

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: P257958

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257958  
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-AF72-220-D-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26565 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

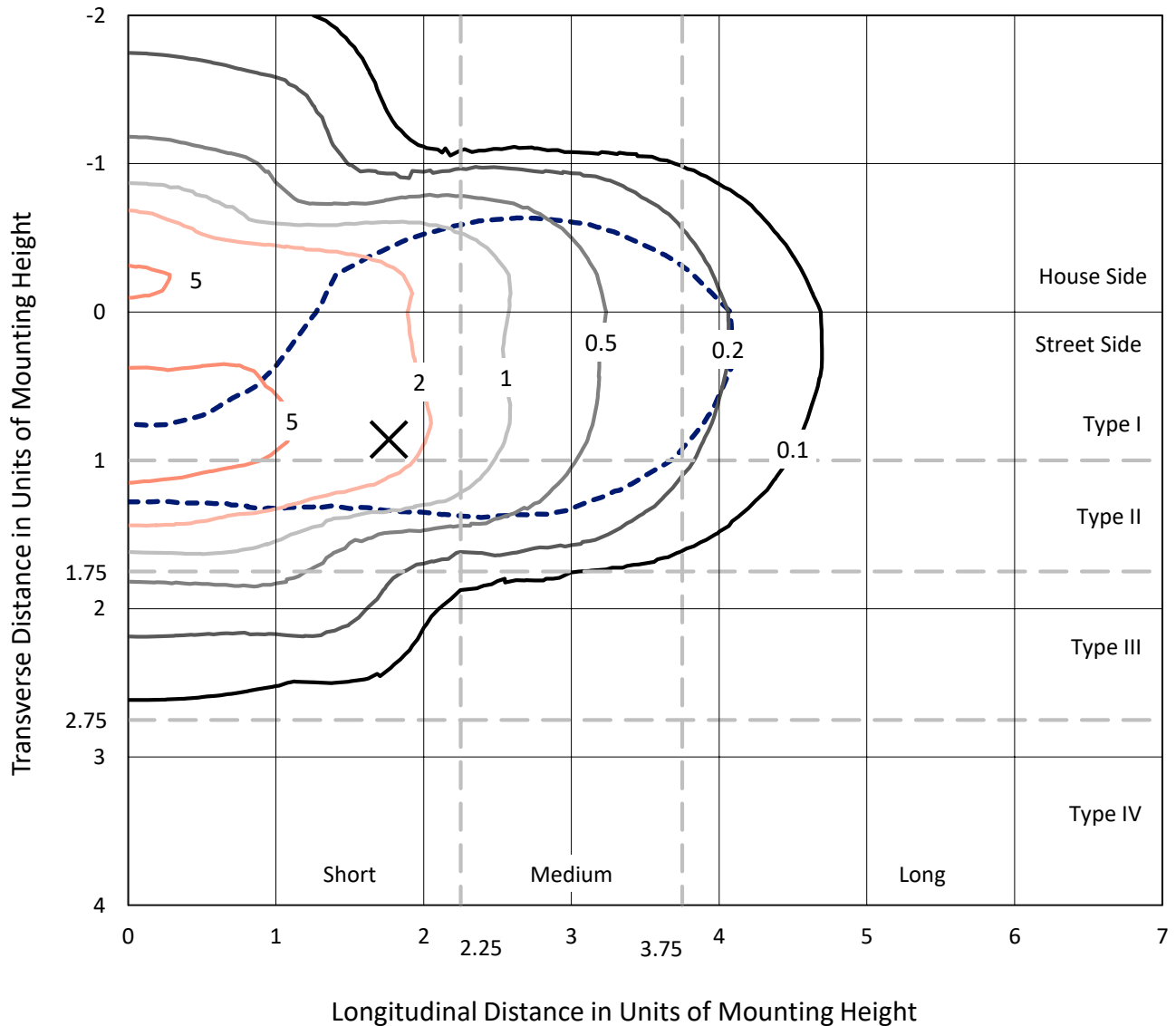
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

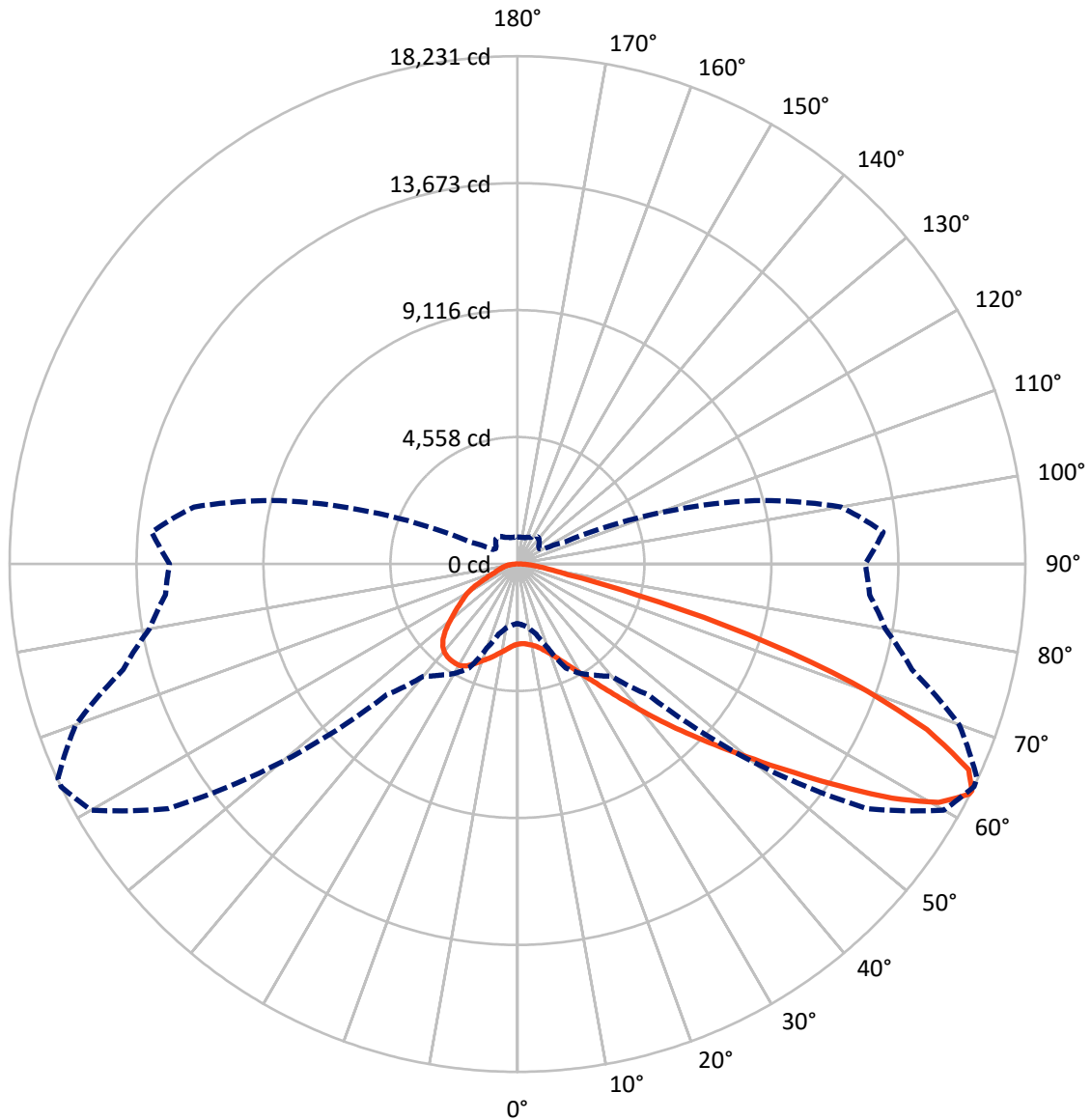


Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type II - Short - Semi-Cutoff

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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	7809.2	0.0	7809.2
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	18755.9	0.0	18755.9
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	26565.0	0.0	26565.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.2	1.1
10°-20°	956.7	3.6
20°-30°	1795.9	6.8
30°-40°	3010.2	11.3
40°-50°	5050.4	19.0
50°-60°	6402.3	24.1
60°-70°	5647.8	21.3
70°-80°	2915.5	11.0
80°-90°	498.9	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°	26565.0	100.0
0°-180°	26565.0	100.0



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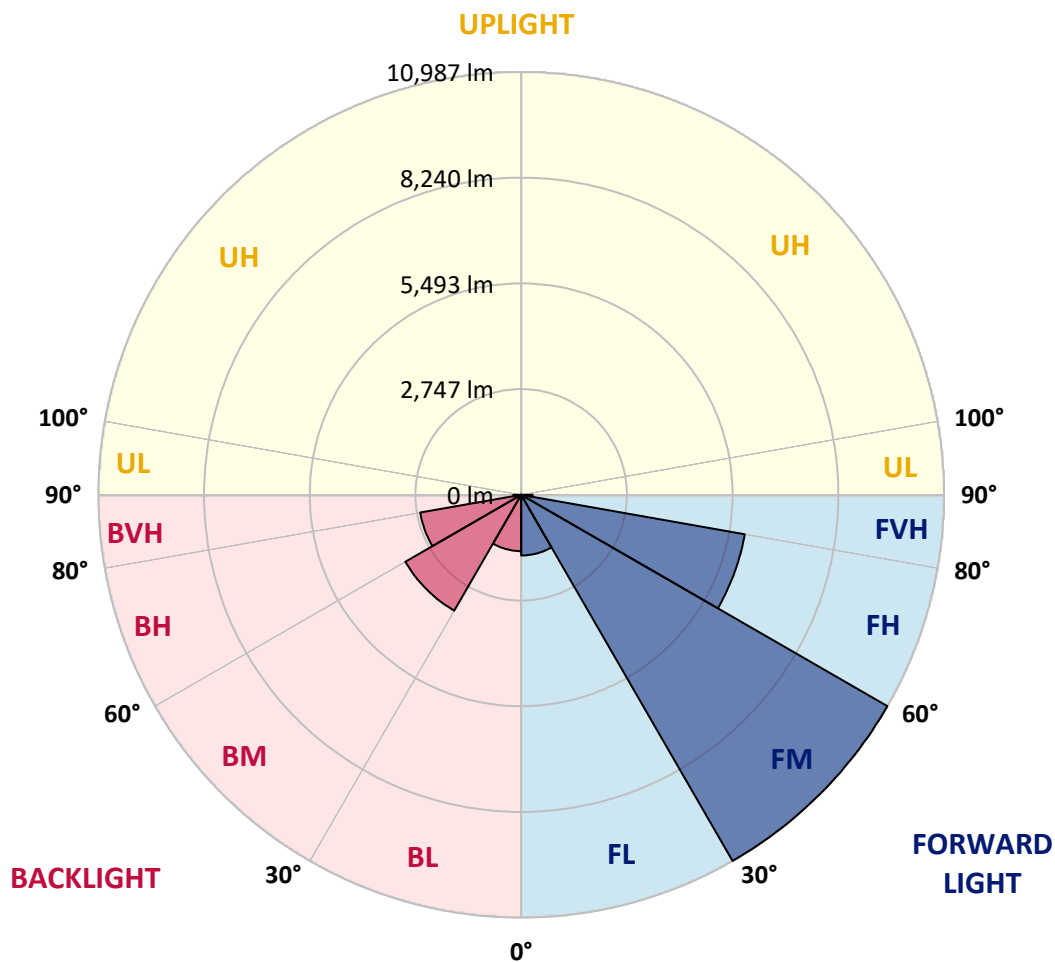
CATALOG NUMBER: ARCH-L-AF72-220-D-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1576.7	5.9			
FM	(30°-60°)	10986.6	41.4			
FH	(60°-80°)	5898.9	22.2			G3/7500
FVH	(80°-90°)	293.6	1.1			G3/500
BL	(0°-30°)	1463.2	5.5	B3/2500		
BM	(30°-60°)	3476.2	13.1	B3/5000		
BH	(60°-80°)	2664.4	10.0	B4/5000		G4/5000
BVH	(80°-90°)	205.3	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°	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9
2.5°	2859.1	2854.7	2854.7	2854.7	2854.7	2850.4	2854.7	2863.6	2859.1	2854.7	2863.6
