

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: P257946

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257946
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-AF72-100-D-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14358.1 lumens
Efficiency: N/A
Efficacy: 140.8 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

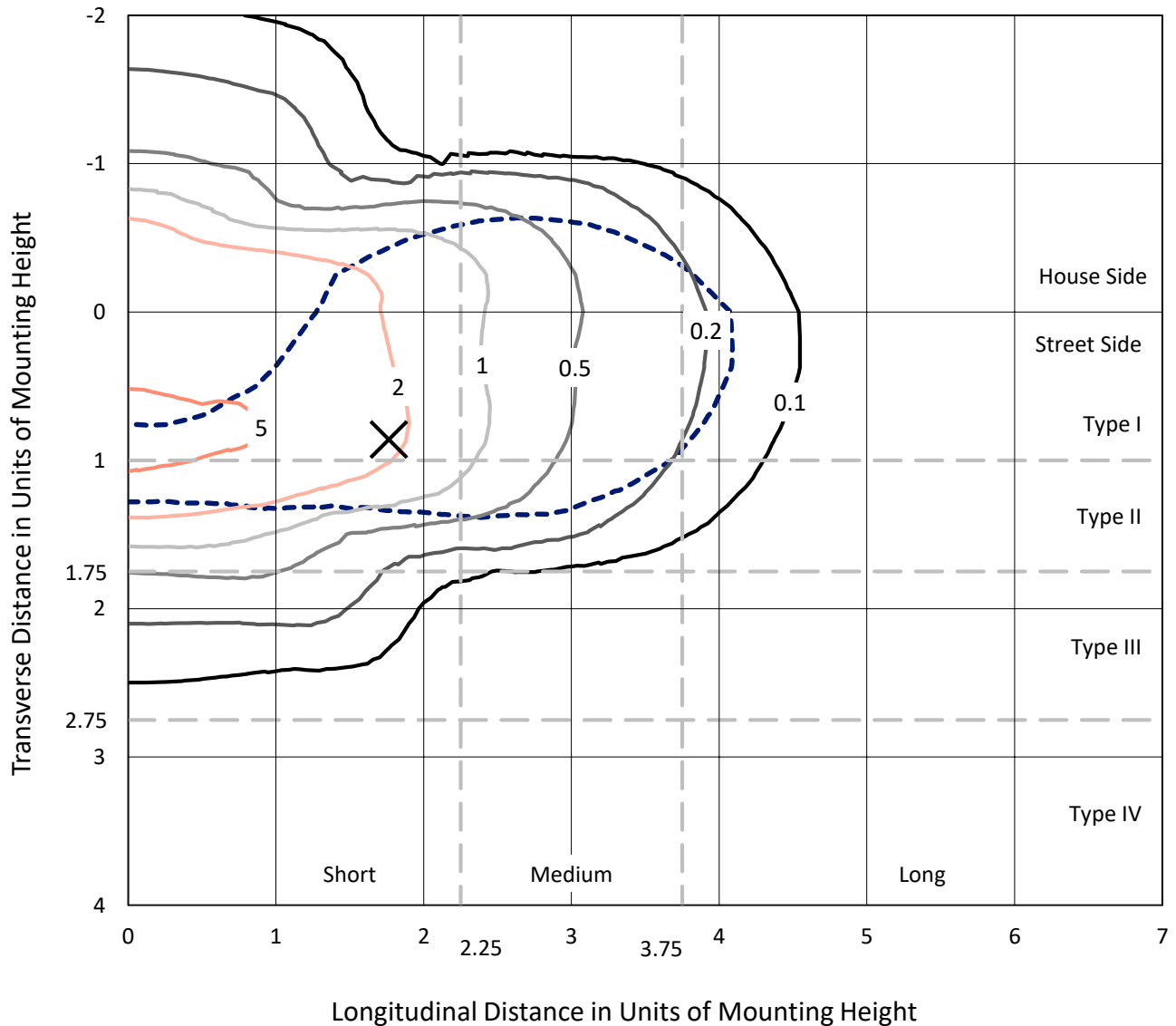
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

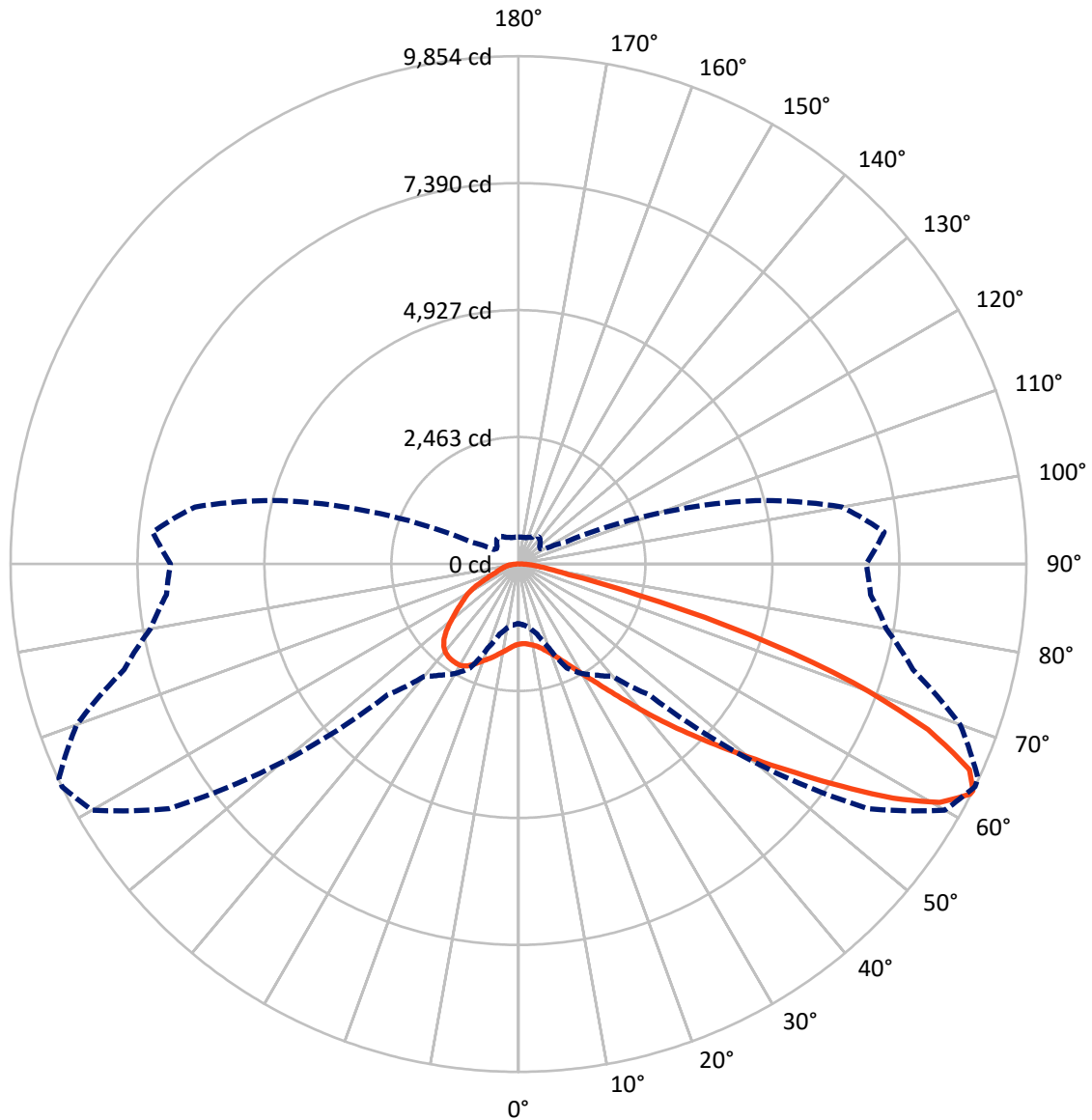


Based on 20 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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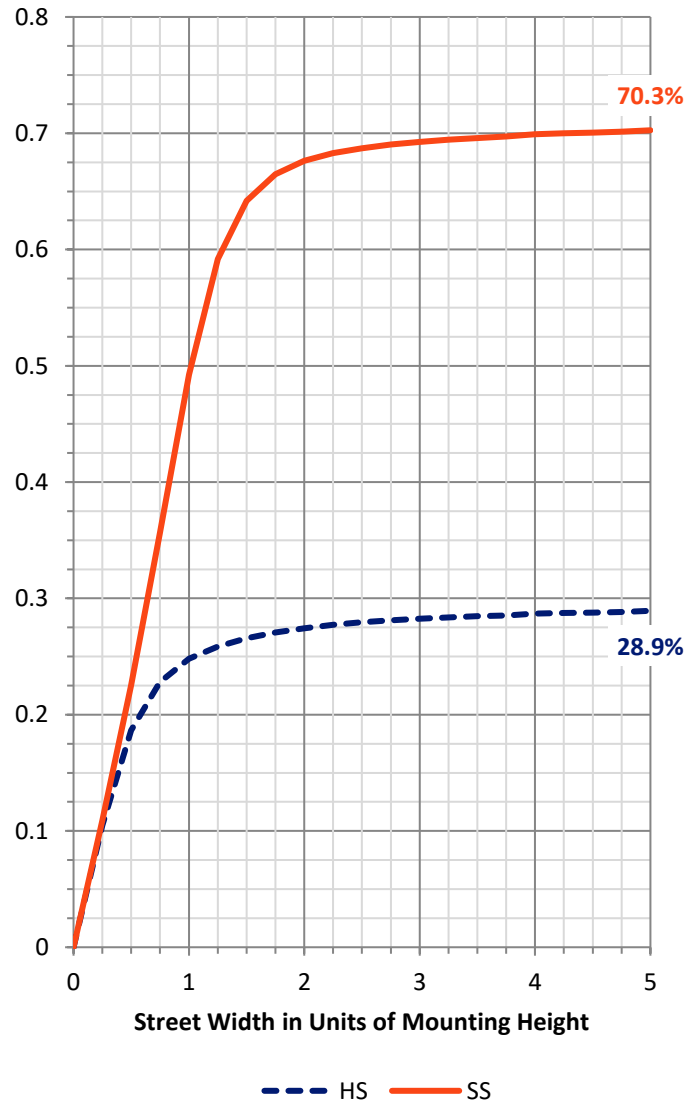
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4220.8	0.0	4220.8
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	10137.4	0.0	10137.4
	% Fixture	70.6	0.0	70.6
Total	Lumens	14358.1	0.0	14358.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	1.1
10°-20°	517.1	3.6
20°-30°	970.7	6.8
30°-40°	1627.0	11.3
40°-50°	2729.7	19.0
50°-60°	3460.4	24.1
60°-70°	3052.6	21.3
70°-80°	1575.8	11.0
80°-90°	269.6	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°	14358.1	100.0
0°-180°	14358.1	100.0



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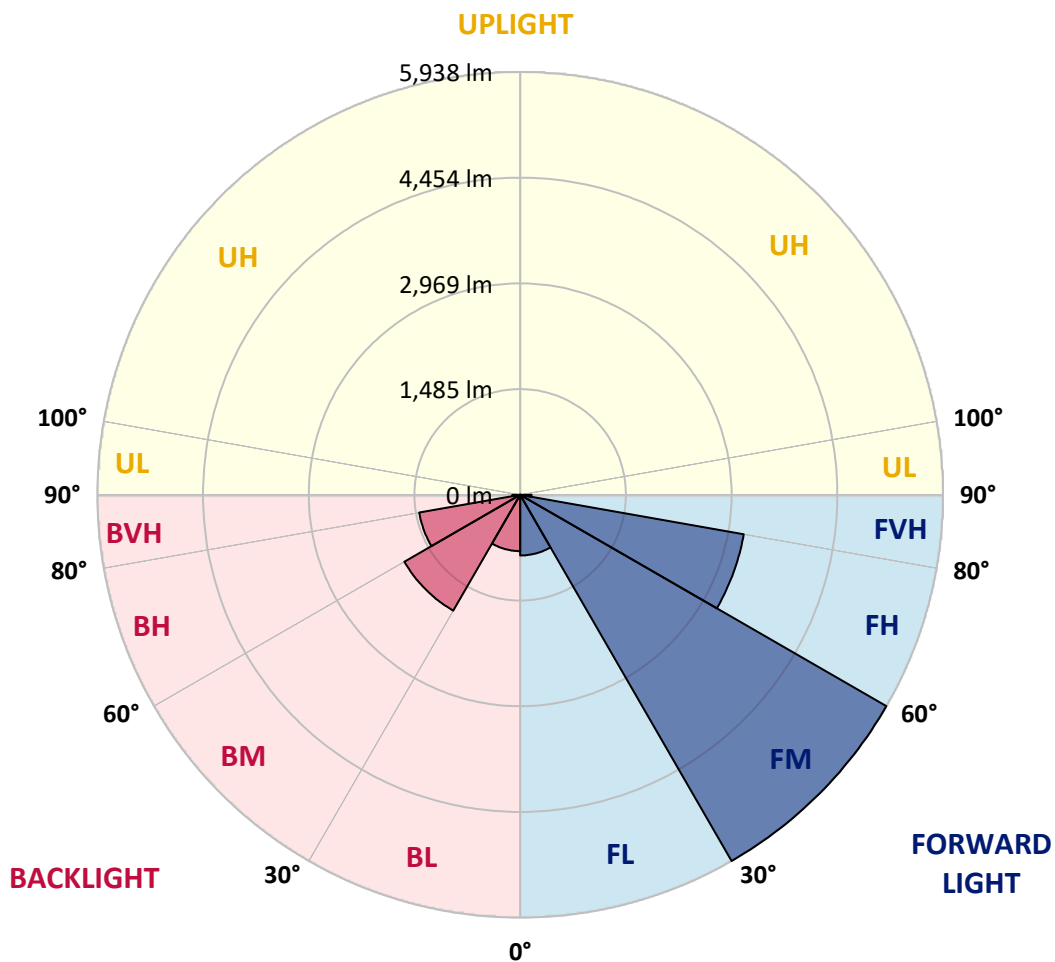
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	852.2	5.9			
FM	(30°-60°)	5938.2	41.4			
FH	(60°-80°)	3188.3	22.2			G2/5000
FVH	(80°-90°)	158.7	1.1			G2/225
BL	(0°-30°)	790.8	5.5	B2/1000		
BM	(30°-60°)	1878.9	13.1	B2/2500		
