

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: P257948

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257948
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-AF72-120-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 16916.5 lumens
Efficiency: N/A
Efficacy: 137.5 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

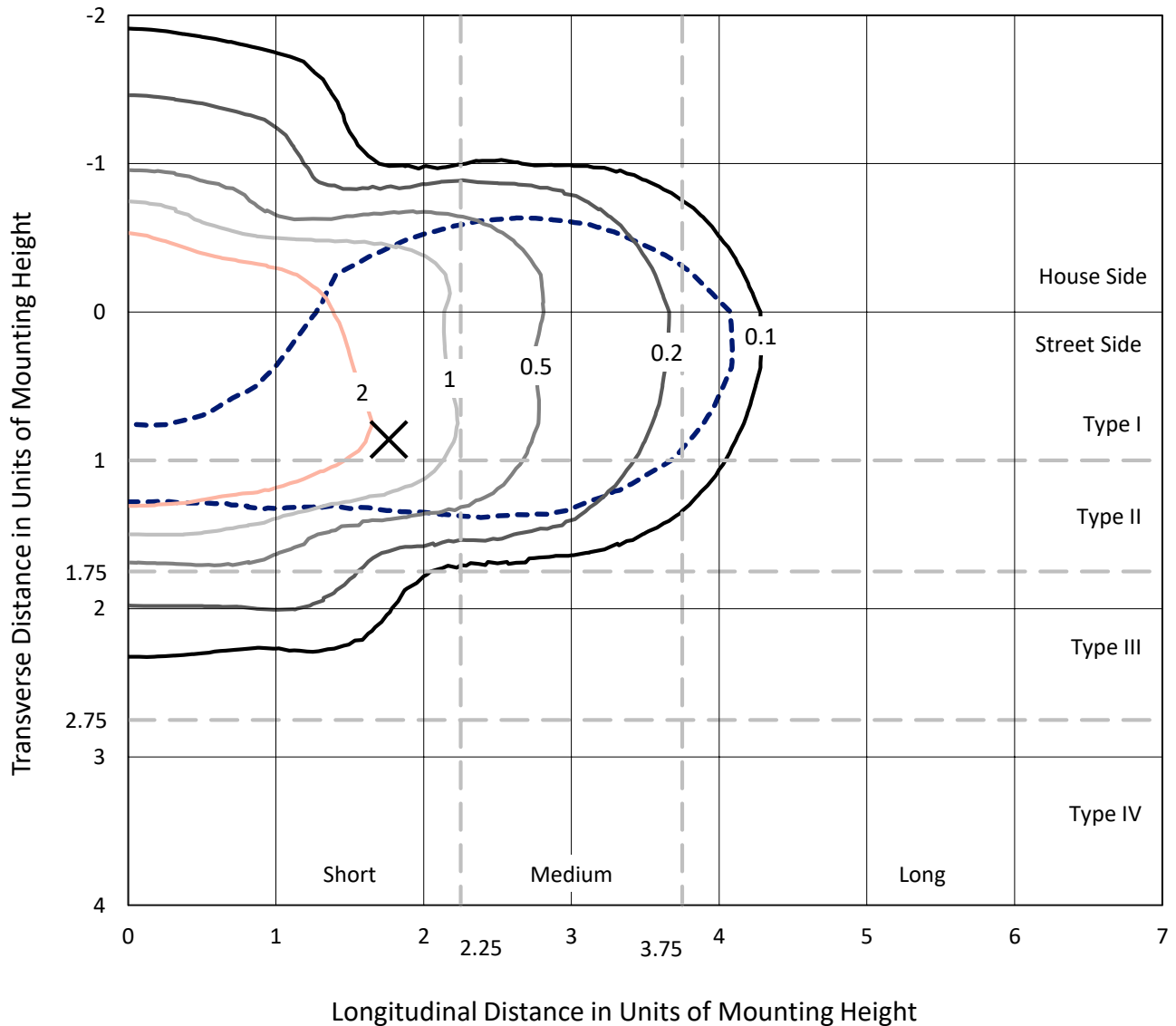
Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

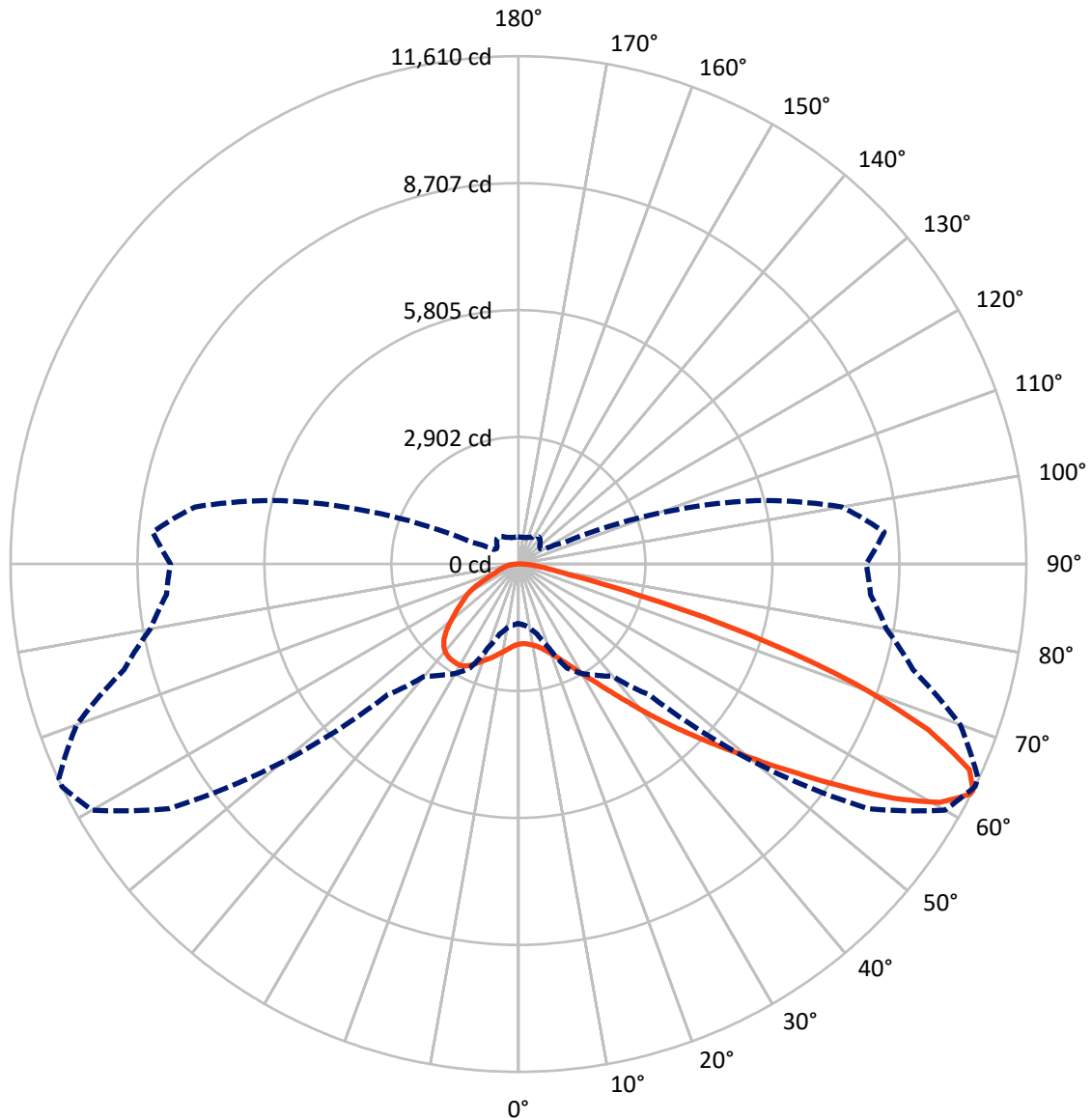


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type II - Short - Semi-Cutoff

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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	4972.9	0.0	4972.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	11943.7	0.0	11943.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	16916.5	0.0	16916.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.9	1.1
10°-20°	609.2	3.6
20°-30°	1143.6	6.8
30°-40°	1916.9	11.3
40°-50°	3216.1	19.0
50°-60°	4077.0	24.1
60°-70°	3596.5	21.3
70°-80°	1856.6	11.0
80°-90°	317.7	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°	16916.5	100.0
0°-180°	16916.5	100.0



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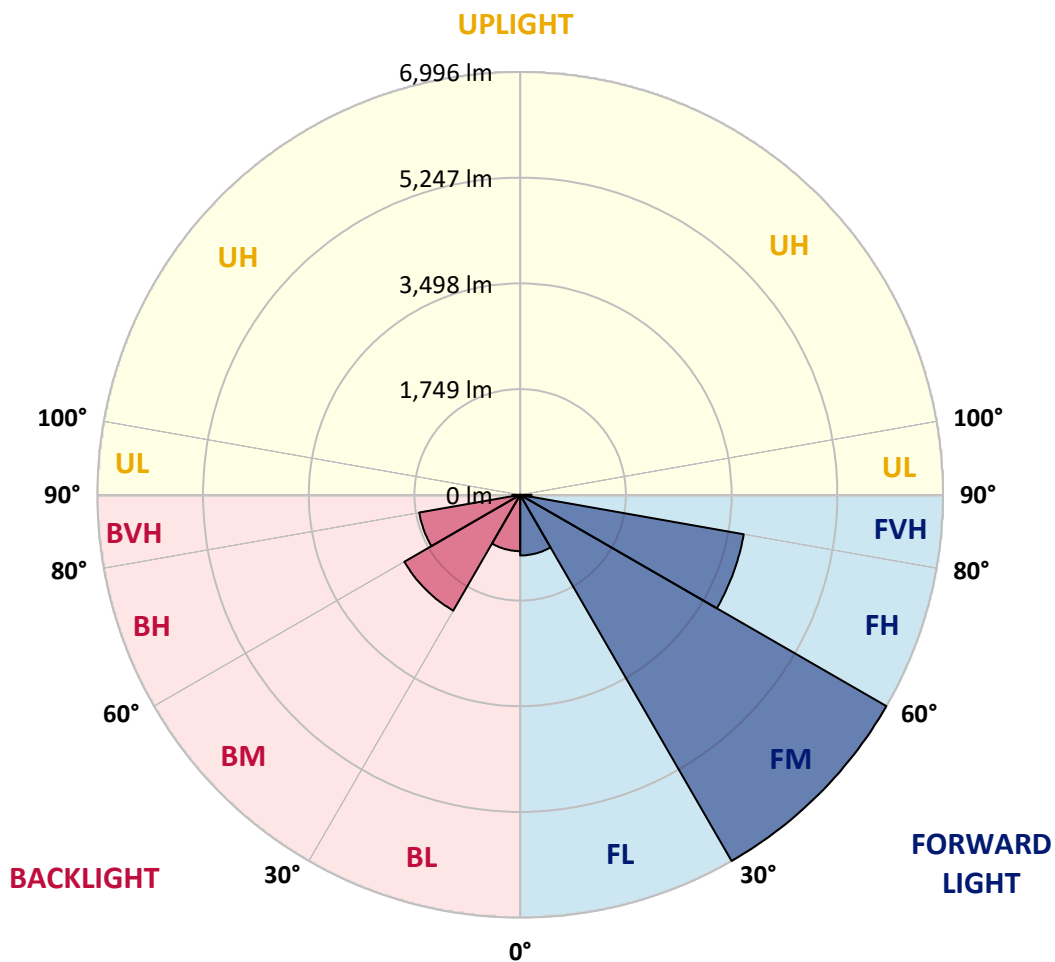
CATALOG NUMBER: ARCH-L-AF72-120-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1004.1	5.9			
FM (30°-60°)	6996.2	41.4			
FH (60°-80°)	3756.4	22.2			G2/5000
FVH (80°-90°)	187.0	1.1			G2/225
BL (0°-30°)	931.7	5.5	B2/1000		
BM (30°-60°)	2213.7	13.1	B2/2500		
BH (60°-80°)	1696.7	10.0	B3/2500		G3/2500
BVH (80°-90°)	130.7	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°	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1