5°	2868.0	2863.6	2863.6	2863.6	2868.0	2863.6	2868.0	2881.4	2872.5	2872.5	2881.4
7.5°	2890.3	2885.8	2890.3	2885.8	2885.8	2885.8	2890.3	2903.6	2899.2	2903.6	2917.0
10°	2917.0	2917.0	2917.0	2917.0	2917.0	2917.0	2925.8	2934.7	2939.2	2943.6	2961.4
12.5°	2997.0	2997.0	2997.0	2992.6	2992.6	2979.2	2997.0	3005.9	3014.8	3023.7	3037.0
15°	3166.0	3166.0	3161.5	3143.7	3143.7	3117.1	3121.5	3126.0	3126.0	3134.9	3143.7
17.5°	3388.3	3383.9	3375.0	3361.6	3343.9	3312.7	3303.8	3294.9	3281.6	3277.2	3277.2
20°	3699.6	3695.2	3677.4	3641.8	3619.6	3570.6	3535.1	3499.5	3486.2	3463.9	3459.5
22.5°	4144.3	4144.3	4108.7	4055.4	4037.6	3935.3	3833.0	3757.4	3730.7	3699.6	3699.6
25°	4682.4	4677.9	4629.0	4566.7	4491.1	4384.4	4259.9	4157.6	4090.9	4019.8	3993.1
27.5°	5327.1	5313.7	5247.0	5171.4	5029.1	4895.7	4749.0	4642.3	4526.7	4437.8	4357.7
30°	6083.0	6069.7	5954.1	5811.8	5665.0	5531.6	5318.2	5189.2	5006.9	4900.2	4811.2
32.5°	6959.0	6945.6	6736.6	6598.9	6443.2	6278.7	6025.2	5820.7	5589.4	5438.2	5313.7
35°	8075.1	8021.8	7723.8	7532.6	7288.0	7123.5	6856.7	6581.1	6309.8	6096.4	5914.1
37.5°	9280.1	9217.9	8955.5	8670.9	8430.9	8230.8	7852.8	7505.9	7185.8	6892.3	6665.5
40°	10538.5	10374.1	10093.9	9884.9	9720.4	9529.2	9133.4	8768.7	8266.4	7937.3	7594.9
42.5°	11410.1	11250.0	11054.3	10916.5	10836.4	10689.7	10467.4	10151.7	9702.6	9711.5	8808.8
45°	11983.7	11748.1	11614.7	11623.5	11654.7	11654.7	11614.7	11565.7	11370.1	11503.5	10747.5
47.5°	11779.2	11623.5	11539.1	11716.9	11939.3	12161.6	12419.4	12699.6	13019.8	13397.8	12468.4
50°	10578.5	10636.3	10676.4	11054.3	11530.2	12037.1	12628.4	13393.3	14287.0	14460.5	14011.4
52.5°	8662.0	8786.5	8919.9	9498.0	10125.0	11001.0	12037.1	13299.9	14500.5	15207.5	15163.1
55°	6727.7	6883.4	7168.0	7599.3	8097.4	8924.4	10205.1	12152.7	14024.8	15149.7	15834.5
