

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: P265655

Luminaire Tested: **ARCH-L-AF72-180-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265655  
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-AF72-180-D-U-T2U-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19494.2 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G3

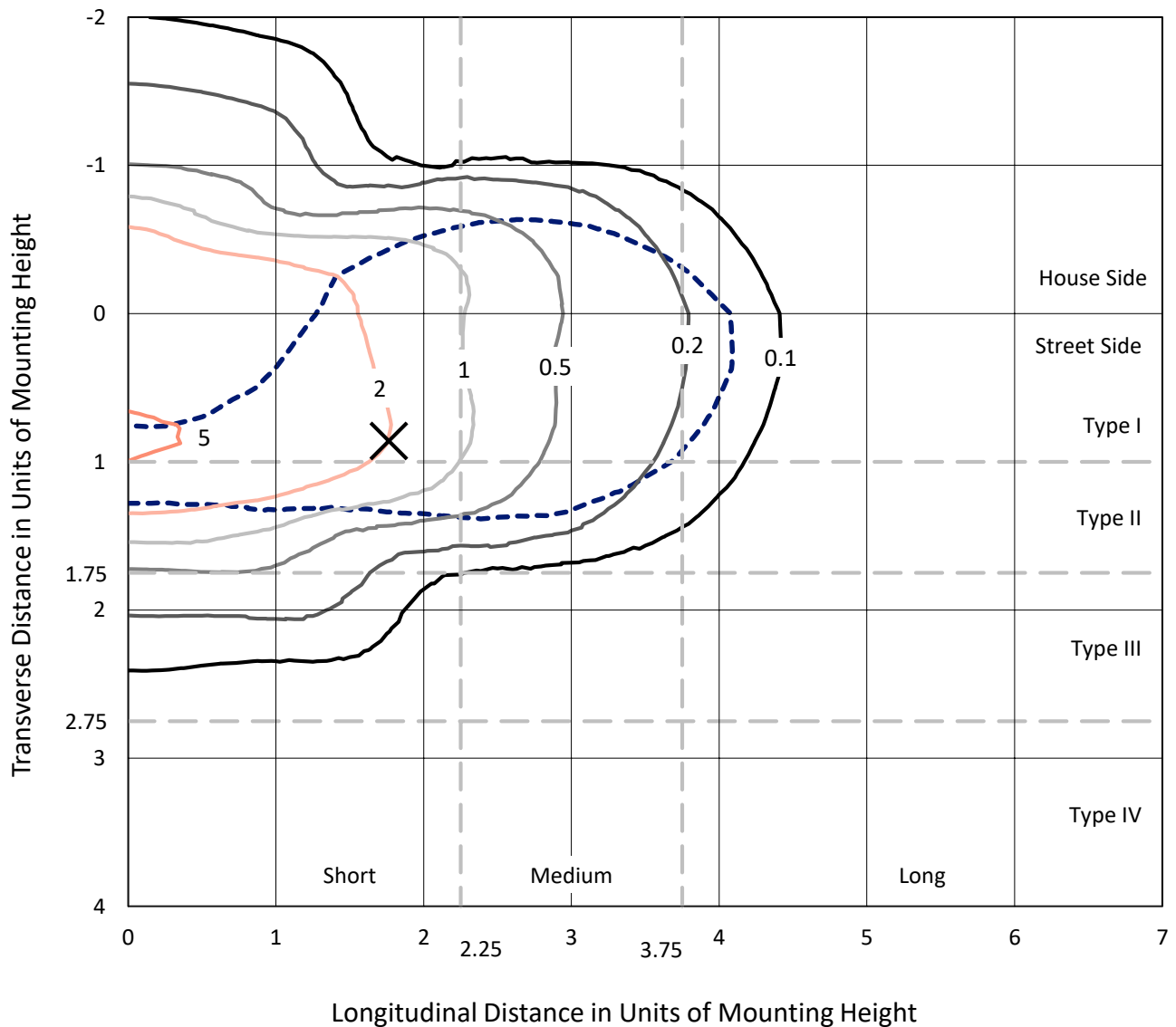
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

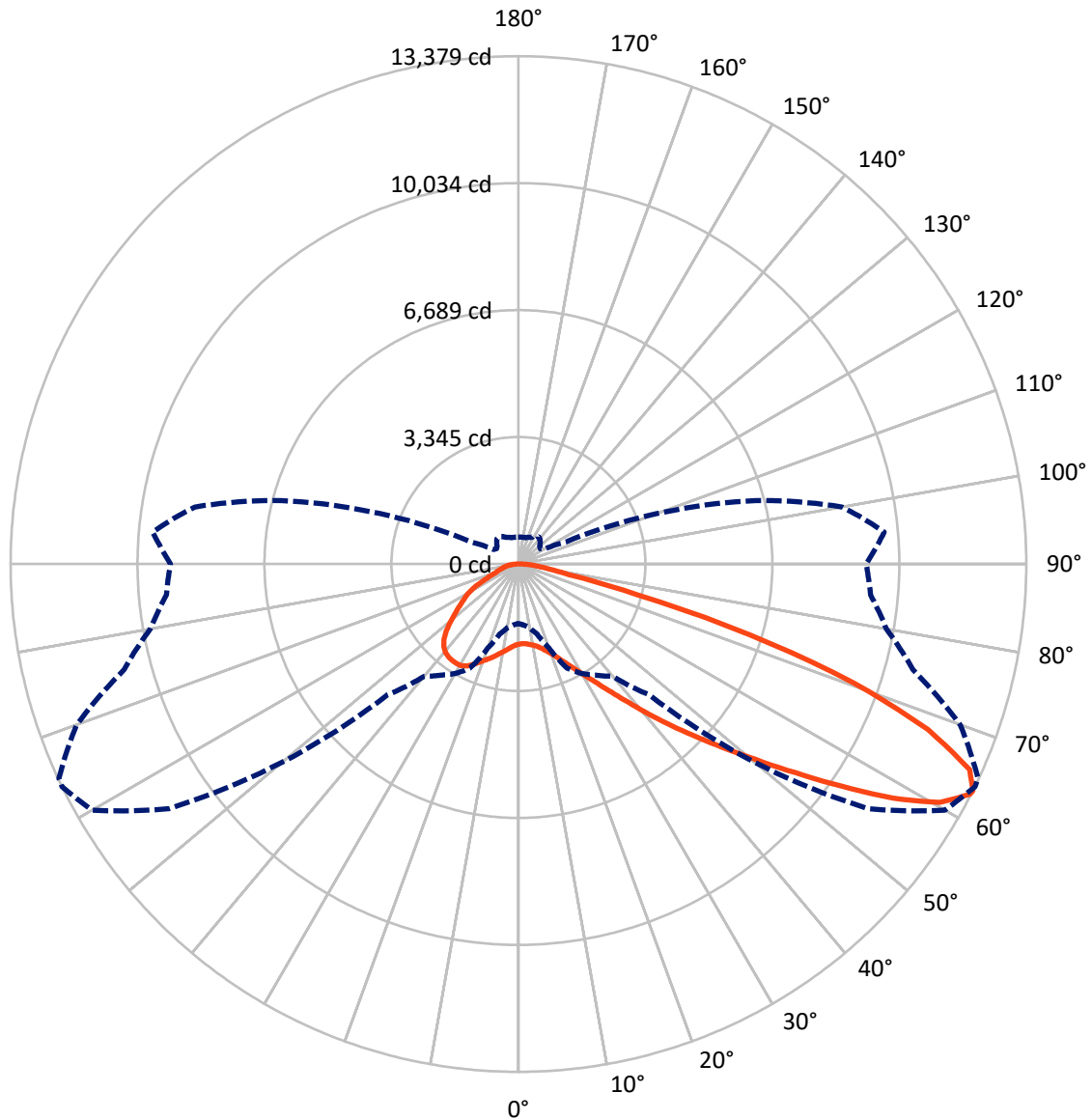


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Semi-Cutoff

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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	5730.6	0.0	5730.6
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	13763.6	0.0	13763.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	19494.2	0.0	19494.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.8	1.1
10°-20°	702.1	3.6
20°-30°	1317.9	6.8
30°-40°	2208.9	11.3
40°-50°	3706.1	19.0
50°-60°	4698.2	24.1
60°-70°	4144.5	21.3
70°-80°	2139.5	11.0
80°-90°	366.1	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°	19494.2	100.0
0°-180°	19494.2	100.0



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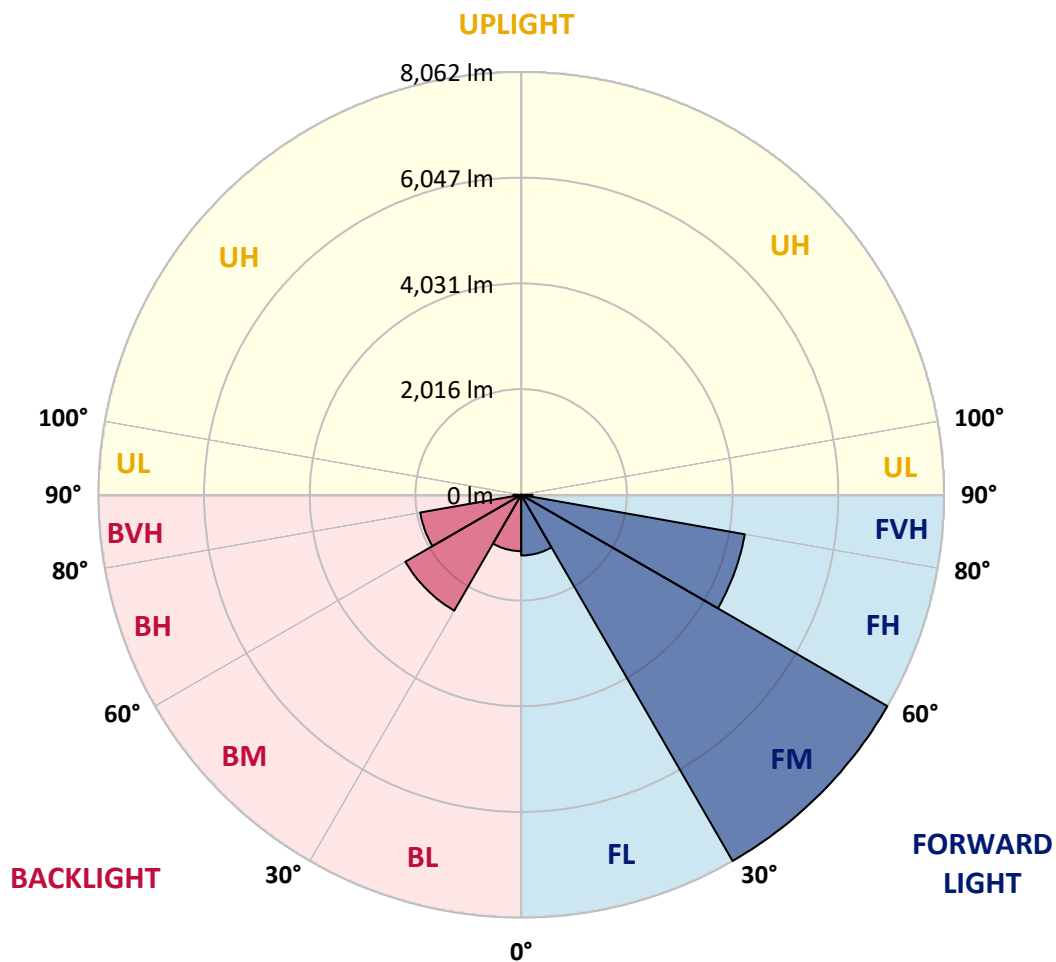
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1157.0	5.9			
FM	(30°-60°)	8062.3	41.4			
FH	(60°-80°)	4328.8	22.2			G2/5000
FVH	(80°-90°)	215.5	1.1			G2/225
BL	(0°-30°)	1073.7	5.5	B3/2500		
BM	(30°-60°)	2551.0	13.1	B3/5000		
BH	(60°-80°)	1955.2	10.0	B3/2500		G3/2500
BVH	(80°-90°)	150.6	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2098.1	2094.8	2094.8	2094.8	2094.8	2091.7	2094.8	2101.4	2098.1	2094.8	2101.4
5°	2104.6	2101.4	2101.4	2101.4	2104.6	2101.4	2104.6	2114.5	2108.0	2108.0	2114.5
