

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: P265628

Luminaire Tested: **ARCH-L-AF72-150-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265628
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-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 17357.5 lumens
Efficiency: N/A
Efficacy: 113.4 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

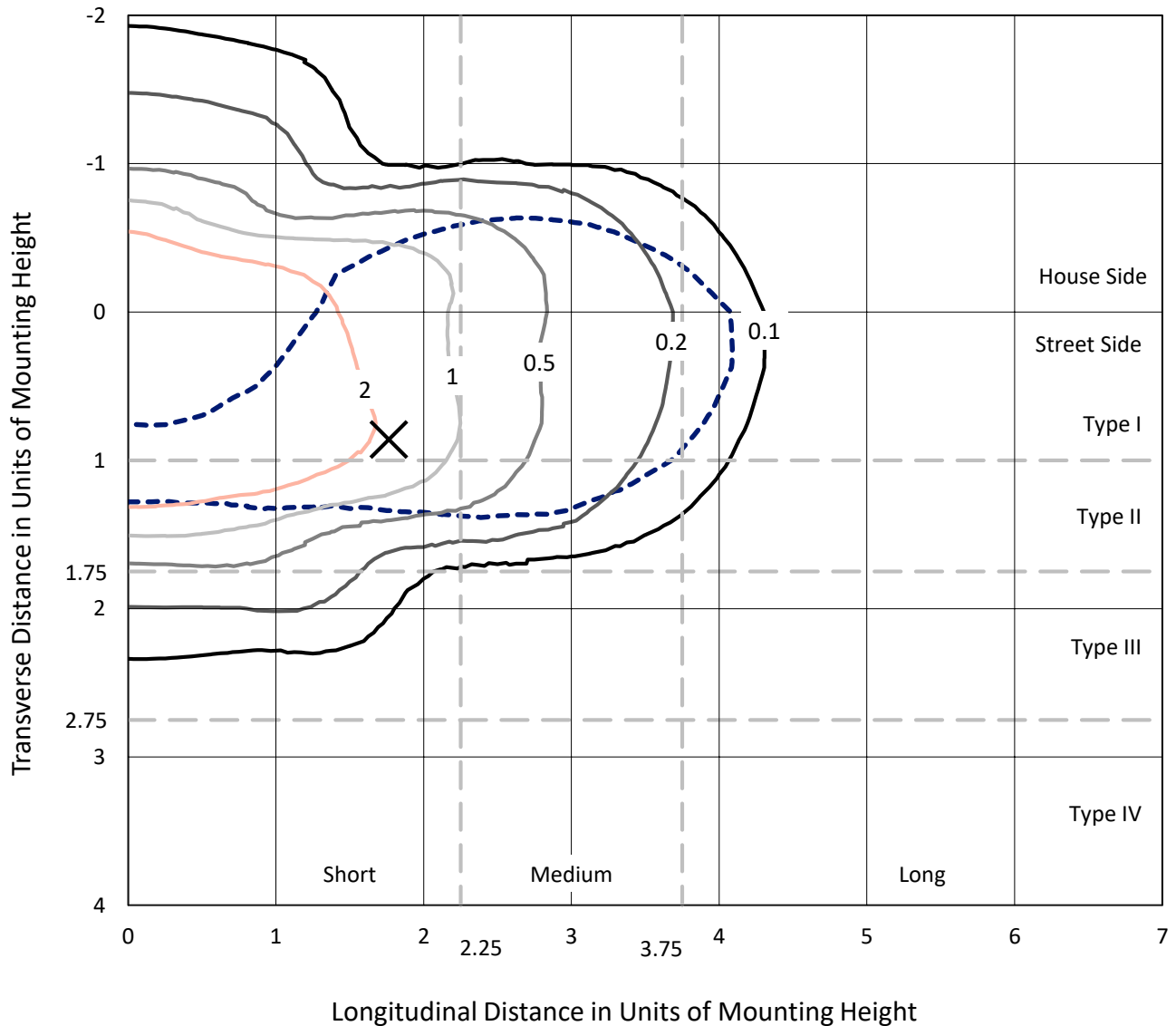


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

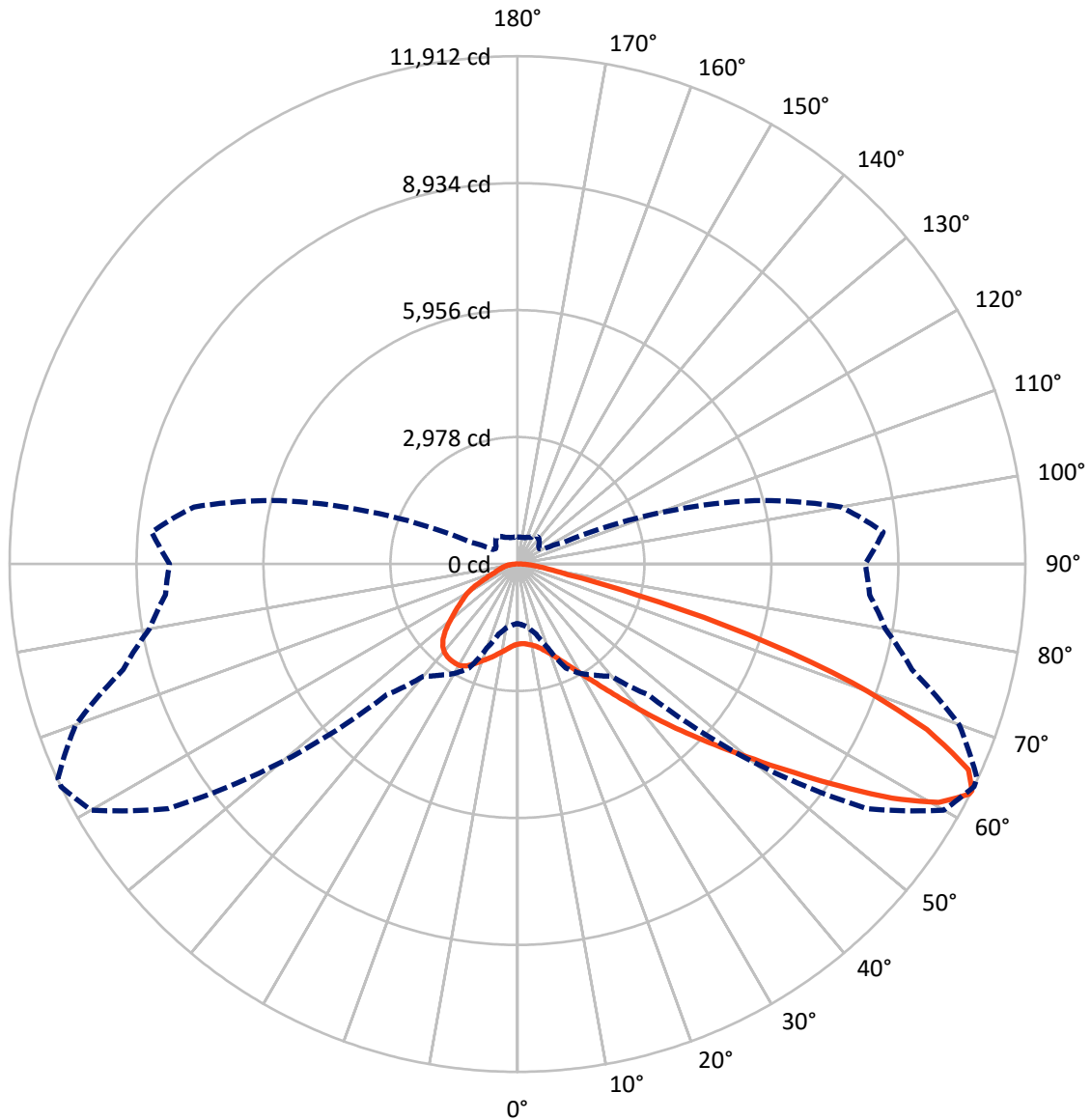


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - Semi-Cutoff

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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
House Side	Lumens	5102.5	0.0	5102.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	12255.0	0.0	12255.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	17357.5	0.0	17357.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.7	1.1
10°-20°	625.1	3.6
20°-30°	1173.4	6.8
30°-40°	1966.8	11.3
40°-50°	3299.9	19.0
50°-60°	4183.3	24.1
60°-70°	3690.3	21.3
70°-80°	1905.0	11.0
80°-90°	326.0	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°	17357.5	100.0
0°-180°	17357.5	100.0



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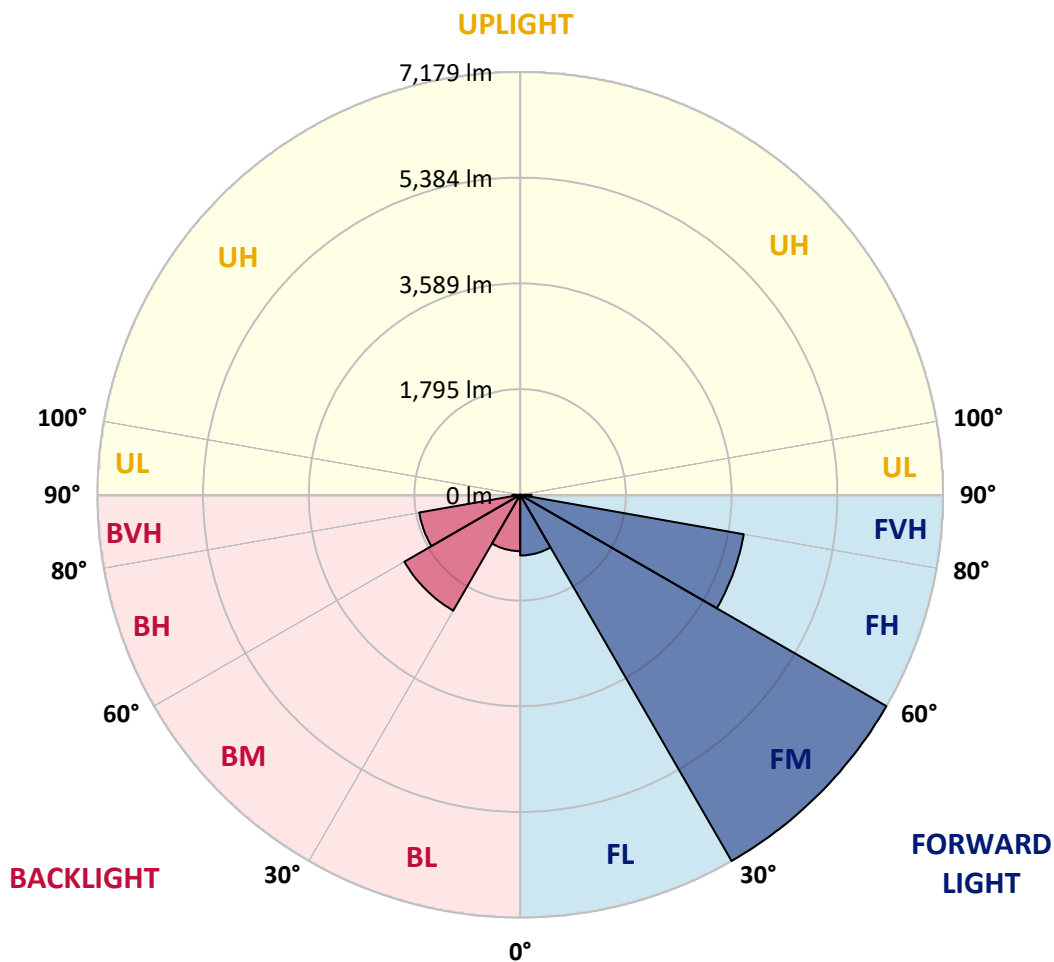
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1030.2	5.9			
FM	(30°-60°)	7178.6	41.4			
FH	(60°-80°)	3854.4	22.2			G2/5000
FVH	(80°-90°)	191.8	1.1			G2/225
BL	(0°-30°)	956.0	5.5	B2/1000		
BM	(30°-60°)	2271.4	13.1	B2/2500		
BH	(60°-80°)	1740.9	10.0	B3/2500		G3/2500
BVH	(80°-90°)	134.1	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°	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9
2.5°	1868.1	1865.3	1865.3	1865.3	1865.3	1862.4	1865.3	1871.1	1868.1	1865.3	1871.1
