

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: P265583

Luminaire Tested: **ARCH-L-AF72-100-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265583
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-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 12194.9 lumens
Efficiency: N/A
Efficacy: 119.6 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

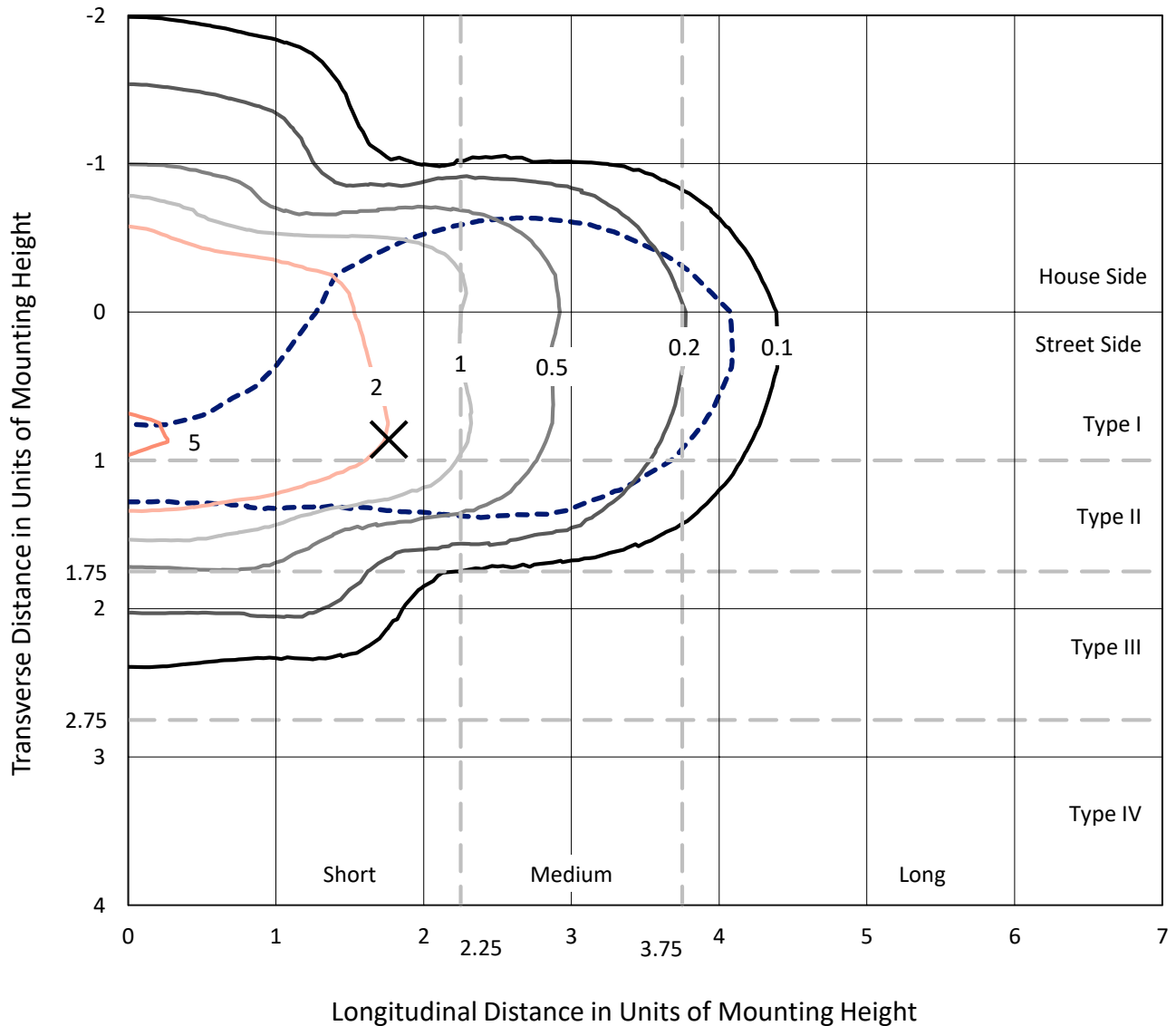
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

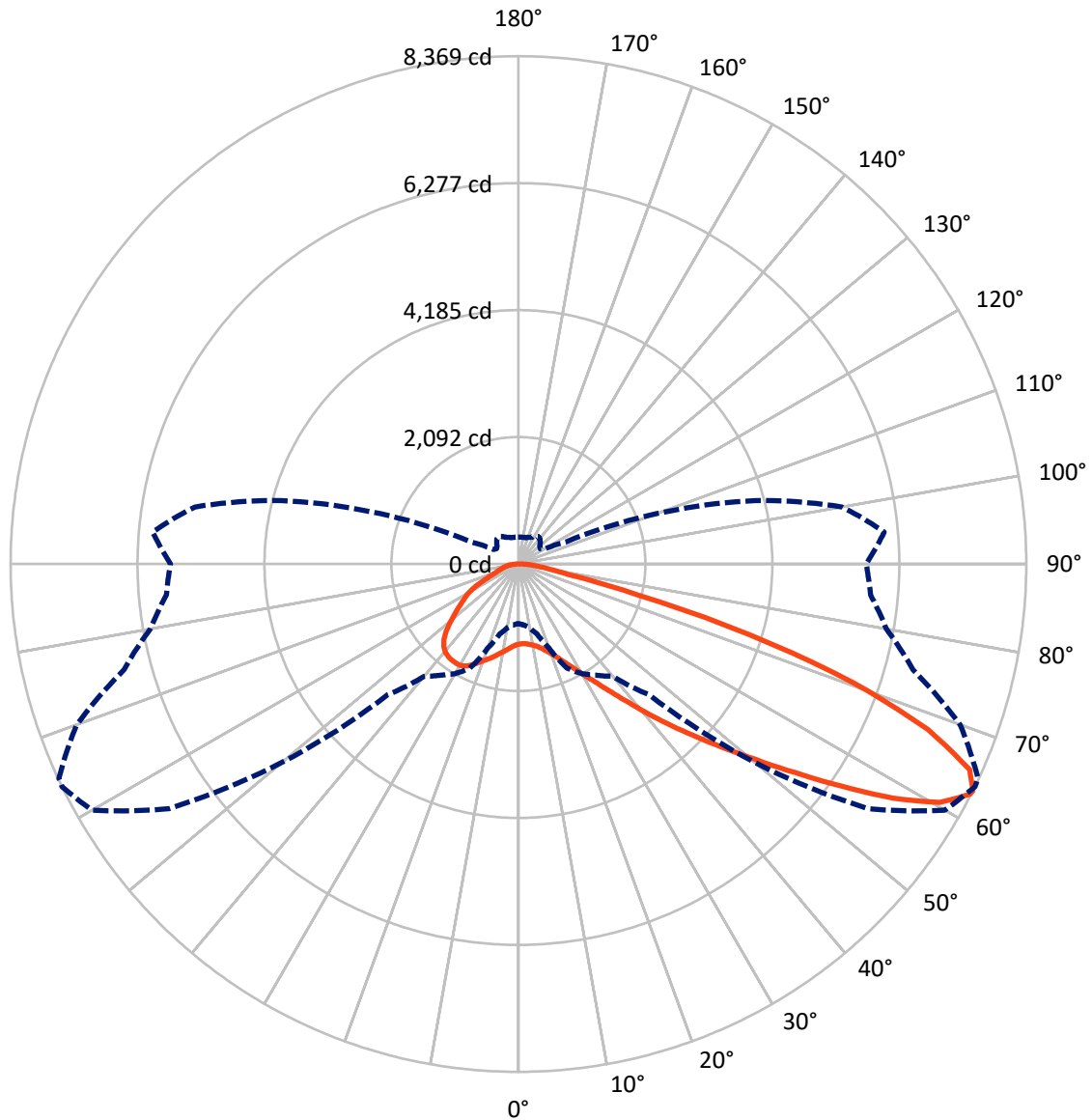


Based on 20 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - Semi-Cutoff

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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	3584.9	0.0	3584.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	8610.0	0.0	8610.0
	% Fixture	70.6	0.0	70.6
Total	Lumens	12194.9	0.0	12194.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.1
10°-20°	439.2	3.6
20°-30°	824.4	6.8
30°-40°	1381.8	11.3
40°-50°	2318.4	19.0
50°-60°	2939.1	24.1
60°-70°	2592.7	21.3
70°-80°	1338.4	11.0
80°-90°	229.0	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°	12194.9	100.0
0°-180°	12194.9	100.0



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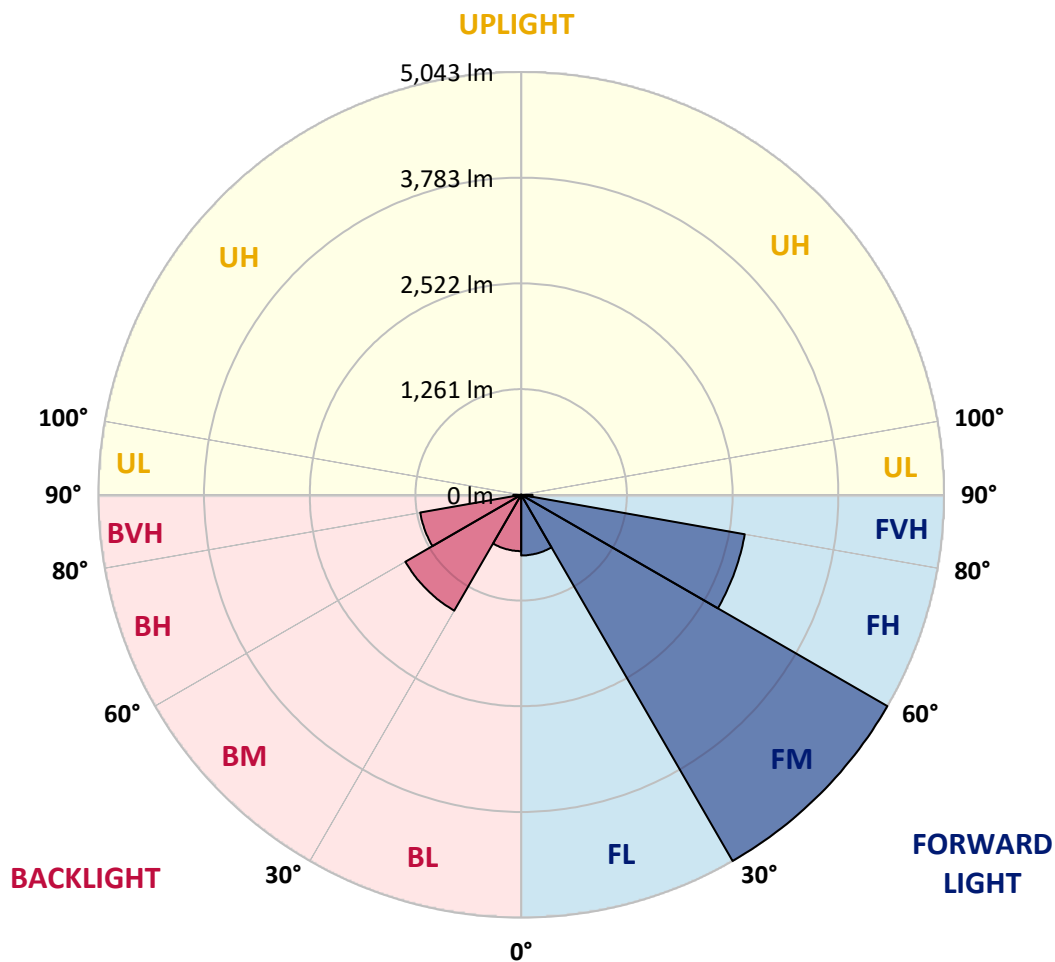
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	723.8	5.9			
FM	(30°-60°)	5043.5	41.4			
FH	(60°-80°)	2708.0	22.2			G2/5000
FVH	(80°-90°)	134.8	1.1			G2/225
BL	(0°-30°)	671.7	5.5	B2/1000		
BM	(30°-60°)	1595.8	13.1	B2/2500		
BH	(60°-80°)	1223.1	10.0	B3/2500		G3/2500
BVH	(80°-90°)	94.2	0.8			G1/100
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°	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7
