

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: P257968

Luminaire Tested: **ARCH-L-AF72-120-D-U-T2U-7050**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P257968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-120-D-U-T2U-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16537 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

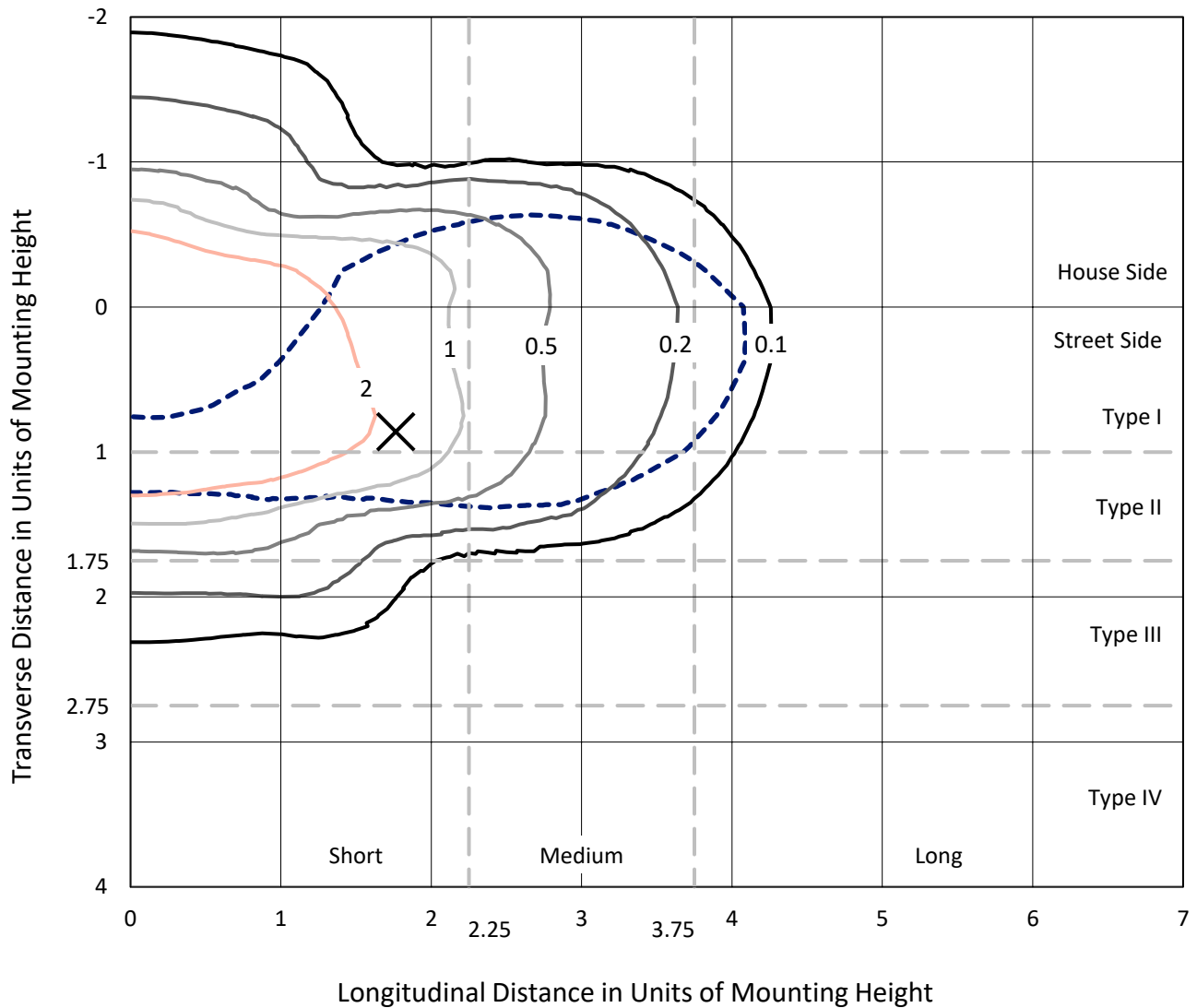
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

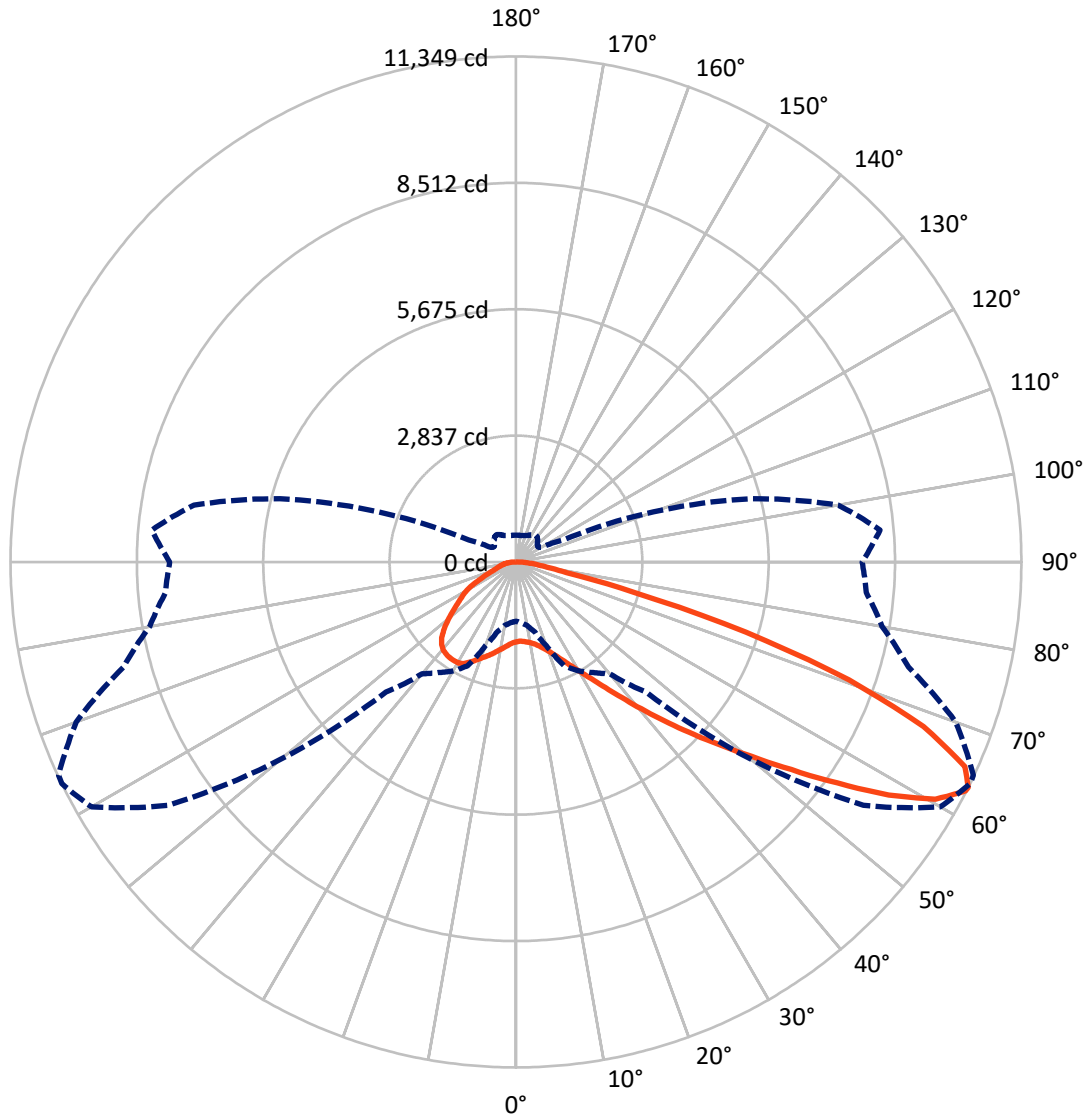
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 63-Deg Vertical

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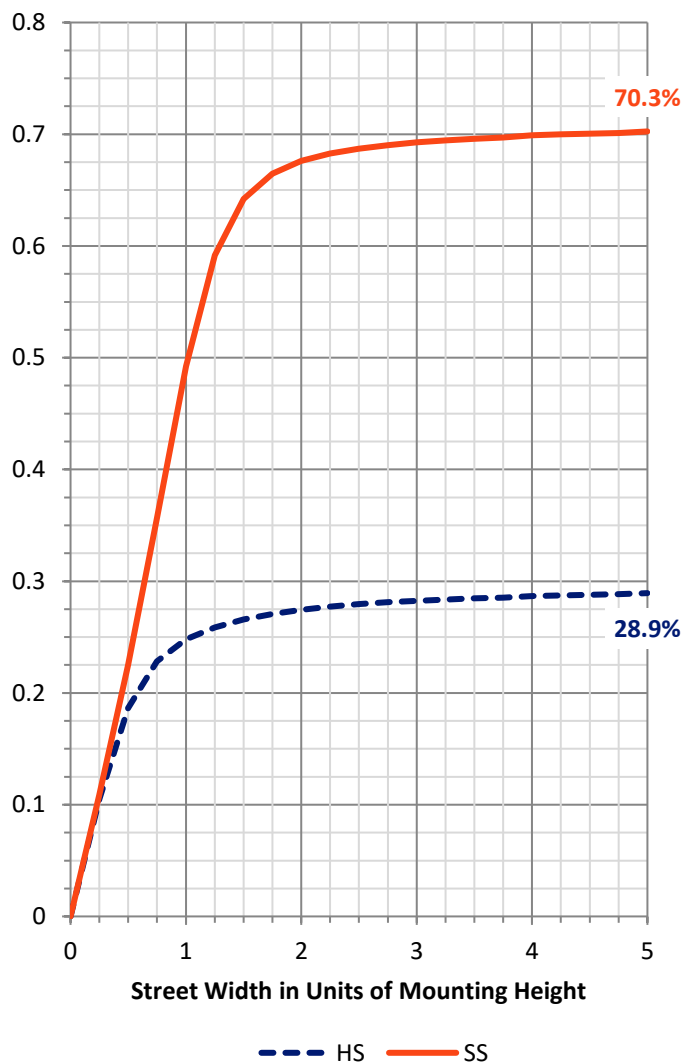
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4861.3	0.0	4861.3
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	11675.7	0.0	11675.7
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	16537.0	0.0	16537.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.8	1.1
10°-20°	595.6	3.6
20°-30°	1118.0	6.8
30°-40°	1873.8	11.3
40°-50°	3143.9	19.0
50°-60°	3985.5	24.1
60°-70°	3515.8	21.3
70°-80°	1814.9	11.0
80°-90°	310.6	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°	16537.0	100.0
0°-180°	16537.0	100.0

**Coefficient of Utilization**

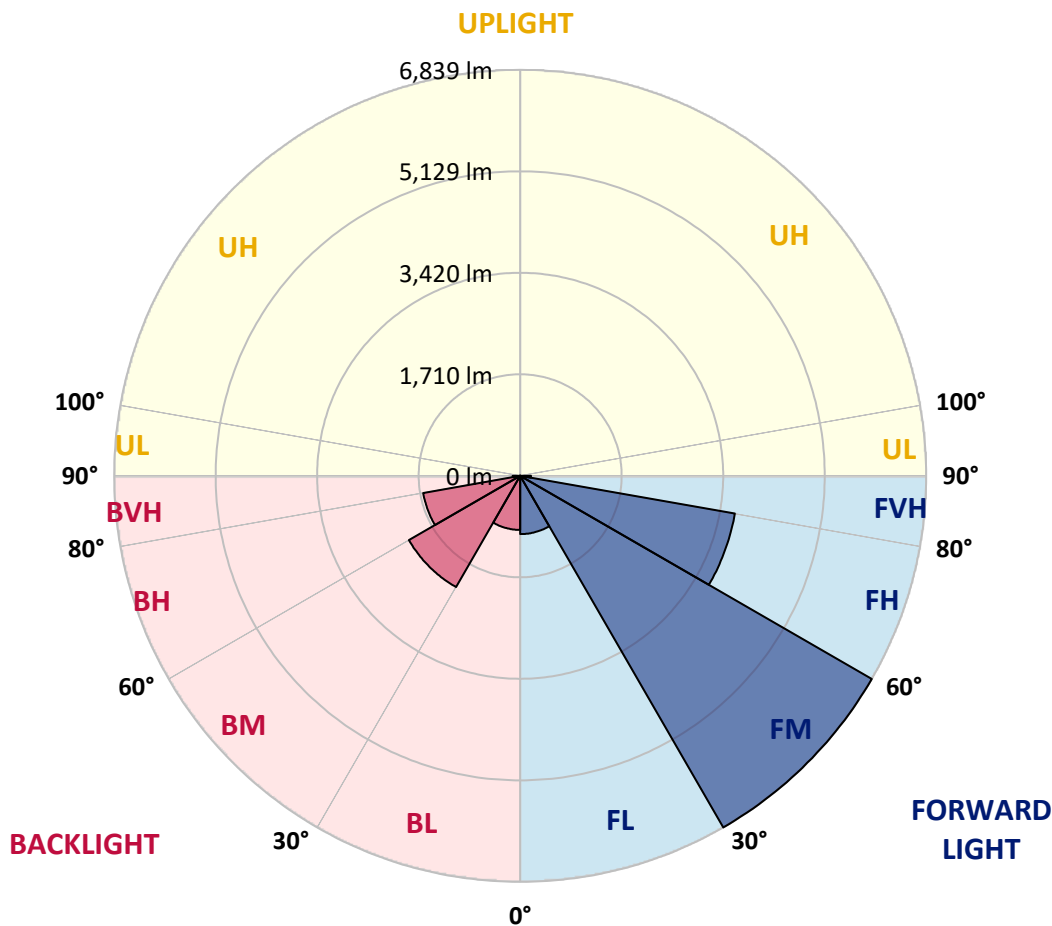


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	981.5	5.9			
FM (30°-60°)	6839.3	41.4			
FH (60°-80°)	3672.1	22.2			G2/5000
FVH (80°-90°)	182.8	1.1			G2/225
BL (0°-30°)	910.8	5.5	B2/1000		
BM (30°-60°)	2164.0	13.1	B2/2500		