5°	1874.0	1871.1	1871.1	1871.1	1874.0	1871.1	1874.0	1882.7	1876.9	1876.9	1882.7
7.5°	1888.5	1885.6	1888.5	1885.6	1885.6	1885.6	1888.5	1897.2	1894.3	1897.2	1905.9
10°	1905.9	1905.9	1905.9	1905.9	1905.9	1905.9	1911.8	1917.6	1920.4	1923.5	1934.9
12.5°	1958.2	1958.2	1958.2	1955.3	1955.3	1946.6	1958.2	1964.1	1969.9	1975.7	1984.4
15°	2068.6	2068.6	2065.7	2054.2	2054.2	2036.6	2039.6	2042.6	2042.6	2048.3	2054.2
17.5°	2214.0	2211.0	2205.2	2196.4	2184.9	2164.6	2158.7	2152.9	2144.3	2141.3	2141.3
20°	2417.2	2414.5	2402.7	2379.5	2365.0	2333.1	2309.8	2286.5	2277.8	2263.3	2260.4
22.5°	2707.9	2707.9	2684.7	2649.7	2638.1	2571.3	2504.5	2455.1	2437.6	2417.2	2417.2
25°	3059.4	3056.6	3024.6	2983.9	2934.5	2864.8	2783.4	2716.6	2672.9	2626.6	2609.0
27.5°	3480.8	3471.9	3428.4	3379.1	3286.0	3198.9	3102.9	3033.2	2957.7	2899.5	2847.3
30°	3974.6	3965.8	3890.4	3797.3	3701.6	3614.3	3475.0	3390.7	3271.4	3201.7	3143.7
32.5°	4547.0	4538.2	4401.8	4311.7	4209.9	4102.5	3936.8	3803.2	3652.1	3553.3	3471.9
35°	5276.3	5241.4	5046.7	4921.9	4761.9	4654.5	4480.1	4300.0	4122.9	3983.4	3864.1
37.5°	6063.6	6023.0	5851.5	5665.6	5508.6	5378.0	5130.9	4904.3	4695.3	4503.5	4355.3
40°	6885.9	6778.4	6595.4	6458.8	6351.2	6226.3	5967.7	5729.5	5401.1	5186.2	4962.4
42.5°	7455.4	7350.7	7222.9	7132.8	7080.5	6984.6	6839.3	6633.1	6339.7	6345.4	5755.6
45°	7830.2	7676.1	7589.1	7594.8	7615.1	7615.1	7589.1	7557.0	7429.2	7516.4	7022.4
47.5°	7696.5	7594.8	7539.6	7655.7	7801.2	7946.3	8114.8	8298.0	8507.0	8754.1	8146.8
50°	6912.0	6949.7	6975.9	7222.9	7533.7	7865.0	8251.4	8751.2	9335.1	9448.5	9154.9
52.5°	5659.9	5741.1	5828.4	6206.0	6615.7	7188.0	7865.0	8690.2	9474.7	9936.5	9907.4