2.5°	1820.8	1817.9	1817.9	1817.9	1817.9	1815.0	1817.9	1823.5	1820.8	1817.9	1823.5
5°	1826.4	1823.5	1823.5	1823.5	1826.4	1823.5	1826.4	1834.9	1829.2	1829.2	1834.9
7.5°	1840.6	1837.7	1840.6	1837.7	1837.7	1837.7	1840.6	1849.1	1846.2	1849.1	1857.6
10°	1857.6	1857.6	1857.6	1857.6	1857.6	1857.6	1863.2	1868.8	1871.7	1874.6	1885.8
12.5°	1908.5	1908.5	1908.5	1905.7	1905.7	1897.2	1908.5	1914.1	1919.9	1925.5	1934.0
15°	2016.1	2016.1	2013.3	2001.9	2001.9	1984.9	1987.8	1990.7	1990.7	1996.3	2001.9
17.5°	2157.7	2154.8	2149.2	2140.7	2129.4	2109.5	2103.9	2098.3	2089.7	2086.9	2086.9
20°	2355.9	2353.1	2341.7	2319.1	2304.9	2273.8	2251.1	2228.5	2220.0	2205.8	2203.0
22.5°	2639.1	2639.1	2616.4	2582.4	2571.1	2506.0	2440.9	2392.7	2375.7	2355.9	2355.9
25°	2981.7	2978.8	2947.7	2908.0	2860.0	2791.9	2712.7	2647.6	2605.0	2559.7	2542.7
27.5°	3392.3	3383.8	3341.3	3293.2	3202.6	3117.6	3024.1	2956.2	2882.6	2825.9	2775.0
30°	3873.6	3865.1	3791.6	3700.9	3607.4	3522.5	3386.6	3304.5	3188.4	3120.4	3063.8
32.5°	4431.5	4422.9	4289.8	4202.1	4103.1	3998.2	3836.9	3706.6	3559.4	3463.1	3383.8
35°	5142.2	5108.2	4918.6	4796.7	4641.0	4536.3	4366.4	4190.8	4018.0	3882.1	3766.1
37.5°	5909.6	5869.9	5702.8	5521.7	5368.8	5241.3	5000.6	4779.7	4575.9	4389.0	4244.6
40°	6711.0	6606.1	6427.8	6294.7	6189.9	6068.1	5816.1	5584.0	5264.0	5054.4	4836.4
42.5°	7265.9	7164.0	7039.4	6951.6	6900.6	6807.2	6665.6	6464.5	6178.6	6184.2	5609.5
45°	7631.2	7481.1	7396.1	7401.9	7421.6	7421.6	7396.1	7365.0	7240.4	7325.4	6844.1
47.5°	7501.0	7401.9	7348.1	7461.3	7602.9	7744.5	7908.7	8087.0	8290.9	8531.6	7939.8
50°	6736.4	6773.3	6798.7	7039.4	7342.3	7665.2	8041.8	8528.9	9098.0	9208.4	8922.4
52.5°	5516.0	5595.2	5680.2	6048.3	6447.6	7005.4	7665.2	8469.3	9233.9	9684.1	9655.8
