

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: P265574

Luminaire Tested: **ARCH-L-AF72-90-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265574
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-AF72-90-D-U-T2U-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 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: 11325.3 lumens
Efficiency: N/A
Efficacy: 121.8 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

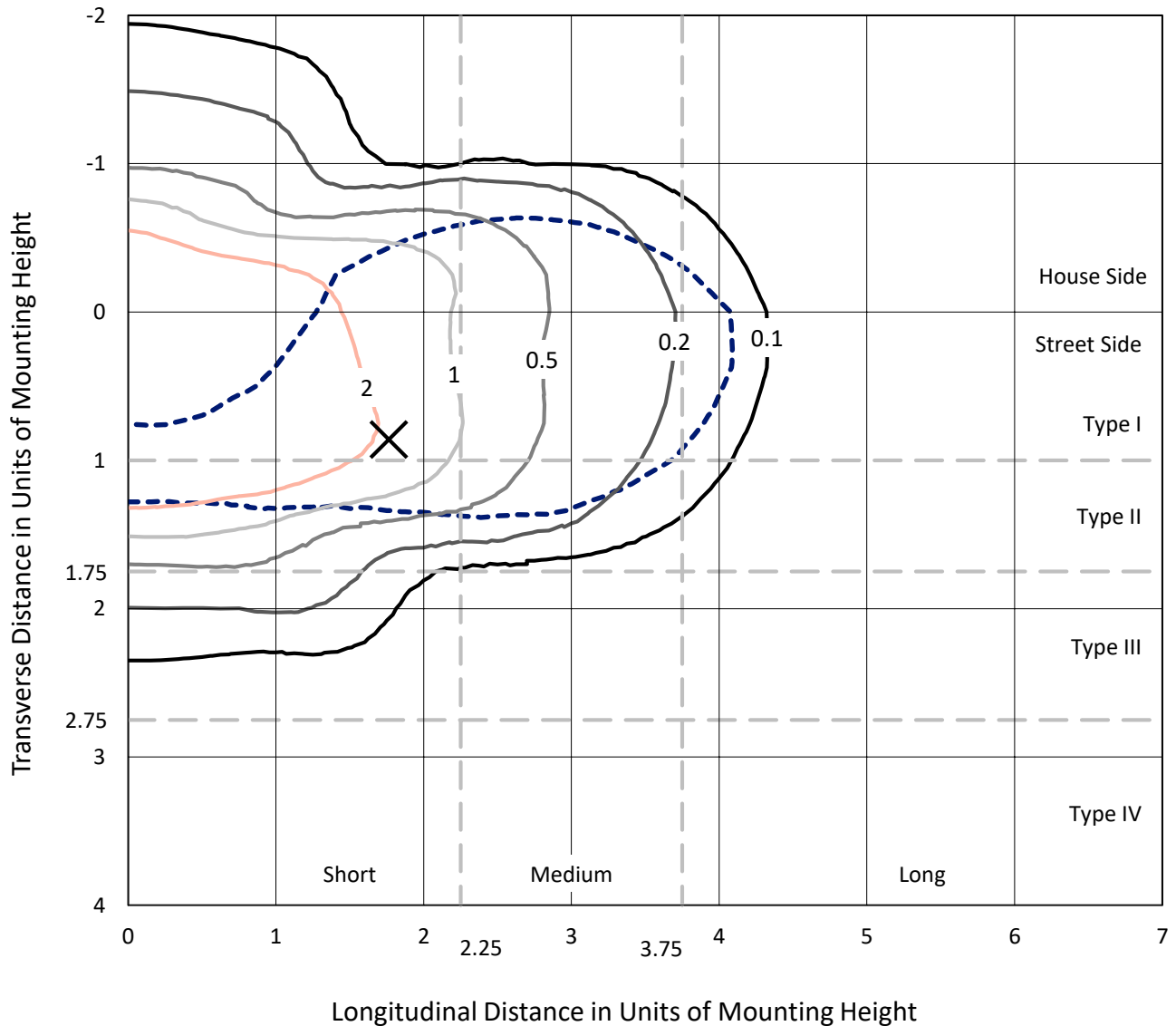
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

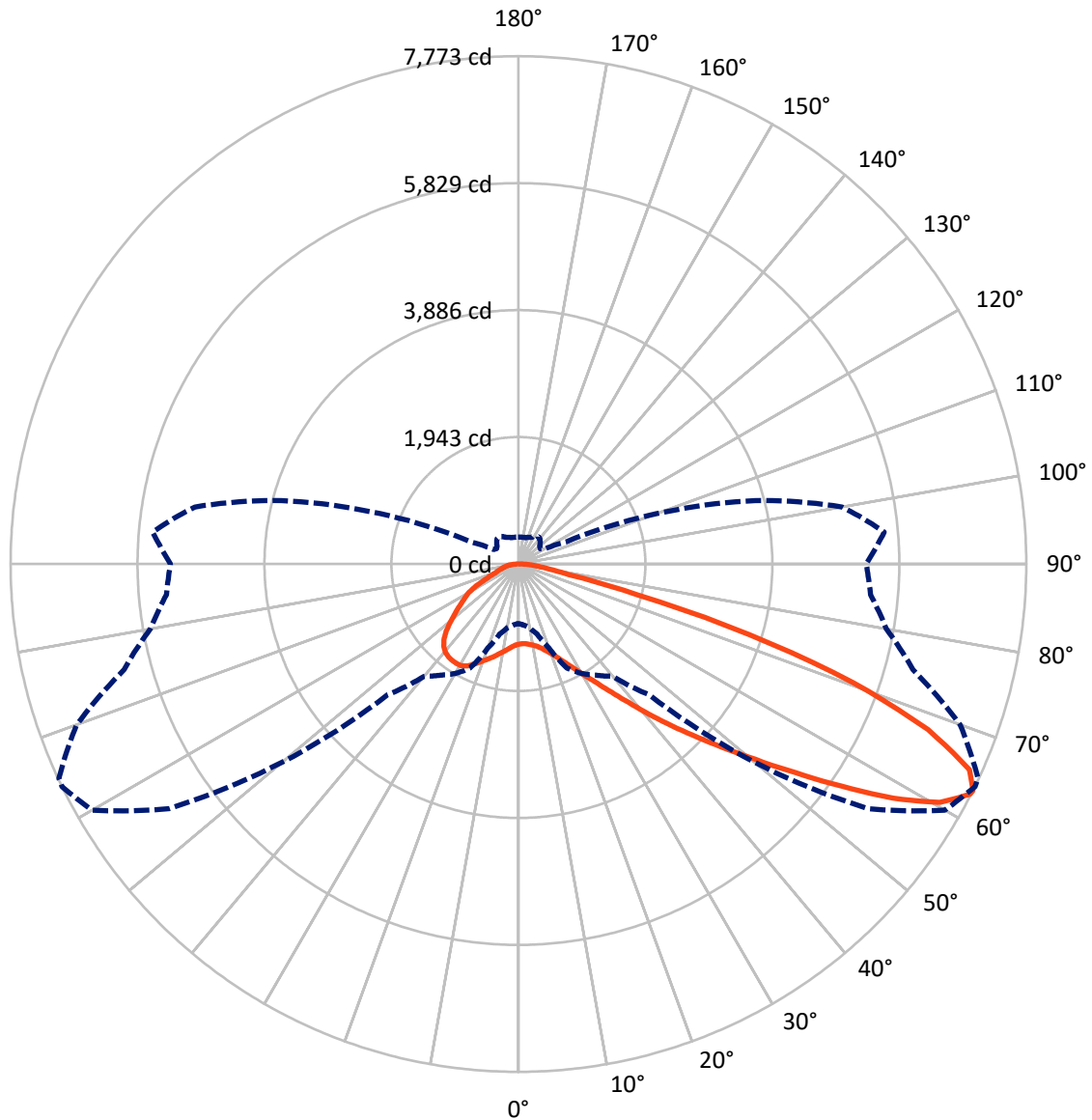
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5 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	3329.2	0.0	3329.2
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	7996.1	0.0	7996.1
	% Fixture	70.6	0.0	70.6
Total	Lumens	11325.3	0.0	11325.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	1.1
10°-20°	407.9	3.6
20°-30°	765.6	6.8
30°-40°	1283.3	11.3
40°-50°	2153.1	19.0
50°-60°	2729.5	24.1
60°-70°	2407.8	21.3
70°-80°	1243.0	11.0
80°-90°	212.7	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°	11325.3	100.0
0°-180°	11325.3	100.0



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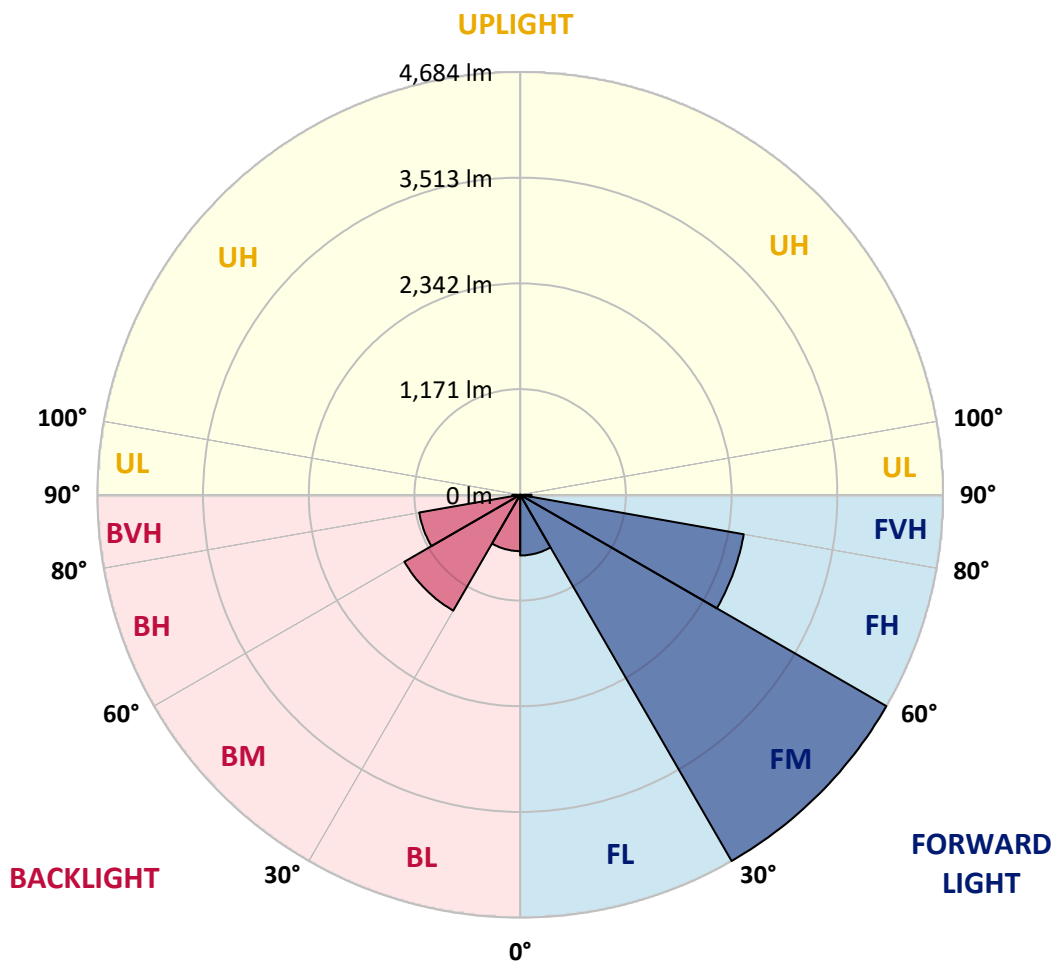
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	672.2	5.9			
FM	(30°-60°)	4683.9	41.4			
FH	(60°-80°)	2514.9	22.2			G2/5000
FVH	(80°-90°)	125.2	1.1			G2/225
BL	(0°-30°)	623.8	5.5	B2/1000		
BM	(30°-60°)	1482.0	13.1	B2/2500		
BH	(60°-80°)	1135.9	10.0	B3/2500		G3/2500
BVH	(80°-90°)	87.5	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°	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1218.9	1217.1	1217.1	1217.1	1217.1	1215.1	1217.1	1220.8	1218.9	1217.1	1220.8
