.7	168.7	177.8	186.9	209.7	237.0	255.2	264.3
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):**

	160°	165°	170°	175°	180°
0°	2949.2	2949.2	2949.2	2949.2	2949.2
2.5°	3022.1	3026.7	3022.1	3026.7	3031.3
5°	3172.6	3181.7	3177.1	3177.1	3195.4
7.5°	3345.8	3364.0	3364.0	3373.2	3382.3
10°	3532.7	3550.9	3564.6	3564.6	3578.3
12.5°	3719.6	3728.7	3742.4	3742.4	3742.4
15°	3815.3	3810.7	3806.2	3801.6	3801.6
17.5°	3801.6	3783.4	3774.3	3765.2	3769.7
20°	3701.3	3669.4	3660.3	3646.6	3655.7
22.5°	3528.2	3482.5	3464.3	3441.5	3450.6
25°	3268.3	3213.6	3204.5	3177.1	3190.8
27.5°	2967.5	2940.1	2935.6	2931.0	2953.8
30°	2684.8	2693.9	2698.5	2707.6	2730.5
32.5°	2425.0	2443.2	2447.8	2452.3	2484.2
35°	2169.8	2147.0	2169.8	2160.7	2188.0
37.5°	1891.6	1873.4	1855.2	1832.4	1850.6
40°	1659.2	1627.3	1572.6	1545.3	1549.8
42.5°	1476.8	1435.8	1390.3	1362.9	1362.9
45°	1358.4	1308.3	1267.2	1248.9	1248.9
47.5°	1267.2	1244.4	1221.6	1207.9	1207.9
50°	1230.7	1203.4	1189.7	1180.6	1180.6
52.5°	1203.4	1176.1	1162.4	1153.3	1144.2
55°	1180.6	1139.6	1125.9	1121.4	1121.4
57.5°	1148.7	1112.3	1093.9	1089.4	1089.4
60°	1098.5	1071.2	1052.9	1048.4	1048.4
62.5°	1048.4	1021.0	1002.8	1002.8	1002.8
63°	1039.3	1007.4	993.7	993.7	993.7
65°	998.3	966.4	952.7	952.7	948.2
67.5°	943.6	911.7	902.5	902.5	893.4
70°	879.7	852.4	843.3	847.8	829.6
72.5°	815.9	788.6	774.9	774.9	756.7
75°	743.0	715.7	697.4	692.8	674.6
77.5°	660.9	638.1	619.9	601.7	592.6
80°	574.4	556.1	533.4	519.7	506.0
82.5°	483.1	464.9	451.2	469.5	401.1
85°	378.3	360.1	341.9	369.2	287.1
87.5°	278.0	268.9	250.7	218.8	191.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)