

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: P257947

Luminaire Tested: **ARCH-L-AF72-110-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257947
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-AF72-110-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15695.1 lumens
Efficiency: N/A
Efficacy: 138.9 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

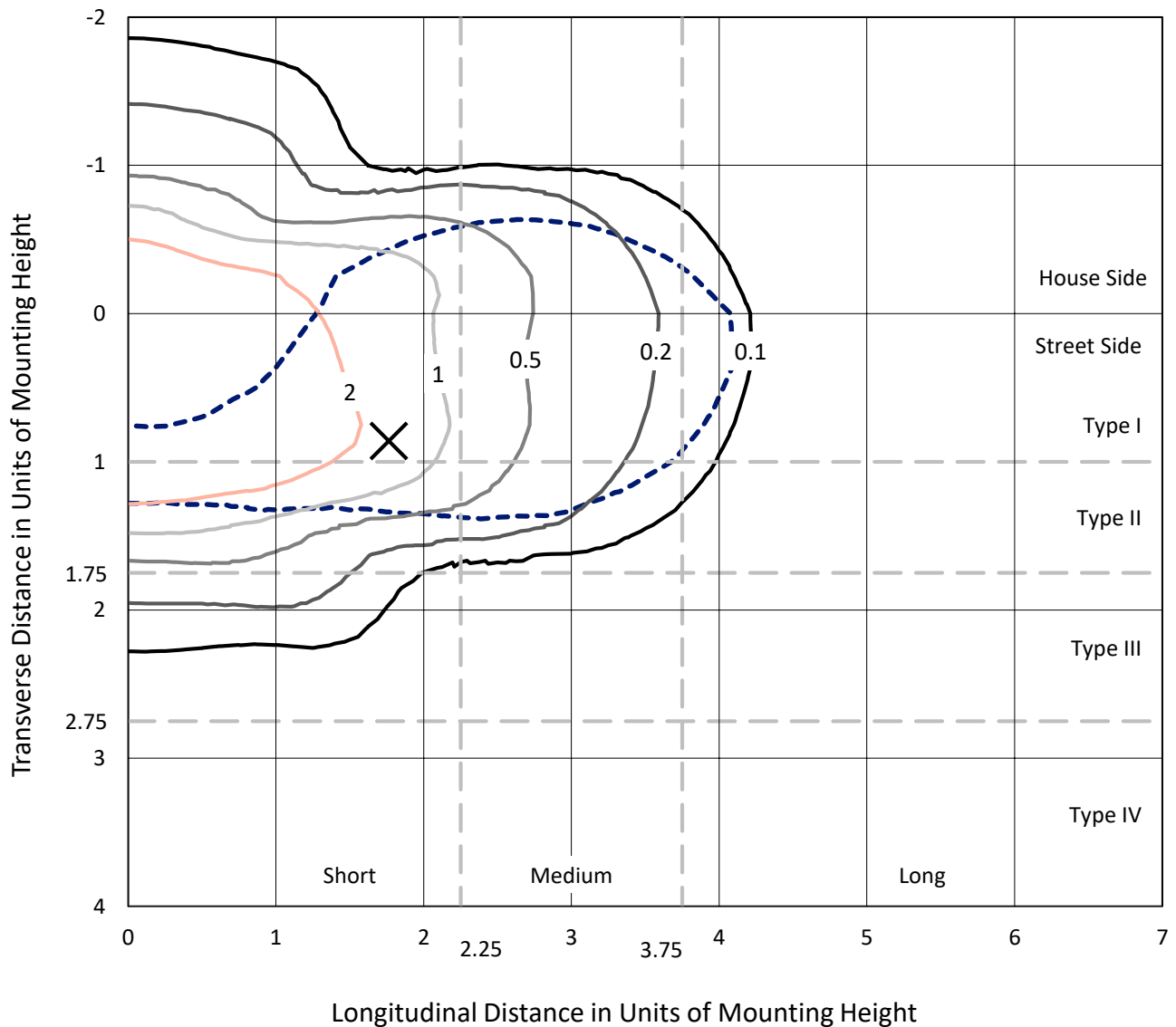
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

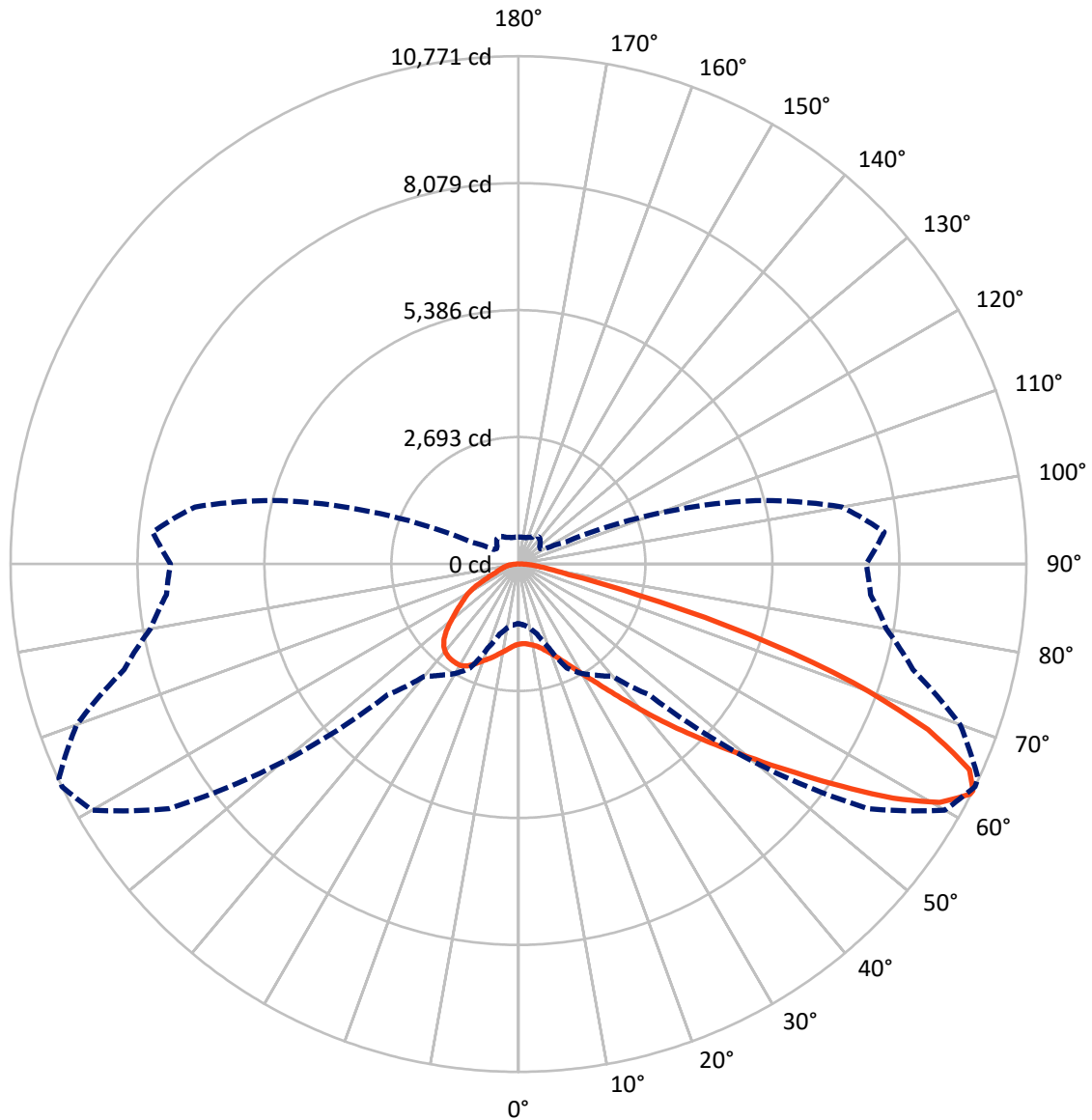
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 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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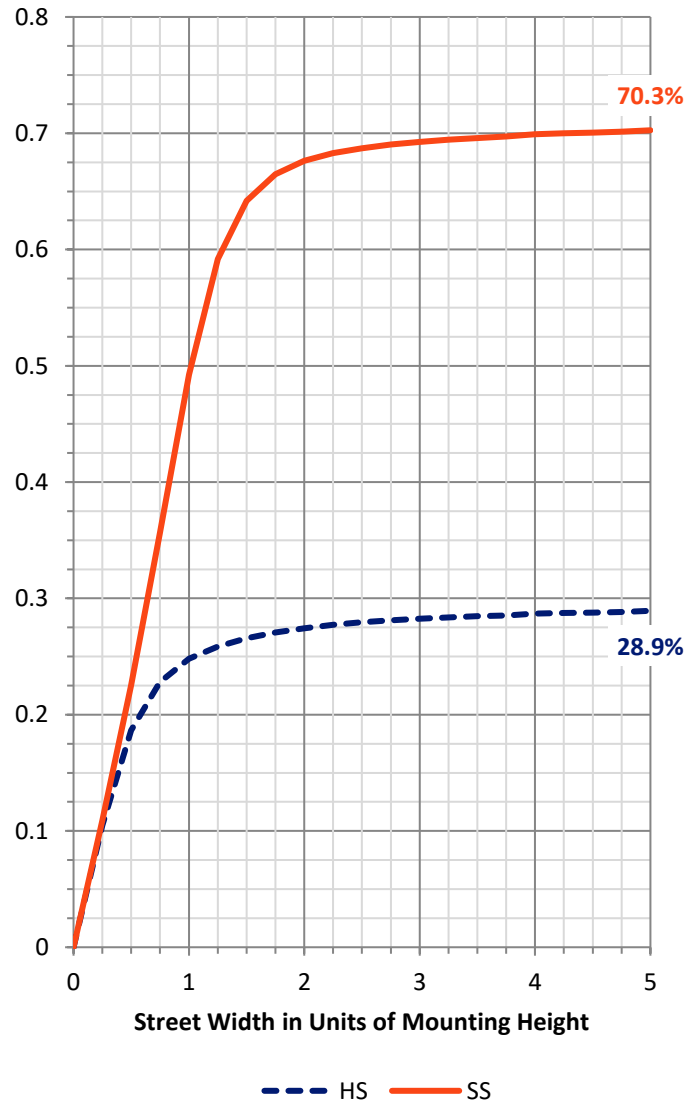
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4613.8	0.0	4613.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	11081.3	0.0	11081.3
	% Fixture	70.6	0.0	70.6
Total	Lumens	15695.1	0.0	15695.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.7	1.1
10°-20°	565.3	3.6
20°-30°	1061.1	6.8
30°-40°	1778.5	11.3
40°-50°	2983.9	19.0
50°-60°	3782.6	24.1
60°-70°	3336.9	21.3
70°-80°	1722.6	11.0
80°-90°	294.8	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°	15695.1	100.0
0°-180°	15695.1	100.0



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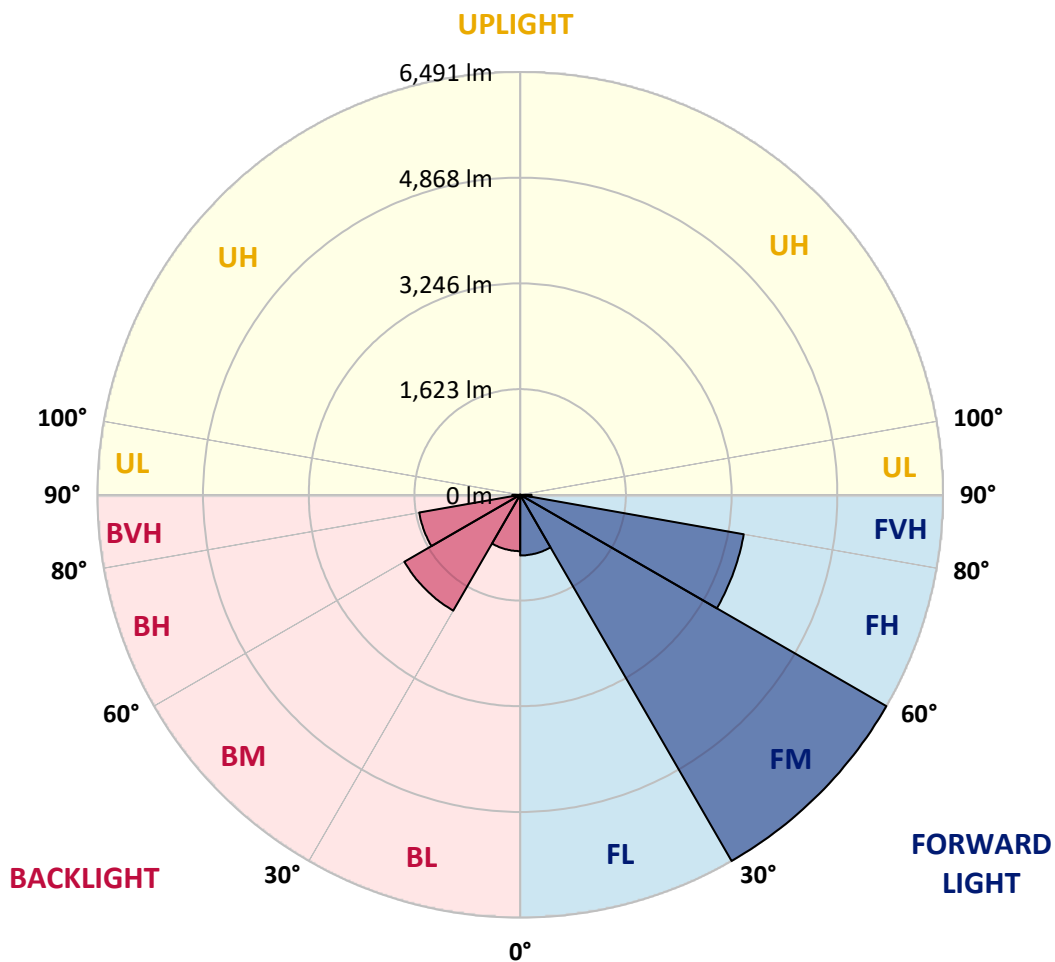
CATALOG NUMBER: ARCH-L-AF72-110-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	931.6	5.9			
FM	(30°-60°)	6491.1	41.4			
FH	(60°-80°)	3485.2	22.2			G2/5000
FVH	(80°-90°)	173.5	1.1			G2/225