7.5°	2121.0	2117.8	2121.0	2117.8	2117.8	2117.8	2121.0	2130.8	2127.5	2130.8	2140.7
10°	2140.7	2140.7	2140.7	2140.7	2140.7	2140.7	2147.0	2153.6	2156.9	2160.2	2173.2
12.5°	2199.3	2199.3	2199.3	2196.0	2196.0	2186.3	2199.3	2205.9	2212.3	2219.0	2228.7
15°	2323.2	2323.2	2320.1	2306.9	2306.9	2287.4	2290.7	2293.9	2293.9	2300.5	2306.9
17.5°	2486.5	2483.3	2476.6	2466.8	2453.8	2431.1	2424.4	2418.0	2408.1	2404.9	2404.9
20°	2714.9	2711.7	2698.6	2672.5	2656.2	2620.3	2594.1	2568.1	2558.3	2541.9	2538.7
22.5°	3041.2	3041.2	3015.2	2975.9	2962.9	2887.8	2812.8	2757.3	2737.8	2714.9	2714.9
25°	3436.0	3432.8	3396.9	3351.1	3295.7	3217.4	3126.0	3051.0	3002.0	2949.9	2930.2
27.5°	3909.2	3899.5	3850.4	3795.0	3690.5	3592.6	3485.0	3406.6	3321.8	3256.5	3197.8
30°	4463.9	4454.1	4369.3	4264.9	4157.1	4059.4	3902.6	3808.1	3674.2	3595.9	3530.7
32.5°	5106.8	5097.0	4943.6	4842.5	4728.1	4607.4	4421.5	4271.4	4101.8	3990.7	3899.5
35°	5925.8	5886.7	5667.9	5527.7	5348.1	5227.4	5031.6	4829.4	4630.4	4473.6	4339.9
37.5°	6810.1	6764.3	6571.8	6363.1	6186.7	6039.9	5762.5	5508.0	5273.1	5057.7	4891.4
40°	7733.5	7612.7	7407.2	7253.9	7133.1	6992.8	6702.3	6434.7	6066.1	5824.6	5573.4
42.5°	8373.0	8255.7	8112.1	8010.8	7952.2	7844.4	7681.2	7449.6	7120.1	7126.6	6464.2
45°	8794.0	8621.0	8523.2	8529.6	8552.6	8552.6	8523.2	8487.2	8343.6	8441.6	7886.8
47.5°	8643.9	8529.6	8467.8	8598.1	8761.3	8924.5	9113.8	9319.3	9554.4	9831.7	9149.6
50°	7762.9	7805.4	7834.7	8112.1	8461.1	8833.2	9267.2	9828.4	10484.3	10611.6	10282.0
52.5°	6356.4	6447.9	6545.7	6969.9	7430.1	8072.9	8833.2	9759.8	10641.0	11159.7	11127.0
55°	4937.1	5051.3	5260.0	5576.6	5942.1	6549.1	7488.8	8918.1	10291.7	11117.3	11619.8