55°	4395.9	4497.6	4683.6	4965.4	5290.7	5831.2	6667.9	7940.5	9163.7	9898.9	10346.1
57.5°	3129.2	3277.3	3521.4	3913.6	4201.3	4506.3	5125.2	6537.1	7876.6	9245.0	10273.6
60°	2080.3	2150.1	2309.8	2798.0	3283.1	3602.7	4041.5	4552.8	5648.2	7533.7	9524.0
62.5°	1475.9	1522.4	1621.3	1842.1	2280.7	2858.9	3123.3	3358.7	3710.2	4846.3	7647.1
63°	1394.6	1435.3	1516.6	1702.6	2097.7	2696.3	2966.5	3181.4	3437.2	4335.0	7234.5
65°	1156.4	1173.7	1217.4	1307.5	1519.6	2016.3	2458.0	2588.7	2632.4	2786.4	4532.5
67.5°	976.2	987.9	1002.4	1028.5	1112.8	1342.2	1833.4	1998.9	1949.5	1844.9	2240.1
70°	848.4	857.2	880.3	912.3	941.3	999.5	1261.0	1508.0	1452.6	1310.4	1371.4
72.5°	677.0	691.4	717.7	772.8	830.9	906.5	970.3	1124.4	1089.6	953.0	967.6
75°	534.6	543.4	566.6	607.3	662.4	749.5	874.5	926.8	830.9	703.2	703.2
77.5°	424.2	433.0	453.3	485.3	520.1	581.1	668.2	804.8	746.8	528.8	525.9
80°	319.5	328.3	348.6	377.6	412.6	456.2	508.4	569.4	685.6	493.9	395.2
82.5°	235.4	238.2	273.2	293.4	305.1	339.9	383.5	418.4	470.7	456.2	351.5
85°	177.2	174.4	197.5	212.1	215.1	223.7	249.9	284.8	307.9	296.4	273.2
87.5°	98.8	87.1	101.7	116.2	116.2	119.1	125.0	145.3	165.6	159.8	145.3
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°	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9
2.5°	1871.1	1871.1	1868.1	1868.1	1871.1	1871.1	1868.1	1876.9	1882.7	1882.7	1885.6
5°	1879.9	1882.7	1879.9	1879.9	1882.7	1882.7	1885.6	1894.3	1903.1	1908.9	1917.6
7.5°	1905.9	1908.9	1905.9	1905.9	1908.9	1911.8	1917.6	1929.2	1934.9	1946.6	1961.2
10°	1934.9	1938.0	1934.9	1938.0	1940.8	1943.8	1952.5	1961.2	1969.9	1981.5	2004.7
12.5°	1987.3	1990.3	1984.4	1987.3	1996.0	1996.0	2001.9	2007.6	2022.2	2036.6	2060.0
15°	2060.0	2060.0	2054.2	2057.1	2065.7	2065.7	2068.6	2074.5	2092.0	2109.3	2132.5