BH	(60°-80°)	1440.1	10.0	B3/2500		G3/2500
BVH	(80°-90°)	111.0	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°	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1545.4	1542.9	1542.9	1542.9	1542.9	1540.6	1542.9	1547.7	1545.4	1542.9	1547.7
5°	1550.2	1547.7	1547.7	1547.7	1550.2	1547.7	1550.2	1557.3	1552.5	1552.5	1557.3
7.5°	1562.1	1559.8	1562.1	1559.8	1559.8	1559.8	1562.1	1569.4	1567.0	1569.4	1576.6
10°	1576.6	1576.6	1576.6	1576.6	1576.6	1576.6	1581.4	1586.2	1588.6	1591.0	1600.6
12.5°	1619.8	1619.8	1619.8	1617.5	1617.5	1610.2	1619.8	1624.7	1629.5	1634.3	1641.5
15°	1711.2	1711.2	1708.8	1699.2	1699.2	1684.8	1687.2	1689.6	1689.6	1694.4	1699.2
17.5°	1831.4	1828.9	1824.1	1817.0	1807.3	1790.5	1785.7	1780.9	1773.7	1771.2	1771.2
20°	1999.6	1997.2	1987.6	1968.4	1956.4	1929.9	1910.7	1891.4	1884.3	1872.2	1869.9
22.5°	2240.0	2240.0	2220.7	2191.9	2182.3	2127.0	2071.7	2030.9	2016.4	1999.6	1999.6
25°	2530.8	2528.3	2501.9	2468.3	2427.4	2369.8	2302.5	2247.1	2211.1	2172.6	2158.2
27.5°	2879.2	2872.0	2835.9	2795.1	2718.2	2646.1	2566.8	2509.1	2446.6	2398.5	2355.3
30°	3287.8	3280.6	3218.1	3141.2	3061.9	2989.8	2874.4	2804.7	2706.2	2648.5	2600.4
32.5°	3761.3	3754.0	3641.1	3566.6	3482.5	3393.5	3256.6	3146.0	3021.1	2939.3	2872.0
35°	4364.5	4335.7	4174.7	4071.3	3939.1	3850.2	3705.9	3557.0	3410.4	3295.0	3196.5
37.5°	5015.8	4982.2	4840.4	4686.5	4556.8	4448.6	4244.3	4056.9	3883.8	3725.2	3602.6
40°	5696.0	5607.1	5455.6	5342.7	5253.8	5150.5	4936.6	4739.4	4467.8	4290.1	4105.0