5°	1222.8	1220.8	1220.8	1220.8	1222.8	1220.8	1222.8	1228.4	1224.6	1224.6	1228.4
7.5°	1232.3	1230.3	1232.3	1230.3	1230.3	1230.3	1232.3	1238.0	1236.0	1238.0	1243.7
10°	1243.7	1243.7	1243.7	1243.7	1243.7	1243.7	1247.3	1251.2	1253.0	1254.9	1262.6
12.5°	1277.7	1277.7	1277.7	1275.9	1275.9	1270.2	1277.7	1281.5	1285.3	1289.1	1294.7
15°	1349.8	1349.8	1347.8	1340.4	1340.4	1329.0	1330.7	1332.6	1332.6	1336.5	1340.4
17.5°	1444.6	1442.7	1438.8	1433.2	1425.6	1412.3	1408.5	1404.7	1399.0	1397.1	1397.1
20°	1577.2	1575.4	1567.7	1552.6	1543.1	1522.3	1507.0	1491.9	1486.2	1476.8	1474.8
22.5°	1766.7	1766.7	1751.7	1728.9	1721.3	1677.8	1634.0	1601.9	1590.4	1577.2	1577.2
25°	1996.3	1994.2	1973.4	1946.8	1914.6	1869.2	1816.2	1772.4	1744.1	1713.7	1702.4
27.5°	2271.1	2265.3	2236.9	2204.7	2144.1	2087.2	2024.6	1979.1	1929.7	1891.9	1857.9
30°	2593.3	2587.7	2538.4	2477.6	2415.2	2358.3	2267.3	2212.3	2134.6	2089.1	2051.2
32.5°	2966.8	2961.2	2872.1	2813.2	2746.8	2676.8	2568.8	2481.5	2382.9	2318.4	2265.3
35°	3442.7	3419.8	3292.8	3211.4	3107.1	3036.9	2923.2	2805.6	2690.1	2599.1	2521.4
37.5°	3956.3	3929.8	3817.9	3696.6	3594.3	3509.0	3347.9	3199.9	3063.5	2938.4	2841.7
40°	4492.9	4422.6	4303.3	4214.2	4144.1	4062.6	3893.9	3738.3	3524.1	3383.8	3237.9
42.5°	4864.4	4796.1	4712.8	4653.9	4619.9	4557.3	4462.5	4327.9	4136.4	4140.3	3755.5
45°	5108.9	5008.5	4951.5	4955.4	4968.6	4968.6	4951.5	4930.7	4847.3	4904.1	4582.0
47.5°	5021.7	4955.4	4919.4	4995.3	5089.9	5184.7	5294.7	5414.2	5550.6	5711.9	5315.6
50°	4509.9	4534.6	4551.6	4712.8	4915.5	5131.7	5383.8	5709.8	6091.0	6164.9	5973.4
52.5°	3692.8	3745.9	3802.9	4049.2	4316.5	4690.1	5131.7	5670.1	6182.0	6483.3	6464.5
