

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: NEO-RAY

Report Number: P331411-830

Luminaire Tested: **SA2XXDIP-C865D1080U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331411-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

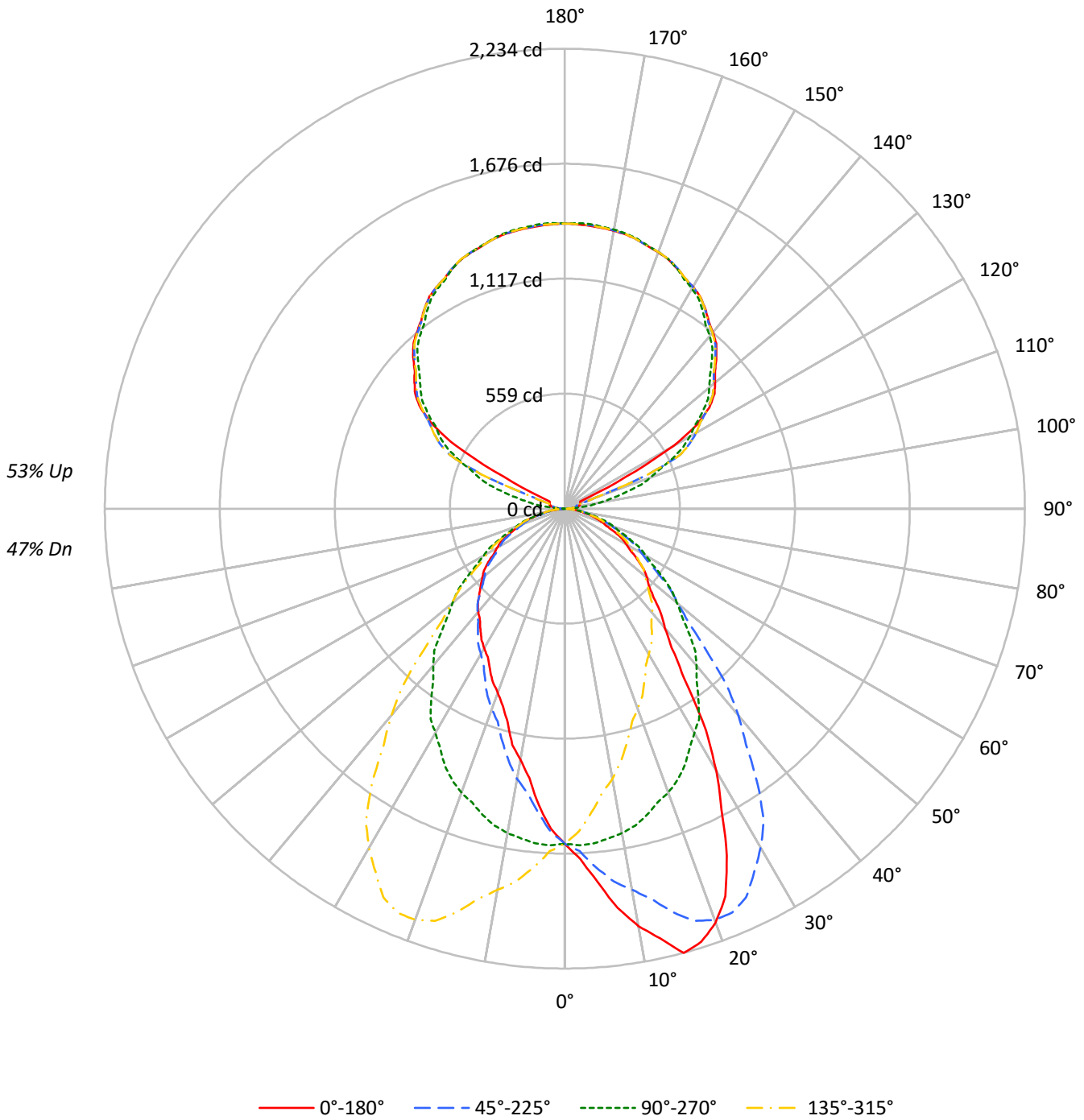
Lumens per Lamp: N/A
Luminaire Lumens: 7651.6 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 65.4
Input Voltage (V): 120
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: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	98	93	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	40
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	43	41	39	35
3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34	30
4	75	64	57	51	69	60	53	48	51	46	42	42	39	36	34	32	30	26
5	69	58	50	44	63	53	47	41	46	40	36	38	34	31	31	28	26	23
6	64	52	44	38	58	48	41	36	41	36	32	35	31	27	28	26	23	20
7	59	47	39	34	54	44	37	32	37	32	28	32	28	24	26	23	21	18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	32	27	47	36	30	25	31	26	23	27	23	20	22	19	17	15
10	48	36	29	24	44	34	27	23	29	24	20	25	21	18	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	26274	26274	26274	26274
5°	29457	26446	23436	26446
10°	33755	26230	20282	26230
15°	37342	25748	17919	25748
20°	36773	25232	16333	25232
25°	33157	24545	15330	24545
30°	27401	23448	14600	23448
35°	19969	22300	14079	22300
40°	15951	20946	13789	20946
45°	13938	19379	13394	19379
50°	13102	17862	13132	17862
55°	12076	16321	12780	16321
60°	11066	14683	12239	14683
65°	10082	13211	11706	13211
70°	9153	11783	10924	11783
75°	8116	10181	9676	10181
80°	6974	8433	7792	8433
85°	6243	6243	4631	6243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	2.0
10°-20°	450.6	5.9
20°-30°	653.9	8.5
30°-40°	690.0	9.0
40°-50°	611.0	8.0
50°-60°	487.6	6.4
60°-70°	331.4	4.3
70°-80°	169.9	2.2
80°-90°	44.4	0.6
90°-100°	46.2	0.6
100°-110°	169.4	2.2
110°-120°	452.8	5.9
120°-130°	747.4	9.8
130°-140°	794.9	10.4
140°-150°	738.8	9.7
150°-160°	594.0	7.8
160°-170°	382.8	5.0
170°-180°	131.8	1.7
0°-30°	1259.4	16.5
0°-40°	1949.5	25.5
0°-60°	3048.0	39.8
0°-90°	3593.7	47.0
90°-120°	668.4	8.7
90°-150°	2949.4	38.5
90°-180°	4058.0	53.0
0°-180°	7651.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1627	1627	1627	1627	1627	
5°	1818	1632	1446	1632	1818	181
15°	2234	1540	1072	1540	2234	616
25°	1861	1378	860	1378	1861	841
35°	1013	1131	714	1131	1013	659
45°	610	849	587	849	610	480
55°	429	580	454	580	429	385
65°	264	346	306	346	264	262
75°	130	163	155	163	130	139
85°	34	34	25	34	34	38
90°	27	1	27	1	27	14
95°	43	65	43	65	43	40
105°	76	305	76	305	76	79
115°	82	576	82	576	82	206
125°	857	815	857	815	857	741
135°	1041	1008	1041	1008	1041	802
145°	1187	1169	1187	1169	1187	743
155°	1288	1288	1288	1288	1288	595
165°	1354	1357	1354	1357	1354	382
175°	1380	1388	1380	1388	1380	131
180°	1385	1385	1385	1385	1385	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1702.4	1702.9	1703.9	1695.9	1694.9	1694.9	1687.9	1681.9	1674.9	1665.4	1666.4
5°	1817.5	1824.4	1826.8	1819.4	1808.1	1806.9	1796.2	1778.7	1762.5	1749.3	1739.9
7.5°	1954.8	1957.6	1951.4	1941.5	1933.2	1918.2	1898.4	1879.1	1851.9	1827.0	1808.5
10°	2058.9	2062.7	2052.0	2037.6	2025.7	2008.2	1979.4	1950.0	1914.4	1880.0	1852.5
12.5°	2138.0	2147.2	2133.5	2131.7	2111.3	2087.3	2053.0	2038.2	1988.0	1940.0	1910.5
15°	2234.0	2233.4	2234.7	2222.7	2207.7	2203.9	2167.8	2128.4	2057.7	2029.5	1980.8
17.5°	2206.2	2215.7	2220.2	2220.0	2219.6	2217.2	2205.6	2180.8	2145.3	2099.7	2043.3
20°	2140.2	2152.7	2154.6	2169.0	2177.1	2187.7	2192.1	2185.2	2163.3	2125.2	2076.4
22.5°	2038.2	2041.6	2047.5	2069.9	2087.5	2114.2	2128.1	2151.2	2142.8	2124.2	2083.4
25°	1861.2	1855.0	1876.9	1888.1	1928.8	1971.3	2002.0	2035.7	2065.8	2083.9	2072.0
27.5°	1648.9	1639.5	1672.3	1702.1	1735.1	1781.2	1829.0	1885.4	1932.3	1990.9	2011.1
30°	1469.7	1475.4	1506.7	1538.5	1588.6	1653.6	1707.4	1769.3	1836.3	1901.9	1947.6
32.5°	1276.6	1298.3	1318.1	1366.9	1411.0	1483.5	1562.3	1639.7	1723.2	1797.8	1868.5
35°	1013.1	1038.2	1065.7	1101.4	1163.3	1235.2	1312.1	1416.5	1530.4	1632.4	1716.2
37.5°	852.8	848.9	864.6	890.3	940.5	998.5	1087.1	1190.3	1324.3	1444.1	1562.3
40°	756.8	754.2	765.5	789.3	827.5	870.0	947.5	1038.2	1162.6	1309.0	1449.7
42.5°	690.7	692.2	698.4	715.2	741.4	776.4	834.4	911.6	1025.6	1163.4	1314.7
45°	610.4	614.8	621.7	629.8	644.8	673.5	706.1	761.1	851.2	966.3	1115.1
47.5°	552.6	552.7	559.8	566.8	575.8	592.0	618.5	653.1	716.6	810.3	938.3
50°	521.6	517.3	522.3	527.8	537.2	548.5	566.0	598.5	641.0	716.7	823.7
52.5°	483.6	483.7	488.2	490.3	498.7	510.0	525.9	548.5	587.0	646.2	734.1
55°	429.0	432.2	434.7	438.4	445.9	454.0	466.6	481.5	511.6	556.0	621.0
57.5°	377.8	378.7	381.3	388.4	393.1	400.7	412.6	426.1	445.6	478.5	527.4
60°	342.7	342.7	347.7	350.8	357.1	364.6	374.0	387.1	404.6	431.5	471.0
62.5°	310.8	310.2	312.2	317.4	322.1	329.1	338.5	349.6	366.1	390.0	422.4
65°	263.9	262.7	266.5	267.7	272.7	279.6	287.1	299.0	312.1	329.6	358.4