57.5°	3514.3	3680.7	3954.9	4395.3	4718.3	5061.1	5756.1	7341.9	8846.1	10383.1	11538.3
60°	2336.3	2414.6	2594.1	3142.4	3687.4	4046.2	4539.0	5113.2	6343.4	8461.1	10696.4
62.5°	1657.6	1709.8	1820.9	2068.7	2561.4	3210.9	3507.8	3772.2	4167.0	5442.8	8588.4
63°	1566.3	1612.0	1703.4	1912.1	2356.0	3028.1	3331.6	3573.1	3860.2	4868.5	8125.1
65°	1298.7	1318.4	1367.2	1468.4	1706.6	2264.5	2760.6	2907.5	2956.3	3129.2	5090.3
67.5°	1096.4	1109.4	1125.8	1155.1	1249.7	1507.5	2059.1	2245.0	2189.4	2072.1	2515.9
70°	952.8	962.7	988.8	1024.5	1057.2	1122.5	1416.2	1693.6	1631.5	1471.7	1540.1
72.5°	760.2	776.7	806.0	868.0	933.2	1018.0	1089.9	1262.7	1223.6	1070.3	1086.6
75°	600.3	610.2	636.3	682.1	743.9	841.9	982.1	1041.0	933.2	789.7	789.7
77.5°	476.5	486.3	509.0	544.9	584.1	652.6	750.5	903.9	838.6	593.9	590.6
80°	359.0	368.8	391.7	424.2	463.3	512.4	571.1	639.6	770.0	554.8	443.9
82.5°	264.3	267.5	306.7	329.6	342.7	381.8	430.7	469.9	528.7	512.4	394.9
85°	199.1	195.8	221.9	238.2	241.5	251.3	280.6	319.7	345.8	332.8	306.7
87.5°	110.9	97.8	114.3	130.6	130.6	133.8	140.3	163.1	185.9	179.5	163.1
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°	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2101.4	2101.4	2098.1	2098.1	2101.4	2101.4	2098.1	2108.0	2114.5	2114.5	2117.8
5°	2111.1	2114.5	2111.1	2111.1	2114.5	2114.5	2117.8	2127.5	2137.2	2143.8	2153.6
7.5°	2140.7	2143.8	2140.7	2140.7	2143.8	2147.0	2153.6	2166.7	2173.2	2186.3	2202.6
10°	2173.2	2176.5	2173.2	2176.5	2179.7	2183.1	2192.9	2202.6	2212.3	2225.5	2251.5
12.5°	2232.0	2235.3	2228.7	2232.0	2241.7	2241.7	2248.3	2254.7	2271.2	2287.4	2313.6
15°	2313.6	2313.6	2306.9	2310.3	2320.1	2320.1	2323.2	2329.8	2349.3	2369.0	2395.2
17.5°	2408.1	2414.6	2411.4	2414.6	2421.2	2424.4	2424.4	2431.1	2444.1	2457.1	2483.3