55°	4284.2	4383.3	4564.6	4839.3	5156.4	5683.0	6498.6	7738.8	8930.9	9647.3	10083.3
57.5°	3049.6	3194.1	3431.9	3814.2	4094.5	4391.8	4995.0	6371.1	7676.5	9010.2	10012.5
60°	2027.4	2095.4	2251.1	2726.9	3199.7	3511.2	3938.8	4437.2	5504.7	7342.3	9282.1
62.5°	1438.5	1483.8	1580.0	1795.3	2222.8	2786.3	3044.0	3273.3	3615.9	4723.2	7452.8
63°	1359.2	1398.8	1478.1	1659.3	2044.5	2627.8	2891.1	3100.7	3349.8	4224.8	7050.7
65°	1127.0	1144.0	1186.4	1274.2	1480.9	1965.2	2395.5	2523.0	2565.5	2715.5	4417.3
67.5°	951.4	962.7	976.9	1002.4	1084.5	1308.3	1786.8	1948.1	1900.0	1798.0	2183.2
70°	826.9	835.3	857.9	889.1	917.5	974.1	1228.9	1469.6	1415.8	1277.1	1336.5
72.5°	659.8	673.9	699.4	753.2	809.9	883.4	945.7	1095.8	1061.8	928.7	943.0
75°	521.0	529.5	552.2	591.8	645.6	730.6	852.3	903.3	809.9	685.3	685.3
77.5°	413.4	421.9	441.7	472.9	506.9	566.3	651.3	784.4	727.7	515.4	512.5
80°	311.5	320.0	339.8	368.2	402.1	444.6	495.5	555.0	668.3	481.4	385.1
82.5°	229.3	232.2	266.2	286.0	297.3	331.3	373.8	407.7	458.7	444.6	342.6
85°	172.8	169.9	192.5	206.7	209.5	218.0	243.6	277.5	300.1	288.8	266.2
87.5°	96.3	84.9	99.1	113.2	113.2	116.1	121.7	141.6	161.4	155.7	141.6
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°	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1
2.5°	1823.5	1823.5	1820.8	1820.8	1823.5	1823.5	1820.8	1829.2	1834.9	1834.9	1837.7
5°	1832.1	1834.9	1832.1	1832.1	1834.9	1834.9	1837.7	1846.2	1854.7	1860.3	1868.8
7.5°	1857.6	1860.3	1857.6	1857.6	1860.3	1863.2	1868.8	1880.2	1885.8	1897.2	1911.4
10°	1885.8	1888.7	1885.8	1888.7	1891.5	1894.3	1902.9	1911.4	1919.9	1931.1	1953.8
12.5°	1936.9	1939.6	1934.0	1936.9	1945.3	1945.3	1951.0	1956.6	1970.8	1984.9	2007.6
15°	2007.6	2007.6	2001.9	2004.8	2013.3	2013.3	2016.1	2021.8	2038.7	2055.7	2078.4