BH (60°-80°)	1658.6	10.0	B3/2500		G3/2500
BVH (80°-90°)	127.8	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°	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0
2.5°	1779.9	1777.1	1777.1	1777.1	1777.1	1774.3	1777.1	1782.6	1779.9	1777.1	1782.6
5°	1785.4	1782.6	1782.6	1782.6	1785.4	1782.6	1785.4	1793.7	1788.2	1788.2	1793.7
7.5°	1799.3	1796.5	1799.3	1796.5	1796.5	1796.5	1799.3	1807.6	1804.8	1807.6	1815.9
10°	1815.9	1815.9	1815.9	1815.9	1815.9	1815.9	1821.4	1826.9	1829.7	1832.5	1843.5
12.5°	1865.7	1865.7	1865.7	1862.9	1862.9	1854.6	1865.7	1871.2	1876.8	1882.3	1890.6
15°	1970.9	1970.9	1968.1	1957.0	1957.0	1940.4	1943.2	1946.0	1946.0	1951.5	1957.0
17.5°	2109.3	2106.5	2101.0	2092.7	2081.6	2062.2	2056.7	2051.2	2042.8	2040.1	2040.1
20°	2303.0	2300.3	2289.2	2267.1	2253.2	2222.8	2200.6	2178.5	2170.2	2156.3	2153.6
22.5°	2579.9	2579.9	2557.7	2524.5	2513.4	2449.8	2386.1	2339.0	2322.4	2303.0	2303.0
25°	2914.8	2912.0	2881.6	2842.8	2795.8	2729.3	2651.8	2588.2	2546.6	2502.3	2485.7
27.5°	3316.2	3307.9	3266.3	3219.3	3130.7	3047.7	2956.3	2889.9	2817.9	2762.5	2712.7
30°	3786.7	3778.4	3706.5	3617.9	3526.5	3443.5	3310.6	3230.4	3116.9	3050.4	2995.1
32.5°	4332.1	4323.7	4193.6	4107.8	4011.0	3908.5	3750.8	3623.4	3479.5	3385.4	3307.9
35°	5026.8	4993.6	4808.2	4689.1	4536.9	4434.5	4268.4	4096.8	3927.9	3795.0	3681.6
37.5°	5777.0	5738.2	5574.9	5397.8	5248.3	5123.7	4888.4	4672.5	4473.2	4290.5	4149.4
40°	6560.4	6457.9	6283.6	6153.5	6051.0	5932.0	5685.6	5458.7	5145.9	4941.0	4727.9