42.5°	6167.1	6080.5	5974.7	5900.3	5857.0	5777.7	5657.5	5486.9	5244.2	5249.0	4761.1
45°	6477.1	6349.7	6277.6	6282.5	6299.2	6299.2	6277.6	6251.2	6145.4	6217.5	5808.9
47.5°	6366.5	6282.5	6236.7	6332.9	6453.1	6573.2	6712.6	6864.0	7037.1	7241.4	6739.1
50°	5717.6	5748.9	5770.5	5974.7	6231.9	6506.0	6825.5	7238.9	7722.1	7815.8	7573.0
52.5°	4681.7	4749.0	4821.2	5133.6	5472.5	5945.9	6506.0	7188.5	7837.4	8219.5	8195.5
55°	3636.3	3720.4	3874.2	4107.4	4376.5	4823.5	5515.8	6568.4	7580.3	8188.3	8558.4
57.5°	2588.5	2711.0	2912.9	3237.3	3475.3	3727.6	4239.5	5407.6	6515.6	7647.5	8498.3
60°	1720.8	1778.5	1910.7	2314.4	2715.8	2980.2	3343.1	3766.1	4672.1	6231.9	7878.3
62.5°	1220.9	1259.4	1341.1	1523.8	1886.6	2365.0	2583.7	2778.3	3069.1	4008.8	6325.6
63°	1153.6	1187.2	1254.5	1408.4	1735.2	2230.3	2453.9	2631.6	2843.2	3585.9	5984.4
65°	956.6	971.0	1007.0	1081.6	1257.0	1667.9	2033.2	2141.4	2177.5	2304.8	3749.2
67.5°	807.5	817.1	829.2	850.8	920.5	1110.3	1516.5	1653.5	1612.7	1526.1	1853.0
70°	701.7	709.0	728.2	754.6	778.7	826.7	1043.1	1247.4	1201.7	1083.9	1134.4
72.5°	560.0	572.0	593.6	639.3	687.3	749.8	802.7	930.1	901.2	788.3	800.4
75°	442.2	449.4	468.6	502.3	548.0	620.1	723.4	766.7	687.3	581.6	581.6
77.5°	350.9	358.1	374.9	401.4	430.3	480.7	552.8	665.7	617.7	437.4	435.1
80°	264.3	271.6	288.4	312.4	341.3	377.4	420.6	471.1	567.2	408.6	326.8
82.5°	194.7	197.1	225.9	242.7	252.4	281.2	317.2	346.1	389.3	377.4	290.8
85°	146.6	144.2	163.5	175.4	177.9	185.1	206.7	235.5	254.7	245.1	225.9