17.5°	2089.7	2095.4	2092.5	2095.4	2101.0	2103.9	2103.9	2109.5	2120.9	2132.2	2154.8
20°	2200.2	2203.0	2197.3	2203.0	2208.7	2203.0	2197.3	2194.5	2200.2	2205.8	2231.3
22.5°	2350.2	2347.4	2333.2	2333.2	2333.2	2321.9	2307.8	2290.8	2290.8	2282.3	2302.2
25°	2528.6	2520.1	2500.3	2503.2	2483.3	2466.3	2440.9	2415.4	2392.7	2384.2	2387.1
27.5°	2738.1	2721.2	2701.4	2695.7	2675.8	2644.7	2602.3	2554.1	2517.3	2488.9	2483.3
30°	3001.5	2964.7	2930.8	2925.0	2893.9	2843.0	2775.0	2709.9	2647.6	2599.4	2582.4
32.5°	3313.0	3256.4	3202.6	3196.9	3145.9	3078.0	2995.8	2905.3	2814.6	2738.1	2701.4
35°	3678.2	3593.3	3542.4	3528.2	3454.6	3369.6	3279.0	3162.9	3035.5	2927.9	2860.0
37.5°	4122.8	4035.0	3947.3	3950.1	3848.1	3749.0	3627.3	3485.7	3324.3	3174.2	3078.0
40°	4672.1	4547.5	4434.3	4408.8	4321.0	4182.3	4049.2	3885.0	3686.7	3488.6	3349.8
42.5°	5337.6	5133.7	4978.0	4955.3	4839.3	4669.4	4507.9	4289.8	4088.8	3848.1	3681.1
45°	6093.6	5768.0	5581.1	5547.2	5360.3	5187.5	4992.1	4759.9	4513.6	4241.8	4043.5
47.5°	7033.7	6569.4	6252.2	6195.6	5937.9	5711.3	5507.5	5249.8	4955.3	4652.4	4434.3
50°	8129.6	7444.3	7016.7	6929.0	6583.5	6317.3	6056.8	5734.0	5419.7	5102.6	4850.5
52.5°	9228.2	8492.0	7922.9	7815.2	7305.6	6948.8	6606.1	6283.4	5912.5	5598.1	5312.1
55°	10111.7	9621.8	8962.1	8812.0	8081.4	7597.3	7146.9	6778.9	6410.7	6161.6	5824.6
57.5°	10644.0	10618.5	10097.5	9890.8	8891.3	8174.9	7673.7	7254.6	6897.9	6793.0	6345.7
60°	10629.9	11289.6	11066.0	10910.2	9709.6	8766.7	8115.4	7662.3	7367.9	7486.8	6869.5
62.5°	9981.4	11317.9	11587.0	11544.5	10581.7	9242.4	8477.8	8010.6	7854.9	8208.9	7413.1
63°	9746.4	11252.9	11609.6	11592.6	10748.8	9333.0	8540.1	8078.5	7951.2	8392.9	7512.2
65°	8237.2	10683.7	11334.9	11411.4	11108.4	9644.5	8684.5	8251.3	8237.2	8803.5	7747.3
