

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: P257965

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2U-7050**

Issue Date: 8/21/2018

Test Information

Test Method: LM-79-08
Report Number: P257965
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-AF72-90-D-U-T2U-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13036 lumens
Efficiency: N/A
Efficacy: 140.2 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

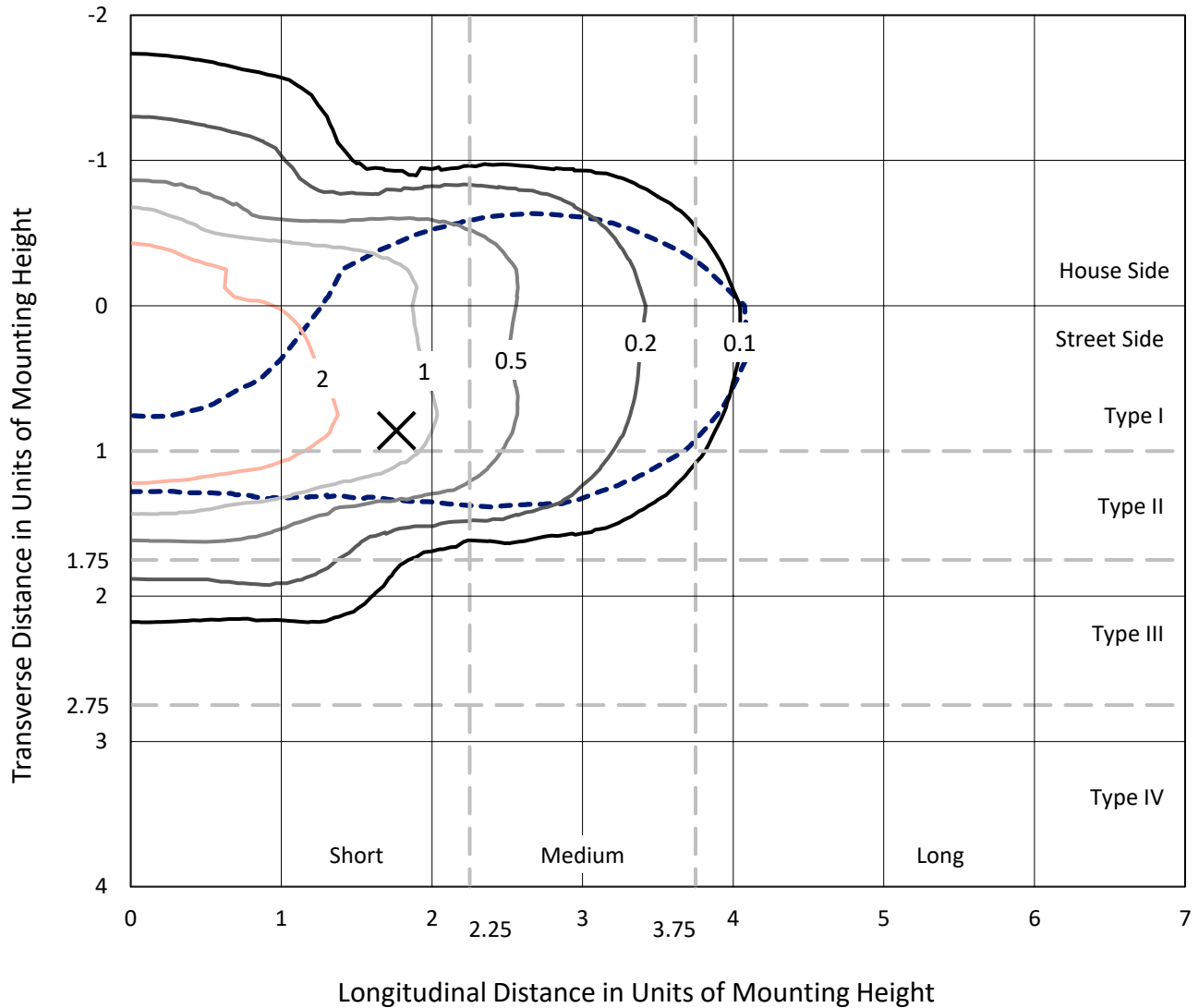
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

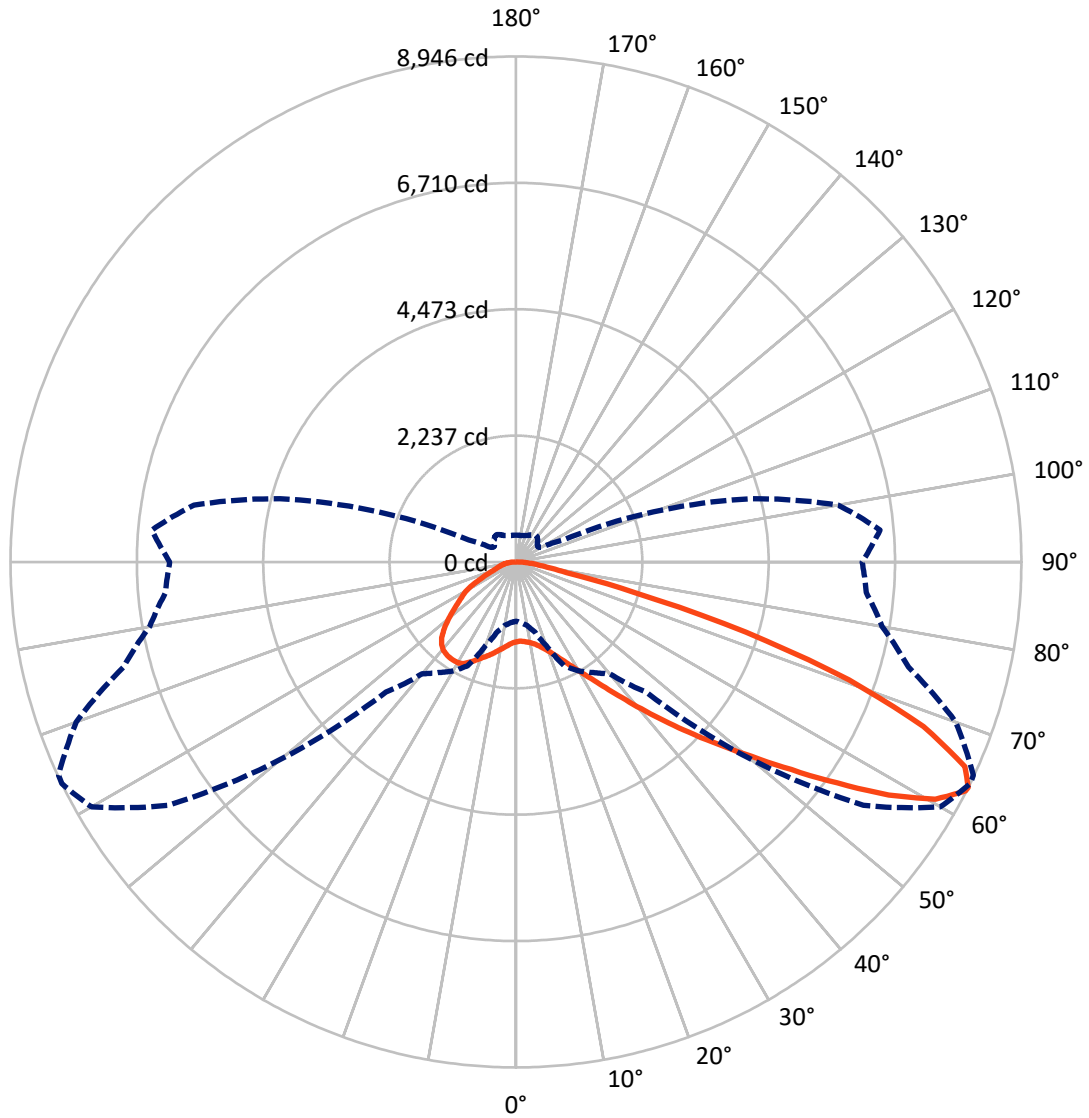
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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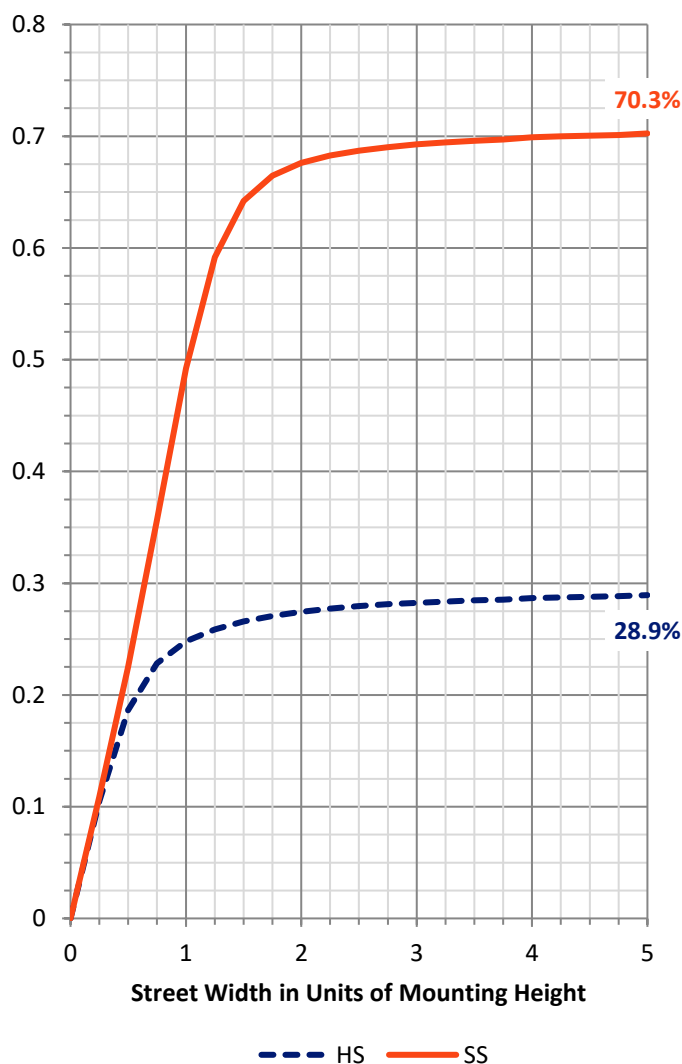
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3832.1	0.0	3832.1
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	9203.9	0.0	9203.9
	% Fixture	70.6	0.0	70.6
Total	Lumens	13036.0	0.0	13036.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.0	1.1
10°-20°	469.5	3.6
20°-30°	881.3	6.8
30°-40°	1477.1	11.3
40°-50°	2478.3	19.0
50°-60°	3141.8	24.1
60°-70°	2771.5	21.3
70°-80°	1430.7	11.0
80°-90°	244.8	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°	13036.0	100.0
0°-180°	13036.0	100.0

Coefficient of Utilization



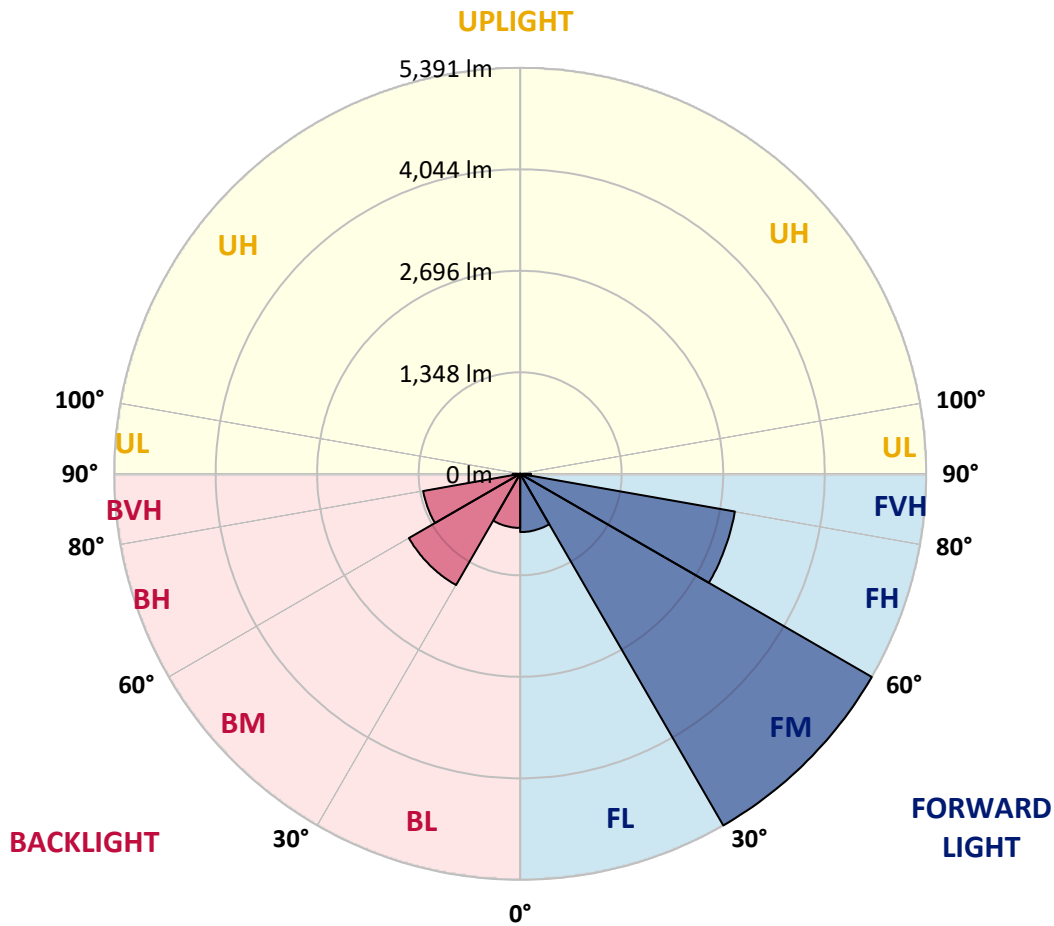
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	773.7	5.9			
FM (30°-60°)	5391.3	41.4			
FH (60°-80°)	2894.7	22.2			G2/5000
FVH (80°-90°)	144.1	1.1			G2/225
BL (0°-30°)	718.0	5.5	B2/1000		