87.5°	81.7	72.1	84.1	96.2	96.2	98.5	103.3	120.2	137.0	132.2	120.2
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1547.7	1547.7	1545.4	1545.4	1547.7	1547.7	1545.4	1552.5	1557.3	1557.3	1559.8
5°	1555.0	1557.3	1555.0	1555.0	1557.3	1557.3	1559.8	1567.0	1574.2	1579.0	1586.2
7.5°	1576.6	1579.0	1576.6	1576.6	1579.0	1581.4	1586.2	1595.8	1600.6	1610.2	1622.3
10°	1600.6	1603.1	1600.6	1603.1	1605.4	1607.9	1615.0	1622.3	1629.5	1639.1	1658.3
12.5°	1643.9	1646.3	1641.5	1643.9	1651.1	1651.1	1656.0	1660.8	1672.7	1684.8	1704.0
15°	1704.0	1704.0	1699.2	1701.6	1708.8	1708.8	1711.2	1716.0	1730.4	1744.8	1764.1
17.5°	1773.7	1778.5	1776.0	1778.5	1783.3	1785.7	1785.7	1790.5	1800.1	1809.7	1828.9
20°	1867.4	1869.9	1865.0	1869.9	1874.7	1869.9	1865.0	1862.6	1867.4	1872.2	1893.9
22.5°	1994.8	1992.4	1980.3	1980.3	1980.3	1970.7	1958.7	1944.3	1944.3	1937.2	1953.9
25°	2146.3	2139.0	2122.2	2124.6	2107.8	2093.4	2071.7	2050.1	2030.9	2023.6	2026.1
27.5°	2324.0	2309.6	2292.8	2288.0	2271.2	2244.8	2208.7	2167.8	2136.6	2112.6	2107.8
30°	2547.6	2516.4	2487.5	2482.7	2456.2	2412.9	2355.3	2300.0	2247.1	2206.3	2191.9
32.5°	2812.0	2763.9	2718.2	2713.4	2670.1	2612.5	2542.7	2465.8	2389.0	2324.0	2292.8
35°	3121.9	3049.8	3006.7	2994.6	2932.1	2860.0	2783.1	2684.5	2576.4	2485.1	2427.4
37.5°	3499.3	3424.8	3350.3	3352.7	3266.2	3182.1	3078.7	2958.6	2821.6	2694.1	2612.5
40°	3965.6	3859.8	3763.6	3742.1	3667.6	3549.7	3436.8	3297.4	3129.2	2960.9	2843.2
42.5°	4530.3	4357.3	4225.1	4205.9	4107.4	3963.1	3826.1	3641.1	3470.5	3266.2	3124.4
