

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: P257949

Luminaire Tested: **ARCH-L-AF72-130-D-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257949  
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-AF72-130-D-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 575mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18130.8 lumens  
Efficiency: N/A  
Efficacy: 136.3 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

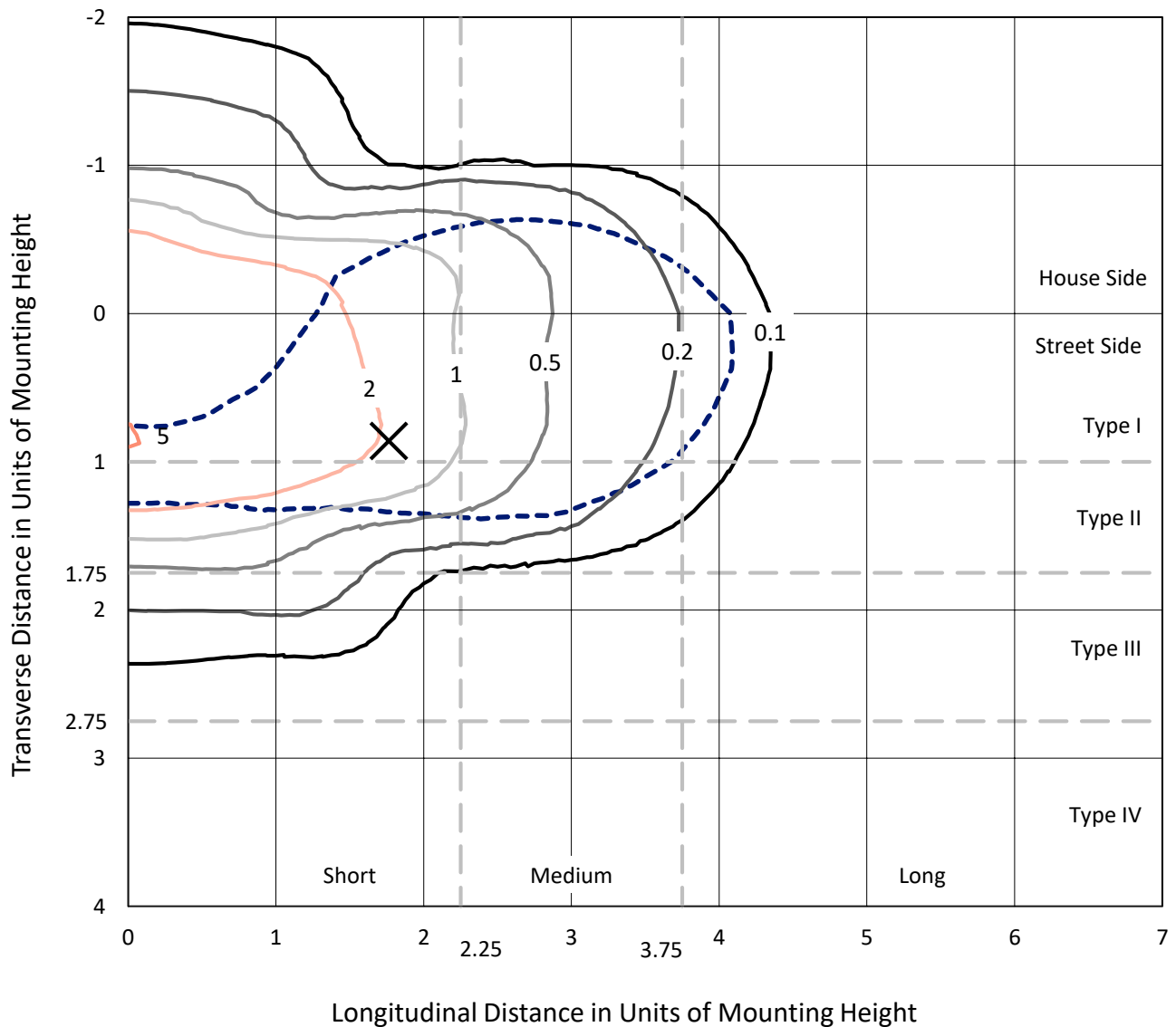
Input Watts (W): 133  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

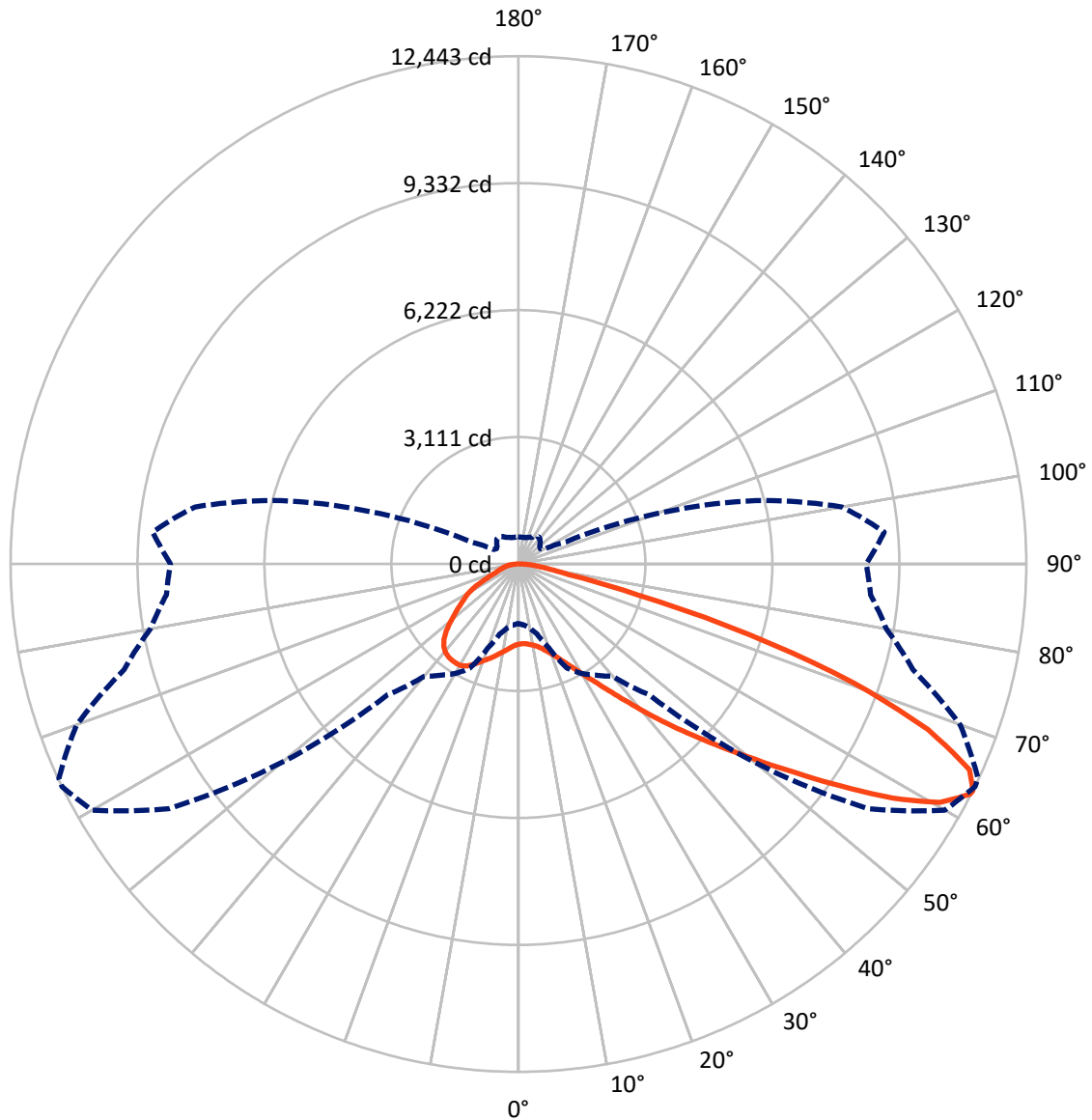
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	5329.8	0.0	5329.8
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	12801.0	0.0	12801.0
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	18130.8	0.0	18130.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.0	1.1
10°-20°	653.0	3.6
20°-30°	1225.7	6.8
30°-40°	2054.4	11.3
40°-50°	3446.9	19.0
50°-60°	4369.6	24.1
60°-70°	3854.7	21.3
70°-80°	1989.9	11.0
80°-90°	340.5	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°	18130.8	100.0
0°-180°	18130.8	100.0



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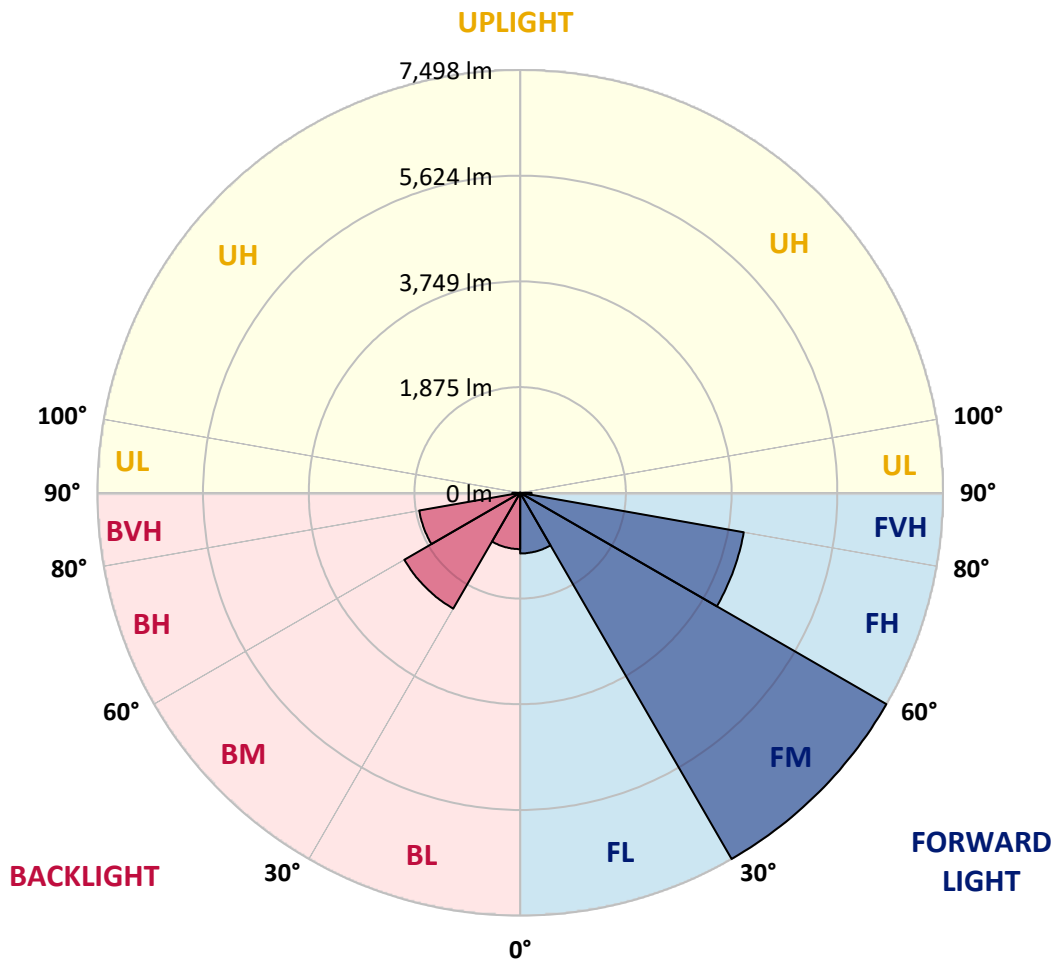
CATALOG NUMBER: ARCH-L-AF72-130-D-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1076.1	5.9			
FM	(30°-60°)	7498.4	41.4			
FH	(60°-80°)	4026.1	22.2			G2/5000
FVH	(80°-90°)	200.4	1.1			G2/225
BL	(0°-30°)	998.6	5.5	B2/1000		
BM	(30°-60°)	2372.6	13.1	B2/2500		
BH	(60°-80°)	1818.5	10.0	B3/2500		G3/2500
BVH	(80°-90°)	140.1	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°	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6
2.5°	1951.4	1948.4	1948.4	1948.4	1948.4	1945.3	1948.4	1954.4	1951.4	1948.4	1954.4