17.5°	2144.3	2150.1	2147.0	2150.1	2155.8	2158.7	2158.7	2164.6	2176.1	2187.8	2211.0
20°	2257.5	2260.4	2254.6	2260.4	2266.2	2260.4	2254.6	2251.7	2257.5	2263.3	2289.5
22.5°	2411.5	2408.5	2394.1	2394.1	2394.1	2382.5	2367.9	2350.4	2350.4	2341.8	2362.2
25°	2594.6	2585.9	2565.5	2568.4	2548.0	2530.6	2504.5	2478.3	2455.1	2446.4	2449.3
27.5°	2809.5	2792.1	2771.8	2766.1	2745.6	2713.7	2670.1	2620.6	2582.9	2553.9	2548.0
30°	3079.7	3042.0	3007.2	3001.2	2969.3	2917.1	2847.3	2780.6	2716.6	2667.2	2649.7
32.5°	3399.4	3341.2	3286.0	3280.3	3227.9	3158.3	3073.9	2980.9	2888.1	2809.5	2771.8
35°	3774.1	3687.1	3634.7	3620.2	3544.6	3457.4	3364.5	3245.3	3114.7	3004.2	2934.5
37.5°	4230.3	4140.2	4050.2	4053.1	3948.5	3846.8	3721.9	3576.6	3411.0	3257.0	3158.3
40°	4794.0	4666.2	4549.8	4523.8	4433.7	4291.4	4154.8	3986.3	3782.9	3579.4	3437.2
42.5°	5476.7	5267.5	5107.8	5084.4	4965.4	4791.0	4625.5	4401.8	4195.4	3948.5	3777.1
45°	6252.5	5918.4	5726.5	5691.8	5500.0	5322.7	5122.2	4884.1	4631.2	4352.3	4148.9
47.5°	7217.1	6740.6	6415.2	6357.0	6092.7	5860.3	5651.1	5386.6	5084.4	4773.7	4549.8
50°	8341.5	7638.4	7199.6	7109.5	6755.2	6482.0	6214.7	5883.4	5561.0	5235.6	4977.0
52.5°	9468.8	8713.4	8129.4	8019.0	7495.9	7129.8	6778.4	6447.1	6066.6	5744.0	5450.6
55°	10375.2	9872.6	9195.7	9041.7	8292.1	7795.2	7333.4	6955.5	6577.8	6322.2	5976.5
57.5°	10921.6	10895.4	10360.7	10148.6	9123.0	8388.0	7873.7	7443.6	7077.7	6970.0	6511.1
60°	10907.0	11584.0	11354.3	11194.6	9962.7	8995.2	8327.0	7862.1	7560.0	7681.9	7048.6
62.5°	10241.7	11613.0	11889.0	11845.4	10857.5	9483.2	8698.8	8219.4	8059.7	8422.8	7606.4
63°	10000.6	11546.2	11912.2	11894.7	11029.0	9576.3	8762.7	8289.2	8158.4	8611.7	7708.0
65°	8452.0	10962.1	11630.4	11708.9	11398.0	9895.9	8910.9	8466.4	8452.0	9032.9	7949.2