55°	2868.2	2934.6	3055.9	3239.7	3452.0	3804.7	4350.8	5181.0	5979.1	6458.8	6750.7
57.5°	2041.7	2138.3	2297.7	2553.5	2741.2	2940.2	3344.0	4265.3	5139.3	6032.2	6703.2
60°	1357.2	1402.9	1507.0	1825.5	2142.2	2350.7	2637.0	2970.5	3685.2	4915.5	6214.1
62.5°	963.1	993.3	1057.8	1201.9	1488.1	1865.4	2037.8	2191.4	2420.8	3162.0	4989.5
63°	910.0	936.6	989.6	1110.8	1368.7	1759.2	1935.5	2075.9	2242.6	2828.5	4720.4
65°	754.4	765.9	794.3	853.1	991.5	1315.6	1603.7	1689.2	1717.5	1818.0	2957.3
67.5°	637.0	644.5	654.1	671.0	726.1	875.8	1196.3	1304.2	1272.0	1203.8	1461.6
70°	553.5	559.3	574.3	595.2	614.3	652.1	822.8	983.9	947.8	854.9	894.8
72.5°	441.6	451.2	468.2	504.3	542.1	591.4	633.1	733.6	710.9	621.7	631.2
75°	348.8	354.6	369.7	396.2	432.3	489.0	570.7	604.6	542.1	458.8	458.8
77.5°	276.8	282.4	295.7	316.7	339.3	379.2	435.9	525.1	487.2	344.9	343.2
80°	208.5	214.2	227.5	246.4	269.2	297.6	331.7	371.5	447.4	322.3	257.9
82.5°	153.6	155.4	178.3	191.5	199.1	221.8	250.3	272.9	307.1	297.6	229.3
85°	115.6	113.7	128.8	138.3	140.2	146.0	163.0	185.8	201.0	193.3	178.3
87.5°	64.5	56.9	66.4	75.8	75.8	77.8	81.6	94.9	108.1	104.3	94.9
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°	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1220.8	1220.8	1218.9	1218.9	1220.8	1220.8	1218.9	1224.6	1228.4	1228.4	1230.3
5°	1226.5	1228.4	1226.5	1226.5	1228.4	1228.4	1230.3	1236.0	1241.6	1245.5	1251.2
7.5°	1243.7	1245.5	1243.7	1243.7	1245.5	1247.3	1251.2	1258.7	1262.6	1270.2	1279.6
10°	1262.6	1264.5	1262.6	1264.5	1266.3	1268.2	1273.9	1279.6	1285.3	1292.9	1308.0
12.5°	1296.7	1298.6	1294.7	1296.7	1302.4	1302.4	1306.1	1310.0	1319.4	1329.0	1344.0
15°	1344.0	1344.0	1340.4	1342.2	1347.8	1347.8	1349.8	1353.6	1365.0	1376.4	1391.5
