

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: P257951

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257951  
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-AF72-150-D-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20436.5 lumens  
Efficiency: N/A  
Efficacy: 133.6 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

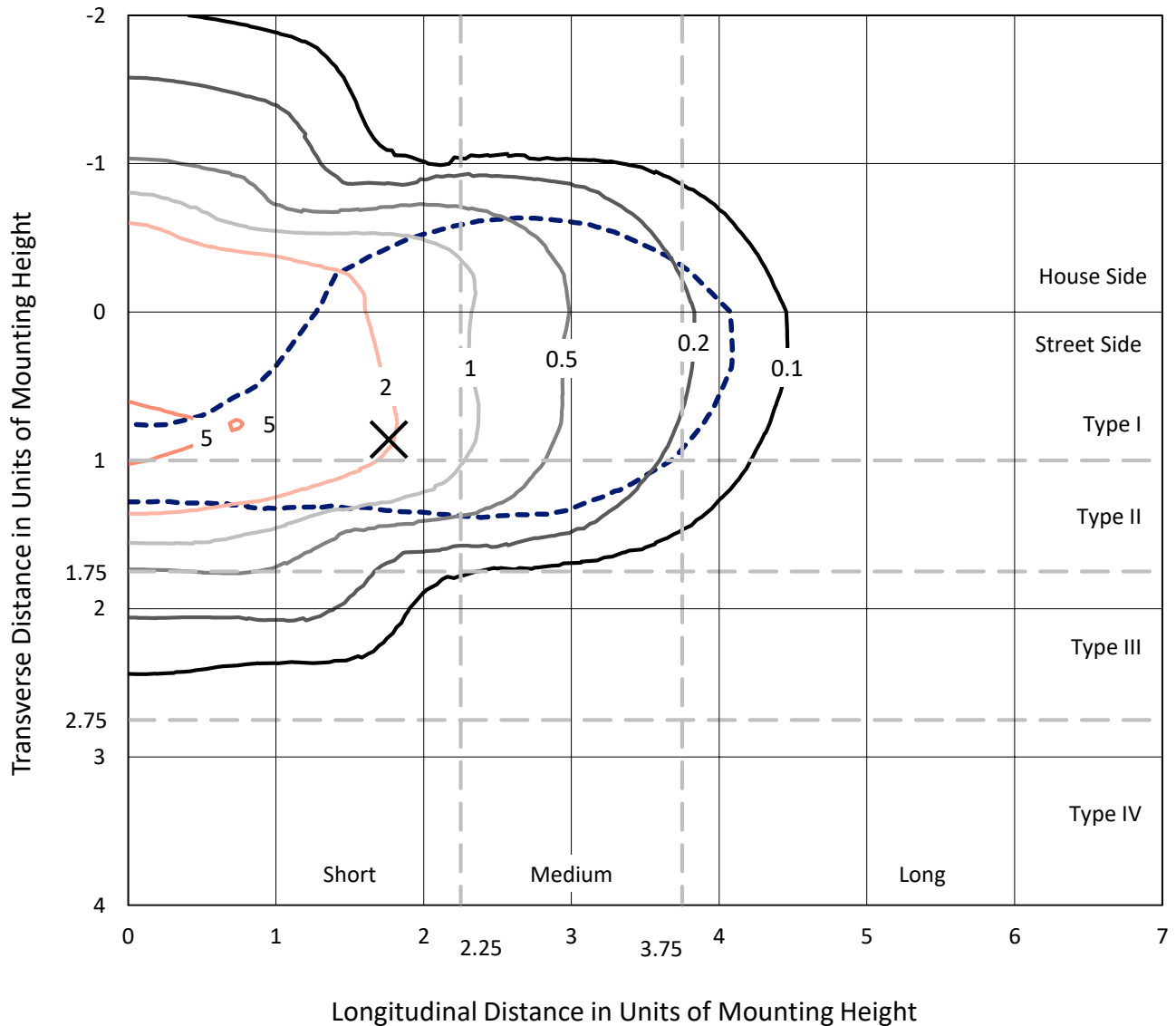
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

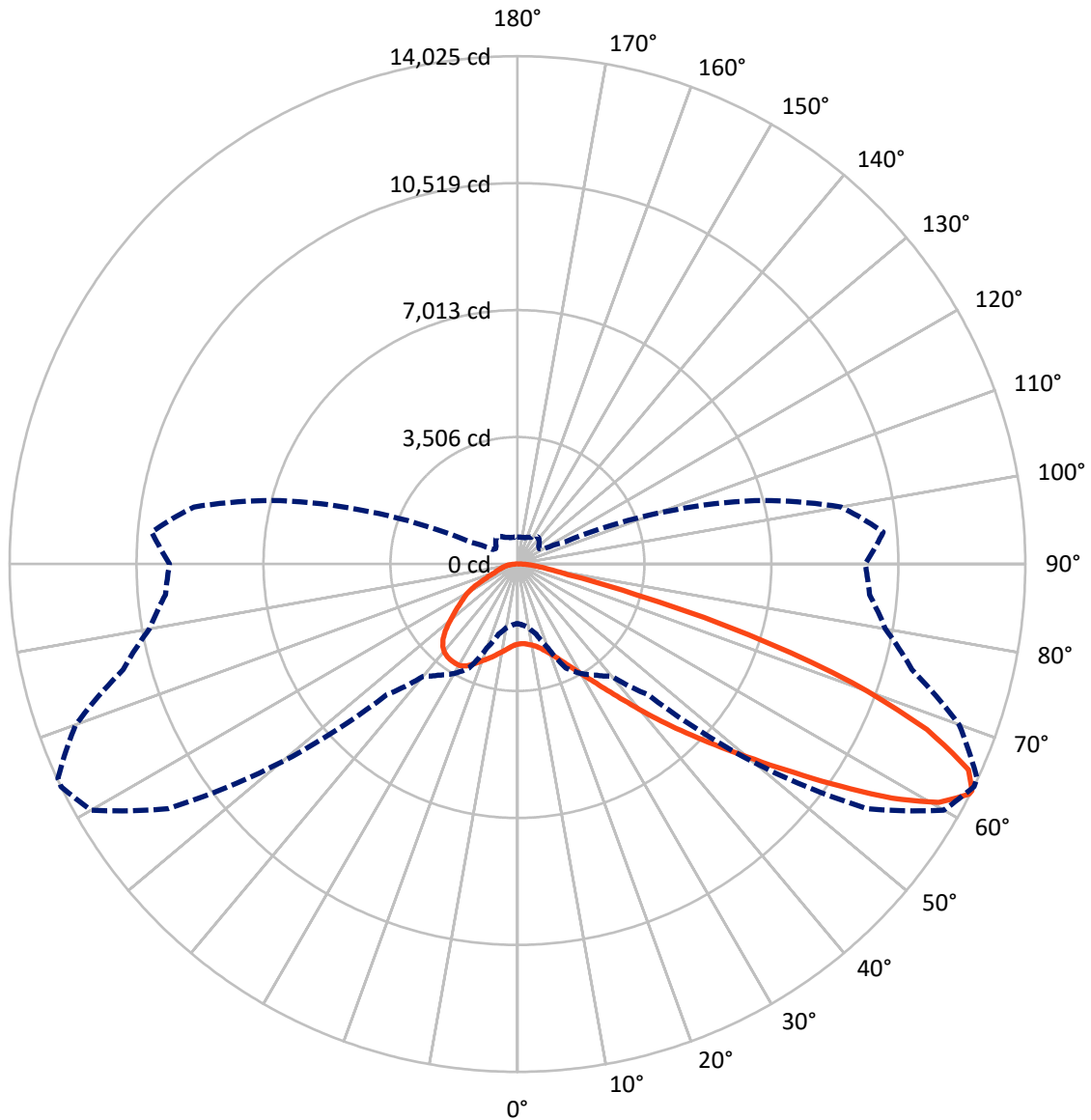
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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	6007.6	0.0	6007.6
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	14428.9	0.0	14428.9
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	20436.5	0.0	20436.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.0	1.1
10°-20°	736.0	3.6
20°-30°	1381.6	6.8
30°-40°	2315.7	11.3
40°-50°	3885.3	19.0
50°-60°	4925.3	24.1
60°-70°	4344.9	21.3
70°-80°	2242.9	11.0
80°-90°	383.8	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°	20436.5	100.0
0°-180°	20436.5	100.0



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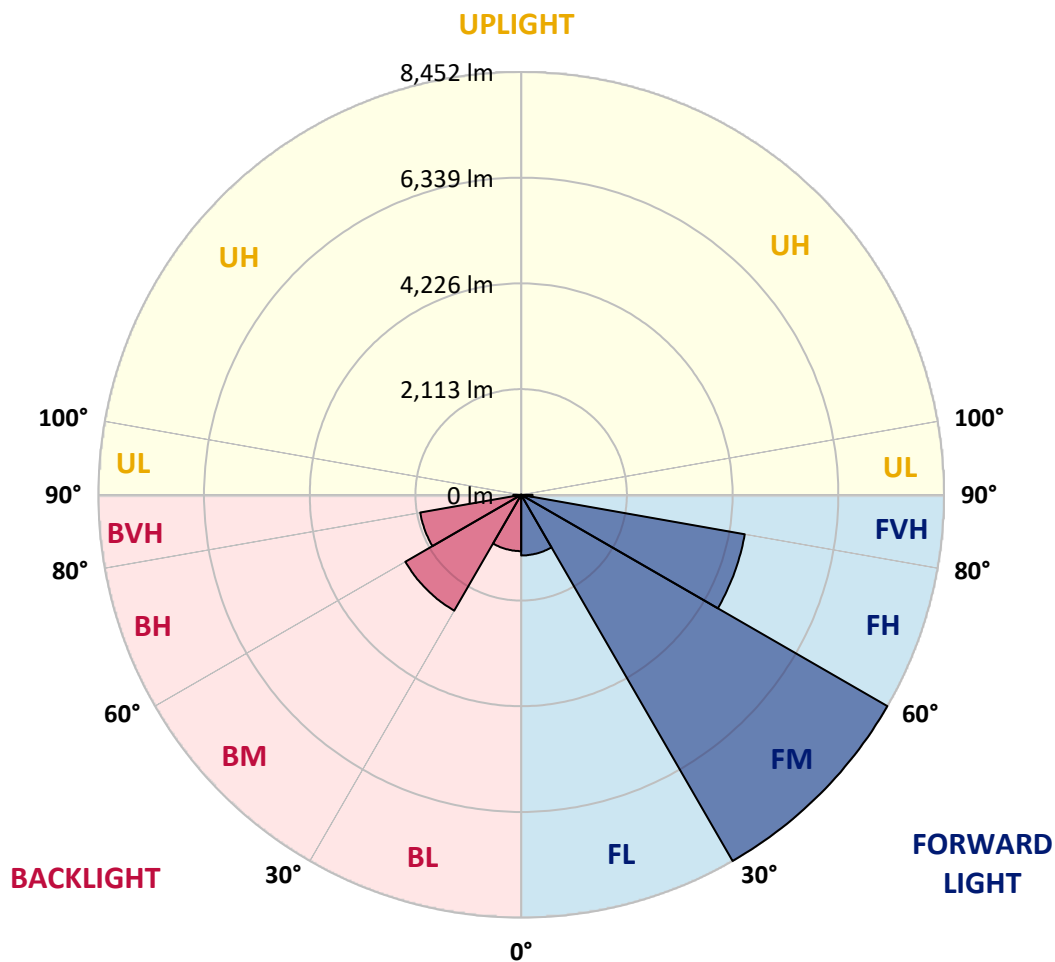
CATALOG NUMBER: ARCH-L-AF72-150-D-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1213.0	5.9			
FM	(30°-60°)	8452.0	41.4			
FH	(60°-80°)	4538.1	22.2			G2/5000
FVH	(80°-90°)	225.9	1.1			G3/500
BL	(0°-30°)	1125.6	5.5	B3/2500		
BM	(30°-60°)	2674.3	13.1	B3/5000		
BH	(60°-80°)	2049.7	10.0	B3/2500		G3/2500
BVH	(80°-90°)	157.9	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3
2.5°	2199.5	2196.2	2196.2	2196.2	2196.2	2192.7	2196.2	2203.0	2199.5	2196.2	2203.0
5°	2206.4	2203.0	2203.0	2203.0	2206.4	2203.0	2206.4	2216.7	2209.9	2209.9	2216.7