42.5°	7102.9	7003.3	6881.5	6795.6	6745.8	6654.5	6516.1	6319.5	6040.0	6045.5	5483.6
45°	7460.0	7313.3	7230.2	7235.8	7255.1	7255.1	7230.2	7199.8	7078.0	7161.0	6690.5
47.5°	7332.7	7235.8	7183.2	7293.9	7432.3	7570.7	7731.3	7905.6	8104.9	8340.2	7761.7
50°	6585.3	6621.3	6646.2	6881.5	7177.6	7493.2	7861.4	8337.5	8893.9	9001.8	8722.2
52.5°	5392.2	5469.7	5552.8	5912.6	6302.9	6848.2	7493.2	8279.3	9026.7	9466.8	9439.2
55°	4188.1	4285.0	4462.2	4730.7	5040.7	5555.5	6352.8	7565.2	8730.5	9430.9	9857.1
57.5°	2981.2	3122.4	3354.9	3728.6	4002.6	4293.3	4882.9	6228.2	7504.3	8808.0	9787.9
60°	1981.9	2048.4	2200.6	2665.7	3127.9	3432.4	3850.4	4337.6	5381.2	7177.6	9073.8
62.5°	1406.2	1450.5	1544.6	1755.0	2172.9	2723.8	2975.7	3199.9	3534.8	4617.2	7285.6
63°	1328.7	1367.4	1444.9	1622.1	1998.6	2568.8	2826.2	3031.1	3274.6	4130.0	6892.5
65°	1101.7	1118.3	1159.8	1245.6	1447.7	1921.1	2341.8	2466.4	2507.9	2654.6	4318.2
67.5°	930.1	941.1	955.0	979.9	1060.2	1278.9	1746.7	1904.4	1857.4	1757.7	2134.2
70°	808.3	816.6	838.7	869.2	896.9	952.2	1201.3	1436.6	1384.0	1248.4	1306.5
72.5°	645.0	658.8	683.7	736.3	791.7	863.6	924.5	1071.2	1038.0	907.9	921.8
75°	509.3	517.6	539.8	578.5	631.1	714.2	833.2	883.0	791.7	669.9	669.9
77.5°	404.1	412.4	431.8	462.3	495.5	553.6	636.7	766.8	711.4	503.8	501.0
80°	304.5	312.8	332.2	359.9	393.1	434.6	484.4	542.5	653.3	470.6	376.5
82.5°	224.2	227.0	260.2	279.6	290.6	323.9	365.4	398.6	448.4	434.6	334.9
85°	168.9	166.1	188.2	202.1	204.8	213.1	238.1	271.3	293.4	282.3	260.2