BL	(0°-30°)	864.5	5.5	B2/1000		
BM	(30°-60°)	2053.8	13.1	B2/2500		
BH	(60°-80°)	1574.2	10.0	B3/2500		G3/2500
BVH	(80°-90°)	121.3	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°	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7
2.5°	1689.3	1686.6	1686.6	1686.6	1686.6	1684.0	1686.6	1691.9	1689.3	1686.6	1691.9
5°	1694.5	1691.9	1691.9	1691.9	1694.5	1691.9	1694.5	1702.4	1697.2	1697.2	1702.4
7.5°	1707.6	1705.1	1707.6	1705.1	1705.1	1705.1	1707.6	1715.5	1712.9	1715.5	1723.5
10°	1723.5	1723.5	1723.5	1723.5	1723.5	1723.5	1728.7	1733.9	1736.6	1739.2	1749.7
12.5°	1770.7	1770.7	1770.7	1768.1	1768.1	1760.2	1770.7	1775.9	1781.3	1786.5	1794.4
15°	1870.6	1870.6	1867.9	1857.4	1857.4	1841.6	1844.3	1846.9	1846.9	1852.2	1857.4
17.5°	2001.9	1999.3	1994.0	1986.2	1975.6	1957.2	1952.0	1946.8	1938.8	1936.2	1936.2
20°	2185.8	2183.2	2172.6	2151.7	2138.5	2109.6	2088.6	2067.6	2059.7	2046.5	2044.0
22.5°	2448.5	2448.5	2427.5	2396.0	2385.4	2325.1	2264.6	2219.9	2204.2	2185.8	2185.8
25°	2766.4	2763.8	2734.9	2698.1	2653.4	2590.4	2516.9	2456.4	2417.0	2375.0	2359.2
27.5°	3147.3	3139.4	3100.1	3055.3	2971.4	2892.5	2805.9	2742.7	2674.5	2621.9	2574.7
30°	3593.9	3586.1	3517.8	3433.7	3347.0	3268.2	3142.1	3065.9	2958.2	2895.2	2842.6
32.5°	4111.5	4103.7	3980.2	3898.7	3806.8	3709.5	3559.8	3439.0	3302.4	3213.0	3139.4
35°	4770.9	4739.4	4563.4	4450.4	4305.9	4208.7	4051.1	3888.2	3727.9	3601.8	3494.1
37.5°	5482.9	5446.1	5291.1	5122.9	4981.2	4862.9	4639.6	4434.7	4245.5	4072.1	3938.2