7.5°	2223.5	2220.1	2223.5	2220.1	2220.1	2220.1	2223.5	2233.8	2230.3	2233.8	2244.0
10°	2244.0	2244.0	2244.0	2244.0	2244.0	2244.0	2250.9	2257.8	2261.1	2264.6	2278.2
12.5°	2305.6	2305.6	2305.6	2302.3	2302.3	2291.9	2305.6	2312.5	2319.3	2326.2	2336.4
15°	2435.6	2435.6	2432.2	2418.6	2418.6	2398.0	2401.4	2404.9	2404.9	2411.7	2418.6
17.5°	2606.7	2603.2	2596.4	2586.1	2572.4	2548.5	2541.6	2534.9	2524.5	2521.2	2521.2
20°	2846.2	2842.7	2829.0	2801.7	2784.6	2746.9	2719.5	2692.2	2681.9	2664.8	2661.4
22.5°	3188.2	3188.2	3160.8	3119.8	3106.1	3027.4	2948.8	2890.6	2870.1	2846.2	2846.2
25°	3602.1	3598.7	3561.1	3513.2	3455.0	3372.9	3277.1	3198.5	3147.1	3092.4	3071.9
27.5°	4098.1	4087.9	4036.6	3978.4	3868.9	3766.3	3653.5	3571.3	3482.4	3414.0	3352.4
30°	4679.7	4669.4	4580.5	4471.0	4358.1	4255.5	4091.3	3992.1	3851.8	3769.8	3701.3
32.5°	5353.6	5343.3	5182.6	5076.5	4956.7	4830.2	4635.2	4477.9	4300.0	4183.7	4087.9
35°	6212.2	6171.2	5941.9	5794.8	5606.7	5480.2	5274.8	5062.8	4854.1	4689.9	4549.7
37.5°	7139.3	7091.3	6889.5	6670.6	6485.8	6332.0	6041.1	5774.4	5528.0	5302.3	5127.8
40°	8107.3	7980.8	7765.2	7604.5	7477.9	7330.8	7026.3	6745.8	6359.3	6106.2	5842.8
42.5°	8777.8	8654.7	8504.1	8398.1	8336.5	8223.6	8052.6	7809.7	7464.2	7471.0	6776.6
45°	9219.1	9037.8	8935.2	8942.0	8966.0	8966.0	8935.2	8897.5	8747.0	8849.6	8268.1
47.5°	9061.7	8942.0	8877.0	9013.8	9184.9	9355.9	9554.4	9769.8	10016.1	10306.9	9592.0
50°	8138.1	8182.6	8213.4	8504.1	8870.2	9260.2	9715.1	10303.5	10991.1	11124.5	10778.9
52.5°	6663.7	6759.6	6862.2	7306.8	7789.2	8463.1	9260.2	10231.7	11155.3	11699.2	11665.0
55°	5175.7	5295.4	5514.3	5846.2	6229.3	6865.5	7850.7	9349.1	10789.3	11654.7	12181.5
57.5°	3684.3	3858.7	4146.0	4607.9	4946.5	5305.6	6034.3	7696.8	9273.9	10885.0	12096.0