87.5°	94.1	83.0	96.9	110.7	110.7	113.5	119.0	138.4	157.8	152.2	138.4
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°	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0
2.5°	1782.6	1782.6	1779.9	1779.9	1782.6	1782.6	1779.9	1788.2	1793.7	1793.7	1796.5
5°	1791.0	1793.7	1791.0	1791.0	1793.7	1793.7	1796.5	1804.8	1813.1	1818.6	1826.9
7.5°	1815.9	1818.6	1815.9	1815.9	1818.6	1821.4	1826.9	1838.0	1843.5	1854.6	1868.5
10°	1843.5	1846.3	1843.5	1846.3	1849.1	1851.8	1860.2	1868.5	1876.8	1887.8	1910.0
12.5°	1893.4	1896.1	1890.6	1893.4	1901.7	1901.7	1907.2	1912.7	1926.6	1940.4	1962.6
15°	1962.6	1962.6	1957.0	1959.8	1968.1	1968.1	1970.9	1976.4	1993.0	2009.6	2031.8
17.5°	2042.8	2048.4	2045.6	2048.4	2053.9	2056.7	2056.7	2062.2	2073.3	2084.4	2106.5
20°	2150.8	2153.6	2148.0	2153.6	2159.1	2153.6	2148.0	2145.3	2150.8	2156.3	2181.2
22.5°	2297.5	2294.7	2280.9	2280.9	2280.9	2269.8	2256.0	2239.4	2239.4	2231.1	2250.5
25°	2471.9	2463.6	2444.2	2447.0	2427.6	2411.0	2386.1	2361.2	2339.0	2330.7	2333.5
27.5°	2676.7	2660.1	2640.8	2635.2	2615.8	2585.4	2543.9	2496.8	2460.8	2433.1	2427.6
30°	2934.2	2898.2	2865.0	2859.4	2829.0	2779.2	2712.7	2649.1	2588.2	2541.1	2524.5
32.5°	3238.7	3183.3	3130.7	3125.2	3075.3	3008.9	2928.6	2840.1	2751.5	2676.7	2640.8
35°	3595.7	3512.7	3462.9	3449.0	3377.1	3294.0	3205.4	3091.9	2967.4	2862.2	2795.8
37.5°	4030.3	3944.5	3858.7	3861.5	3761.8	3664.9	3545.9	3407.5	3249.7	3103.0	3008.9
40°	4567.3	4445.5	4334.8	4309.9	4224.1	4088.5	3958.4	3797.8	3604.0	3410.3	3274.6