17.5°	1399.0	1402.9	1400.9	1402.9	1406.7	1408.5	1408.5	1412.3	1420.0	1427.4	1442.7
20°	1473.0	1474.8	1471.1	1474.8	1478.7	1474.8	1471.1	1469.2	1473.0	1476.8	1493.8
22.5°	1573.4	1571.6	1562.1	1562.1	1562.1	1554.4	1545.1	1533.6	1533.6	1527.9	1541.2
25°	1692.9	1687.1	1673.9	1675.8	1662.6	1651.2	1634.0	1617.0	1601.9	1596.2	1598.1
27.5°	1833.1	1821.9	1808.5	1804.8	1791.5	1770.6	1742.2	1710.0	1685.3	1666.4	1662.6
30°	2009.5	1984.8	1962.1	1958.2	1937.5	1903.2	1857.9	1814.1	1772.4	1740.2	1728.9
32.5°	2217.9	2180.0	2144.1	2140.2	2106.2	2060.6	2005.6	1945.0	1884.4	1833.1	1808.5
35°	2462.6	2405.8	2371.5	2362.1	2312.7	2256.0	2195.3	2117.6	2032.1	1960.2	1914.6
37.5°	2760.1	2701.5	2642.6	2644.5	2576.2	2510.0	2428.4	2333.6	2225.6	2125.1	2060.6
40°	3127.9	3044.5	2968.7	2951.7	2892.8	2799.9	2710.8	2601.0	2468.3	2335.6	2242.6
42.5°	3573.4	3436.9	3332.6	3317.5	3239.7	3126.0	3017.9	2872.1	2737.4	2576.2	2464.4
45°	4079.6	3861.5	3736.5	3713.8	3588.5	3472.9	3342.1	3186.6	3021.8	2839.8	2707.1
47.5°	4708.9	4398.0	4185.7	4147.8	3975.3	3823.6	3687.2	3514.7	3317.5	3114.7	2968.7
50°	5442.7	4983.8	4697.5	4638.8	4407.5	4229.3	4054.9	3838.8	3628.4	3416.1	3247.4
52.5°	6178.2	5685.3	5304.2	5232.2	4890.9	4652.1	4422.6	4206.7	3958.2	3747.8	3556.4
55°	6769.5	6441.7	5999.9	5899.4	5410.3	5086.3	4784.8	4538.3	4291.9	4125.0	3899.5
57.5°	7126.0	7108.9	6760.1	6621.8	5952.6	5473.0	5137.3	4856.9	4617.9	4547.8	4248.4
60°	7116.6	7558.2	7408.4	7304.2	6500.5	5869.2	5433.0	5129.9	4932.7	5012.3	4599.1
62.5°	6682.4	7577.2	7757.3	7728.8	7084.3	6187.6	5675.9	5363.1	5258.7	5495.7	4963.0
63°	6525.1	7533.5	7772.5	7761.0	7196.1	6248.3	5717.4	5408.4	5323.1	5618.9	5029.3