60°	2449.3	2531.4	2719.5	3294.2	3865.5	4241.8	4758.4	5360.4	6650.1	8870.2	11213.4
62.5°	1737.8	1792.5	1908.8	2168.8	2685.3	3366.1	3677.4	3954.4	4368.4	5705.9	9003.6
63°	1642.0	1689.9	1785.7	2004.6	2469.8	3174.5	3492.7	3745.7	4046.8	5103.8	8517.8
65°	1361.4	1382.0	1433.4	1539.3	1789.0	2374.1	2894.0	3048.0	3099.2	3280.6	5336.4
67.5°	1149.4	1163.1	1180.2	1211.0	1310.2	1580.5	2158.5	2353.5	2295.4	2172.2	2637.5
70°	998.9	1009.1	1036.6	1074.1	1108.4	1176.8	1484.6	1775.4	1710.4	1542.8	1614.6
72.5°	797.1	814.2	845.0	909.9	978.4	1067.2	1142.5	1323.9	1282.8	1122.1	1139.2
75°	629.4	639.7	667.1	714.9	779.9	882.6	1029.7	1091.3	978.4	827.9	827.9
77.5°	499.4	509.7	533.7	571.3	612.3	684.1	786.8	947.6	879.1	622.6	619.2
80°	376.2	386.6	410.5	444.7	485.8	537.0	598.6	670.4	807.3	581.5	465.2
82.5°	277.1	280.5	321.5	345.6	359.2	400.3	451.5	492.6	554.1	537.0	413.9
85°	208.7	205.2	232.6	249.7	253.2	263.4	294.2	335.2	362.6	348.9	321.5
87.5°	116.3	102.6	119.7	136.9	136.9	140.2	147.1	171.0	195.0	188.1	171.0
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°	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3
2.5°	2203.0	2203.0	2199.5	2199.5	2203.0	2203.0	2199.5	2209.9	2216.7	2216.7	2220.1
5°	2213.3	2216.7	2213.3	2213.3	2216.7	2216.7	2220.1	2230.3	2240.7	2247.4	2257.8
7.5°	2244.0	2247.4	2244.0	2244.0	2247.4	2250.9	2257.8	2271.5	2278.2	2291.9	2309.0
10°	2278.2	2281.7	2278.2	2281.7	2285.1	2288.5	2298.8	2309.0	2319.3	2333.0	2360.4
12.5°	2339.8	2343.3	2336.4	2339.8	2350.1	2350.1	2357.0	2363.7	2380.9	2398.0	2425.3
15°	2425.3	2425.3	2418.6	2421.9	2432.2	2432.2	2435.6	2442.5	2463.0	2483.5	2510.8
17.5°	2524.5	2531.4	2528.0	2531.4	2538.2	2541.6	2541.6	2548.5	2562.2	2575.9	2603.2