67.5°	5020.4	9027.2	10097.5	10244.8	10601.6	9743.6	8602.4	8191.9	8395.8	8862.9	7676.5
70°	2146.4	5957.7	8115.4	8353.2	9225.4	9250.9	8367.4	7948.3	8358.9	8398.5	7172.5
72.5°	1271.4	2808.9	5524.4	6042.7	7299.9	7959.7	7829.5	7523.6	7874.7	7376.4	6107.8
75°	900.5	1313.9	2806.2	3358.2	5082.7	6076.6	6577.9	6719.5	6705.2	5850.2	4584.4
77.5°	645.6	843.8	1183.7	1396.0	2837.3	3901.9	4513.6	4927.0	4794.0	3916.2	2825.9
80°	450.2	583.3	724.9	770.2	1316.7	2004.8	2378.6	2559.7	2480.5	1956.6	1265.7
82.5°	325.6	382.3	467.2	495.5	662.6	926.0	1101.5	971.3	931.6	722.1	546.5
85°	252.1	246.3	291.6	303.0	387.9	484.2	495.5	385.1	337.0	300.1	305.9
87.5°	178.4	152.9	155.7	161.4	201.0	257.7	252.1	158.6	136.0	144.4	164.2
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°	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1	1832.1
2.5°	1843.4	1846.2	1851.8	1854.7	1860.3	1860.3	1866.1	1868.8	1874.6	1880.2	1883.0
5°	1877.3	1885.8	1897.2	1902.9	1914.1	1922.6	1934.0	1939.6	1951.0	1959.5	1970.8
7.5°	1928.4	1942.5	1956.6	1973.7	1990.7	2004.8	2016.1	2030.3	2050.1	2064.2	2072.7
10°	1976.4	1996.3	2021.8	2041.6	2067.1	2086.9	2103.9	2129.4	2152.0	2171.8	2183.2
12.5°	2038.7	2064.2	2089.7	2120.9	2154.8	2180.3	2205.8	2239.9	2271.0	2293.6	2304.9
15°	2112.4	2143.5	2171.8	2208.7	2248.3	2282.3	2319.1	2355.9	2378.6	2378.6	2372.9
17.5°	2188.8	2214.3	2248.3	2290.8	2344.6	2387.1	2406.9	2412.5	2404.0	2384.2	2370.1
20°	2265.3	2287.9	2324.8	2375.7	2432.4	2440.9	2421.0	2395.5	2370.1	2336.1	2313.4
22.5°	2327.6	2358.7	2415.4	2474.8	2477.7	2429.5	2375.7	2333.2	2293.6	2254.0	2211.5
25°	2401.2	2443.7	2520.1	2542.7	2469.2	2378.6	2302.2	2239.9	2174.7	2109.5	2061.5