BM (30°-60°)	1705.9	13.1	B2/2500		
BH (60°-80°)	1307.5	10.0	B3/2500		G3/2500
BVH (80°-90°)	100.7	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°	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8
2.5°	1403.1	1400.9	1400.9	1400.9	1400.9	1398.7	1400.9	1405.2	1403.1	1400.9	1405.2
5°	1407.4	1405.2	1405.2	1405.2	1407.4	1405.2	1407.4	1414.0	1409.6	1409.6	1414.0
7.5°	1418.3	1416.2	1418.3	1416.2	1416.2	1416.2	1418.3	1424.9	1422.7	1424.9	1431.4
10°	1431.4	1431.4	1431.4	1431.4	1431.4	1431.4	1435.8	1440.2	1442.3	1444.5	1453.3
12.5°	1470.7	1470.7	1470.7	1468.5	1468.5	1462.0	1470.7	1475.1	1479.4	1483.8	1490.3
15°	1553.6	1553.6	1551.4	1542.7	1542.7	1529.6	1531.8	1534.0	1534.0	1538.4	1542.7
17.5°	1662.7	1660.5	1656.2	1649.6	1640.9	1625.6	1621.3	1616.9	1610.4	1608.2	1608.2
20°	1815.5	1813.3	1804.6	1787.1	1776.2	1752.2	1734.7	1717.3	1710.7	1699.8	1697.6
22.5°	2033.7	2033.7	2016.2	1990.0	1981.3	1931.1	1880.9	1843.8	1830.7	1815.5	1815.5
25°	2297.7	2295.5	2271.5	2241.0	2203.9	2151.5	2090.4	2040.2	2007.5	1972.6	1959.5
27.5°	2614.1	2607.6	2574.8	2537.7	2467.9	2402.4	2330.4	2278.1	2221.3	2177.7	2138.4
30°	2985.1	2978.5	2921.8	2852.0	2779.9	2714.5	2609.7	2546.5	2457.0	2404.6	2361.0
32.5°	3414.9	3408.4	3305.8	3238.2	3161.8	3081.1	2956.7	2856.3	2742.9	2668.7	2607.6
35°	3962.6	3936.4	3790.2	3696.4	3576.4	3495.7	3364.7	3229.4	3096.3	2991.6	2902.1
37.5°	4554.0	4523.4	4394.7	4255.0	4137.2	4039.0	3853.5	3683.3	3526.2	3382.2	3270.9
40°	5171.5	5090.7	4953.3	4850.7	4770.0	4676.2	4482.0	4303.0	4056.5	3895.0	3727.0