67.5°	5151.3	9262.6	10360.7	10511.8	10877.9	9997.5	8826.7	8405.4	8614.6	9094.0	7876.6
70°	2202.4	6113.1	8327.0	8571.0	9465.9	9492.0	8585.6	8155.5	8576.7	8617.5	7359.5
72.5°	1304.5	2882.2	5668.5	6200.2	7490.2	8167.1	8033.5	7719.8	8080.0	7568.6	6266.9
75°	923.9	1348.1	2879.2	3445.8	5215.2	6235.0	6749.2	6894.6	6880.1	6002.7	4703.9
77.5°	662.4	865.8	1214.5	1432.3	2911.2	4003.7	4631.2	5055.4	4918.8	4018.2	2899.5
80°	462.0	598.5	743.7	790.2	1351.1	2057.1	2440.5	2626.6	2545.2	2007.6	1298.7
82.5°	334.1	392.2	479.3	508.4	679.8	950.0	1130.2	996.6	955.8	740.9	560.7
85°	258.6	252.8	299.2	310.9	398.0	496.9	508.4	395.2	345.8	307.9	313.8
87.5°	183.1	156.9	159.8	165.6	206.3	264.5	258.6	162.8	139.4	148.2	168.5
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°	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9	1879.9
2.5°	1891.4	1894.3	1900.2	1903.1	1908.9	1908.9	1914.6	1917.6	1923.5	1929.2	1932.2
5°	1926.2	1934.9	1946.6	1952.5	1964.1	1972.8	1984.4	1990.3	2001.9	2010.5	2022.2
7.5°	1978.5	1993.1	2007.6	2025.0	2042.6	2057.1	2068.6	2083.2	2103.6	2118.1	2126.7
10°	2028.1	2048.3	2074.5	2094.8	2121.0	2141.3	2158.7	2184.9	2208.2	2228.4	2240.1
12.5°	2092.0	2118.1	2144.3	2176.1	2211.0	2237.1	2263.3	2298.3	2330.2	2353.4	2365.0
15°	2167.4	2199.4	2228.4	2266.2	2306.8	2341.8	2379.5	2417.2	2440.5	2440.5	2434.8
17.5°	2245.9	2272.1	2306.8	2350.4	2405.8	2449.3	2469.6	2475.4	2466.7	2446.4	2431.8
20°	2324.4	2347.6	2385.4	2437.6	2495.8	2504.5	2484.2	2458.0	2431.8	2396.9	2373.7
22.5°	2388.2	2420.3	2478.3	2539.4	2542.3	2492.8	2437.6	2394.1	2353.4	2312.7	2269.2
25°	2463.8	2507.3	2585.9	2609.0	2533.5	2440.5	2362.2	2298.3	2231.4	2164.6	2115.1