20°	2535.5	2538.7	2532.1	2538.7	2545.2	2538.7	2532.1	2528.9	2535.5	2541.9	2571.3
22.5°	2708.4	2705.1	2688.7	2688.7	2688.7	2675.7	2659.4	2639.8	2639.8	2630.1	2652.9
25°	2913.9	2904.1	2881.4	2884.5	2861.7	2842.1	2812.8	2783.4	2757.3	2747.6	2750.8
27.5°	3155.3	3135.9	3112.9	3106.5	3083.6	3047.7	2998.8	2943.2	2900.8	2868.3	2861.7
30°	3458.8	3416.4	3377.3	3370.8	3334.9	3276.1	3197.8	3122.8	3051.0	2995.5	2975.9
32.5°	3817.7	3752.5	3690.5	3683.9	3625.3	3547.0	3452.4	3348.0	3243.5	3155.3	3112.9
35°	4238.7	4140.8	4082.1	4065.8	3981.0	3883.1	3778.6	3644.9	3498.0	3374.0	3295.7
37.5°	4751.0	4649.8	4548.7	4552.0	4434.6	4320.3	4180.1	4016.9	3830.8	3657.9	3547.0
40°	5384.1	5240.5	5110.0	5080.6	4979.5	4819.5	4666.2	4477.0	4248.5	4020.2	3860.2
42.5°	6151.0	5916.0	5736.4	5710.3	5576.6	5380.8	5194.8	4943.6	4711.9	4434.6	4241.9
45°	7022.1	6646.9	6431.5	6392.3	6177.0	5978.0	5752.8	5485.2	5201.4	4888.0	4659.7
47.5°	8105.4	7570.3	7204.9	7139.5	6842.7	6581.6	6346.6	6049.7	5710.3	5361.3	5110.0
50°	9368.3	8578.6	8086.0	7984.8	7586.6	7280.0	6979.7	6607.8	6245.6	5880.0	5589.7
52.5°	10634.3	9786.0	9130.2	9006.0	8418.7	8007.6	7612.7	7240.8	6813.4	6451.1	6121.5
55°	11652.5	11087.9	10327.6	10154.7	9312.8	8754.8	8236.0	7811.8	7387.7	7100.5	6712.1
57.5°	12265.8	12236.5	11636.1	11398.0	10246.1	9420.5	8842.9	8359.9	7948.8	7828.1	7312.6
60°	12249.6	13010.0	12752.1	12572.7	11189.1	10102.5	9352.0	8829.9	8490.5	8627.6	7916.3
62.5°	11502.3	13042.5	13352.5	13303.5	12194.1	10650.7	9769.6	9231.3	9051.9	9459.7	8542.7
63°	11231.5	12967.5	13378.6	13359.1	12386.6	10755.0	9841.4	9309.6	9162.7	9671.8	8657.0
65°	9492.3	12311.6	13062.2	13150.2	12801.0	11114.0	10007.8	9508.6	9492.3	10144.9	8927.7