5°	1957.5	1954.4	1954.4	1954.4	1957.5	1954.4	1957.5	1966.6	1960.5	1960.5	1966.6
7.5°	1972.7	1969.6	1972.7	1969.6	1969.6	1969.6	1972.7	1981.8	1978.7	1981.8	1990.9
10°	1990.9	1990.9	1990.9	1990.9	1990.9	1990.9	1996.9	2003.0	2006.0	2009.1	2021.2
12.5°	2045.5	2045.5	2045.5	2042.4	2042.4	2033.3	2045.5	2051.5	2057.7	2063.7	2072.8
15°	2160.8	2160.8	2157.8	2145.6	2145.6	2127.4	2130.5	2133.5	2133.5	2139.6	2145.6
17.5°	2312.6	2309.5	2303.5	2294.4	2282.2	2260.9	2254.9	2248.9	2239.8	2236.7	2236.7
20°	2525.1	2522.0	2509.8	2485.6	2470.4	2437.0	2412.7	2388.4	2379.3	2364.1	2361.1
22.5°	2828.5	2828.5	2804.2	2767.8	2755.6	2685.9	2616.1	2564.4	2546.2	2525.1	2525.1
25°	3195.7	3192.6	3159.3	3116.8	3065.2	2992.3	2907.4	2837.6	2792.0	2743.6	2725.3
27.5°	3635.8	3626.7	3581.1	3529.6	3432.4	3341.4	3241.2	3168.4	3089.5	3028.8	2974.1
30°	4151.6	4142.5	4063.7	3966.6	3866.4	3775.4	3629.7	3541.7	3417.3	3344.4	3283.7
32.5°	4749.6	4740.5	4597.9	4503.7	4397.6	4285.2	4112.3	3972.6	3814.8	3711.7	3626.7
35°	5511.4	5474.9	5271.6	5141.0	4974.1	4861.9	4679.8	4491.6	4306.5	4160.8	4036.4
37.5°	6333.8	6291.2	6112.2	5918.0	5754.1	5617.5	5359.5	5122.8	4904.3	4704.0	4549.3
40°	7192.7	7080.4	6889.2	6746.5	6634.2	6503.7	6233.7	5984.8	5641.8	5417.2	5183.5
42.5°	7787.4	7678.2	7544.7	7450.6	7395.9	7295.8	7144.1	6928.5	6622.1	6628.1	6012.1
45°	8179.0	8018.1	7927.1	7933.1	7954.4	7954.4	7927.1	7893.7	7760.1	7851.1	7335.3
47.5°	8039.4	7933.1	7875.5	7996.8	8148.6	8300.3	8476.4	8667.6	8886.1	9144.1	8509.7
50°	7220.0	7259.4	7286.7	7544.7	7869.4	8215.4	8619.0	9141.0	9751.0	9869.3	9562.9
52.5°	5911.9	5996.8	6087.9	6482.4	6910.3	7508.3	8215.4	9077.3	9896.6	10379.3	10348.9