67.5°	218.9	220.4	222.4	224.8	227.5	234.8	239.8	248.2	259.3	273.8	293.3
70°	193.9	193.9	193.9	195.8	199.5	203.3	208.3	215.2	225.7	238.3	255.8
72.5°	165.9	167.9	169.8	168.7	173.5	175.8	181.7	185.6	195.8	203.8	219.2
75°	130.1	130.1	130.1	133.2	135.1	137.0	140.7	144.5	149.5	159.5	167.6
77.5°	97.1	96.8	97.5	98.2	100.2	102.5	103.6	107.0	111.6	116.2	123.1
80°	75.0	76.3	76.9	78.1	78.1	79.5	80.0	84.5	87.6	90.7	95.1
82.5°	58.1	58.2	58.4	58.6	59.2	59.9	61.5	63.0	64.0	66.6	70.0
85°	33.7	33.2	33.2	34.4	33.7	33.7	35.1	36.3	36.3	36.9	38.7
87.5°	18.4	18.3	18.8	18.2	18.1	18.4	18.2	17.4	17.7	18.0	18.2
90°	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2	21.1	20.1	18.3
92.5°	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4	23.8	23.3	22.3
95°	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3	40.2	39.1	37.5
97.5°	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1	53.2	52.3	48.7
100°	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7	58.9	57.1	53.3
102.5°	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3	61.1	58.7	50.4
105°	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0	63.5	61.1	53.3
107.5°	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6	83.0	85.6	75.4
110°	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8	153.1	175.3	239.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8	361.1	442.2	458.2
115°	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0	515.1	618.2	612.7
117.5°	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9	659.8	684.8	680.9
120°	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8	737.1	734.4	730.5
122.5°	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9	783.3	781.7	777.4
125°	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8	848.2	846.7	842.4
127.5°	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7	907.5	905.2	902.0
130°	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7	945.3	942.8	940.4
132.5°	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7	982.6	980.5	978.1
135°	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5	1035.3	1033.0	1031.0
137.5°	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5	1084.3	1082.1	1079.9
140°	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2	1116.2	1114.2	1111.7
142.5°	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5	1145.7	1143.9	1141.0
145°	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5	1186.8	1185.3	1181.6
147.5°	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1	1222.9	1221.8	1218.0
150°	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1	1244.8	1243.4	1239.9
152.5°	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1	1264.8	1263.5	1260.1
155°	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2	1291.8	1290.5	1287.9
157.5°	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0	1314.5	1313.0	1311.1
160°	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3	1327.9	1326.6	1325.3
162.5°	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6	1340.1	1338.6	1337.5
165°	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7	1353.0
167.5°	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4	1367.8	1366.3	1365.6
170°	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8	1374.2	1372.7	1372.2
172.5°	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6	1379.0	1377.5	1377.1
175°	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8	1384.3	1382.7	1382.2
177.5°	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4	1385.2	1383.9	1383.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1669.9	1665.8	1663.4	1654.4	1646.3	1638.3	1635.9	1636.8	1625.9	1615.3	1610.8
5°	1734.9	1722.4	1710.5	1693.7	1673.7	1651.7	1640.5	1631.7	1609.9	1586.1	1572.3
7.5°	1793.2	1775.3	1752.5	1720.7	1691.5	1657.1	1635.2	1615.8	1583.8	1550.3	1529.7
10°	1828.7	1804.3	1774.9	1736.2	1700.5	1658.6	1629.2	1599.9	1562.3	1522.3	1497.2
12.5°	1859.3	1826.4	1797.4	1747.7	1705.5	1653.1	1618.3	1576.8	1537.3	1489.8	1465.3
15°	1931.9	1871.2	1816.2	1759.9	1708.0	1634.8	1596.1	1540.4	1488.5	1429.7	1401.6
17.5°	1988.1	1920.0	1833.2	1761.7	1701.1	1620.1	1563.2	1496.5	1435.1	1367.9	1329.6
20°	2020.2	1941.9	1848.7	1763.7	1691.1	1598.6	1536.6	1468.5	1396.6	1320.9	1279.6
22.5°	2039.1	1956.9	1864.7	1756.1	1671.1	1581.0	1503.2	1428.4	1355.6	1273.8	1230.6
25°	2045.1	1970.1	1872.5	1749.9	1646.2	1544.2	1450.4	1377.8	1289.6	1213.3	1150.2
27.5°	2015.3	1961.5	1867.7	1738.1	1617.2	1498.0	1393.5	1311.3	1218.2	1135.4	1071.9
30°	1978.9	1947.6	1856.2	1726.2	1594.2	1466.0	1350.9	1257.7	1165.2	1081.4	1016.3
32.5°	1922.3	1915.5	1835.2	1709.1	1569.7	1425.5	1306.4	1212.2	1109.7	1027.3	965.3
35°	1811.2	1841.3	1790.5	1671.1	1523.5	1367.8	1239.0	1131.4	1025.1	946.2	888.1
37.5°	1662.4	1736.9	1723.6	1615.4	1461.2	1305.0	1162.8	1050.4	949.0	869.5	812.4
40°	1559.8	1654.8	1668.6	1572.9	1417.2	1256.5	1105.8	993.8	894.9	822.5	764.9
42.5°	1449.7	1560.8	1598.6	1521.9	1369.1	1205.4	1054.7	938.8	840.9	770.4	719.3
45°	1265.3	1412.2	1480.4	1436.6	1289.0	1121.3	966.3	848.7	759.9	693.6	654.2