45°	5172.0	4895.6	4737.1	4708.2	4549.6	4403.0	4237.2	4040.0	3831.0	3600.3	3432.0
47.5°	5969.9	5575.8	5306.7	5258.6	5039.9	4847.6	4674.6	4455.9	4205.9	3948.7	3763.6
50°	6900.1	6318.5	5955.5	5881.0	5587.9	5361.9	5140.8	4866.8	4600.0	4330.9	4117.0
52.5°	7832.6	7207.7	6724.7	6633.3	6200.7	5897.8	5607.1	5333.1	5018.2	4751.5	4508.8
55°	8582.5	8166.6	7606.7	7479.3	6859.2	6448.3	6066.1	5753.7	5441.3	5229.7	4943.7
57.5°	9034.3	9012.6	8570.4	8394.9	7546.6	6938.6	6513.1	6157.4	5854.7	5765.7	5385.9
60°	9022.2	9582.2	9392.3	9260.2	8241.2	7440.8	6888.0	6503.5	6253.6	6354.5	5830.6
62.5°	8471.9	9606.2	9834.5	9798.5	8981.4	7844.6	7195.6	6799.1	6667.0	6967.4	6292.1
63°	8272.4	9551.0	9853.8	9839.4	9123.2	7921.5	7248.5	6856.8	6748.7	7123.6	6376.2
65°	6991.4	9067.9	9620.6	9685.6	9428.4	8185.9	7371.2	7003.4	6991.4	7472.0	6575.6
67.5°	4261.2	7661.9	8570.4	8695.4	8998.2	8270.0	7301.4	6953.0	7126.0	7522.6	6515.6
70°	1821.8	5056.7	6888.0	7090.0	7830.2	7851.8	7101.9	6746.3	7094.8	7128.4	6087.8
72.5°	1079.1	2384.2	4689.0	5128.8	6195.9	6755.9	6645.3	6385.8	6683.8	6260.8	5184.1
75°	764.2	1115.1	2381.7	2850.4	4314.1	5157.6	5583.1	5703.2	5691.2	4965.4	3891.1
77.5°	548.0	716.2	1004.6	1184.9	2408.1	3311.8	3831.0	4181.8	4068.9	3323.9	2398.5
80°	382.2	495.1	615.3	653.7	1117.6	1701.6	2018.8	2172.6	2105.3	1660.8	1074.3
82.5°	276.4	324.5	396.6	420.6	562.4	785.9	934.9	824.4	790.7	612.8	463.8
85°	213.9	209.1	247.6	257.2	329.3	411.0	420.6	326.8	286.0	254.7	259.5