55°	4591.7	4698.0	4892.2	5186.6	5526.5	6091.0	6965.0	8294.3	9572.0	10339.8	10807.2
57.5°	3268.5	3423.3	3678.2	4087.9	4388.5	4707.1	5353.5	6828.4	8227.5	9657.0	10731.3
60°	2173.0	2245.8	2412.7	2922.6	3429.4	3763.2	4221.5	4755.6	5899.8	7869.4	9948.3
62.5°	1541.7	1590.3	1693.5	1924.1	2382.4	2986.3	3262.5	3508.3	3875.6	5062.2	7987.7
63°	1456.8	1499.2	1584.2	1778.4	2191.2	2816.4	3098.6	3323.2	3590.3	4528.0	7556.8
65°	1207.9	1226.1	1271.6	1365.6	1587.2	2106.2	2567.5	2704.1	2749.6	2910.4	4734.4
67.5°	1019.7	1031.9	1047.0	1074.3	1162.4	1402.1	1915.0	2087.9	2036.4	1927.1	2339.9
70°	886.2	895.3	919.5	953.0	983.3	1044.0	1317.2	1575.1	1517.4	1368.7	1432.4
72.5°	707.2	722.3	749.6	807.3	868.0	946.8	1013.6	1174.4	1138.0	995.4	1010.6
75°	558.4	567.5	591.8	634.3	691.9	783.0	913.5	968.1	868.0	734.5	734.5
77.5°	443.0	452.1	473.4	506.9	543.3	607.0	698.1	840.7	780.0	552.4	549.3
80°	333.8	342.9	364.2	394.6	431.0	476.5	531.1	594.8	716.3	516.0	412.8
82.5°	245.8	248.9	285.3	306.5	318.6	355.1	400.6	437.0	491.6	476.5	367.2
85°	185.2	182.1	206.3	221.6	224.5	233.6	261.0	297.4	321.7	309.5	285.3
87.5°	103.2	91.0	106.2	121.4	121.4	124.4	130.5	151.7	173.0	166.9	151.7
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°	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6
2.5°	1954.4	1954.4	1951.4	1951.4	1954.4	1954.4	1951.4	1960.5	1966.6	1966.6	1969.6
5°	1963.6	1966.6	1963.6	1963.6	1966.6	1966.6	1969.6	1978.7	1987.8	1993.9	2003.0
7.5°	1990.9	1993.9	1990.9	1990.9	1993.9	1996.9	2003.0	2015.1	2021.2	2033.3	2048.6
10°	2021.2	2024.2	2021.2	2024.2	2027.3	2030.4	2039.5	2048.6	2057.7	2069.7	2094.1
12.5°	2075.9	2078.8	2072.8	2075.9	2085.0	2085.0	2091.0	2097.0	2112.3	2127.4	2151.7
15°	2151.7	2151.7	2145.6	2148.7	2157.8	2157.8	2160.8	2166.9	2185.1	2203.3	2227.6