2.5°	1312.6	1310.4	1310.4	1310.4	1310.4	1308.4	1310.4	1314.6	1312.6	1310.4	1314.6
5°	1316.6	1314.6	1314.6	1314.6	1316.6	1314.6	1316.6	1322.8	1318.6	1318.6	1322.8
7.5°	1326.8	1324.8	1326.8	1324.8	1324.8	1324.8	1326.8	1332.9	1330.8	1332.9	1339.1
10°	1339.1	1339.1	1339.1	1339.1	1339.1	1339.1	1343.1	1347.3	1349.3	1351.3	1359.5
12.5°	1375.8	1375.8	1375.8	1373.8	1373.8	1367.7	1375.8	1379.8	1384.0	1388.2	1394.2
15°	1453.4	1453.4	1451.3	1443.1	1443.1	1430.9	1432.9	1435.0	1435.0	1439.1	1443.1
17.5°	1555.4	1553.3	1549.3	1543.2	1535.1	1520.7	1516.7	1512.6	1506.5	1504.4	1504.4
20°	1698.3	1696.3	1688.2	1671.7	1661.5	1639.1	1622.8	1606.4	1600.4	1590.2	1588.2
22.5°	1902.5	1902.5	1886.1	1861.6	1853.5	1806.5	1759.6	1724.8	1712.6	1698.3	1698.3
25°	2149.5	2147.4	2125.0	2096.4	2061.7	2012.7	1955.5	1908.5	1877.9	1845.3	1833.0
27.5°	2445.5	2439.3	2408.6	2374.0	2308.6	2247.4	2180.0	2131.0	2078.0	2037.1	2000.4
30°	2792.4	2786.4	2733.3	2668.0	2600.6	2539.4	2441.4	2382.1	2298.5	2249.4	2208.7
32.5°	3194.6	3188.4	3092.5	3029.3	2957.8	2882.3	2765.9	2672.0	2565.9	2496.5	2439.3
35°	3706.9	3682.4	3545.7	3457.9	3345.6	3270.1	3147.7	3021.1	2896.6	2798.6	2714.9
37.5°	4260.1	4231.6	4111.2	3980.5	3870.3	3778.5	3604.9	3445.7	3298.7	3164.0	3059.8
40°	4837.8	4762.3	4633.6	4537.8	4462.2	4374.4	4192.7	4025.3	3794.7	3643.6	3486.5
42.5°	5237.8	5164.4	5074.6	5011.4	4974.5	4907.3	4805.2	4660.2	4454.1	4458.2	4043.8
45°	5501.2	5393.1	5331.8	5335.9	5350.1	5350.1	5331.8	5309.3	5219.5	5280.7	4933.8
47.5°	5407.3	5335.9	5297.0	5378.7	5480.7	5582.8	5701.3	5829.9	5976.9	6150.3	5723.7
50°	4856.1	4882.7	4901.2	5074.6	5293.1	5525.7	5797.2	6148.3	6558.6	6638.2	6432.0
52.5°	3976.3	4033.6	4094.8	4360.2	4648.0	5050.1	5525.7	6105.4	6656.6	6981.2	6960.7