42.5°	5217.8	5018.5	4866.3	4844.1	4730.7	4564.6	4406.8	4193.6	3997.1	3761.8	3598.5
45°	5956.9	5638.6	5455.9	5422.7	5240.0	5071.1	4880.1	4653.1	4412.3	4146.6	3952.8
47.5°	6875.9	6422.0	6111.9	6056.6	5804.7	5583.2	5383.9	5132.0	4844.1	4548.0	4334.8
50°	7947.2	7277.3	6859.3	6773.5	6435.8	6175.6	5920.9	5605.4	5298.1	4988.1	4741.7
52.5°	9021.2	8301.5	7745.1	7639.9	7141.7	6792.9	6457.9	6142.4	5779.8	5472.5	5192.9
55°	9884.8	9405.9	8761.0	8614.3	7900.1	7426.8	6986.6	6626.8	6266.9	6023.4	5693.9
57.5°	10405.2	10380.3	9871.0	9668.9	8691.8	7991.5	7501.5	7091.8	6743.1	6640.6	6203.3
60°	10391.4	11036.3	10817.7	10665.4	9491.8	8570.0	7933.3	7490.4	7202.6	7318.8	6715.4
62.5°	9757.5	11064.0	11327.0	11285.5	10344.3	9035.0	8287.6	7830.9	7678.7	8024.7	7246.8
63°	9527.7	11000.4	11349.1	11332.5	10507.6	9123.6	8348.5	7897.3	7772.8	8204.6	7343.7
65°	8052.4	10444.0	11080.6	11155.4	10859.2	9428.1	8489.7	8066.2	8052.4	8606.0	7573.5
67.5°	4907.8	8824.7	9871.0	10014.9	10363.7	9525.0	8409.4	8008.1	8207.4	8664.1	7504.3
70°	2098.2	5824.0	7933.3	8165.8	9018.4	9043.3	8179.7	7770.0	8171.4	8210.1	7011.6
72.5°	1242.9	2745.9	5400.5	5907.1	7136.1	7781.1	7653.8	7354.8	7698.0	7210.9	5970.8
75°	880.3	1284.4	2743.2	3282.9	4968.7	5940.3	6430.3	6568.7	6554.8	5718.9	4481.5
77.5°	631.1	824.9	1157.1	1364.7	2773.6	3814.4	4412.3	4816.5	4686.4	3828.3	2762.5
80°	440.1	570.2	708.6	752.9	1287.2	1959.8	2325.2	2502.3	2424.8	1912.7	1237.3
82.5°	318.3	373.7	456.7	484.4	647.7	905.2	1076.8	949.5	910.7	705.9	534.2
85°	246.4	240.8	285.1	296.2	379.2	473.3	484.4	376.5	329.4	293.4	299.0