20°	2657.9	2661.4	2654.6	2661.4	2668.3	2661.4	2654.6	2651.1	2657.9	2664.8	2695.6
22.5°	2839.3	2835.8	2818.7	2818.7	2818.7	2805.0	2788.0	2767.4	2767.4	2757.2	2781.1
25°	3054.7	3044.5	3020.6	3024.0	3000.0	2979.5	2948.8	2918.0	2890.6	2880.3	2883.7
27.5°	3307.9	3287.4	3263.4	3256.6	3232.6	3195.1	3143.7	3085.5	3041.1	3006.9	3000.0
30°	3626.1	3581.6	3540.5	3533.7	3496.0	3434.5	3352.4	3273.7	3198.5	3140.4	3119.8
32.5°	4002.4	3934.0	3868.9	3862.0	3800.6	3718.4	3619.2	3509.7	3400.3	3307.9	3263.4
35°	4443.6	4341.0	4279.4	4262.3	4173.4	4070.7	3961.3	3821.0	3667.1	3537.2	3455.0
37.5°	4980.7	4874.7	4768.6	4772.1	4648.9	4529.1	4382.0	4211.0	4016.0	3834.7	3718.4
40°	5644.3	5493.9	5357.0	5326.2	5220.1	5052.6	4891.8	4693.4	4453.9	4214.5	4046.8
42.5°	6448.3	6201.9	6013.8	5986.4	5846.2	5641.0	5445.9	5182.6	4939.6	4648.9	4447.1
45°	7361.6	6968.2	6742.4	6701.4	6475.6	6266.9	6030.9	5750.4	5452.7	5124.4	4884.9
47.5°	8497.3	7936.3	7553.2	7484.7	7173.4	6899.8	6653.5	6342.2	5986.4	5620.4	5357.0
50°	9821.1	8993.3	8476.8	8370.7	7953.3	7631.8	7317.2	6927.1	6547.4	6164.3	5859.9
52.5°	11148.4	10259.0	9571.4	9441.4	8825.7	8394.6	7980.8	7590.8	7142.7	6762.9	6417.5
55°	12215.8	11623.9	10826.9	10645.5	9763.0	9178.0	8634.1	8189.4	7744.8	7443.7	7036.6
57.5°	12858.8	12828.0	12198.6	11948.9	10741.4	9875.9	9270.4	8764.1	8333.1	8206.5	7666.0
60°	12841.7	13638.8	13368.5	13180.4	11730.0	10590.8	9804.1	9256.7	8901.0	9044.6	8298.9
62.5°	12058.3	13673.0	13998.0	13946.6	12783.6	11165.5	10241.9	9677.5	9489.3	9916.9	8955.7
63°	11774.5	13594.3	14025.4	14004.8	12985.4	11275.0	10317.2	9759.6	9605.6	10139.3	9075.4
65°	9951.2	12906.8	13693.5	13785.9	13419.9	11651.3	10491.6	9968.2	9951.2	10635.3	9359.4