67.5°	5785.4	10402.7	11636.1	11805.9	12216.9	11228.3	9913.2	9440.1	9675.0	10213.4	8846.1
70°	2473.5	6865.6	9352.0	9626.1	10631.1	10660.5	9642.3	9159.5	9632.6	9678.2	8265.3
72.5°	1465.1	3237.0	6366.3	6963.4	8412.2	9172.6	9022.3	8670.0	9074.6	8500.3	7038.5
75°	1037.6	1514.1	3233.7	3870.0	5857.2	7002.6	7580.2	7743.3	7727.0	6741.5	5282.9
77.5°	743.9	972.3	1363.9	1608.8	3269.7	4496.6	5201.4	5677.7	5524.3	4512.8	3256.5
80°	518.9	672.2	835.3	887.5	1517.3	2310.3	2741.0	2949.9	2858.4	2254.7	1458.6
82.5°	375.2	440.4	538.4	571.1	763.6	1067.0	1269.3	1119.3	1073.6	832.1	629.8
85°	290.4	283.9	336.1	349.1	447.0	557.9	571.1	443.9	388.2	345.8	352.4
87.5°	205.6	176.2	179.5	185.9	231.7	296.9	290.4	182.7	156.7	166.5	189.3
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°	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2124.2	2127.5	2134.1	2137.2	2143.8	2143.8	2150.4	2153.6	2160.2	2166.7	2169.9
5°	2163.4	2173.2	2186.3	2192.9	2205.9	2215.6	2228.7	2235.3	2248.3	2258.1	2271.2
7.5°	2222.1	2238.4	2254.7	2274.4	2293.9	2310.3	2323.2	2339.6	2362.5	2378.8	2388.6
10°	2277.7	2300.5	2329.8	2352.8	2382.0	2404.9	2424.4	2453.8	2480.0	2502.8	2515.9
12.5°	2349.3	2378.8	2408.1	2444.1	2483.3	2512.6	2541.9	2581.1	2617.0	2643.2	2656.2
15°	2434.2	2470.2	2502.8	2545.2	2590.9	2630.1	2672.5	2714.9	2741.0	2741.0	2734.5
17.5°	2522.4	2551.7	2590.9	2639.8	2701.8	2750.8	2773.5	2780.2	2770.4	2747.6	2731.1
20°	2610.5	2636.5	2678.9	2737.8	2803.0	2812.8	2790.0	2760.6	2731.1	2692.0	2665.9
22.5°	2682.2	2718.1	2783.4	2851.8	2855.3	2799.7	2737.8	2688.7	2643.2	2597.4	2548.4
25°	2767.0	2816.0	2904.1	2930.2	2845.4	2741.0	2652.9	2581.1	2506.0	2431.1	2375.5
27.5°	2871.5	2943.2	3031.4	2956.3	2790.0	2643.2	2522.4	2414.6	2316.8	2212.3	2150.4