42.5°	5599.2	5520.6	5424.6	5357.0	5317.7	5245.7	5136.6	4981.6	4761.3	4765.6	4322.7
45°	5880.7	5765.0	5699.5	5703.9	5719.2	5719.2	5699.5	5675.5	5579.5	5645.0	5274.0
47.5°	5780.3	5703.9	5662.4	5749.7	5858.8	5967.9	6094.5	6232.0	6389.1	6574.5	6118.5
50°	5191.1	5219.5	5239.1	5424.6	5658.1	5906.8	6197.1	6572.4	7011.0	7096.1	6875.7
52.5°	4250.7	4311.8	4377.2	4660.9	4968.6	5398.4	5906.8	6526.5	7115.7	7462.6	7440.8
55°	3301.5	3377.8	3517.5	3729.1	3973.5	4379.4	5007.8	5963.6	6882.2	7434.3	7770.3
57.5°	2350.1	2461.4	2644.7	2939.2	3155.3	3384.4	3849.2	4909.6	5915.6	6943.3	7715.8
60°	1562.4	1614.7	1734.7	2101.3	2465.7	2705.8	3035.2	3419.3	4241.9	5658.1	7152.8
62.5°	1108.5	1143.4	1217.6	1383.4	1712.9	2147.1	2345.7	2522.5	2786.5	3639.7	5743.2
63°	1047.4	1077.9	1139.0	1278.7	1575.4	2025.0	2227.9	2389.4	2581.4	3255.6	5433.3
65°	868.5	881.6	914.3	981.9	1141.2	1514.4	1846.0	1944.2	1976.9	2092.6	3404.0
67.5°	733.2	741.9	752.8	772.4	835.7	1008.1	1376.9	1501.3	1464.2	1385.6	1682.4
70°	637.2	643.7	661.2	685.2	707.0	750.6	947.0	1132.5	1091.0	984.1	1029.9
72.5°	508.4	519.3	539.0	580.4	624.1	680.8	728.8	844.5	818.3	715.7	726.6
75°	401.5	408.0	425.5	456.1	497.5	563.0	656.8	696.1	624.1	528.1	528.1
77.5°	318.6	325.1	340.4	364.4	390.6	436.4	501.9	604.4	560.8	397.1	395.0
80°	240.0	246.6	261.8	283.7	309.9	342.6	381.9	427.7	515.0	371.0	296.8
82.5°	176.7	178.9	205.1	220.4	229.1	255.3	288.0	314.2	353.5	342.6	264.0
85°	133.1	130.9	148.4	159.3	161.5	168.0	187.7	213.8	231.3	222.6	205.1