47.5°	1092.7	1253.3	1345.0	1329.6	1199.8	1033.8	880.4	767.6	681.2	628.3	593.0
50°	970.6	1135.8	1246.4	1251.5	1135.8	971.3	817.5	711.1	631.7	582.3	553.5
52.5°	864.6	1022.2	1142.9	1169.4	1064.2	906.3	760.9	655.1	585.1	539.7	514.0
55°	726.1	859.3	993.2	1042.0	957.5	807.4	673.0	579.8	514.1	482.9	460.3
57.5°	603.7	714.7	838.3	892.2	840.2	711.7	585.6	504.7	451.4	424.0	406.8
60°	539.1	626.7	736.8	801.2	756.1	641.7	531.6	454.7	410.9	386.5	370.2
62.5°	479.1	556.7	649.7	708.6	684.1	576.2	477.6	409.6	371.8	349.0	337.2
65°	395.3	456.6	528.5	582.9	566.7	484.7	404.1	345.8	315.8	297.7	288.3
67.5°	325.5	369.8	419.6	467.3	454.2	396.2	331.3	286.1	263.7	248.1	242.4
70°	281.4	315.2	359.6	397.8	387.1	339.6	288.3	249.6	230.2	217.1	211.4
72.5°	239.4	267.2	301.0	332.2	325.1	285.6	242.8	213.5	198.6	186.5	181.9
75°	180.8	202.0	222.6	243.3	241.4	210.8	185.8	163.2	151.4	141.9	140.1
77.5°	133.5	145.3	159.4	171.6	168.2	150.7	131.1	118.2	109.4	103.2	102.2
80°	102.0	108.9	118.9	127.6	123.2	115.7	100.1	90.7	84.5	78.1	75.7
82.5°	73.9	80.8	86.8	91.5	88.2	81.2	71.5	65.1	61.5	57.1	56.2
85°	38.7	42.5	45.1	46.3	45.1	40.6	36.3	33.7	30.6	28.7	28.2
87.5°	18.3	17.9	17.6	18.2	16.2	15.6	13.2	11.2	11.2	11.2	10.7
90°	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0	3.5	5.9	8.4
92.5°	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3	20.0	19.8	19.6
95°	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1	57.8	50.4	43.1
97.5°	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2	108.6	87.8	67.1
100°	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4	146.8	116.3	85.9
102.5°	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3	223.8	217.4	210.8
105°	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6	311.3	317.9	324.6
107.5°	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4	394.7	400.1	405.5
110°	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8	448.6	453.3	457.9



TEST NUMBER: P331411-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2	499.4	503.4	507.6
115°	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2	579.9	583.7	587.5
117.5°	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5	652.7	657.0	661.2
120°	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3	704.7	708.0	711.4
122.5°	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3	749.8	753.3	756.9
125°	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6	817.5	820.4	823.3
127.5°	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6	879.8	883.0	886.2
130°	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8	919.4	922.9	926.5
132.5°	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8	958.9	962.0	965.0
135°	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0	1011.5	1015.1	1018.7
137.5°	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6	1063.2	1065.6	1068.2
140°	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1	1096.9	1098.7	1100.5
142.5°	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0	1125.6	1127.2	1128.8
145°	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3	1169.0	1168.8	1168.7
147.5°	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8	1208.0	1207.1	1206.3
150°	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4	1232.8	1231.3	1229.7
152.5°	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0	1254.3	1252.5	1250.8
155°	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5	1285.5	1283.6	1281.5
157.5°	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2	1310.5	1308.8	1307.1
160°	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1325.3	1323.9	1322.6
162.5°	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4	1338.1	1336.7	1335.4
165°	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7	1355.3	1354.0	1352.6
167.5°	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5	1368.2	1366.8	1365.5
170°	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7	1375.4	1374.0	1372.7
172.5°	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5	1380.2	1378.8	1377.5
175°	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7	1386.2	1384.6	1383.1
177.5°	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7	1387.5	1386.2	1385.0
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1605.8	1602.8	1592.3	1586.9	1577.8	1569.3	1563.8	1566.3	1568.3	1567.3	1565.8
5°	1559.8	1547.9	1529.7	1514.1	1502.9	1482.2	1473.5	1469.1	1465.4	1460.9	1456.6
7.5°	1505.1	1486.3	1460.2	1437.9	1416.9	1391.3	1376.7	1367.9	1359.0	1349.1	1340.3
10°	1466.0	1439.7	1412.2	1380.9	1355.9	1332.8	1312.1	1298.4	1285.9	1273.9	1265.3
12.5°	1424.9	1394.7	1360.7	1317.9	1290.3	1257.3	1254.1	1229.8	1210.3	1203.0	1192.7
15°	1359.7	1317.1	1273.9	1223.3	1201.5	1171.4	1152.6	1133.9	1117.0	1105.1	1102.0
17.5°	1285.5	1230.5	1187.5	1151.1	1115.2	1084.5	1067.2	1052.3	1038.3	1022.5	1020.3
20°	1229.0	1181.4	1134.5	1102.6	1065.7	1034.4	1013.1	998.2	986.3	976.9	968.7
22.5°	1175.4	1123.4	1080.4	1045.6	1009.2	983.9	967.1	952.6	942.7	932.4	924.7
25°	1089.5	1048.9	1001.9	962.5	932.5	916.2	902.5	889.9	883.7	876.8	868.1