17.5°	2239.8	2245.8	2242.7	2245.8	2251.8	2254.9	2254.9	2260.9	2273.1	2285.3	2309.5
20°	2358.1	2361.1	2355.0	2361.1	2367.2	2361.1	2355.0	2352.0	2358.1	2364.1	2391.5
22.5°	2518.9	2515.9	2500.7	2500.7	2500.7	2488.6	2473.4	2455.2	2455.2	2446.1	2467.4
25°	2710.1	2701.0	2679.8	2682.8	2661.6	2643.4	2616.1	2588.8	2564.4	2555.3	2558.4
27.5°	2934.7	2916.5	2895.3	2889.2	2867.9	2834.6	2789.1	2737.4	2698.0	2667.7	2661.6
30°	3217.0	3177.5	3141.1	3135.0	3101.6	3047.0	2974.1	2904.4	2837.6	2786.0	2767.8
32.5°	3550.8	3490.1	3432.4	3426.4	3371.7	3298.9	3210.8	3113.8	3016.7	2934.7	2895.3
35°	3942.2	3851.2	3796.6	3781.4	3702.6	3611.5	3514.3	3390.0	3253.4	3138.0	3065.2
37.5°	4418.7	4324.7	4230.6	4233.6	4124.3	4018.2	3887.6	3735.9	3562.9	3402.1	3298.9
40°	5007.5	4874.0	4752.6	4725.3	4631.2	4482.5	4339.9	4163.8	3951.4	3739.0	3590.3
42.5°	5720.8	5502.2	5335.3	5311.1	5186.6	5004.5	4831.5	4597.9	4382.3	4124.3	3945.3
45°	6531.0	6182.0	5981.7	5945.3	5745.0	5559.8	5350.4	5101.6	4837.5	4546.2	4333.8
47.5°	7538.6	7040.9	6700.9	6640.3	6364.1	6121.3	5902.8	5626.6	5311.1	4986.3	4752.6
50°	8713.1	7978.6	7520.4	7426.3	7056.0	6770.8	6491.5	6145.6	5808.7	5468.8	5198.7
52.5°	9890.6	9101.6	8491.5	8376.2	7830.0	7447.6	7080.4	6734.4	6336.8	5999.9	5693.4
55°	10837.4	10312.5	9605.3	9444.5	8661.5	8142.6	7660.0	7265.5	6871.0	6603.9	6242.8
57.5°	11408.0	11380.7	10822.3	10600.7	9529.5	8761.7	8224.5	7775.3	7393.0	7280.6	6801.1
60°	11392.9	12100.0	11860.2	11693.4	10406.6	9395.9	8697.9	8212.4	7896.7	8024.1	7362.6
62.5°	10697.9	12130.4	12418.6	12373.1	11341.3	9905.7	9086.4	8585.6	8418.7	8798.1	7945.3
63°	10446.0	12060.6	12443.0	12424.8	11520.4	10002.9	9153.2	8658.5	8521.9	8995.3	8051.4