57.5°	4789.0	5015.8	5389.3	5989.6	6429.9	6896.7	7843.9	10005.0	12054.9	14149.3	15723.4
60°	3183.8	3290.5	3535.1	4282.1	5024.7	5513.8	6185.3	6967.9	8644.2	11530.2	14576.1
62.5°	2258.9	2330.1	2481.3	2819.2	3490.6	4375.5	4780.1	5140.3	5678.4	7417.0	11703.6
63°	2134.4	2196.7	2321.2	2605.8	3210.4	4126.5	4540.1	4869.0	5260.4	6634.3	11072.1
65°	1769.8	1796.4	1863.1	2001.0	2325.6	3085.9	3761.9	3962.0	4028.7	4264.4	6936.7
67.5°	1494.1	1511.8	1534.1	1574.1	1703.1	2054.4	2805.9	3059.3	2983.7	2823.7	3428.3
70°	1298.4	1311.7	1347.3	1396.2	1440.7	1529.6	1929.8	2307.8	2223.3	2005.4	2098.8
72.5°	1036.0	1058.3	1098.3	1182.8	1271.7	1387.3	1485.2	1720.8	1667.5	1458.5	1480.7
75°	818.2	831.6	867.1	929.4	1013.8	1147.2	1338.4	1418.5	1271.7	1076.0	1076.0
77.5°	649.2	662.6	693.7	742.6	796.0	889.4	1022.7	1231.7	1142.7	809.3	804.9
80°	489.2	502.5	533.6	578.1	631.5	698.2	778.2	871.6	1049.4	756.0	604.8
82.5°	360.2	364.6	418.0	449.1	466.9	520.3	587.0	640.4	720.4	698.2	538.1
85°	271.3	266.8	302.4	324.6	329.1	342.4	382.4	435.8	471.4	453.6	418.0
87.5°	151.2	133.4	155.6	177.9	177.9	182.3	191.2	222.3	253.5	244.6	222.3
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):**

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9
2.5°	2863.6	2863.6	2859.1	2859.1	2863.6	2863.6	2859.1	2872.5	2881.4	2881.4	2885.8
5°	2876.9	2881.4	2876.9	2876.9	2881.4	2881.4	2885.8	2899.2	2912.5	2921.4	2934.7
7.5°	2917.0	2921.4	2917.0	2917.0	2921.4	2925.8	2934.7	2952.5	2961.4	2979.2	3001.4
10°	2961.4	2965.9	2961.4	2965.9	2970.3	2974.8	2988.1	3001.4	3014.8	3032.6	3068.1
12.5°	3041.5	3045.9	3037.0	3041.5	3054.8	3054.8	3063.7	3072.6	3094.8	3117.1	3152.6
15°	3152.6	3152.6	3143.7	3148.2	3161.5	3161.5	3166.0	3174.9	3201.6	3228.2	3263.8