27.5°	1014.3	969.1	925.3	894.8	868.4	853.9	844.2	835.7	829.8	825.8	820.8
30°	961.3	915.6	881.2	851.2	829.3	814.9	808.7	803.7	796.8	794.3	791.8
32.5°	910.2	869.1	839.7	813.7	792.8	783.4	777.7	773.2	767.8	765.3	760.3
35°	838.1	803.7	774.9	760.5	743.7	735.5	731.1	724.9	719.8	717.4	716.7
37.5°	770.2	740.3	721.3	702.9	695.7	690.7	684.8	680.4	678.9	678.5	678.0
40°	726.1	701.7	684.9	669.9	666.7	659.2	654.2	650.4	650.4	651.1	650.4
42.5°	686.1	664.2	649.3	636.3	632.6	628.2	623.2	622.9	624.0	626.0	624.0
45°	625.4	609.8	599.2	592.9	586.0	581.6	581.0	582.9	583.5	584.2	586.0
47.5°	569.7	559.2	549.6	542.7	539.7	538.9	538.2	541.5	544.5	545.6	548.5
50°	536.6	524.7	516.6	512.2	509.7	508.5	509.7	513.5	515.9	519.1	520.9
52.5°	499.5	491.2	485.6	482.2	481.2	481.9	482.2	486.4	490.5	491.5	492.5
55°	448.5	442.1	440.9	435.3	437.8	437.2	440.3	442.8	446.6	450.3	450.9
57.5°	397.4	392.4	389.0	389.6	390.3	393.0	395.7	400.0	404.1	408.0	408.4
60°	363.4	360.9	359.0	359.0	360.2	364.0	367.1	371.5	374.0	376.5	378.3
62.5°	332.3	329.9	328.0	328.9	332.2	334.5	338.1	340.4	343.0	345.4	346.4
65°	283.3	282.1	284.0	285.2	285.8	289.0	293.3	295.2	297.7	299.0	303.3
67.5°	238.2	238.4	238.2	239.9	243.6	244.3	248.5	252.8	253.3	255.7	258.5
70°	207.6	208.9	210.2	211.4	214.5	215.7	218.9	220.7	223.3	225.2	227.1
72.5°	179.6	179.8	181.2	180.9	183.5	186.2	188.9	190.8	193.2	195.7	197.5
75°	138.2	138.2	139.5	140.1	143.3	146.4	145.7	146.9	149.5	151.9	153.3
77.5°	100.9	99.5	100.9	101.6	102.5	105.2	105.7	107.4	110.3	109.4	110.8
80°	76.9	75.0	76.9	77.6	77.6	80.7	80.7	81.9	83.8	81.9	83.8
82.5°	55.0	54.0	55.4	55.5	56.6	56.6	57.7	57.9	59.8	58.9	59.8
85°	27.5	26.9	27.5	26.9	27.5	28.2	28.2	27.5	27.5	28.7	26.9
87.5°	10.7	10.6	10.5	10.8	10.7	10.6	10.3	10.5	10.7	9.9	10.1
90°	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2	23.4	24.5	25.3
92.5°	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4	25.0	25.5	26.0
95°	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3	42.4	43.5	44.0
97.5°	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1	55.0	55.9	56.5
100°	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7	62.5	64.3	65.3
102.5°	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3	65.7	68.0	69.5
105°	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0	68.4	70.9	72.6
107.5°	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6	78.0	75.6	74.8
110°	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8	108.6	86.2	75.6



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8	198.6	117.3	77.1
115°	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0	309.0	205.9	146.3
117.5°	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9	609.9	585.0	546.2
120°	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8	742.4	745.2	731.4
122.5°	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9	786.6	788.2	786.0
125°	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8	851.3	852.9	854.0
127.5°	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7	912.0	914.3	915.5
130°	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7	950.2	952.6	953.8
132.5°	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7	986.8	988.9	989.9
135°	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5	1039.7	1041.9	1042.8
137.5°	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5	1088.6	1090.8	1091.6
140°	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2	1120.2	1122.2	1122.7
142.5°	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5	1149.3	1151.1	1151.5
145°	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5	1190.0	1191.6	1191.8
147.5°	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1	1225.3	1226.4	1226.5
150°	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1	1247.5	1248.8	1248.9
152.5°	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1	1267.5	1268.9	1268.8
155°	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2	1294.6	1295.9	1295.6
157.5°	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0	1317.5	1319.0	1318.9
160°	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3	1330.6	1331.9	1331.8
162.5°	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6	1343.1	1344.7	1344.4
165°	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9
167.5°	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4	1370.9	1372.5	1372.2
170°	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8	1377.3	1378.9	1378.7
172.5°	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6	1382.1	1383.7	1383.6
175°	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8	1387.4	1388.9	1388.6
177.5°	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4	1387.6	1388.9	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1560.8	1559.8	1559.8	1555.3	1559.8	1559.8	1560.8	1565.8	1567.3	1568.3	1566.3
5°	1447.8	1446.0	1442.8	1446.0	1442.8	1446.0	1447.8	1456.6	1460.9	1465.4	1469.1
7.5°	1336.1	1328.6	1327.5	1320.1	1327.5	1328.6	1336.1	1340.3	1349.1	1359.0	1367.9