27.5°	2556.8	2620.6	2699.1	2632.4	2484.2	2353.4	2245.9	2150.1	2062.9	1969.9	1914.6
30°	2655.6	2754.4	2771.8	2597.4	2399.9	2231.4	2086.1	1940.8	1830.4	1746.1	1714.1
32.5°	2774.7	2902.6	2798.0	2536.5	2286.5	2065.7	1871.1	1696.8	1603.8	1551.6	1537.0
35°	2954.9	3059.4	2812.5	2472.6	2155.8	1868.1	1624.1	1484.7	1426.6	1391.7	1374.2
37.5°	3213.3	3210.5	2809.5	2394.1	2004.7	1653.2	1426.6	1327.8	1281.3	1252.2	1220.3
40°	3515.5	3326.8	2792.1	2280.7	1801.5	1446.9	1290.0	1197.0	1153.5	1118.6	1080.8
42.5°	3814.8	3405.1	2742.7	2112.3	1548.6	1298.7	1191.2	1107.0	1060.4	1022.7	970.3
45°	4073.5	3437.2	2646.9	1879.9	1321.9	1182.4	1127.4	1054.7	999.5	941.3	900.7
47.5°	4276.8	3431.3	2492.8	1606.7	1170.9	1101.1	1075.0	1025.7	958.9	886.2	833.8
50°	4448.1	3387.7	2283.8	1365.6	1069.3	1028.5	1019.8	1005.3	897.8	836.9	804.8
52.5°	4605.2	3323.8	2060.0	1202.8	982.0	947.2	964.6	950.0	874.5	822.2	790.2
55°	4820.0	3280.3	1839.1	1078.0	880.3	871.6	886.2	906.5	859.9	810.6	775.7
57.5°	5072.9	3303.4	1670.6	938.5	784.5	790.2	839.6	868.8	845.5	793.2	758.3
60°	5363.4	3373.1	1522.4	804.8	706.0	720.5	793.2	833.8	830.9	769.9	729.2
62.5°	5688.8	3445.8	1287.1	703.2	639.2	662.4	738.0	790.2	799.0	746.8	697.4
63°	5752.7	3451.6	1226.0	682.8	627.6	653.7	723.5	778.7	790.2	740.9	691.4
65°	5909.6	3399.4	987.9	627.6	581.1	610.2	679.8	729.2	752.5	708.9	668.2
67.5°	5778.8	2972.2	743.7	560.7	543.4	563.6	624.7	671.2	691.4	671.2	630.5
70°	5285.0	2161.6	581.1	499.7	502.6	517.2	563.6	607.3	630.5	624.7	587.0
72.5°	4256.4	1226.0	485.3	447.4	456.2	473.5	505.6	546.2	566.6	563.6	537.5
75°	2803.7	627.6	409.6	401.0	406.8	421.2	444.5	476.6	499.7	496.9	485.3
77.5°	1388.8	435.8	351.5	354.4	357.3	369.1	386.5	415.5	430.0	433.0	430.0
80°	572.4	339.9	302.2	305.1	307.9	316.7	328.3	354.4	363.2	369.1	371.9