40°	6226.4	6129.2	5963.7	5840.2	5742.9	5630.0	5396.2	5180.7	4883.9	4689.5	4487.2
42.5°	6741.3	6646.7	6531.1	6449.7	6402.4	6315.7	6184.4	5997.9	5732.5	5737.7	5204.5
45°	7080.3	6940.9	6862.2	6867.4	6885.8	6885.8	6862.2	6833.2	6717.6	6796.5	6349.9
47.5°	6959.3	6867.4	6817.5	6922.6	7054.0	7185.3	7337.6	7503.1	7692.4	7915.7	7366.6
50°	6250.0	6284.2	6307.8	6531.1	6812.2	7111.8	7461.2	7913.0	8441.1	8543.6	8278.2
52.5°	5117.7	5191.3	5270.1	5611.6	5982.0	6499.6	7111.8	7857.9	8567.2	8984.9	8958.6
55°	3974.9	4066.8	4235.0	4489.8	4784.0	5272.7	6029.4	7180.1	8286.1	8950.7	9355.3
57.5°	2829.5	2963.5	3184.1	3538.8	3798.9	4074.7	4634.3	5911.1	7122.3	8359.7	9289.6
60°	1881.0	1944.1	2088.6	2530.0	2968.7	3257.7	3654.4	4116.8	5107.2	6812.2	8611.8
62.5°	1334.6	1376.6	1466.0	1665.7	2062.4	2585.1	2824.2	3037.0	3354.9	4382.1	6914.7
63°	1261.0	1297.8	1371.4	1539.5	1896.9	2438.0	2682.4	2876.7	3107.9	3919.7	6541.7
65°	1045.7	1061.4	1100.8	1182.2	1374.0	1823.2	2222.6	2340.8	2380.2	2519.4	4098.4
67.5°	882.7	893.2	906.3	930.1	1006.2	1213.7	1657.7	1807.5	1762.9	1668.2	2025.5
70°	767.1	775.0	796.1	824.9	851.2	903.8	1140.2	1363.5	1313.6	1184.9	1240.0
72.5°	612.1	625.2	649.0	698.8	751.4	819.7	877.5	1016.7	985.2	861.7	874.8
75°	483.4	491.3	512.3	549.1	599.0	677.8	790.7	838.1	751.4	635.8	635.8
77.5°	383.6	391.5	409.8	438.7	470.3	525.4	604.3	727.7	675.1	478.1	475.5
80°	289.0	296.9	315.3	341.6	373.1	412.5	459.7	515.0	620.0	446.6	357.3
82.5°	212.8	215.4	246.9	265.4	275.9	307.4	346.8	378.3	425.6	412.5	317.9