10°	1254.6	1249.6	1249.0	1237.1	1249.0	1249.6	1254.6	1265.3	1273.9	1285.9	1298.4
12.5°	1192.6	1180.5	1182.9	1176.0	1182.9	1180.5	1192.6	1192.7	1203.0	1210.3	1229.8
15°	1085.1	1085.1	1082.6	1072.0	1082.6	1085.1	1085.1	1102.0	1105.1	1117.0	1133.9
17.5°	1008.0	1006.6	1000.7	1003.7	1000.7	1006.6	1008.0	1020.3	1022.5	1038.3	1052.3
20°	961.9	958.2	950.6	950.6	950.6	958.2	961.9	968.7	976.9	986.3	998.2
22.5°	918.4	918.1	910.1	912.6	910.1	918.1	918.4	924.7	932.4	942.7	952.6
25°	867.4	862.4	858.8	860.5	858.8	862.4	867.4	868.1	876.8	883.7	889.9
27.5°	819.2	816.4	816.1	811.1	816.1	816.4	819.2	820.8	825.8	829.8	835.7
30°	791.2	784.9	786.2	783.1	786.2	784.9	791.2	791.8	794.3	796.8	803.7
32.5°	759.1	756.9	755.6	753.0	755.6	756.9	759.1	760.3	765.3	767.8	773.2
35°	715.5	716.1	712.9	714.3	712.9	716.1	715.5	716.7	717.4	719.8	724.9
37.5°	677.3	679.3	677.9	678.3	677.9	679.3	677.3	678.0	678.5	678.9	680.4
40°	652.3	652.3	652.3	654.2	652.3	652.3	652.3	650.4	651.1	650.4	650.4
42.5°	628.3	627.3	626.3	626.1	626.3	627.3	628.3	624.0	626.0	624.0	622.9
45°	587.3	589.2	589.7	586.6	589.7	589.2	587.3	586.0	584.2	583.5	582.9
47.5°	550.2	550.4	550.2	552.9	550.2	550.4	550.2	548.5	545.6	544.5	541.5
50°	524.1	522.8	524.1	522.8	524.1	522.8	524.1	520.9	519.1	515.9	513.5
52.5°	496.6	496.8	496.1	495.9	496.1	496.8	496.6	492.5	491.5	490.5	486.4
55°	453.5	454.7	454.0	454.0	454.0	454.7	453.5	450.9	450.3	446.6	442.8
57.5°	408.8	409.9	410.8	408.0	410.8	409.9	408.8	408.4	408.0	404.1	400.0
60°	377.8	380.9	380.2	379.0	380.2	380.9	377.8	378.3	376.5	374.0	371.5
62.5°	349.2	350.3	350.2	350.0	350.2	350.3	349.2	346.4	345.4	343.0	340.4
65°	305.2	306.4	304.5	306.4	304.5	306.4	305.2	303.3	299.0	297.7	295.2
67.5°	257.8	258.2	259.6	260.4	259.6	258.2	257.8	258.5	255.7	253.3	252.8
70°	228.3	227.6	229.5	231.4	229.5	227.6	228.3	227.1	225.2	223.3	220.7
72.5°	197.3	198.6	198.0	199.3	198.0	198.6	197.3	197.5	195.7	193.2	190.8
75°	151.9	153.8	153.3	155.1	153.3	153.8	151.9	153.3	151.9	149.5	146.9
77.5°	109.8	110.1	109.8	110.8	109.8	110.1	109.8	110.8	109.4	110.3	107.4
80°	83.8	82.6	81.3	83.8	81.3	82.6	83.8	83.8	81.9	83.8	81.9
82.5°	58.2	59.0	57.8	57.8	57.8	59.0	58.2	59.8	58.9	59.8	57.9
85°	26.9	26.3	25.0	25.0	25.0	26.3	26.9	26.9	28.7	27.5	27.5
87.5°	10.2	9.7	9.8	9.4	9.8	9.7	10.2	10.1	9.9	10.7	10.5
90°	25.7	26.2	26.6	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2
92.5°	26.3	26.5	26.8	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4
95°	43.7	43.5	43.3	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3
97.5°	56.7	57.0	57.2	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1
100°	65.8	66.3	66.7	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7
102.5°	70.0	70.7	71.4	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3
105°	73.5	74.4	75.2	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0
107.5°	75.7	76.5	77.5	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6
110°	76.4	77.4	78.2	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	77.9	78.5	79.3	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8
115°	130.3	114.2	98.2	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0
117.5°	493.5	440.8	388.1	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9
120°	701.3	671.3	641.2	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8
122.5°	780.2	774.4	768.5	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9
125°	854.7	855.4	856.0	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8
127.5°	915.6	915.8	915.9	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7
130°	953.6	953.3	953.1	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7
132.5°	989.6	989.4	989.2	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7
135°	1042.4	1041.9	1041.5	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5
137.5°	1090.8	1090.1	1089.3	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5
140°	1121.5	1120.4	1119.3	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2
142.5°	1150.4	1149.2	1148.2	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5
145°	1190.7	1189.6	1188.5	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5
147.5°	1225.6	1224.6	1223.7	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1
150°	1247.7	1246.7	1245.6	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1
152.5°	1267.2	1265.8	1264.3	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1
155°	1293.8	1292.1	1290.3	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2
157.5°	1317.2	1315.4	1313.7	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0
160°	1330.3	1328.7	1327.2	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3
162.5°	1342.6	1340.7	1338.7	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6
165°	1358.3	1356.8	1355.2	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8
167.5°	1370.3	1368.3	1366.3	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4
170°	1376.7	1374.7	1372.7	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8
172.5°	1381.5	1379.5	1377.5	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6