65°	8828.4	11450.5	12148.6	12230.5	11905.7	10336.7	9307.9	8843.6	8828.4	9435.4	8303.4
67.5°	5380.8	9675.2	10822.3	10980.1	11362.5	10443.0	9220.0	8779.9	8998.4	9499.1	8227.5
70°	2300.4	6385.4	8697.9	8952.9	9887.5	9914.8	8968.0	8518.8	8958.9	9001.4	7687.3
72.5°	1362.7	3010.5	5921.0	6476.4	7823.8	8531.0	8391.4	8063.6	8440.0	7905.8	6546.2
75°	965.1	1408.2	3007.6	3599.4	5447.6	6512.8	7050.0	7201.8	7186.5	6270.1	4913.4
77.5°	691.9	904.4	1268.6	1496.2	3040.9	4182.0	4837.5	5280.7	5138.0	4197.2	3028.8
80°	482.5	625.2	776.9	825.5	1411.2	2148.7	2549.3	2743.6	2658.5	2097.0	1356.5
82.5°	349.0	409.7	500.7	531.1	710.1	992.4	1180.6	1041.0	998.5	773.9	585.7
85°	270.1	264.0	312.6	324.7	415.7	518.9	531.1	412.8	361.1	321.7	327.8
87.5°	191.2	163.9	166.9	173.0	215.4	276.2	270.1	169.9	145.7	154.8	176.0
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6	1963.6
2.5°	1975.7	1978.7	1984.8	1987.8	1993.9	1993.9	2000.0	2003.0	2009.1	2015.1	2018.2
5°	2012.1	2021.2	2033.3	2039.5	2051.5	2060.6	2072.8	2078.8	2091.0	2100.1	2112.3
7.5°	2066.8	2081.9	2097.0	2115.3	2133.5	2148.7	2160.8	2176.0	2197.2	2212.4	2221.5
10°	2118.3	2139.6	2166.9	2188.1	2215.4	2236.7	2254.9	2282.2	2306.4	2327.7	2339.9
12.5°	2185.1	2212.4	2239.8	2273.1	2309.5	2336.8	2364.1	2400.6	2434.0	2458.3	2470.4
15°	2264.0	2297.3	2327.7	2367.2	2409.7	2446.1	2485.6	2525.1	2549.3	2549.3	2543.3
17.5°	2345.9	2373.2	2409.7	2455.2	2512.9	2558.4	2579.7	2585.7	2576.6	2555.3	2540.2
20°	2427.9	2452.2	2491.6	2546.2	2607.0	2616.1	2594.8	2567.5	2540.2	2503.8	2479.5
22.5°	2494.7	2528.0	2588.8	2652.5	2655.5	2603.9	2546.2	2500.7	2458.3	2415.8	2370.2
25°	2573.5	2619.1	2701.0	2725.3	2646.4	2549.3	2467.4	2400.6	2330.8	2260.9	2209.4
27.5°	2670.7	2737.4	2819.4	2749.6	2594.8	2458.3	2345.9	2245.8	2154.7	2057.7	2000.0