85°	160.3	157.6	178.6	191.8	194.4	202.3	226.0	257.5	278.4	268.0	246.9
87.5°	89.3	78.8	92.0	105.1	105.1	107.7	112.9	131.3	149.8	144.5	131.3
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°	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7
2.5°	1691.9	1691.9	1689.3	1689.3	1691.9	1691.9	1689.3	1697.2	1702.4	1702.4	1705.1
5°	1699.7	1702.4	1699.7	1699.7	1702.4	1702.4	1705.1	1712.9	1720.8	1726.0	1733.9
7.5°	1723.5	1726.0	1723.5	1723.5	1726.0	1728.7	1733.9	1744.4	1749.7	1760.2	1773.4
10°	1749.7	1752.3	1749.7	1752.3	1755.0	1757.5	1765.4	1773.4	1781.3	1791.7	1812.8
12.5°	1797.0	1799.6	1794.4	1797.0	1804.9	1804.9	1810.1	1815.3	1828.5	1841.6	1862.7
15°	1862.7	1862.7	1857.4	1860.0	1867.9	1867.9	1870.6	1875.8	1891.5	1907.3	1928.4
17.5°	1938.8	1944.1	1941.5	1944.1	1949.3	1952.0	1952.0	1957.2	1967.7	1978.3	1999.3
20°	2041.3	2044.0	2038.6	2044.0	2049.2	2044.0	2038.6	2036.1	2041.3	2046.5	2070.2
22.5°	2180.5	2178.0	2164.8	2164.8	2164.8	2154.2	2141.1	2125.4	2125.4	2117.5	2135.9
25°	2346.0	2338.2	2319.7	2322.4	2304.0	2288.2	2264.6	2241.0	2219.9	2212.0	2214.7
27.5°	2540.5	2524.7	2506.3	2501.0	2482.7	2453.8	2414.4	2369.7	2335.6	2309.3	2304.0
30°	2784.8	2750.6	2719.1	2713.9	2684.9	2637.7	2574.7	2514.2	2456.4	2411.7	2396.0
32.5°	3073.8	3021.3	2971.4	2966.0	2918.8	2855.8	2779.6	2695.5	2611.4	2540.5	2506.3
35°	3412.7	3333.9	3286.5	3273.4	3205.1	3126.3	3042.3	2934.5	2816.3	2716.4	2653.4
37.5°	3825.1	3743.7	3662.3	3664.9	3570.3	3478.3	3365.4	3234.1	3084.3	2945.1	2855.8
40°	4334.9	4219.3	4114.1	4090.5	4009.0	3880.4	3756.9	3604.5	3420.5	3236.7	3107.9