67.5°	6065.1	10905.6	12198.6	12376.5	12807.5	11771.0	10392.5	9896.4	10142.7	10707.1	9273.9
70°	2593.0	7197.4	9804.1	10091.4	11145.0	11175.8	10108.5	9602.2	10098.3	10146.1	8664.9
72.5°	1536.0	3393.4	6674.0	7300.0	8818.9	9615.9	9458.5	9089.1	9513.2	8911.2	7378.6
75°	1087.8	1587.2	3390.1	4057.1	6140.4	7341.1	7946.6	8117.6	8100.4	7067.4	5538.3
77.5°	779.9	1019.4	1429.9	1686.4	3427.7	4713.9	5452.7	5952.2	5791.4	4730.9	3414.0
80°	543.9	704.7	875.7	930.5	1590.7	2421.9	2873.5	3092.4	2996.6	2363.7	1529.1
82.5°	393.4	461.8	564.5	598.6	800.5	1118.6	1330.7	1173.3	1125.5	872.3	660.2
85°	304.4	297.6	352.3	366.0	468.6	584.9	598.6	465.2	407.0	362.6	369.5
87.5°	215.5	184.7	188.1	195.0	242.8	311.3	304.4	191.6	164.2	174.4	198.5
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°	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3	2213.3
2.5°	2227.0	2230.3	2237.2	2240.7	2247.4	2247.4	2254.3	2257.8	2264.6	2271.5	2274.8
5°	2268.0	2278.2	2291.9	2298.8	2312.5	2322.7	2336.4	2343.3	2357.0	2367.2	2380.9
7.5°	2329.6	2346.6	2363.7	2384.3	2404.9	2421.9	2435.6	2452.7	2476.7	2493.7	2504.1
10°	2387.8	2411.7	2442.5	2466.4	2497.2	2521.2	2541.6	2572.4	2599.8	2623.8	2637.5
12.5°	2463.0	2493.7	2524.5	2562.2	2603.2	2634.0	2664.8	2705.9	2743.5	2770.9	2784.6
15°	2552.0	2589.6	2623.8	2668.3	2716.1	2757.2	2801.7	2846.2	2873.5	2873.5	2866.6
17.5°	2644.3	2675.1	2716.1	2767.4	2832.4	2883.7	2907.7	2914.5	2904.3	2880.3	2863.2
20°	2736.7	2764.0	2808.5	2870.1	2938.5	2948.8	2924.8	2894.0	2863.2	2822.2	2794.8
22.5°	2811.9	2849.5	2918.0	2989.8	2993.3	2935.1	2870.1	2818.7	2770.9	2723.0	2671.6
25°	2900.9	2952.1	3044.5	3071.9	2982.9	2873.5	2781.1	2705.9	2627.1	2548.5	2490.4
27.5°	3010.3	3085.5	3177.9	3099.2	2924.8	2770.9	2644.3	2531.4	2428.8	2319.3	2254.3