87.5°	174.4	149.5	152.2	157.8	196.5	251.9	246.4	155.0	132.9	141.2	160.5
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°	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0	1791.0
2.5°	1802.0	1804.8	1810.3	1813.1	1818.6	1818.6	1824.2	1826.9	1832.5	1838.0	1840.8
5°	1835.2	1843.5	1854.6	1860.2	1871.2	1879.5	1890.6	1896.1	1907.2	1915.5	1926.6
7.5°	1885.1	1898.9	1912.7	1929.4	1946.0	1959.8	1970.9	1984.7	2004.1	2017.9	2026.2
10°	1932.1	1951.5	1976.4	1995.8	2020.7	2040.1	2056.7	2081.6	2103.7	2123.1	2134.2
12.5°	1993.0	2017.9	2042.8	2073.3	2106.5	2131.4	2156.3	2189.6	2220.0	2242.1	2253.2
15°	2065.0	2095.4	2123.1	2159.1	2197.9	2231.1	2267.1	2303.0	2325.2	2325.2	2319.7
17.5°	2139.7	2164.6	2197.9	2239.4	2292.0	2333.5	2352.9	2358.4	2350.1	2330.7	2316.9
20°	2214.5	2236.6	2272.6	2322.4	2377.8	2386.1	2366.7	2341.8	2316.9	2283.7	2261.5
22.5°	2275.4	2305.8	2361.2	2419.3	2422.1	2375.0	2322.4	2280.9	2242.1	2203.4	2161.9
25°	2347.3	2388.9	2463.6	2485.7	2413.8	2325.2	2250.5	2189.6	2125.9	2062.2	2015.2
27.5°	2435.9	2496.8	2571.5	2507.9	2366.7	2242.1	2139.7	2048.4	1965.3	1876.8	1824.2
30°	2530.0	2624.1	2640.8	2474.7	2286.4	2125.9	1987.5	1849.1	1743.9	1663.6	1633.2
32.5°	2643.5	2765.3	2665.7	2416.5	2178.5	1968.1	1782.6	1616.6	1528.0	1478.2	1464.3
35°	2815.1	2914.8	2679.5	2355.6	2053.9	1779.9	1547.4	1414.5	1359.1	1325.9	1309.3
37.5°	3061.5	3058.7	2676.7	2280.9	1910.0	1575.0	1359.1	1265.0	1220.7	1193.0	1162.6
40°	3349.4	3169.5	2660.1	2172.9	1716.2	1378.5	1229.0	1140.5	1098.9	1065.7	1029.7