42.5°	4952.2	4763.1	4618.5	4597.6	4489.8	4332.2	4182.4	3980.2	3793.6	3570.3	3415.3
45°	5653.6	5351.6	5178.2	5146.6	4973.2	4813.0	4631.7	4416.3	4187.7	3935.5	3751.6
47.5°	6525.9	6095.0	5800.7	5748.3	5509.2	5299.0	5109.8	4870.8	4597.6	4316.4	4114.1
50°	7542.6	6906.9	6510.2	6428.6	6108.1	5861.2	5619.5	5320.1	5028.4	4734.1	4500.4
52.5°	8561.9	7878.9	7350.8	7251.0	6778.1	6447.0	6129.2	5829.7	5485.6	5193.9	4928.6
55°	9381.6	8927.1	8315.0	8175.7	7497.9	7048.6	6631.0	6289.4	5947.9	5716.8	5404.0
57.5°	9875.6	9851.8	9368.5	9176.7	8249.3	7584.7	7119.6	6730.8	6399.8	6302.6	5887.5
60°	9862.4	10474.5	10266.9	10122.5	9008.5	8133.7	7529.4	7109.1	6835.9	6946.2	6373.5
62.5°	9260.8	10500.8	10750.4	10710.9	9817.8	8575.1	7865.8	7432.2	7287.8	7616.2	6877.9
63°	9042.7	10440.3	10771.4	10755.6	9972.7	8659.2	7923.6	7495.3	7377.1	7786.9	6969.9
65°	7642.5	9912.3	10516.5	10587.4	10306.3	8948.2	8057.5	7655.6	7642.5	8167.9	7188.0
67.5°	4658.0	8375.4	9368.5	9505.1	9836.1	9040.1	7981.4	7600.4	7789.6	8223.0	7122.3
70°	1991.4	5527.5	7529.4	7750.2	8559.3	8583.0	7763.3	7374.5	7755.4	7792.2	6654.6
72.5°	1179.6	2606.2	5125.6	5606.4	6772.9	7385.0	7264.1	6980.4	7306.1	6843.7	5666.8
75°	835.4	1219.1	2603.5	3115.8	4715.8	5637.9	6102.9	6234.3	6221.2	5427.7	4253.4
77.5°	599.0	782.9	1098.1	1295.2	2632.5	3620.2	4187.7	4571.3	4447.8	3633.4	2621.9
80°	417.7	541.2	672.6	714.6	1221.6	1860.0	2206.8	2375.0	2301.4	1815.3	1174.3
82.5°	302.1	354.7	433.5	459.7	614.8	859.1	1021.9	901.1	864.3	669.9	507.1