17.5°	3281.6	3290.5	3286.0	3290.5	3299.4	3303.8	3303.8	3312.7	3330.5	3348.3	3383.9
20°	3455.0	3459.5	3450.6	3459.5	3468.4	3459.5	3450.6	3446.1	3455.0	3463.9	3503.9
22.5°	3690.7	3686.3	3664.0	3664.0	3664.0	3646.2	3624.0	3597.3	3597.3	3584.0	3615.1
25°	3970.9	3957.5	3926.4	3930.8	3899.7	3873.0	3833.0	3793.0	3757.4	3744.1	3748.5
27.5°	4299.9	4273.3	4242.1	4233.2	4202.1	4153.2	4086.5	4010.9	3953.1	3908.6	3899.7
30°	4713.5	4655.7	4602.3	4593.4	4544.5	4464.5	4357.7	4255.5	4157.6	4082.0	4055.4
32.5°	5202.6	5113.6	5029.1	5020.2	4940.2	4833.5	4704.6	4562.3	4420.0	4299.9	4242.1
35°	5776.2	5642.8	5562.7	5540.5	5424.9	5291.5	5149.2	4966.9	4766.8	4597.9	4491.1
37.5°	6474.4	6336.5	6198.7	6203.1	6043.0	5887.4	5696.2	5473.8	5220.3	4984.7	4833.5
40°	7337.0	7141.3	6963.4	6923.4	6785.5	6567.7	6358.7	6100.8	5789.5	5478.3	5260.4
42.5°	8382.0	8061.8	7817.2	7781.6	7599.3	7332.5	7079.0	6736.6	6421.0	6043.0	5780.6
45°	9569.2	9057.8	8764.3	8710.9	8417.5	8146.3	7839.5	7474.8	7087.9	6661.0	6349.8
47.5°	11045.5	10316.3	9818.2	9729.3	9324.6	8968.9	8648.7	8244.1	7781.6	7305.8	6963.4
50°	12766.3	11690.2	11018.8	10880.9	10338.5	9920.5	9511.4	9004.4	8510.8	8012.9	7617.1
52.5°	14491.6	13335.5	12441.7	12272.8	11472.4	10912.0	10374.1	9867.1	9284.6	8791.0	8341.9
55°	15879.0	15109.7	14073.7	13838.0	12690.7	11930.4	11223.3	10645.2	10067.2	9675.9	9146.7
57.5°	16714.9	16674.9	15856.8	15532.2	13962.5	12837.4	12050.4	11392.3	10832.0	10667.5	9965.0
60°	16692.7	17728.8	17377.5	17132.9	15247.6	13766.8	12744.1	12032.7	11570.2	11757.0	10787.5
62.5°	15674.5	17773.3	18195.6	18128.9	16617.1	14513.8	13313.3	12579.5	12334.9	12890.8	11641.3
63°	15305.4	17671.0	18231.2	18204.5	16879.5	14656.1	13411.1	12686.3	12486.1	13179.9	11797.0
65°	12935.3	16777.2	17800.0	17920.0	17444.2	15145.3	13637.9	12957.5	12935.3	13824.7	12166.1