87.5°	151.4	129.8	132.2	137.0	170.6	218.7	213.9	134.6	115.4	122.5	139.4
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°	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1564.6	1567.0	1571.8	1574.2	1579.0	1579.0	1583.8	1586.2	1591.0	1595.8	1598.3
5°	1593.5	1600.6	1610.2	1615.0	1624.7	1631.9	1641.5	1646.3	1656.0	1663.1	1672.7
7.5°	1636.7	1648.7	1660.8	1675.2	1689.6	1701.6	1711.2	1723.3	1740.0	1752.0	1759.3
10°	1677.5	1694.4	1716.0	1732.9	1754.5	1771.2	1785.7	1807.3	1826.6	1843.4	1853.0
12.5°	1730.4	1752.0	1773.7	1800.1	1828.9	1850.6	1872.2	1901.1	1927.5	1946.8	1956.4
15°	1792.9	1819.3	1843.4	1874.7	1908.3	1937.2	1968.4	1999.6	2018.8	2018.8	2014.0
17.5°	1857.8	1879.5	1908.3	1944.3	1989.9	2026.1	2042.8	2047.6	2040.5	2023.6	2011.6
20°	1922.7	1942.0	1973.2	2016.4	2064.5	2071.7	2054.9	2033.2	2011.6	1982.8	1963.6
22.5°	1975.5	2002.0	2050.1	2100.5	2103.0	2062.1	2016.4	1980.3	1946.8	1913.1	1877.0
25°	2038.0	2074.1	2139.0	2158.2	2095.7	2018.8	1953.9	1901.1	1845.8	1790.5	1749.7
27.5°	2115.0	2167.8	2232.7	2177.5	2054.9	1946.8	1857.8	1778.5	1706.4	1629.5	1583.8
30°	2196.7	2278.4	2292.8	2148.6	1985.1	1845.8	1725.6	1605.4	1514.2	1444.4	1418.0
32.5°	2295.2	2401.0	2314.4	2098.2	1891.4	1708.8	1547.7	1403.6	1326.7	1283.4	1271.4
35°	2444.2	2530.8	2326.5	2045.3	1783.3	1545.4	1343.4	1228.2	1180.1	1151.2	1136.8
37.5°	2658.1	2655.7	2324.0	1980.3	1658.3	1367.5	1180.1	1098.3	1059.9	1035.8	1009.4
40°	2908.0	2751.8	2309.6	1886.6	1490.1	1196.9	1067.1	990.2	954.1	925.3	894.1