87.5°	74.2	65.5	76.4	87.3	87.3	89.5	93.8	109.1	124.4	120.0	109.1
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°	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8
2.5°	1405.2	1405.2	1403.1	1403.1	1405.2	1405.2	1403.1	1409.6	1414.0	1414.0	1416.2
5°	1411.8	1414.0	1411.8	1411.8	1414.0	1414.0	1416.2	1422.7	1429.2	1433.6	1440.2
7.5°	1431.4	1433.6	1431.4	1431.4	1433.6	1435.8	1440.2	1448.9	1453.3	1462.0	1472.9
10°	1453.3	1455.4	1453.3	1455.4	1457.6	1459.8	1466.3	1472.9	1479.4	1488.2	1505.6
12.5°	1492.5	1494.7	1490.3	1492.5	1499.1	1499.1	1503.4	1507.8	1518.7	1529.6	1547.1
15°	1547.1	1547.1	1542.7	1544.9	1551.4	1551.4	1553.6	1558.0	1571.1	1584.2	1601.6
17.5°	1610.4	1614.7	1612.5	1614.7	1619.1	1621.3	1621.3	1625.6	1634.4	1643.1	1660.5
20°	1695.5	1697.6	1693.3	1697.6	1702.0	1697.6	1693.3	1691.1	1695.5	1699.8	1719.5
22.5°	1811.1	1808.9	1798.0	1798.0	1798.0	1789.3	1778.4	1765.3	1765.3	1758.7	1774.0
25°	1948.6	1942.0	1926.8	1928.9	1913.7	1900.6	1880.9	1861.3	1843.8	1837.3	1839.5
27.5°	2110.1	2097.0	2081.7	2077.3	2062.0	2038.0	2005.3	1968.2	1939.9	1918.0	1913.7
30°	2313.0	2284.6	2258.4	2254.1	2230.1	2190.8	2138.4	2088.2	2040.2	2003.1	1990.0
32.5°	2553.0	2509.4	2467.9	2463.5	2424.3	2371.9	2308.6	2238.8	2169.0	2110.1	2081.7
35°	2834.5	2769.0	2729.8	2718.8	2662.1	2596.7	2526.8	2437.4	2339.2	2256.3	2203.9
37.5°	3177.1	3109.4	3041.8	3044.0	2965.4	2889.0	2795.2	2686.1	2561.7	2446.1	2371.9
40°	3600.4	3504.4	3417.1	3397.5	3329.8	3222.9	3120.3	2993.8	2841.0	2688.3	2581.4