67.5°	7883.9	14176.0	15856.8	16087.9	16648.2	15300.9	13508.9	12864.1	13184.3	13918.0	12054.9
70°	3370.5	9355.7	12744.1	13117.6	14487.1	14527.2	13139.8	12481.7	13126.5	13188.7	11263.3
72.5°	1996.5	4411.1	8675.4	9489.1	11463.5	12499.5	12294.9	11814.8	12366.1	11583.5	9591.4
75°	1414.0	2063.3	4406.7	5273.7	7981.8	9542.5	10329.6	10551.8	10529.6	9186.8	7199.1
77.5°	1013.8	1325.1	1858.7	2192.2	4455.6	6127.5	7087.9	7737.2	7528.2	6149.7	4437.8
80°	707.1	916.1	1138.3	1209.5	2067.7	3148.2	3735.2	4019.8	3895.3	3072.6	1987.7
82.5°	511.4	600.3	733.7	778.2	1040.5	1454.0	1729.7	1525.2	1462.9	1133.9	858.2
85°	395.8	386.9	458.0	475.8	609.2	760.4	778.2	604.8	529.2	471.4	480.3
87.5°	280.2	240.1	244.6	253.5	315.7	404.7	395.8	249.0	213.5	226.8	257.9
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9	2876.9
2.5°	2894.7	2899.2	2908.1	2912.5	2921.4	2921.4	2930.3	2934.7	2943.6	2952.5	2957.0
5°	2948.1	2961.4	2979.2	2988.1	3005.9	3019.2	3037.0	3045.9	3063.7	3077.0	3094.8
7.5°	3028.1	3050.4	3072.6	3099.3	3126.0	3148.2	3166.0	3188.2	3219.3	3241.6	3254.9
10°	3103.7	3134.9	3174.9	3206.0	3246.0	3277.2	3303.8	3343.9	3379.4	3410.6	3428.3
12.5°	3201.6	3241.6	3281.6	3330.5	3383.9	3423.9	3463.9	3517.3	3566.2	3601.8	3619.6
15°	3317.2	3366.1	3410.6	3468.4	3530.6	3584.0	3641.8	3699.6	3735.2	3735.2	3726.3
17.5°	3437.2	3477.3	3530.6	3597.3	3681.8	3748.5	3779.6	3788.5	3775.2	3744.1	3721.8
20°	3557.3	3592.9	3650.7	3730.7	3819.7	3833.0	3801.9	3761.9	3721.8	3668.5	3632.9
22.5°	3655.1	3704.1	3793.0	3886.4	3890.8	3815.2	3730.7	3664.0	3601.8	3539.5	3472.8
25°	3770.8	3837.5	3957.5	3993.1	3877.5	3735.2	3615.1	3517.3	3415.0	3312.7	3237.1
27.5°	3913.1	4010.9	4131.0	4028.7	3801.9	3601.8	3437.2	3290.5	3157.1	3014.8	2930.3