65°	5514.6	7152.6	7588.5	7639.7	7436.9	6456.7	5814.2	5524.0	5514.6	5893.8	5186.6
67.5°	3361.1	6043.5	6760.1	6858.6	7097.6	6523.1	5759.2	5484.3	5620.8	5933.6	5139.3
70°	1437.0	3988.6	5433.0	5592.4	6176.2	6193.4	5601.8	5321.3	5596.1	5622.8	4801.8
72.5°	851.1	1880.5	3698.5	4045.4	4887.1	5328.8	5241.6	5036.8	5272.1	4938.3	4089.1
75°	602.9	879.6	1878.6	2248.3	3402.8	4068.2	4403.8	4498.5	4489.0	3916.5	3069.1
77.5°	432.3	564.9	792.5	934.5	1899.5	2612.4	3021.8	3298.5	3209.5	2621.8	1891.9
80°	301.4	390.6	485.4	515.6	881.4	1342.2	1592.3	1713.7	1660.6	1310.0	847.5
82.5°	218.0	255.9	312.8	331.7	443.7	619.9	737.4	650.3	623.8	483.4	365.9
85°	168.7	164.8	195.2	202.8	259.7	324.2	331.7	257.9	225.6	201.0	204.8
87.5°	119.5	102.3	104.3	108.1	134.6	172.6	168.7	106.2	91.0	96.7	110.0
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1234.1	1236.0	1239.8	1241.6	1245.5	1245.5	1249.3	1251.2	1254.9	1258.7	1260.6
5°	1256.9	1262.6	1270.2	1273.9	1281.5	1287.2	1294.7	1298.6	1306.1	1311.9	1319.4
7.5°	1291.0	1300.4	1310.0	1321.2	1332.6	1342.2	1349.8	1359.2	1372.5	1382.0	1387.6
10°	1323.3	1336.5	1353.6	1366.9	1383.8	1397.1	1408.5	1425.6	1440.7	1453.9	1461.6
12.5°	1365.0	1382.0	1399.0	1420.0	1442.7	1459.7	1476.8	1499.5	1520.3	1535.6	1543.1
15°	1414.2	1435.0	1453.9	1478.7	1505.2	1527.9	1552.6	1577.2	1592.3	1592.3	1588.7
17.5°	1465.3	1482.5	1505.2	1533.6	1569.7	1598.1	1611.4	1615.2	1609.5	1596.2	1586.8
20°	1516.6	1531.7	1556.4	1590.4	1628.4	1634.0	1620.8	1603.7	1586.8	1563.9	1548.8
22.5°	1558.3	1579.1	1617.0	1656.8	1658.7	1626.6	1590.4	1562.1	1535.6	1509.1	1480.5
25°	1607.5	1636.1	1687.1	1702.4	1653.2	1592.3	1541.2	1499.5	1456.0	1412.3	1380.1
27.5°	1668.2	1710.0	1761.0	1717.5	1620.8	1535.6	1465.3	1402.9	1346.0	1285.3	1249.3