42.5°	4113.2	3956.1	3836.1	3818.6	3729.1	3598.2	3473.8	3305.8	3150.9	2965.4	2836.7
45°	4695.8	4444.9	4300.8	4274.7	4130.6	3997.5	3847.0	3668.0	3478.2	3268.7	3116.0
47.5°	5420.2	5062.4	4818.0	4774.3	4575.8	4401.2	4244.1	4045.5	3818.6	3585.1	3417.1
50°	6264.7	5736.6	5407.1	5339.5	5073.3	4868.2	4667.4	4418.7	4176.5	3932.1	3737.9
52.5°	7111.3	6544.0	6105.4	6022.5	5629.7	5354.8	5090.7	4842.0	4556.1	4313.9	4093.5
55°	7792.1	7414.6	6906.2	6790.6	6227.6	5854.5	5507.5	5223.9	4940.2	4748.2	4488.5
57.5°	8202.4	8182.7	7781.2	7621.9	6851.7	6299.6	5913.4	5590.4	5315.5	5234.8	4890.0
60°	8191.5	8699.9	8527.5	8407.5	7482.3	6755.7	6253.8	5904.7	5677.7	5769.4	5293.7
62.5°	7691.8	8721.7	8929.0	8896.3	8154.4	7122.2	6533.1	6173.1	6053.0	6325.8	5712.6
63°	7510.7	8671.5	8946.4	8933.4	8283.1	7192.1	6581.1	6225.4	6127.2	6467.6	5789.0
65°	6347.6	8232.9	8734.8	8793.7	8560.2	7432.1	6692.4	6358.5	6347.6	6784.0	5970.1
67.5°	3868.8	6956.4	7781.2	7894.7	8169.6	7508.5	6629.1	6312.7	6469.8	6829.9	5915.6
70°	1654.0	4591.1	6253.8	6437.1	7109.2	7128.8	6448.0	6125.0	6441.4	6472.0	5527.2
72.5°	979.7	2164.6	4257.2	4656.5	5625.4	6133.8	6033.4	5797.7	6068.3	5684.3	4706.7
75°	693.9	1012.5	2162.4	2587.9	3916.8	4682.7	5068.9	5178.0	5167.1	4508.1	3532.8
77.5°	497.5	650.3	912.1	1075.8	2186.4	3006.9	3478.2	3796.8	3694.2	3017.8	2177.7
80°	346.9	449.5	558.6	593.5	1014.7	1544.9	1832.9	1972.6	1911.5	1507.8	975.4
82.5°	250.9	294.6	360.0	381.9	510.6	713.5	848.8	748.4	717.9	556.4	421.1