175°	1386.4	1384.1	1382.0	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8
177.5°	1387.1	1385.5	1383.9	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1563.8	1569.3	1577.8	1586.9	1592.3	1602.8	1605.8	1610.8	1615.3	1625.9	1636.8
5°	1473.5	1482.2	1502.9	1514.1	1529.7	1547.9	1559.8	1572.3	1586.1	1609.9	1631.7
7.5°	1376.7	1391.3	1416.9	1437.9	1460.2	1486.3	1505.1	1529.7	1550.3	1583.8	1615.8
10°	1312.1	1332.8	1355.9	1380.9	1412.2	1439.7	1466.0	1497.2	1522.3	1562.3	1599.9
12.5°	1254.1	1257.3	1290.3	1317.9	1360.7	1394.7	1424.9	1465.3	1489.8	1537.3	1576.8
15°	1152.6	1171.4	1201.5	1223.3	1273.9	1317.1	1359.7	1401.6	1429.7	1488.5	1540.4
17.5°	1067.2	1084.5	1115.2	1151.1	1187.5	1230.5	1285.5	1329.6	1367.9	1435.1	1496.5
20°	1013.1	1034.4	1065.7	1102.6	1134.5	1181.4	1229.0	1279.6	1320.9	1396.6	1468.5
22.5°	967.1	983.9	1009.2	1045.6	1080.4	1123.4	1175.4	1230.6	1273.8	1355.6	1428.4
25°	902.5	916.2	932.5	962.5	1001.9	1048.9	1089.5	1150.2	1213.3	1289.6	1377.8
27.5°	844.2	853.9	868.4	894.8	925.3	969.1	1014.3	1071.9	1135.4	1218.2	1311.3
30°	808.7	814.9	829.3	851.2	881.2	915.6	961.3	1016.3	1081.4	1165.2	1257.7
32.5°	777.7	783.4	792.8	813.7	839.7	869.1	910.2	965.3	1027.3	1109.7	1212.2
35°	731.1	735.5	743.7	760.5	774.9	803.7	838.1	888.1	946.2	1025.1	1131.4
37.5°	684.8	690.7	695.7	702.9	721.3	740.3	770.2	812.4	869.5	949.0	1050.4
40°	654.2	659.2	666.7	669.9	684.9	701.7	726.1	764.9	822.5	894.9	993.8
42.5°	623.2	628.2	632.6	636.3	649.3	664.2	686.1	719.3	770.4	840.9	938.8
45°	581.0	581.6	586.0	592.9	599.2	609.8	625.4	654.2	693.6	759.9	848.7
47.5°	538.2	538.9	539.7	542.7	549.6	559.2	569.7	593.0	628.3	681.2	767.6
50°	509.7	508.5	509.7	512.2	516.6	524.7	536.6	553.5	582.3	631.7	711.1
52.5°	482.2	481.9	481.2	482.2	485.6	491.2	499.5	514.0	539.7	585.1	655.1
55°	440.3	437.2	437.8	435.3	440.9	442.1	448.5	460.3	482.9	514.1	579.8
57.5°	395.7	393.0	390.3	389.6	389.0	392.4	397.4	406.8	424.0	451.4	504.7
60°	367.1	364.0	360.2	359.0	359.0	360.9	363.4	370.2	386.5	410.9	454.7
62.5°	338.1	334.5	332.2	328.9	328.0	329.9	332.3	337.2	349.0	371.8	409.6
65°	293.3	289.0	285.8	285.2	284.0	282.1	283.3	288.3	297.7	315.8	345.8
67.5°	248.5	244.3	243.6	239.9	238.2	238.4	238.2	242.4	248.1	263.7	286.1
70°	218.9	215.7	214.5	211.4	210.2	208.9	207.6	211.4	217.1	230.2	249.6
72.5°	188.9	186.2	183.5	180.9	181.2	179.8	179.6	181.9	186.5	198.6	213.5
75°	145.7	146.4	143.3	140.1	139.5	138.2	138.2	140.1	141.9	151.4	163.2
77.5°	105.7	105.2	102.5	101.6	100.9	99.5	100.9	102.2	103.2	109.4	118.2
80°	80.7	80.7	77.6	77.6	76.9	75.0	76.9	75.7	78.1	84.5	90.7
82.5°	57.7	56.6	56.6	55.5	55.4	54.0	55.0	56.2	57.1	61.5	65.1
85°	28.2	28.2	27.5	26.9	27.5	26.9	27.5	28.2	28.7	30.6	33.7
87.5°	10.3	10.6	10.7	10.8	10.5	10.6	10.7	10.7	11.2	11.2	11.2
90°	21.1	20.1	18.3	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0
92.5°	23.8	23.3	22.3	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3
95°	40.2	39.1	37.5	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1
97.5°	53.2	52.3	48.7	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2
100°	58.9	57.1	53.3	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4
102.5°	61.1	58.7	90.4	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3
105°	63.5	61.1	121.9	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6
107.5°	83.0	85.6	158.4	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4
110°	153.1	175.3	239.7	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	361.1	442.2	458.2	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2
115°	515.1	618.2	612.7	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2
117.5°	659.8	684.8	680.9	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5
120°	737.1	734.4	730.5	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3
122.5°	783.3	781.7	777.4	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3
125°	848.2	846.7	842.4	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6
127.5°	907.5	905.2	902.0	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6
130°	945.3	942.8	940.4	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8
132.5°	982.6	980.5	978.1	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8
135°	1035.3	1033.0	1031.0	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0
137.5°	1084.3	1082.1	1079.9	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6
140°	1116.2	1114.2	1111.7	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1
142.5°	1145.7	1143.9	1141.0	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0
145°	1186.8	1185.3	1181.6	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3
147.5°	1222.9	1221.8	1218.0	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8
150°	1244.8	1243.4	1239.9	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4
152.5°	1264.8	1263.5	1260.1	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0
155°	1291.8	1290.5	1287.9	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5