30°	3126.6	3243.0	3263.4	3058.2	2825.6	2627.1	2456.1	2285.1	2155.2	2055.9	2018.3
32.5°	3266.9	3417.4	3294.2	2986.4	2692.2	2432.2	2203.0	1997.7	1888.3	1826.7	1809.6
35°	3479.0	3602.1	3311.4	2911.1	2538.2	2199.5	1912.2	1748.0	1679.6	1638.6	1618.0
37.5°	3783.4	3780.0	3307.9	2818.7	2360.4	1946.5	1679.6	1563.3	1508.5	1474.4	1436.7
40°	4139.2	3916.9	3287.4	2685.3	2120.9	1703.5	1518.9	1409.4	1358.1	1317.0	1272.6
42.5°	4491.6	4009.1	3229.3	2486.9	1823.3	1529.1	1402.6	1303.3	1248.6	1204.1	1142.5
45°	4796.0	4046.8	3116.3	2213.3	1556.4	1392.2	1327.3	1241.8	1176.8	1108.4	1060.5
47.5°	5035.5	4039.9	2935.1	1891.7	1378.6	1296.5	1265.7	1207.6	1128.8	1043.3	981.7
50°	5237.3	3988.7	2688.7	1607.8	1258.8	1211.0	1200.7	1183.6	1057.0	985.2	947.6
52.5°	5421.9	3913.4	2425.3	1416.2	1156.2	1115.2	1135.7	1118.6	1029.7	968.1	930.5
55°	5675.1	3862.0	2165.4	1269.1	1036.6	1026.2	1043.3	1067.2	1012.5	954.4	913.4
57.5°	5972.7	3889.5	1966.9	1104.9	923.6	930.5	988.6	1022.8	995.4	933.9	892.8
60°	6314.8	3971.6	1792.5	947.6	831.2	848.3	933.9	981.7	978.4	906.5	858.7
62.5°	6698.0	4057.1	1515.4	827.9	752.6	779.9	868.9	930.5	940.7	879.1	821.0
63°	6773.2	4063.9	1443.6	803.9	738.9	769.7	851.8	916.8	930.5	872.3	814.2
65°	6957.9	4002.4	1163.1	738.9	684.1	718.4	800.5	858.7	886.0	834.7	786.8
67.5°	6804.0	3499.5	875.7	660.2	639.7	663.6	735.5	790.2	814.2	790.2	742.4
70°	6222.5	2545.1	684.1	588.4	591.8	608.9	663.6	714.9	742.4	735.5	691.0
72.5°	5011.5	1443.6	571.3	526.8	537.0	557.6	595.3	643.1	667.1	663.6	632.9
75°	3301.1	738.9	482.3	472.1	478.9	496.0	523.3	561.0	588.4	584.9	571.3
77.5°	1635.2	513.1	413.9	417.4	420.7	434.4	455.0	489.2	506.3	509.7	506.3
80°	673.9	400.3	355.8	359.2	362.6	372.9	386.6	417.4	427.6	434.4	437.8