30°	2982.5	3093.5	3112.9	2917.2	2695.4	2506.0	2342.9	2179.7	2055.7	1961.1	1925.2
32.5°	3116.2	3259.8	3142.4	2848.6	2568.1	2320.1	2101.4	1905.7	1801.2	1742.5	1726.2
35°	3318.6	3436.0	3158.7	2776.9	2421.2	2098.1	1824.1	1667.4	1602.1	1563.1	1543.5
37.5°	3609.0	3605.6	3155.3	2688.7	2251.5	1856.6	1602.1	1491.2	1439.1	1406.3	1370.5
40°	3948.3	3736.2	3135.9	2561.4	2023.2	1625.0	1448.7	1344.5	1295.4	1256.3	1213.9
42.5°	4284.5	3824.4	3080.4	2372.2	1739.2	1458.6	1337.8	1243.3	1191.1	1148.7	1089.9
45°	4574.9	3860.2	2972.8	2111.1	1484.7	1328.1	1266.2	1184.4	1122.5	1057.2	1011.5
47.5°	4803.2	3853.6	2799.7	1804.4	1314.9	1236.6	1207.3	1151.8	1076.8	995.2	936.6
50°	4995.7	3804.7	2564.8	1533.6	1200.9	1155.1	1145.3	1129.0	1008.3	939.7	903.9
52.5°	5172.0	3732.9	2313.6	1351.0	1102.8	1063.8	1083.4	1067.0	982.1	923.5	887.5
55°	5413.5	3683.9	2065.6	1210.6	988.8	979.0	995.2	1018.0	965.9	910.4	871.3
57.5°	5697.3	3710.1	1876.3	1054.0	881.1	887.5	943.0	975.6	949.6	890.8	851.7
60°	6023.7	3788.4	1709.8	903.9	792.9	809.3	890.8	936.6	933.2	864.7	819.1
62.5°	6389.1	3870.0	1445.6	789.7	717.8	743.9	828.9	887.5	897.3	838.6	783.1
63°	6460.9	3876.5	1377.0	766.9	704.8	734.2	812.4	874.5	887.5	832.1	776.7
65°	6637.0	3817.7	1109.4	704.8	652.6	685.2	763.6	819.1	845.1	796.2	750.5
67.5°	6490.3	3338.1	835.3	629.8	610.2	633.0	701.5	753.8	776.7	753.8	708.0
70°	5935.6	2427.7	652.6	561.3	564.6	580.8	633.0	682.1	708.0	701.5	659.1
72.5°	4780.4	1377.0	544.9	502.5	512.4	531.8	567.8	613.5	636.3	633.0	603.8
75°	3148.9	704.8	460.1	450.3	456.9	473.1	499.3	535.1	561.3	557.9	544.9
77.5°	1559.7	489.4	394.9	398.0	401.4	414.4	434.1	466.6	482.8	486.3	482.8
80°	642.8	381.8	339.4	342.7	345.8	355.6	368.8	398.0	407.9	414.4	417.7