157.5°	1314.5	1313.0	1311.1	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2
160°	1327.9	1326.6	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6
162.5°	1340.1	1338.6	1337.5	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4
165°	1355.2	1353.7	1353.0	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7
167.5°	1367.8	1366.3	1365.6	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5
170°	1374.2	1372.7	1372.2	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7
172.5°	1379.0	1377.5	1377.1	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5
175°	1384.3	1382.7	1382.2	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7
177.5°	1385.2	1383.9	1383.7	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1635.9	1638.3	1646.3	1654.4	1663.4	1665.8	1669.9	1666.4	1665.4	1674.9	1681.9
5°	1640.5	1651.7	1673.7	1693.7	1710.5	1722.4	1734.9	1739.9	1749.3	1762.5	1778.7
7.5°	1635.2	1657.1	1691.5	1720.7	1752.5	1775.3	1793.2	1808.5	1827.0	1851.9	1879.1
10°	1629.2	1658.6	1700.5	1736.2	1774.9	1804.3	1828.7	1852.5	1880.0	1914.4	1950.0
12.5°	1618.3	1653.1	1705.5	1747.7	1797.4	1826.4	1859.3	1910.5	1940.0	1988.0	2038.2
15°	1596.1	1634.8	1708.0	1759.9	1816.2	1871.2	1931.9	1980.8	2029.5	2057.7	2128.4
17.5°	1563.2	1620.1	1701.1	1761.7	1833.2	1920.0	1988.1	2043.3	2099.7	2145.3	2180.8
20°	1536.6	1598.6	1691.1	1763.7	1848.7	1941.9	2020.2	2076.4	2125.2	2163.3	2185.2
22.5°	1503.2	1581.0	1671.1	1756.1	1864.7	1956.9	2039.1	2083.4	2124.2	2142.8	2151.2
25°	1450.4	1544.2	1646.2	1749.9	1872.5	1970.1	2045.1	2072.0	2083.9	2065.8	2035.7
27.5°	1393.5	1498.0	1617.2	1738.1	1867.7	1961.5	2015.3	2011.1	1990.9	1932.3	1885.4
30°	1350.9	1466.0	1594.2	1726.2	1856.2	1947.6	1978.9	1947.6	1901.9	1836.3	1769.3
32.5°	1306.4	1425.5	1569.7	1709.1	1835.2	1915.5	1922.3	1868.5	1797.8	1723.2	1639.7
35°	1239.0	1367.8	1523.5	1671.1	1790.5	1841.3	1811.2	1716.2	1632.4	1530.4	1416.5
37.5°	1162.8	1305.0	1461.2	1615.4	1723.6	1736.9	1662.4	1562.3	1444.1	1324.3	1190.3
40°	1105.8	1256.5	1417.2	1572.9	1668.6	1654.8	1559.8	1449.7	1309.0	1162.6	1038.2
42.5°	1054.7	1205.4	1369.1	1521.9	1598.6	1560.8	1449.7	1314.7	1163.4	1025.6	911.6
45°	966.3	1121.3	1289.0	1436.6	1480.4	1412.2	1265.3	1115.1	966.3	851.2	761.1
47.5°	880.4	1033.8	1199.8	1329.6	1345.0	1253.3	1092.7	938.3	810.3	716.6	653.1
50°	817.5	971.3	1135.8	1251.5	1246.4	1135.8	970.6	823.7	716.7	641.0	598.5
52.5°	760.9	906.3	1064.2	1169.4	1142.9	1022.2	864.6	734.1	646.2	587.0	548.5
55°	673.0	807.4	957.5	1042.0	993.2	859.3	726.1	621.0	556.0	511.6	481.5
57.5°	585.6	711.7	840.2	892.2	838.3	714.7	603.7	527.4	478.5	445.6	426.1
60°	531.6	641.7	756.1	801.2	736.8	626.7	539.1	471.0	431.5	404.6	387.1
62.5°	477.6	576.2	684.1	708.6	649.7	556.7	479.1	422.4	390.0	366.1	349.6
65°	404.1	484.7	566.7	582.9	528.5	456.6	395.3	358.4	329.6	312.1	299.0
67.5°	331.3	396.2	454.2	467.3	419.6	369.8	325.5	293.3	273.8	259.3	248.2
70°	288.3	339.6	387.1	397.8	359.6	315.2	281.4	255.8	238.3	225.7	215.2
72.5°	242.8	285.6	325.1	332.2	301.0	267.2	239.4	219.2	203.8	195.8	185.6
75°	185.8	210.8	241.4	243.3	222.6	202.0	180.8	167.6	159.5	149.5	144.5
77.5°	131.1	150.7	168.2	171.6	159.4	145.3	133.5	123.1	116.2	111.6	107.0
80°	100.1	115.7	123.2	127.6	118.9	108.9	102.0	95.1	90.7	87.6	84.5
82.5°	71.5	81.2	88.2	91.5	86.8	80.8	73.9	70.0	66.6	64.0	63.0
85°	36.3	40.6	45.1	46.3	45.1	42.5	38.7	38.7	36.9	36.3	36.3
87.5°	13.2	15.6	16.2	18.2	17.6	17.9	18.3	18.2	18.0	17.7	17.4
90°	3.5	5.9	8.4	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2
92.5°	20.0	19.8	19.6	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4
95°	57.8	50.4	43.1	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3
97.5°	108.6	87.8	67.1	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1
100°	146.8	116.3	85.9	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7
102.5°	223.8	217.4	210.8	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3
105°	311.3	317.9	324.6	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0
107.5°	394.7	400.1	405.5	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6
110°	448.6	453.3	457.9	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	499.4	503.4	507.6	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8
115°	579.9	583.7	587.5	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0
117.5°	652.7	657.0	661.2	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9
120°	704.7	708.0	711.4	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8
122.5°	749.8	753.3	756.9	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9
125°	817.5	820.4	823.3	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8
127.5°	879.8	883.0	886.2	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7
130°	919.4	922.9	926.5	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7
132.5°	958.9	962.0	965.0	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7
135°	1011.5	1015.1	1018.7	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5
137.5°	1063.2	1065.6	1068.2	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5