82.5°	342.9	258.6	241.1	246.9	249.9	258.6	267.2	290.5	299.2	307.9	307.9
85°	226.6	180.1	174.4	180.1	185.9	191.8	194.7	209.1	223.7	235.4	241.1
87.5°	122.0	107.4	104.7	107.4	107.4	113.2	119.1	133.7	151.1	162.8	168.5
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°	1879.9	1879.9	1879.9	1879.9	1879.9
2.5°	1926.2	1929.2	1926.2	1929.2	1932.2
5°	2022.2	2028.1	2025.0	2025.0	2036.6
7.5°	2132.5	2144.3	2144.3	2150.1	2155.8
10°	2251.7	2263.3	2272.1	2272.1	2280.7
12.5°	2370.8	2376.6	2385.4	2385.4	2385.4
15°	2431.8	2428.9	2426.1	2423.1	2423.1
17.5°	2423.1	2411.5	2405.8	2399.9	2402.7
20°	2359.2	2338.8	2333.1	2324.4	2330.2
22.5°	2248.7	2219.7	2208.2	2193.7	2199.4
25°	2083.2	2048.3	2042.6	2025.0	2033.9
27.5°	1891.4	1874.0	1871.1	1868.1	1882.7
30°	1711.4	1717.1	1720.1	1725.9	1740.3
32.5°	1545.7	1557.3	1560.3	1563.1	1583.4
35°	1383.0	1368.5	1383.0	1377.2	1394.6
37.5°	1205.7	1194.1	1182.4	1167.9	1179.7
40°	1057.6	1037.3	1002.4	984.9	987.9
42.5°	941.3	915.3	886.2	868.8	868.8
45°	865.8	833.8	807.7	796.1	796.1
47.5°	807.7	793.2	778.7	769.9	769.9
50°	784.5	767.1	758.3	752.5	752.5
52.5°	767.1	749.5	740.9	735.1	729.2
55°	752.5	726.4	717.7	714.7	714.7
57.5°	732.2	708.9	697.4	694.4	694.4
60°	700.1	682.8	671.2	668.2	668.2
62.5°	668.2	650.8	639.2	639.2	639.2
63°	662.4	642.1	633.3	633.3	633.3
65°	636.3	616.0	607.3	607.3	604.3
67.5°	601.4	581.1	575.3	575.3	569.4
70°	560.7	543.4	537.5	540.4	528.8
72.5°	520.1	502.6	493.9	493.9	482.3
75°	473.5	456.2	444.5	441.6	430.0
77.5°	421.2	406.8	395.2	383.5	377.6
80°	366.1	354.4	339.9	331.3	322.5
82.5°	307.9	296.4	287.6	299.2	255.7
85°	241.1	229.5	217.8	235.4	183.1
87.5°	177.2	171.4	159.8	139.4	122.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)