82.5°	385.1	290.4	270.7	277.3	280.6	290.4	300.3	326.4	336.1	345.8	345.8
85°	254.5	202.3	195.8	202.3	208.9	215.4	218.6	234.9	251.3	264.3	270.7
87.5°	137.0	120.7	117.5	120.7	120.7	127.3	133.8	150.0	169.7	182.7	189.3
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°	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2163.4	2166.7	2163.4	2166.7	2169.9
5°	2271.2	2277.7	2274.4	2274.4	2287.4
7.5°	2395.2	2408.1	2408.1	2414.6	2421.2
10°	2528.9	2541.9	2551.7	2551.7	2561.4
12.5°	2662.7	2669.3	2678.9	2678.9	2678.9
15°	2731.1	2728.0	2724.6	2721.4	2721.4
17.5°	2721.4	2708.4	2701.8	2695.4	2698.6
20°	2649.6	2626.7	2620.3	2610.5	2617.0
22.5°	2525.7	2492.9	2480.0	2463.6	2470.2
25°	2339.6	2300.5	2293.9	2274.4	2284.2
27.5°	2124.2	2104.6	2101.4	2098.1	2114.5
30°	1922.0	1928.5	1931.7	1938.3	1954.6
32.5°	1736.0	1749.0	1752.2	1755.6	1778.4
35°	1553.2	1536.9	1553.2	1546.7	1566.3
37.5°	1354.1	1341.1	1328.1	1311.7	1324.8
40°	1187.7	1164.9	1125.8	1106.3	1109.4
42.5°	1057.2	1027.9	995.2	975.6	975.6
45°	972.3	936.6	907.2	894.2	894.2
47.5°	907.2	890.8	874.5	864.7	864.7
50°	881.1	861.5	851.7	845.1	845.1
52.5°	861.5	841.9	832.1	825.5	819.1
55°	845.1	815.8	806.0	802.7	802.7
57.5°	822.3	796.2	783.1	779.9	779.9
60°	786.3	766.9	753.8	750.5	750.5
62.5°	750.5	731.0	717.8	717.8	717.8
63°	743.9	721.1	711.4	711.4	711.4
65°	714.6	691.8	682.1	682.1	678.7
67.5°	675.4	652.6	646.2	646.2	639.6
70°	629.8	610.2	603.8	607.0	593.9
72.5°	584.1	564.6	554.8	554.8	541.7
75°	531.8	512.4	499.3	496.0	482.8
77.5°	473.1	456.9	443.9	430.7	424.2
80°	411.2	398.0	381.8	372.0	362.1
82.5°	345.8	332.8	323.0	336.1	287.2
85°	270.7	257.8	244.7	264.3	205.6
87.5°	199.1	192.5	179.5	156.7	137.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)