140°	1096.9	1098.7	1100.5	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2
142.5°	1125.6	1127.2	1128.8	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5
145°	1169.0	1168.8	1168.7	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5
147.5°	1208.0	1207.1	1206.3	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1
150°	1232.8	1231.3	1229.7	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1
152.5°	1254.3	1252.5	1250.8	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1
155°	1285.5	1283.6	1281.5	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2
157.5°	1310.5	1308.8	1307.1	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0
160°	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3
162.5°	1338.1	1336.7	1335.4	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6
165°	1355.3	1354.0	1352.6	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8
167.5°	1368.2	1366.8	1365.5	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4
170°	1375.4	1374.0	1372.7	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8
172.5°	1380.2	1378.8	1377.5	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6
175°	1386.2	1384.6	1383.1	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8
177.5°	1387.5	1386.2	1385.0	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3	1627.3
2.5°	1687.9	1694.9	1694.9	1695.9	1703.9	1702.9	1702.4
5°	1796.2	1806.9	1808.1	1819.4	1826.8	1824.4	1817.5
7.5°	1898.4	1918.2	1933.2	1941.5	1951.4	1957.6	1954.8
10°	1979.4	2008.2	2025.7	2037.6	2052.0	2062.7	2058.9
12.5°	2053.0	2087.3	2111.3	2131.7	2133.5	2147.2	2138.0
15°	2167.8	2203.9	2207.7	2222.7	2234.7	2233.4	2234.0
17.5°	2205.6	2217.2	2219.6	2220.0	2220.2	2215.7	2206.2
20°	2192.1	2187.7	2177.1	2169.0	2154.6	2152.7	2140.2
22.5°	2128.1	2114.2	2087.5	2069.9	2047.5	2041.6	2038.2
25°	2002.0	1971.3	1928.8	1888.1	1876.9	1855.0	1861.2
27.5°	1829.0	1781.2	1735.1	1702.1	1672.3	1639.5	1648.9
30°	1707.4	1653.6	1588.6	1538.5	1506.7	1475.4	1469.7
32.5°	1562.3	1483.5	1411.0	1366.9	1318.1	1298.3	1276.6
35°	1312.1	1235.2	1163.3	1101.4	1065.7	1038.2	1013.1
37.5°	1087.1	998.5	940.5	890.3	864.6	848.9	852.8
40°	947.5	870.0	827.5	789.3	765.5	754.2	756.8
42.5°	834.4	776.4	741.4	715.2	698.4	692.2	690.7
45°	706.1	673.5	644.8	629.8	621.7	614.8	610.4
47.5°	618.5	592.0	575.8	566.8	559.8	552.7	552.6
50°	566.0	548.5	537.2	527.8	522.3	517.3	521.6
52.5°	525.9	510.0	498.7	490.3	488.2	483.7	483.6
55°	466.6	454.0	445.9	438.4	434.7	432.2	429.0
57.5°	412.6	400.7	393.1	388.4	381.3	378.7	377.8
60°	374.0	364.6	357.1	350.8	347.7	342.7	342.7
62.5°	338.5	329.1	322.1	317.4	312.2	310.2	310.8
65°	287.1	279.6	272.7	267.7	266.5	262.7	263.9
67.5°	239.8	234.8	227.5	224.8	222.4	220.4	218.9
70°	208.3	203.3	199.5	195.8	193.9	193.9	193.9
72.5°	181.7	175.8	173.5	168.7	169.8	167.9	165.9
75°	140.7	137.0	135.1	133.2	130.1	130.1	130.1
77.5°	103.6	102.5	100.2	98.2	97.5	96.8	97.1
80°	80.0	79.5	78.1	78.1	76.9	76.3	75.0
82.5°	61.5	59.9	59.2	58.6	58.4	58.2	58.1
85°	35.1	33.7	33.7	34.4	33.2	33.2	33.7
87.5°	18.2	18.4	18.1	18.2	18.8	18.3	18.4
90°	23.4	24.5	25.3	25.7	26.2	26.6	27.1
92.5°	25.0	25.5	26.0	26.3	26.5	26.8	27.1
95°	42.4	43.5	44.0	43.7	43.5	43.3	43.1
97.5°	55.0	55.9	56.5	56.7	57.0	57.2	57.5
100°	62.5	64.3	65.3	65.8	66.3	66.7	67.1
102.5°	65.7	68.0	69.5	70.0	70.7	71.4	71.9
105°	68.4	70.9	72.6	73.5	74.4	75.2	76.2
107.5°	78.0	75.6	74.8	75.7	76.5	77.5	78.3
110°	108.6	86.2	75.6	76.4	77.4	78.2	79.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	198.6	117.3	77.1	77.9	78.5	79.3	79.9
115°	309.0	205.9	146.3	130.3	114.2	98.2	82.2
117.5°	609.9	585.0	546.2	493.5	440.8	388.1	335.5
120°	742.4	745.2	731.4	701.3	671.3	641.2	611.2
122.5°	786.6	788.2	786.0	780.2	774.4	768.5	762.7
125°	851.3	852.9	854.0	854.7	855.4	856.0	856.7
127.5°	912.0	914.3	915.5	915.6	915.8	915.9	916.0
130°	950.2	952.6	953.8	953.6	953.3	953.1	952.9
132.5°	986.8	988.9	989.9	989.6	989.4	989.2	988.9
135°	1039.7	1041.9	1042.8	1042.4	1041.9	1041.5	1041.0
137.5°	1088.6	1090.8	1091.6	1090.8	1090.1	1089.3	1088.5
140°	1120.2	1122.2	1122.7	1121.5	1120.4	1119.3	1118.2
142.5°	1149.3	1151.1	1151.5	1150.4	1149.2	1148.2	1147.1
145°	1190.0	1191.6	1191.8	1190.7	1189.6	1188.5	1187.3
147.5°	1225.3	1226.4	1226.5	1225.6	1224.6	1223.7	1222.8
150°	1247.5	1248.8	1248.9	1247.7	1246.7	1245.6	1244.4
152.5°	1267.5	1268.9	1268.8	1267.2	1265.8	1264.3	1262.9
155°	1294.6	1295.9	1295.6	1293.8	1292.1	1290.3	1288.5
157.5°	1317.5	1319.0	1318.9	1317.2	1315.4	1313.7	1311.9
160°	1330.6	1331.9	1331.8	1330.3	1328.7	1327.2	1325.6
162.5°	1343.1	1344.7	1344.4	1342.6	1340.7	1338.7	1336.8
165°	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7
167.5°	1370.9	1372.5	1372.2	1370.3	1368.3	1366.3	1364.2
170°	1377.3	1378.9	1378.7	1376.7	1374.7	1372.7	1370.6
172.5°	1382.1	1383.7	1383.6	1381.5	1379.5	1377.5	1375.5
175°	1387.4	1388.9	1388.6	1386.4	1384.1	1382.0	1379.7
177.5°	1387.6	1388.9	1388.7	1387.1	1385.5	1383.9	1382.3
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7

(END OF REPORT)