30°	4064.2	4215.4	4242.1	3975.3	3672.9	3415.0	3192.7	2970.3	2801.4	2672.5	2623.6
32.5°	4246.6	4442.2	4282.1	3881.9	3499.5	3161.5	2863.6	2596.9	2454.6	2374.5	2352.3
35°	4522.3	4682.4	4304.4	3784.1	3299.4	2859.1	2485.7	2272.3	2183.3	2130.0	2103.3
37.5°	4918.0	4913.5	4299.9	3664.0	3068.1	2530.2	2183.3	2032.1	1961.0	1916.5	1867.6
40°	5380.4	5091.4	4273.3	3490.6	2757.0	2214.4	1974.3	1832.0	1765.3	1711.9	1654.1
42.5°	5838.5	5211.4	4197.7	3232.7	2370.1	1987.7	1823.1	1694.2	1623.0	1565.2	1485.2
45°	6234.2	5260.4	4050.9	2876.9	2023.2	1809.8	1725.3	1614.1	1529.6	1440.7	1378.4
47.5°	6545.5	5251.5	3815.2	2459.0	1792.0	1685.3	1645.2	1569.6	1467.4	1356.2	1276.2
50°	6807.8	5184.8	3495.0	2089.9	1636.4	1574.1	1560.8	1538.5	1374.0	1280.6	1231.7
52.5°	7047.9	5086.9	3152.6	1840.9	1502.9	1449.6	1476.3	1454.0	1338.4	1258.4	1209.5
55°	7377.0	5020.2	2814.8	1649.7	1347.3	1334.0	1356.2	1387.3	1316.2	1240.6	1187.2
57.5°	7763.9	5055.8	2556.9	1436.2	1200.6	1209.5	1285.0	1329.5	1293.9	1213.9	1160.5
60°	8208.5	5162.5	2330.1	1231.7	1080.5	1102.7	1213.9	1276.2	1271.7	1178.3	1116.1
62.5°	8706.5	5273.7	1969.9	1076.0	978.2	1013.8	1129.4	1209.5	1222.8	1142.7	1067.2
63°	8804.3	5282.6	1876.5	1044.9	960.4	1000.4	1107.2	1191.7	1209.5	1133.9	1058.3
65°	9044.5	5202.6	1511.8	960.4	889.4	933.7	1040.5	1116.1	1151.6	1084.9	1022.7
67.5°	8844.3	4549.0	1138.3	858.2	831.6	862.7	956.0	1027.1	1058.3	1027.1	964.9
70°	8088.5	3308.3	889.4	764.9	769.3	791.5	862.7	929.4	964.9	956.0	898.3
72.5°	6514.4	1876.5	742.6	684.8	698.2	724.8	773.8	836.0	867.1	862.7	822.7
75°	4291.0	960.4	627.0	613.7	622.6	644.8	680.4	729.3	764.9	760.4	742.6
77.5°	2125.5	667.0	538.1	542.5	547.0	564.8	591.4	635.9	658.1	662.6	658.1
80°	876.0	520.3	462.5	466.9	471.4	484.7	502.5	542.5	555.9	564.8	569.2