27.5°	2491.8	2554.1	2630.5	2565.5	2421.0	2293.6	2188.8	2095.4	2010.4	1919.9	1866.1
30°	2588.1	2684.3	2701.4	2531.5	2338.9	2174.7	2033.1	1891.5	1783.9	1701.8	1670.7
32.5°	2704.2	2828.8	2726.9	2472.0	2228.5	2013.3	1823.5	1653.7	1563.1	1512.1	1497.9
35°	2879.7	2981.7	2741.0	2409.7	2101.0	1820.8	1582.9	1447.0	1390.3	1356.3	1339.3
37.5°	3131.8	3128.9	2738.1	2333.2	1953.8	1611.1	1390.3	1294.0	1248.7	1220.4	1189.3
40°	3426.3	3242.2	2721.2	2222.8	1755.6	1410.1	1257.2	1166.7	1124.1	1090.2	1053.3
42.5°	3717.9	3318.7	2673.1	2058.6	1509.3	1265.7	1160.9	1078.8	1033.6	996.8	945.7
45°	3970.0	3349.8	2579.6	1832.1	1288.4	1152.5	1098.6	1027.9	974.1	917.5	877.8
47.5°	4168.1	3344.1	2429.5	1565.9	1141.1	1073.2	1047.7	999.5	934.5	863.7	812.6
50°	4335.2	3301.7	2225.6	1330.9	1042.1	1002.4	993.9	979.8	874.9	815.5	784.4
52.5°	4488.1	3239.4	2007.6	1172.3	957.1	923.1	940.1	926.0	852.3	801.4	770.2
55°	4697.7	3196.9	1792.4	1050.6	857.9	849.5	863.7	883.4	838.2	790.0	756.1
57.5°	4944.0	3219.5	1628.1	914.6	764.6	770.2	818.4	846.7	824.0	773.0	739.1
60°	5227.2	3287.5	1483.8	784.4	688.0	702.3	773.0	812.6	809.9	750.3	710.7
62.5°	5544.3	3358.2	1254.4	685.3	623.0	645.6	719.2	770.2	778.7	727.7	679.5
63°	5606.6	3364.0	1194.9	665.4	611.6	637.1	705.1	758.8	770.2	722.1	673.9
65°	5759.5	3313.0	962.7	611.6	566.3	594.6	662.6	710.7	733.4	690.9	651.3
67.5°	5632.1	2896.7	724.9	546.5	529.5	549.3	608.8	654.1	673.9	654.1	614.5
70°	5150.7	2106.8	566.3	487.0	489.9	504.0	549.3	591.8	614.5	608.8	572.0
72.5°	4148.3	1194.9	472.9	436.1	444.6	461.6	492.7	532.3	552.2	549.3	523.9
75°	2732.5	611.6	399.3	390.8	396.4	410.6	433.2	464.4	487.0	484.2	472.9
77.5°	1353.5	424.7	342.6	345.5	348.3	359.6	376.7	404.9	419.1	421.9	419.1
80°	557.8	331.3	294.5	297.3	300.1	308.6	320.0	345.5	353.9	359.6	362.4