42.5°	3155.6	2816.8	2268.8	1747.2	1281.0	1074.3	985.4	915.6	877.2	846.0	802.7
45°	3369.5	2843.2	2189.4	1555.0	1093.5	978.1	932.5	872.4	826.7	778.7	745.0
47.5°	3537.8	2838.4	2062.1	1329.0	968.5	910.8	889.3	848.4	793.1	733.0	689.8
50°	3679.6	2802.4	1889.1	1129.5	884.4	850.8	843.6	831.6	742.7	692.1	665.7
52.5°	3809.4	2749.5	1704.0	995.0	812.3	783.5	797.9	785.9	723.4	680.2	653.7
55°	3987.2	2713.4	1521.3	891.6	728.2	721.0	733.0	749.8	711.4	670.5	641.7
57.5°	4196.2	2732.6	1381.9	776.3	649.0	653.7	694.6	718.6	699.4	656.1	627.3
60°	4436.6	2790.3	1259.4	665.7	584.0	596.1	656.1	689.8	687.3	636.9	603.2
62.5°	4705.8	2850.4	1064.7	581.6	528.8	548.0	610.5	653.7	660.9	617.7	576.8
63°	4758.7	2855.2	1014.3	564.8	519.1	540.7	598.4	644.2	653.7	612.8	572.0
65°	4888.5	2812.0	817.1	519.1	480.7	504.7	562.4	603.2	622.5	586.5	552.8
67.5°	4780.4	2458.7	615.3	463.8	449.4	466.3	516.7	555.2	572.0	555.2	521.5
70°	4371.7	1788.1	480.7	413.4	415.8	427.8	466.3	502.3	521.5	516.7	485.5
72.5°	3520.9	1014.3	401.4	370.1	377.4	391.8	418.2	451.8	468.6	466.3	444.6
75°	2319.2	519.1	338.9	331.6	336.4	348.5	367.8	394.1	413.4	411.0	401.4
77.5°	1148.8	360.5	290.8	293.2	295.6	305.2	319.7	343.7	355.7	358.1	355.7
80°	473.4	281.2	249.9	252.4	254.7	262.0	271.6	293.2	300.4	305.2	307.6
82.5°	283.6	213.9	199.5	204.3	206.7	213.9	221.1	240.3	247.6	254.7	254.7
85°	187.5	149.0	144.2	149.0	153.9	158.7	161.0	173.1	185.1	194.7	199.5
87.5°	101.0	88.9	86.5	88.9	88.9	93.7	98.5	110.6	125.0	134.6	139.4