55°	3088.5	3159.9	3290.5	3488.6	3717.1	4096.8	4684.8	5578.8	6438.2	6954.6	7268.9
57.5°	2198.4	2302.5	2474.0	2749.6	2951.7	3165.9	3600.8	4592.9	5533.9	6495.4	7217.9
60°	1461.5	1510.5	1622.8	1965.8	2306.7	2531.2	2839.5	3198.7	3968.3	5293.1	6691.2
62.5°	1037.0	1069.6	1139.1	1294.2	1602.3	2008.6	2194.4	2359.7	2606.7	3404.8	5372.7
63°	979.8	1008.3	1065.5	1196.3	1473.8	1894.3	2084.2	2235.3	2414.9	3045.6	5082.8
65°	812.4	824.6	855.2	918.5	1067.5	1416.6	1726.9	1818.8	1849.4	1957.5	3184.4
67.5°	685.9	694.0	704.2	722.5	781.9	943.1	1288.0	1404.4	1369.6	1296.3	1573.8
70°	596.0	602.1	618.6	641.0	661.4	702.1	885.9	1059.5	1020.7	920.7	963.5
72.5°	475.7	485.9	504.2	542.9	583.8	636.9	681.8	790.0	765.4	669.5	679.7
75°	375.6	381.7	398.0	426.6	465.4	526.6	614.4	651.2	583.8	494.0	494.0
77.5°	298.0	304.2	318.4	340.8	365.4	408.3	469.5	565.5	524.6	371.4	369.5
80°	224.5	230.7	245.0	265.4	289.9	320.4	357.3	400.0	481.8	347.0	277.7
82.5°	165.4	167.4	191.9	206.3	214.3	238.8	269.4	293.9	330.7	320.4	247.0
85°	124.5	122.4	138.8	148.9	151.1	157.2	175.6	200.1	216.4	208.1	191.9
87.5°	69.3	61.3	71.4	81.7	81.7	83.7	87.8	102.0	116.3	112.3	102.0
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°	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7
2.5°	1314.6	1314.6	1312.6	1312.6	1314.6	1314.6	1312.6	1318.6	1322.8	1322.8	1324.8
5°	1320.7	1322.8	1320.7	1320.7	1322.8	1322.8	1324.8	1330.8	1337.0	1341.1	1347.3
7.5°	1339.1	1341.1	1339.1	1339.1	1341.1	1343.1	1347.3	1355.5	1359.5	1367.7	1377.9
10°	1359.5	1361.6	1359.5	1361.6	1363.5	1365.7	1371.7	1377.9	1384.0	1392.2	1408.5
12.5°	1396.2	1398.3	1394.2	1396.2	1402.3	1402.3	1406.4	1410.5	1420.7	1430.9	1447.3
15°	1447.3	1447.3	1443.1	1445.3	1451.3	1451.3	1453.4	1457.5	1469.6	1481.9	1498.4