82.5°	403.7	304.4	284.0	290.7	294.2	304.4	314.8	342.1	352.3	362.6	362.6
85°	266.8	212.1	205.2	212.1	218.9	225.8	229.2	246.3	263.4	277.1	284.0
87.5°	143.7	126.5	123.2	126.5	126.5	133.4	140.2	157.3	177.9	191.6	198.5
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°	2213.3	2213.3	2213.3	2213.3	2213.3
2.5°	2268.0	2271.5	2268.0	2271.5	2274.8
5°	2380.9	2387.8	2384.3	2384.3	2398.0
7.5°	2510.8	2524.5	2524.5	2531.4	2538.2
10°	2651.1	2664.8	2675.1	2675.1	2685.3
12.5°	2791.4	2798.2	2808.5	2808.5	2808.5
15°	2863.2	2859.8	2856.4	2852.9	2852.9
17.5°	2852.9	2839.3	2832.4	2825.6	2829.0
20°	2777.7	2753.8	2746.9	2736.7	2743.5
22.5°	2647.7	2613.5	2599.8	2582.7	2589.6
25°	2452.7	2411.7	2404.9	2384.3	2394.5
27.5°	2227.0	2206.4	2203.0	2199.5	2216.7
30°	2014.9	2021.7	2025.1	2032.0	2049.1
32.5°	1819.8	1833.5	1837.0	1840.4	1864.3
35°	1628.3	1611.2	1628.3	1621.5	1642.0
37.5°	1419.7	1405.9	1392.2	1375.2	1388.9
40°	1245.1	1221.2	1180.2	1159.6	1163.1
42.5°	1108.4	1077.6	1043.3	1022.8	1022.8
45°	1019.4	981.7	950.9	937.3	937.3
47.5°	950.9	933.9	916.8	906.5	906.5
50°	923.6	903.1	892.8	886.0	886.0
52.5°	903.1	882.6	872.3	865.4	858.7
55°	886.0	855.2	845.0	841.5	841.5
57.5°	862.0	834.7	821.0	817.5	817.5
60°	824.4	803.9	790.2	786.8	786.8
62.5°	786.8	766.3	752.6	752.6	752.6
63°	779.9	756.0	745.7	745.7	745.7
65°	749.1	725.2	714.9	714.9	711.6
67.5°	708.1	684.1	677.3	677.3	670.4
70°	660.2	639.7	632.9	636.3	622.6
72.5°	612.3	591.8	581.5	581.5	567.8
75°	557.6	537.0	523.3	520.0	506.3
77.5°	496.0	478.9	465.2	451.5	444.7
80°	431.1	417.4	400.3	389.9	379.7
82.5°	362.6	348.9	338.7	352.3	301.1
85°	284.0	270.3	256.6	277.1	215.5
87.5°	208.7	201.8	188.1	164.2	143.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)