30°	2773.8	2877.0	2895.3	2713.2	2506.8	2330.8	2179.0	2027.3	1912.0	1823.9	1790.6
32.5°	2898.3	3031.8	2922.6	2649.4	2388.4	2157.8	1954.4	1772.4	1675.3	1620.7	1605.4
35°	3086.4	3195.7	2937.7	2582.6	2251.8	1951.4	1696.5	1550.8	1490.1	1453.7	1435.5
37.5°	3356.6	3353.5	2934.7	2500.7	2094.1	1726.8	1490.1	1386.9	1338.3	1308.0	1274.6
40°	3672.2	3475.0	2916.5	2382.4	1881.6	1511.4	1347.4	1250.4	1204.8	1168.4	1128.9
42.5°	3984.8	3556.9	2864.9	2206.3	1617.6	1356.5	1244.3	1156.2	1107.8	1068.3	1013.6
45°	4254.9	3590.3	2764.7	1963.6	1380.9	1235.2	1177.5	1101.6	1044.0	983.3	940.8
47.5°	4467.3	3584.2	2603.9	1678.3	1223.0	1150.2	1122.9	1071.3	1001.5	925.7	871.0
50°	4646.3	3538.7	2385.4	1426.4	1116.9	1074.3	1065.2	1050.1	937.7	874.0	840.7
52.5°	4810.2	3471.9	2151.7	1256.4	1025.8	989.4	1007.6	992.4	913.5	858.9	825.5
55°	5034.9	3426.4	1921.1	1126.0	919.5	910.4	925.7	946.8	898.4	846.7	810.3
57.5°	5298.9	3450.6	1745.1	980.3	819.4	825.5	877.1	907.5	883.1	828.5	792.1
60°	5602.4	3523.5	1590.3	840.7	737.4	752.7	828.5	871.0	868.0	804.2	761.8
62.5°	5942.2	3599.4	1344.5	734.5	667.7	691.9	770.9	825.5	834.6	780.0	728.3
63°	6009.0	3605.4	1280.7	713.2	655.5	682.8	755.7	813.3	825.5	773.9	722.3
65°	6172.9	3550.8	1031.9	655.5	607.0	637.3	710.1	761.8	786.0	740.5	698.1
67.5°	6036.3	3104.7	776.9	585.7	567.5	588.8	652.5	701.0	722.3	701.0	658.6
70°	5520.5	2258.0	607.0	522.0	525.1	540.2	588.8	634.3	658.6	652.5	613.1
72.5°	4446.1	1280.7	506.9	467.4	476.5	494.7	528.0	570.6	591.8	588.8	561.5
75°	2928.6	655.5	427.9	418.8	424.8	440.1	464.3	497.8	522.0	518.9	506.9
77.5°	1450.6	455.2	367.2	370.2	373.3	385.4	403.7	433.9	449.2	452.1	449.2
80°	597.9	355.1	315.6	318.6	321.7	330.8	342.9	370.2	379.3	385.4	388.4