85°	233.8	228.5	270.6	281.1	359.9	449.3	459.7	357.3	312.6	278.4	283.8
87.5°	165.5	141.9	144.5	149.8	186.5	239.1	233.8	147.1	126.1	134.0	152.4
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7	1699.7
2.5°	1710.3	1712.9	1718.1	1720.8	1726.0	1726.0	1731.3	1733.9	1739.2	1744.4	1747.1
5°	1741.8	1749.7	1760.2	1765.4	1775.9	1783.8	1794.4	1799.6	1810.1	1818.0	1828.5
7.5°	1789.1	1802.2	1815.3	1831.2	1846.9	1860.0	1870.6	1883.7	1902.1	1915.2	1923.0
10°	1833.7	1852.2	1875.8	1894.2	1917.8	1936.2	1952.0	1975.6	1996.6	2015.0	2025.5
12.5°	1891.5	1915.2	1938.8	1967.7	1999.3	2022.9	2046.5	2078.1	2107.0	2128.0	2138.5
15°	1959.9	1988.7	2015.0	2049.2	2086.0	2117.5	2151.7	2185.8	2206.8	2206.8	2201.6
17.5°	2030.8	2054.5	2086.0	2125.4	2175.3	2214.7	2233.1	2238.3	2230.4	2212.0	2198.9
20°	2101.8	2122.7	2156.9	2204.2	2256.7	2264.6	2246.2	2222.6	2198.9	2167.4	2146.4
22.5°	2159.6	2188.4	2241.0	2296.1	2298.8	2254.1	2204.2	2164.8	2128.0	2091.2	2051.8
25°	2227.9	2267.3	2338.2	2359.2	2290.9	2206.8	2135.9	2078.1	2017.7	1957.2	1912.6
27.5°	2311.9	2369.7	2440.7	2380.2	2246.2	2128.0	2030.8	1944.1	1865.2	1781.3	1731.3
30°	2401.3	2490.6	2506.3	2348.7	2170.1	2017.7	1886.3	1755.0	1655.1	1578.9	1550.1
32.5°	2509.0	2624.6	2530.0	2293.6	2067.6	1867.9	1691.9	1534.2	1450.2	1402.9	1389.8
35°	2671.8	2766.4	2543.1	2235.8	1949.3	1689.3	1468.5	1342.5	1289.9	1258.4	1242.7
37.5°	2905.7	2903.0	2540.5	2164.8	1812.8	1494.8	1289.9	1200.6	1158.6	1132.3	1103.5
40°	3178.9	3008.1	2524.7	2062.4	1628.8	1308.4	1166.5	1082.4	1043.0	1011.5	977.3