17.5°	1506.5	1510.5	1508.6	1510.5	1514.6	1516.7	1516.7	1520.7	1528.9	1537.1	1553.3
20°	1586.0	1588.2	1584.0	1588.2	1592.2	1588.2	1584.0	1581.9	1586.0	1590.2	1608.5
22.5°	1694.3	1692.1	1681.9	1681.9	1681.9	1673.8	1663.7	1651.4	1651.4	1645.2	1659.6
25°	1822.8	1816.7	1802.4	1804.4	1790.2	1777.9	1759.6	1741.3	1724.8	1718.7	1720.9
27.5°	1973.9	1961.7	1947.3	1943.4	1929.0	1906.6	1875.9	1841.3	1814.7	1794.3	1790.2
30°	2163.7	2137.2	2112.8	2108.6	2086.1	2049.5	2000.4	1953.5	1908.5	1873.9	1861.6
32.5°	2388.4	2347.5	2308.6	2304.6	2267.9	2218.9	2159.6	2094.4	2029.0	1973.9	1947.3
35°	2651.5	2590.4	2553.6	2543.5	2490.3	2429.0	2363.8	2280.1	2188.2	2110.7	2061.7
37.5°	2972.1	2908.8	2845.6	2847.5	2774.1	2702.6	2614.8	2512.7	2396.5	2288.3	2218.9
40°	3368.0	3278.3	3196.6	3178.3	3115.1	3014.9	2919.0	2800.6	2657.7	2514.8	2414.9
42.5°	3847.8	3700.8	3588.5	3572.2	3488.6	3366.0	3249.7	3092.5	2947.6	2774.1	2653.7
45°	4392.8	4158.1	4023.4	3998.9	3864.1	3739.6	3598.8	3431.3	3253.8	3057.8	2914.9
47.5°	5070.6	4735.8	4507.2	4466.4	4280.6	4117.2	3970.2	3784.5	3572.2	3353.8	3196.6
50°	5860.5	5366.6	5058.3	4994.9	4745.9	4554.0	4366.3	4133.6	3907.0	3678.4	3496.7
52.5°	6652.5	6121.8	5711.5	5633.9	5266.6	5009.3	4762.3	4529.6	4262.2	4035.5	3829.5
55°	7289.3	6936.3	6460.6	6352.5	5825.8	5476.7	5152.1	4886.8	4621.4	4441.8	4198.9
57.5°	7673.1	7654.7	7279.1	7130.1	6409.5	5893.2	5531.9	5229.8	4972.6	4897.0	4574.4
60°	7662.9	8138.6	7977.3	7865.0	6999.6	6319.8	5850.3	5523.7	5311.4	5397.1	4952.1
62.5°	7195.5	8158.9	8352.9	8322.3	7628.2	6662.6	6111.6	5774.8	5662.5	5917.7	5344.0
63°	7026.1	8112.1	8369.1	8356.9	7748.7	6728.0	6156.4	5823.7	5731.8	6050.4	5415.5