42.5°	3634.5	3244.2	2613.1	2012.4	1475.4	1237.3	1134.9	1054.6	1010.4	974.4	924.5
45°	3880.9	3274.6	2521.7	1791.0	1259.5	1126.6	1074.0	1004.8	952.2	896.9	858.1
47.5°	4074.6	3269.1	2375.0	1530.8	1115.5	1049.1	1024.2	977.1	913.5	844.3	794.4
50°	4237.9	3227.6	2175.7	1301.0	1018.7	979.9	971.6	957.8	855.3	797.2	766.8
52.5°	4387.4	3166.7	1962.6	1146.0	935.6	902.4	919.0	905.2	833.2	783.4	752.9
55°	4592.3	3125.2	1752.2	1027.0	838.7	830.4	844.3	863.6	819.4	772.3	739.1
57.5°	4833.1	3147.3	1591.6	894.1	747.4	752.9	800.0	827.7	805.5	755.7	722.5
60°	5109.9	3213.7	1450.5	766.8	672.6	686.5	755.7	794.4	791.7	733.5	694.8
62.5°	5419.9	3282.9	1226.3	669.9	609.0	631.1	703.1	752.9	761.2	711.4	664.3
63°	5480.8	3288.5	1168.1	650.5	597.9	622.8	689.3	741.8	752.9	705.9	658.8
65°	5630.3	3238.7	941.1	597.9	553.6	581.3	647.7	694.8	716.9	675.4	636.7
67.5°	5505.7	2831.7	708.6	534.2	517.6	537.0	595.1	639.4	658.8	639.4	600.7
70°	5035.1	2059.5	553.6	476.1	478.9	492.7	537.0	578.5	600.7	595.1	559.2
72.5°	4055.2	1168.1	462.3	426.3	434.6	451.2	481.6	520.4	539.8	537.0	512.1
75°	2671.2	597.9	390.3	382.0	387.5	401.4	423.5	454.0	476.1	473.3	462.3
77.5°	1323.1	415.2	334.9	337.7	340.5	351.5	368.2	395.8	409.7	412.4	409.7
80°	545.3	323.9	287.9	290.6	293.4	301.7	312.8	337.7	346.0	351.5	354.3
82.5°	326.6	246.4	229.8	235.3	238.1	246.4	254.7	276.8	285.1	293.4	293.4
85°	215.9	171.6	166.1	171.6	177.2	182.7	185.5	199.3	213.1	224.2	229.8
87.5°	116.3	102.4	99.7	102.4	102.4	108.0	113.5	127.3	143.9	155.0	160.5