85°	194.2	189.8	224.8	233.5	298.9	373.1	381.9	296.8	259.7	231.3	235.7
87.5°	137.5	117.8	120.0	124.4	154.9	198.6	194.2	122.2	104.7	111.3	126.6
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8	1411.8
2.5°	1420.5	1422.7	1427.1	1429.2	1433.6	1433.6	1438.0	1440.2	1444.5	1448.9	1451.1
5°	1446.7	1453.3	1462.0	1466.3	1475.1	1481.6	1490.3	1494.7	1503.4	1510.0	1518.7
7.5°	1486.0	1496.9	1507.8	1520.9	1534.0	1544.9	1553.6	1564.5	1579.8	1590.7	1597.3
10°	1523.1	1538.4	1558.0	1573.3	1592.9	1608.2	1621.3	1640.9	1658.4	1673.6	1682.4
12.5°	1571.1	1590.7	1610.4	1634.4	1660.5	1680.2	1699.8	1726.0	1750.0	1767.5	1776.2
15°	1627.8	1651.8	1673.6	1702.0	1732.6	1758.7	1787.1	1815.5	1832.9	1832.9	1828.6
17.5°	1686.7	1706.4	1732.6	1765.3	1806.7	1839.5	1854.8	1859.1	1852.6	1837.3	1826.4
20°	1745.6	1763.1	1791.5	1830.7	1874.4	1880.9	1865.7	1846.0	1826.4	1800.2	1782.7
22.5°	1793.7	1817.7	1861.3	1907.1	1909.3	1872.2	1830.7	1798.0	1767.5	1736.9	1704.2
25°	1850.4	1883.1	1942.0	1959.5	1902.8	1832.9	1774.0	1726.0	1675.8	1625.6	1588.5
27.5°	1920.2	1968.2	2027.1	1976.9	1865.7	1767.5	1686.7	1614.7	1549.3	1479.4	1438.0
30°	1994.4	2068.6	2081.7	1950.8	1802.4	1675.8	1566.7	1457.6	1374.7	1311.4	1287.4
32.5°	2083.9	2179.9	2101.3	1904.9	1717.3	1551.4	1405.2	1274.3	1204.5	1165.2	1154.3
35°	2219.2	2297.7	2112.2	1856.9	1619.1	1403.1	1219.8	1115.0	1071.4	1045.2	1032.1
37.5°	2413.4	2411.2	2110.1	1798.0	1505.6	1241.6	1071.4	997.2	962.3	940.5	916.5
40°	2640.3	2498.5	2097.0	1712.9	1352.9	1086.7	968.8	899.0	866.3	840.1	811.7