65°	5938.1	7701.7	8171.3	8226.3	8007.9	6952.6	6260.6	5948.2	5938.1	6346.3	5584.9
67.5°	3619.2	6507.6	7279.1	7385.3	7642.5	7023.9	6201.4	5905.4	6052.4	6389.1	5533.9
70°	1547.3	4294.8	5850.3	6021.8	6650.4	6668.8	6031.9	5729.8	6025.8	6054.3	5170.6
72.5°	916.5	2024.9	3982.5	4356.2	5262.5	5738.1	5644.1	5423.6	5676.7	5317.4	4403.0
75°	649.1	947.2	2023.0	2420.9	3664.0	4380.6	4741.9	4843.9	4833.7	4217.3	3304.9
77.5°	465.4	608.3	853.3	1006.3	2045.4	2812.9	3253.8	3551.8	3455.9	2823.1	2037.1
80°	324.6	420.4	522.5	555.2	949.1	1445.3	1714.7	1845.3	1788.2	1410.5	912.5
82.5°	234.7	275.6	336.9	357.3	477.7	667.5	794.0	700.1	671.6	520.5	393.9
85°	181.6	177.5	210.3	218.4	279.6	349.0	357.3	277.7	242.9	216.4	220.4
87.5°	128.5	110.2	112.3	116.3	144.9	185.8	181.6	114.4	97.9	104.2	118.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7	1320.7
2.5°	1328.9	1330.8	1335.1	1337.0	1341.1	1341.1	1345.2	1347.3	1351.3	1355.5	1357.5
5°	1353.3	1359.5	1367.7	1371.7	1379.8	1386.1	1394.2	1398.3	1406.4	1412.6	1420.7
7.5°	1390.0	1400.3	1410.5	1422.7	1435.0	1445.3	1453.4	1463.6	1477.9	1488.1	1494.2
10°	1424.8	1439.1	1457.5	1471.8	1490.1	1504.4	1516.7	1535.1	1551.4	1565.7	1573.8
12.5°	1469.6	1488.1	1506.5	1528.9	1553.3	1571.8	1590.2	1614.7	1637.2	1653.4	1661.5
15°	1522.7	1545.3	1565.7	1592.2	1620.8	1645.2	1671.7	1698.3	1714.7	1714.7	1710.6
17.5°	1578.0	1596.3	1620.8	1651.4	1690.3	1720.9	1735.0	1739.2	1733.0	1718.7	1708.5
20°	1632.9	1649.4	1675.9	1712.6	1753.4	1759.6	1745.2	1726.9	1708.5	1684.1	1667.8
22.5°	1677.9	1700.4	1741.3	1784.0	1786.1	1751.4	1712.6	1681.9	1653.4	1624.9	1594.2
25°	1731.0	1761.7	1816.7	1833.0	1780.0	1714.7	1659.6	1614.7	1567.7	1520.7	1486.1
27.5°	1796.3	1841.3	1896.3	1849.4	1745.2	1653.4	1578.0	1510.5	1449.2	1384.0	1345.2