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°	1791.0	1791.0	1791.0	1791.0	1791.0
2.5°	1835.2	1838.0	1835.2	1838.0	1840.8
5°	1926.6	1932.1	1929.4	1929.4	1940.4
7.5°	2031.8	2042.8	2042.8	2048.4	2053.9
10°	2145.3	2156.3	2164.6	2164.6	2172.9
12.5°	2258.8	2264.3	2272.6	2272.6	2272.6
15°	2316.9	2314.1	2311.3	2308.6	2308.6
17.5°	2308.6	2297.5	2292.0	2286.4	2289.2
20°	2247.7	2228.3	2222.8	2214.5	2220.0
22.5°	2142.5	2114.8	2103.7	2089.9	2095.4
25°	1984.7	1951.5	1946.0	1929.4	1937.7
27.5°	1802.0	1785.4	1782.6	1779.9	1793.7
30°	1630.4	1635.9	1638.7	1644.2	1658.1
32.5°	1472.6	1483.7	1486.5	1489.2	1508.6
35°	1317.6	1303.8	1317.6	1312.1	1328.7
37.5°	1148.8	1137.7	1126.6	1112.8	1123.8
40°	1007.6	988.2	955.0	938.4	941.1
42.5°	896.9	871.9	844.3	827.7	827.7
45°	824.9	794.4	769.5	758.5	758.5
47.5°	769.5	755.7	741.8	733.5	733.5
50°	747.4	730.8	722.5	716.9	716.9
52.5°	730.8	714.2	705.9	700.3	694.8
55°	716.9	692.0	683.7	680.9	680.9
57.5°	697.6	675.4	664.3	661.6	661.6
60°	667.1	650.5	639.4	636.7	636.7
62.5°	636.7	620.1	609.0	609.0	609.0
63°	631.1	611.7	603.4	603.4	603.4
65°	606.2	586.8	578.5	578.5	575.8
67.5°	573.0	553.6	548.1	548.1	542.5
70°	534.2	517.6	512.1	514.9	503.8
72.5°	495.5	478.9	470.6	470.6	459.5
75°	451.2	434.6	423.5	420.7	409.7
77.5°	401.4	387.5	376.5	365.4	359.9
80°	348.8	337.7	323.9	315.6	307.3
82.5°	293.4	282.3	274.0	285.1	243.6
85°	229.8	218.7	207.6	224.2	174.4
87.5°	168.9	163.3	152.2	132.9	116.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)