42.5°	2865.0	2557.4	2059.9	1586.4	1163.0	975.4	894.6	831.4	796.5	768.1	728.8
45°	3059.2	2581.4	1987.9	1411.8	992.8	888.1	846.6	792.1	750.6	707.0	676.4
47.5°	3212.0	2577.0	1872.2	1206.7	879.4	827.0	807.4	770.3	720.1	665.5	626.3
50°	3340.7	2544.3	1715.1	1025.6	803.0	772.4	765.9	755.0	674.3	628.4	604.4
52.5°	3458.6	2496.3	1547.1	903.4	737.5	711.4	724.4	713.5	656.8	617.5	593.5
55°	3620.0	2463.5	1381.2	809.5	661.2	654.6	665.5	680.8	645.9	608.8	582.6
57.5°	3809.9	2481.0	1254.7	704.8	589.2	593.5	630.6	652.4	635.0	595.7	569.5
60°	4028.1	2533.4	1143.4	604.4	530.2	541.2	595.7	626.3	624.1	578.2	547.7
62.5°	4272.5	2587.9	966.7	528.1	480.1	497.5	554.2	593.5	600.1	560.8	523.7
63°	4320.5	2592.3	920.8	512.8	471.3	491.0	543.3	584.8	593.5	556.4	519.3
65°	4438.3	2553.0	741.9	471.3	436.4	458.2	510.6	547.7	565.2	532.4	501.9
67.5°	4340.1	2232.2	558.6	421.1	408.0	423.3	469.1	504.1	519.3	504.1	473.5
70°	3969.2	1623.5	436.4	375.3	377.5	388.4	423.3	456.1	473.5	469.1	440.8
72.5°	3196.7	920.8	364.4	336.0	342.6	355.7	379.7	410.2	425.5	423.3	403.7
75°	2105.7	471.3	307.7	301.1	305.5	316.4	333.9	357.9	375.3	373.1	364.4
77.5°	1043.0	327.3	264.0	266.2	268.4	277.1	290.2	312.0	322.9	325.1	322.9
80°	429.9	255.3	226.9	229.1	231.3	237.8	246.6	266.2	272.8	277.1	279.3
82.5°	257.5	194.2	181.1	185.5	187.7	194.2	200.7	218.2	224.8	231.3	231.3
85°	170.2	135.3	130.9	135.3	139.7	144.0	146.2	157.1	168.0	176.7	181.1
87.5°	91.6	80.7	78.6	80.7	80.7	85.1	89.5	100.4	113.5	122.2	126.6