30°	1865.7	1935.0	1947.3	1824.8	1686.1	1567.7	1465.7	1363.5	1286.1	1226.8	1204.4
32.5°	1949.4	2039.2	1965.8	1782.1	1606.4	1451.3	1314.6	1192.1	1126.7	1090.1	1079.9
35°	2076.0	2149.5	1975.9	1737.1	1514.6	1312.6	1141.0	1043.1	1002.2	977.7	965.5
37.5°	2257.6	2255.6	1973.9	1681.9	1408.5	1161.5	1002.2	932.9	900.2	879.8	857.3
40°	2469.9	2337.3	1961.7	1602.3	1265.6	1016.5	906.3	841.1	810.5	785.8	759.3
42.5°	2680.3	2392.4	1927.0	1484.0	1087.9	912.5	837.0	777.8	745.1	718.6	681.8
45°	2861.9	2414.9	1859.6	1320.7	928.8	830.8	792.0	741.0	702.1	661.4	632.8
47.5°	3004.7	2410.7	1751.4	1128.8	822.7	773.6	755.2	720.6	673.5	622.5	585.9
50°	3125.3	2380.1	1604.5	959.4	751.3	722.5	716.5	706.2	630.8	587.9	565.5
52.5°	3235.4	2335.2	1447.3	845.0	690.0	665.5	677.7	667.5	614.4	577.7	555.2
55°	3386.5	2304.6	1292.1	757.4	618.6	612.4	622.5	636.9	604.2	569.5	545.0
57.5°	3564.0	2321.0	1173.7	659.4	551.1	555.2	589.9	610.4	594.0	557.3	532.8
60°	3768.2	2369.9	1069.6	565.5	496.0	506.3	557.3	585.9	583.8	540.9	512.4
62.5°	3996.7	2420.9	904.2	494.0	449.2	465.4	518.5	555.2	561.4	524.6	489.8
63°	4041.7	2425.1	861.5	479.6	440.9	459.4	508.4	547.1	555.2	520.5	485.9
65°	4152.0	2388.4	694.0	440.9	408.3	428.8	477.7	512.4	528.7	498.1	469.5
67.5°	4060.1	2088.2	522.5	393.9	381.7	396.1	438.9	471.5	485.9	471.5	443.0
70°	3713.1	1518.8	408.3	351.1	353.2	363.4	396.1	426.6	443.0	438.9	412.3
72.5°	2990.5	861.5	340.8	314.3	320.4	332.7	355.2	383.8	398.0	396.1	377.6
75°	1969.9	440.9	287.7	281.7	285.8	296.0	312.3	334.8	351.1	349.0	340.8
77.5°	975.6	306.2	247.0	249.0	251.0	259.3	271.5	291.9	302.1	304.2	302.1
80°	402.1	238.8	212.3	214.3	216.4	222.5	230.7	249.0	255.2	259.3	261.2