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°	1555.0	1555.0	1555.0	1555.0	1555.0
2.5°	1593.5	1595.8	1593.5	1595.8	1598.3
5°	1672.7	1677.5	1675.2	1675.2	1684.8
7.5°	1764.1	1773.7	1773.7	1778.5	1783.3
10°	1862.6	1872.2	1879.5	1879.5	1886.6
12.5°	1961.1	1965.9	1973.2	1973.2	1973.2
15°	2011.6	2009.2	2006.8	2004.4	2004.4
17.5°	2004.4	1994.8	1989.9	1985.1	1987.6
20°	1951.6	1934.7	1929.9	1922.7	1927.5
22.5°	1860.2	1836.2	1826.6	1814.5	1819.3
25°	1723.3	1694.4	1689.6	1675.2	1682.3
27.5°	1564.6	1550.2	1547.7	1545.4	1557.3
30°	1415.6	1420.4	1422.8	1427.6	1439.6
32.5°	1278.6	1288.2	1290.7	1293.0	1309.8
35°	1144.0	1132.0	1144.0	1139.2	1153.6
37.5°	997.4	987.8	978.1	966.2	975.8
40°	874.8	858.1	829.2	814.8	817.1
42.5°	778.7	757.1	733.0	718.6	718.6
45°	716.2	689.8	668.1	658.5	658.5
47.5°	668.1	656.1	644.2	636.9	636.9
50°	649.0	634.5	627.3	622.5	622.5
52.5°	634.5	620.1	612.8	608.0	603.2
55°	622.5	600.9	593.6	591.3	591.3
57.5°	605.7	586.5	576.8	574.4	574.4
60°	579.2	564.8	555.2	552.8	552.8
62.5°	552.8	538.4	528.8	528.8	528.8
63°	548.0	531.1	524.0	524.0	524.0
65°	526.3	509.5	502.3	502.3	499.9
67.5°	497.5	480.7	475.9	475.9	471.1
70°	463.8	449.4	444.6	447.0	437.4
72.5°	430.3	415.8	408.6	408.6	399.0
75°	391.8	377.4	367.8	365.3	355.7
77.5°	348.5	336.4	326.8	317.2	312.4
80°	302.8	293.2	281.2	273.9	266.8
82.5°	254.7	245.1	237.9	247.6	211.5
85°	199.5	189.9	180.2	194.7	151.4
87.5°	146.6	141.8	132.2	115.4	101.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)