42.5°	3449.5	3079.1	2480.0	1910.0	1400.3	1174.3	1077.2	1001.0	958.9	924.7	877.5
45°	3683.2	3107.9	2393.4	1699.7	1195.3	1069.3	1019.4	953.7	903.8	851.2	814.4
47.5°	3867.2	3102.7	2254.1	1452.8	1058.8	995.7	972.0	927.4	867.0	801.3	754.0
50°	4022.1	3063.2	2064.9	1234.8	966.8	930.1	922.1	909.0	811.8	756.6	727.7
52.5°	4164.0	3005.4	1862.7	1087.6	888.0	856.4	872.3	859.1	790.7	743.5	714.6
55°	4358.5	2966.0	1663.0	974.7	796.1	788.2	801.3	819.7	777.6	732.9	701.4
57.5°	4587.0	2987.1	1510.6	848.5	709.3	714.6	759.2	785.5	764.6	717.2	685.7
60°	4849.7	3050.1	1376.6	727.7	638.4	651.5	717.2	754.0	751.4	696.2	659.4
62.5°	5144.0	3115.8	1163.8	635.8	578.0	599.0	667.3	714.6	722.5	675.1	630.5
63°	5201.8	3121.0	1108.7	617.4	567.4	591.2	654.2	704.1	714.6	669.9	625.2
65°	5343.7	3073.8	893.2	567.4	525.4	551.7	614.8	659.4	680.5	641.0	604.3
67.5°	5225.4	2687.6	672.6	507.1	491.3	509.6	564.9	606.9	625.2	606.9	570.1
70°	4778.8	1954.7	525.4	451.8	454.5	467.6	509.6	549.1	570.1	564.9	530.7
72.5°	3848.8	1108.7	438.7	404.6	412.5	428.2	457.2	493.9	512.3	509.6	486.0
75°	2535.2	567.4	370.4	362.5	367.9	380.9	401.9	430.9	451.8	449.3	438.7
77.5°	1255.8	394.0	317.9	320.5	323.2	333.7	349.4	375.7	388.8	391.5	388.8
80°	517.5	307.4	273.2	275.9	278.4	286.3	296.9	320.5	328.4	333.7	336.2
82.5°	310.1	233.8	218.1	223.3	226.0	233.8	241.7	262.7	270.6	278.4	278.4
85°	204.9	162.9	157.6	162.9	168.2	173.4	176.0	189.1	202.3	212.8	218.1
87.5°	110.4	97.2	94.6	97.2	97.2	102.5	107.7	120.8	136.6	147.1	152.4