82.5°	240.8	181.6	169.4	173.6	175.6	181.6	187.7	204.2	210.3	216.4	216.4
85°	159.2	126.5	122.4	126.5	130.7	134.7	136.7	147.0	157.2	165.4	169.4
87.5°	85.8	75.5	73.5	75.5	75.5	79.6	83.7	94.0	106.1	114.4	118.3
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):

	160°	165°	170°	175°	180°
0°	1320.7	1320.7	1320.7	1320.7	1320.7
2.5°	1353.3	1355.5	1353.3	1355.5	1357.5
5°	1420.7	1424.8	1422.7	1422.7	1430.9
7.5°	1498.4	1506.5	1506.5	1510.5	1514.6
10°	1581.9	1590.2	1596.3	1596.3	1602.3
12.5°	1665.6	1669.8	1675.9	1675.9	1675.9
15°	1708.5	1706.5	1704.4	1702.4	1702.4
17.5°	1702.4	1694.3	1690.3	1686.1	1688.2
20°	1657.6	1643.2	1639.1	1632.9	1637.2
22.5°	1579.9	1559.5	1551.4	1541.1	1545.3
25°	1463.6	1439.1	1435.0	1422.7	1428.9
27.5°	1328.9	1316.6	1314.6	1312.6	1322.8
30°	1202.3	1206.5	1208.4	1212.5	1222.8
32.5°	1086.0	1094.1	1096.1	1098.2	1112.6
35°	971.6	961.5	971.6	967.6	979.8
37.5°	847.1	838.9	830.8	820.6	828.7
40°	743.0	728.7	704.2	692.0	694.0
42.5°	661.4	642.9	622.5	610.4	610.4
45°	608.3	585.9	567.5	559.4	559.4
47.5°	567.5	557.3	547.1	540.9	540.9
50°	551.1	539.0	532.8	528.7	528.7
52.5°	539.0	526.6	520.5	516.4	512.4
55°	528.7	510.2	504.2	502.2	502.2
57.5°	514.4	498.1	489.8	487.9	487.9
60°	491.9	479.6	471.5	469.5	469.5
62.5°	469.5	457.2	449.2	449.2	449.2
63°	465.4	451.0	445.0	445.0	445.0
65°	447.0	432.8	426.6	426.6	424.5
67.5°	422.6	408.3	404.1	404.1	400.0
70°	393.9	381.7	377.6	379.7	371.4
72.5°	365.4	353.2	347.0	347.0	338.8
75°	332.7	320.4	312.3	310.3	302.1
77.5°	296.0	285.8	277.7	269.4	265.4
80°	257.3	249.0	238.8	232.8	226.6
82.5°	216.4	208.1	202.1	210.3	179.7
85°	169.4	161.2	153.2	165.4	128.5
87.5°	124.5	120.5	112.3	97.9	85.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)