82.5°	358.1	270.1	251.9	258.0	261.0	270.1	279.2	303.5	312.6	321.7	321.7
85°	236.7	188.1	182.1	188.1	194.3	200.3	203.4	218.5	233.6	245.8	251.9
87.5°	127.5	112.3	109.3	112.3	112.3	118.4	124.4	139.6	157.8	169.9	176.0
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):**

	160°	165°	170°	175°	180°
0°	1963.6	1963.6	1963.6	1963.6	1963.6
2.5°	2012.1	2015.1	2012.1	2015.1	2018.2
5°	2112.3	2118.3	2115.3	2115.3	2127.4
7.5°	2227.6	2239.8	2239.8	2245.8	2251.8
10°	2352.0	2364.1	2373.2	2373.2	2382.4
12.5°	2476.5	2482.5	2491.6	2491.6	2491.6
15°	2540.2	2537.1	2534.2	2531.1	2531.1
17.5°	2531.1	2518.9	2512.9	2506.8	2509.8
20°	2464.3	2443.1	2437.0	2427.9	2434.0
22.5°	2349.0	2318.6	2306.4	2291.3	2297.3
25°	2176.0	2139.6	2133.5	2115.3	2124.4
27.5°	1975.7	1957.5	1954.4	1951.4	1966.6
30°	1787.5	1793.6	1796.6	1802.7	1817.9
32.5°	1614.5	1626.7	1629.8	1632.7	1654.0
35°	1444.6	1429.4	1444.6	1438.6	1456.8
37.5°	1259.5	1247.3	1235.2	1220.0	1232.1
40°	1104.7	1083.4	1047.0	1028.8	1031.9
42.5°	983.3	955.9	925.7	907.5	907.5
45°	904.4	871.0	843.7	831.6	831.6
47.5°	843.7	828.5	813.3	804.2	804.2
50°	819.4	801.2	792.1	786.0	786.0
52.5°	801.2	783.0	773.9	767.8	761.8
55°	786.0	758.7	749.6	746.5	746.5
57.5°	764.8	740.5	728.3	725.4	725.4
60°	731.4	713.2	701.0	698.1	698.1
62.5°	698.1	679.9	667.7	667.7	667.7
63°	691.9	670.7	661.6	661.6	661.6
65°	664.6	643.4	634.3	634.3	631.3
67.5°	628.2	607.0	600.9	600.9	594.8
70°	585.7	567.5	561.5	564.5	552.4
72.5°	543.3	525.1	516.0	516.0	503.8
75°	494.7	476.5	464.3	461.2	449.2
77.5°	440.1	424.8	412.8	400.6	394.6
80°	382.4	370.2	355.1	346.0	336.9
82.5°	321.7	309.5	300.4	312.6	267.1
85°	251.9	239.8	227.6	245.8	191.2
87.5°	185.2	179.0	166.9	145.7	127.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)