30°	1732.7	1797.1	1808.5	1694.7	1565.8	1456.0	1361.1	1266.3	1194.2	1139.3	1118.5
32.5°	1810.4	1893.8	1825.5	1654.9	1491.9	1347.8	1220.8	1107.2	1046.4	1012.3	1002.9
35°	1927.9	1996.3	1835.1	1613.3	1406.7	1218.9	1059.7	968.7	930.9	908.0	896.7
37.5°	2096.6	2094.8	1833.1	1562.1	1308.0	1078.7	930.9	866.3	836.1	817.1	796.2
40°	2293.8	2170.6	1821.9	1488.1	1175.3	944.1	841.7	781.0	752.6	729.9	705.2
42.5°	2489.1	2221.8	1789.6	1378.2	1010.5	847.5	777.3	722.2	692.0	667.4	633.1
45°	2657.7	2242.6	1727.0	1226.5	862.6	771.6	735.5	688.1	652.1	614.3	587.8
47.5°	2790.4	2238.8	1626.6	1048.3	764.0	718.5	701.3	669.1	625.6	578.1	544.1
50°	2902.3	2210.4	1490.0	890.9	697.7	671.0	665.5	655.9	585.8	546.0	525.1
52.5°	3004.7	2168.7	1344.0	784.8	640.8	618.0	629.4	619.9	570.7	536.5	515.6
55°	3145.0	2140.2	1200.0	703.4	574.3	568.6	578.1	591.4	561.1	528.9	506.1
57.5°	3310.0	2155.5	1090.1	612.4	511.9	515.6	547.8	566.8	551.6	517.6	494.7
60°	3499.4	2200.9	993.3	525.1	460.7	470.2	517.6	544.1	542.1	502.3	475.8
62.5°	3711.7	2248.3	839.7	458.8	417.1	432.3	481.5	515.6	521.3	487.2	455.0
63°	3753.5	2252.1	800.0	445.5	409.4	426.5	472.0	508.0	515.6	483.4	451.2
65°	3855.9	2217.9	644.5	409.4	379.2	398.0	443.7	475.8	491.1	462.5	435.9
67.5°	3770.5	1939.4	485.4	365.9	354.6	367.8	407.7	438.0	451.2	438.0	411.3
70°	3448.4	1410.3	379.2	326.1	327.9	337.5	367.8	396.2	411.3	407.7	382.9
72.5°	2777.2	800.0	316.7	291.9	297.6	308.9	329.9	356.4	369.7	367.8	350.7
75°	1829.4	409.4	267.2	261.5	265.4	274.9	290.1	311.0	326.1	324.2	316.7
77.5°	906.1	284.4	229.3	231.3	233.2	240.7	252.2	271.1	280.6	282.4	280.6
80°	373.4	221.8	197.2	199.1	201.0	206.6	214.2	231.3	237.0	240.7	242.6