82.5°	334.1	252.1	235.1	240.7	243.6	252.1	260.5	283.2	291.6	300.1	300.1
85°	220.9	175.5	169.9	175.5	181.3	186.9	189.8	203.9	218.0	229.3	235.1
87.5°	119.0	104.8	102.0	104.8	104.8	110.5	116.1	130.2	147.2	158.6	164.2
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°	1832.1	1832.1	1832.1	1832.1	1832.1
2.5°	1877.3	1880.2	1877.3	1880.2	1883.0
5°	1970.8	1976.4	1973.7	1973.7	1984.9
7.5°	2078.4	2089.7	2089.7	2095.4	2101.0
10°	2194.5	2205.8	2214.3	2214.3	2222.8
12.5°	2310.6	2316.3	2324.8	2324.8	2324.8
15°	2370.1	2367.2	2364.3	2361.6	2361.6
17.5°	2361.6	2350.2	2344.6	2338.9	2341.7
20°	2299.3	2279.4	2273.8	2265.3	2271.0
22.5°	2191.7	2163.3	2152.0	2137.9	2143.5
25°	2030.3	1996.3	1990.7	1973.7	1982.2
27.5°	1843.4	1826.4	1823.5	1820.8	1834.9
30°	1667.8	1673.4	1676.3	1681.9	1696.2
32.5°	1506.4	1517.8	1520.6	1523.4	1543.2
35°	1347.8	1333.7	1347.8	1342.2	1359.2
37.5°	1175.2	1163.8	1152.5	1138.3	1149.6
40°	1030.7	1010.9	976.9	959.9	962.7
42.5°	917.5	891.9	863.7	846.7	846.7
45°	843.8	812.6	787.2	775.9	775.9
47.5°	787.2	773.0	758.8	750.3	750.3
50°	764.6	747.6	739.1	733.4	733.4
52.5°	747.6	730.6	722.1	716.4	710.7
55°	733.4	707.9	699.4	696.5	696.5
57.5°	713.6	690.9	679.5	676.8	676.8
60°	682.4	665.4	654.1	651.3	651.3
62.5°	651.3	634.3	623.0	623.0	623.0
63°	645.6	625.7	617.2	617.2	617.2
65°	620.1	600.3	591.8	591.8	589.0
67.5°	586.2	566.3	560.7	560.7	555.0
70°	546.5	529.5	523.9	526.7	515.4
72.5°	506.9	489.9	481.4	481.4	470.0
75°	461.6	444.6	433.2	430.4	419.1
77.5°	410.6	396.4	385.1	373.8	368.2
80°	356.8	345.5	331.3	322.8	314.4
82.5°	300.1	288.8	280.3	291.6	249.2
85°	235.1	223.7	212.4	229.3	178.4
87.5°	172.8	167.0	155.7	136.0	119.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)