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):

	160°	165°	170°	175°	180°
0°	1411.8	1411.8	1411.8	1411.8	1411.8
2.5°	1446.7	1448.9	1446.7	1448.9	1451.1
5°	1518.7	1523.1	1520.9	1520.9	1529.6
7.5°	1601.6	1610.4	1610.4	1614.7	1619.1
10°	1691.1	1699.8	1706.4	1706.4	1712.9
12.5°	1780.6	1784.9	1791.5	1791.5	1791.5
15°	1826.4	1824.2	1822.0	1819.8	1819.8
17.5°	1819.8	1811.1	1806.7	1802.4	1804.6
20°	1771.8	1756.6	1752.2	1745.6	1750.0
22.5°	1688.9	1667.1	1658.4	1647.5	1651.8
25°	1564.5	1538.4	1534.0	1520.9	1527.4
27.5°	1420.5	1407.4	1405.2	1403.1	1414.0
30°	1285.2	1289.6	1291.8	1296.1	1307.1
32.5°	1160.9	1169.6	1171.8	1173.9	1189.2
35°	1038.7	1027.8	1038.7	1034.3	1047.4
37.5°	905.6	896.8	888.1	877.2	885.9
40°	794.3	779.0	752.8	739.7	741.9
42.5°	707.0	687.3	665.5	652.4	652.4
45°	650.3	626.3	606.6	597.9	597.9
47.5°	606.6	595.7	584.8	578.2	578.2
50°	589.2	576.1	569.5	565.2	565.2
52.5°	576.1	563.0	556.4	552.1	547.7
55°	565.2	545.5	539.0	536.8	536.8
57.5°	549.9	532.4	523.7	521.5	521.5
60°	525.9	512.8	504.1	501.9	501.9
62.5°	501.9	488.8	480.1	480.1	480.1
63°	497.5	482.2	475.7	475.7	475.7
65°	477.9	462.6	456.1	456.1	453.9
67.5°	451.7	436.4	432.0	432.0	427.7
70°	421.1	408.0	403.7	405.9	397.1
72.5°	390.6	377.5	371.0	371.0	362.2
75°	355.7	342.6	333.9	331.7	322.9
77.5°	316.4	305.5	296.8	288.0	283.7
80°	274.9	266.2	255.3	248.8	242.2
82.5°	231.3	222.6	216.0	224.8	192.0
85°	181.1	172.4	163.7	176.7	137.5
87.5°	133.1	128.7	120.0	104.7	91.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)