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):

	160°	165°	170°	175°	180°
0°	1699.7	1699.7	1699.7	1699.7	1699.7
2.5°	1741.8	1744.4	1741.8	1744.4	1747.1
5°	1828.5	1833.7	1831.2	1831.2	1841.6
7.5°	1928.4	1938.8	1938.8	1944.1	1949.3
10°	2036.1	2046.5	2054.5	2054.5	2062.4
12.5°	2143.8	2149.0	2156.9	2156.9	2156.9
15°	2198.9	2196.3	2193.7	2191.1	2191.1
17.5°	2191.1	2180.5	2175.3	2170.1	2172.6
20°	2133.3	2114.8	2109.6	2101.8	2107.0
22.5°	2033.4	2007.1	1996.6	1983.5	1988.7
25°	1883.7	1852.2	1846.9	1831.2	1839.1
27.5°	1710.3	1694.5	1691.9	1689.3	1702.4
30°	1547.4	1552.6	1555.3	1560.5	1573.7
32.5°	1397.7	1408.2	1410.8	1413.4	1431.8
35°	1250.6	1237.4	1250.6	1245.2	1261.0
37.5°	1090.3	1079.7	1069.3	1056.1	1066.6
40°	956.3	937.9	906.3	890.6	893.2
42.5°	851.2	827.6	801.3	785.5	785.5
45°	782.9	754.0	730.4	719.9	719.9
47.5°	730.4	717.2	704.1	696.2	696.2
50°	709.3	693.6	685.7	680.5	680.5
52.5°	693.6	677.8	669.9	664.7	659.4
55°	680.5	656.8	649.0	646.3	646.3
57.5°	662.1	641.0	630.5	627.9	627.9
60°	633.1	617.4	606.9	604.3	604.3
62.5°	604.3	588.5	578.0	578.0	578.0
63°	599.0	580.6	572.8	572.8	572.8
65°	575.3	557.0	549.1	549.1	546.5
67.5°	543.8	525.4	520.2	520.2	515.0
70°	507.1	491.3	486.0	488.7	478.1
72.5°	470.3	454.5	446.6	446.6	436.1
75°	428.2	412.5	401.9	399.4	388.8
77.5°	380.9	367.9	357.3	346.8	341.6
80°	331.0	320.5	307.4	299.5	291.6
82.5°	278.4	268.0	260.1	270.6	231.2
85°	218.1	207.6	197.0	212.8	165.5
87.5°	160.3	155.0	144.5	126.1	110.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)