82.5°	524.7	395.8	369.1	378.0	382.4	395.8	409.1	444.7	458.0	471.4	471.4
85°	346.9	275.7	266.8	275.7	284.6	293.5	297.9	320.2	342.4	360.2	369.1
87.5°	186.8	164.5	160.1	164.5	164.5	173.4	182.3	204.6	231.2	249.0	257.9
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):**

	160°	165°	170°	175°	180°
0°	2876.9	2876.9	2876.9	2876.9	2876.9
2.5°	2948.1	2952.5	2948.1	2952.5	2957.0
5°	3094.8	3103.7	3099.3	3099.3	3117.1
7.5°	3263.8	3281.6	3281.6	3290.5	3299.4
10°	3446.1	3463.9	3477.3	3477.3	3490.6
12.5°	3628.5	3637.3	3650.7	3650.7	3650.7
15°	3721.8	3717.4	3712.9	3708.5	3708.5
17.5°	3708.5	3690.7	3681.8	3672.9	3677.4
20°	3610.7	3579.5	3570.6	3557.3	3566.2
22.5°	3441.7	3397.2	3379.4	3357.2	3366.1
25°	3188.2	3134.9	3126.0	3099.3	3112.6
27.5°	2894.7	2868.0	2863.6	2859.1	2881.4
30°	2619.1	2628.0	2632.5	2641.3	2663.6
32.5°	2365.6	2383.4	2387.9	2392.3	2423.4
35°	2116.6	2094.4	2116.6	2107.7	2134.4
37.5°	1845.4	1827.6	1809.8	1787.5	1805.3
40°	1618.6	1587.4	1534.1	1507.4	1511.8
42.5°	1440.7	1400.7	1356.2	1329.5	1329.5
45°	1325.1	1276.2	1236.1	1218.3	1218.3
47.5°	1236.1	1213.9	1191.7	1178.3	1178.3
50°	1200.6	1173.9	1160.5	1151.6	1151.6
52.5°	1173.9	1147.2	1133.9	1125.0	1116.1
55°	1151.6	1111.6	1098.3	1093.8	1093.8
57.5°	1120.5	1084.9	1067.2	1062.7	1062.7
60°	1071.6	1044.9	1027.1	1022.7	1022.7
62.5°	1022.7	996.0	978.2	978.2	978.2
63°	1013.8	982.7	969.3	969.3	969.3
65°	973.8	942.6	929.4	929.4	925.0
67.5°	920.5	889.4	880.5	880.5	871.6
70°	858.2	831.6	822.7	827.1	809.3
72.5°	796.0	769.3	756.0	756.0	738.2
75°	724.8	698.2	680.4	675.9	658.1
77.5°	644.8	622.6	604.8	587.0	578.1
80°	560.3	542.5	520.3	506.9	493.6
82.5°	471.4	453.6	440.2	458.0	391.3
85°	369.1	351.3	333.5	360.2	280.2
87.5°	271.3	262.4	244.6	213.5	186.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)