82.5°	223.7	168.7	157.4	161.2	163.0	168.7	174.5	189.5	195.2	201.0	201.0
85°	148.0	117.6	113.7	117.6	121.4	125.1	127.0	136.5	146.0	153.6	157.4
87.5°	79.6	70.2	68.2	70.2	70.2	73.9	77.8	87.1	98.5	106.2	110.0
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):

	160°	165°	170°	175°	180°
0°	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1256.9	1258.7	1256.9	1258.7	1260.6
5°	1319.4	1323.3	1321.2	1321.2	1329.0
7.5°	1391.5	1399.0	1399.0	1402.9	1406.7
10°	1469.2	1476.8	1482.5	1482.5	1488.1
12.5°	1546.9	1550.7	1556.4	1556.4	1556.4
15°	1586.8	1584.8	1583.0	1581.0	1581.0
17.5°	1581.0	1573.4	1569.7	1565.8	1567.7
20°	1539.3	1526.0	1522.3	1516.6	1520.3
22.5°	1467.3	1448.3	1440.7	1431.3	1435.0
25°	1359.2	1336.5	1332.6	1321.2	1326.9
27.5°	1234.1	1222.8	1220.8	1218.9	1228.4
30°	1116.6	1120.4	1122.3	1126.0	1135.5
32.5°	1008.4	1016.2	1018.0	1019.8	1033.2
35°	902.3	892.8	902.3	898.6	910.0
37.5°	786.7	779.1	771.6	762.1	769.7
40°	690.1	676.8	654.1	642.6	644.5
42.5°	614.3	597.2	578.1	566.8	566.8
45°	564.9	544.1	527.0	519.4	519.4
47.5°	527.0	517.6	508.0	502.3	502.3
50°	511.9	500.4	494.7	491.1	491.1
52.5°	500.4	489.0	483.4	479.6	475.8
55°	491.1	473.9	468.2	466.3	466.3
57.5°	477.7	462.5	455.0	453.0	453.0
60°	456.9	445.5	438.0	435.9	435.9
62.5°	435.9	424.7	417.1	417.1	417.1
63°	432.3	419.0	413.3	413.3	413.3
65°	415.1	401.9	396.2	396.2	394.3
67.5°	392.4	379.2	375.3	375.3	371.5
70°	365.9	354.6	350.7	352.7	344.9
72.5°	339.3	327.9	322.3	322.3	314.6
75°	308.9	297.6	290.1	288.1	280.6
77.5°	274.9	265.4	257.9	250.3	246.4
80°	238.9	231.3	221.8	216.1	210.5
82.5°	201.0	193.3	187.7	195.2	166.8
85°	157.4	149.7	142.2	153.6	119.5
87.5°	115.6	111.8	104.3	91.0	79.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)