

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: P331412-830

Luminaire Tested: **SA2XXDIP-C865D1080U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331412-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
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-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

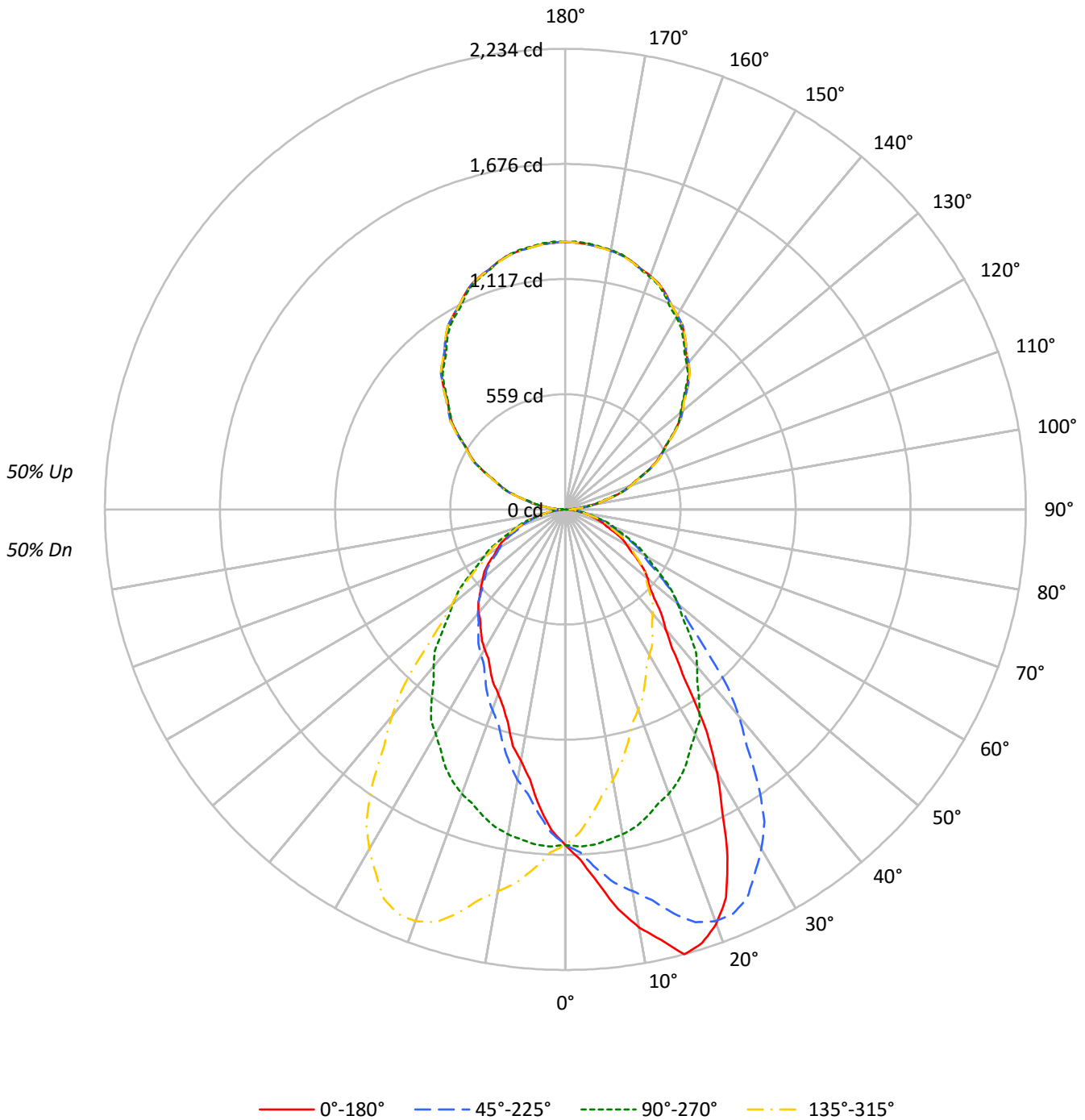
Lumens per Lamp: N/A
Luminaire Lumens: 7223.2 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43
2	90	83	77	72	83	77	71	67	65	61	58	54	52	49	45	43	41	37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	42	40	38	36	32
4	75	65	57	52	69	60	54	48	52	47	43	44	40	37	36	33	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	24
6	64	52	44	39	59	49	42	37	42	37	33	36	32	28	30	27	24	22
7	59	47	40	34	55	44	37	32	38	33	29	33	28	25	27	24	22	19
8	55	43	36	30	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	51	40	32	27	48	37	30	26	32	27	23	28	24	21	23	20	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	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	2.1
10°-20°	450.6	6.2
20°-30°	653.9	9.1
30°-40°	690.0	9.6
40°-50°	611.0	8.5
50°-60°	487.6	6.8
60°-70°	331.4	4.6
70°-80°	169.9	2.4
80°-90°	46.1	0.6
90°-100°	82.2	1.1
100°-110°	255.3	3.5
110°-120°	436.4	6.0
120°-130°	573.9	7.9
130°-140°	644.2	8.9
140°-150°	631.6	8.7
150°-160°	529.8	7.3
160°-170°	351.4	4.9
170°-180°	122.8	1.7
0°-30°	1259.4	17.4
0°-40°	1949.5	27.0
0°-60°	3048.0	42.2
0°-90°	3595.4	49.8
90°-120°	774.0	10.7
90°-150°	2623.7	36.3
90°-180°	3628.0	50.2
0°-180°	7223.2	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°	37	1	37	1	37	18
95°	68	57	68	57	68	76
105°	243	235	243	235	243	256
115°	438	438	438	438	438	432
125°	639	637	639	637	639	570
135°	834	824	834	824	834	642
145°	1012	1001	1012	1001	1012	632
155°	1153	1144	1153	1144	1153	531
165°	1246	1245	1246	1245	1246	351
175°	1291	1295	1291	1295	1291	123
180°	1297	1297	1297	1297	1297	



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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°	20.5	20.4	20.8	20.3	20.3	20.8	20.9	20.5	21.1	21.7	21.1
90°	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3	37.8	38.4	33.0
92.5°	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0	34.9	34.8	33.6
95°	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0	70.0	70.0	69.6
97.5°	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8	117.8	117.8	116.9
100°	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1	151.1	151.1	150.3
102.5°	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4	187.2	187.0	186.1
105°	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9	241.4	240.8	240.3
107.5°	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6	300.4	300.2	300.2
110°	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5	340.5	340.5	340.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5	381.1	381.6	381.8
115°	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9	442.1	442.3	442.8
117.5°	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1	501.7	502.3	503.7
120°	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8	540.8	540.8	542.8
122.5°	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7	582.3	582.9	584.3
125°	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3	643.0	643.8	644.5
127.5°	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2	702.0	702.9	703.8
130°	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3	741.8	742.3	742.8
132.5°	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4	781.6	782.6	782.5
135°	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2	838.4	838.7	838.2
137.5°	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4	893.6	893.8	893.2
140°	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6	930.6	930.6	929.4
142.5°	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3	964.1	963.9	963.1
145°	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4	1015.1	1014.9	1013.4
147.5°	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3	1059.7	1059.1	1058.2
150°	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2	1086.2
152.5°	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2	1114.1
155°	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1	1151.9	1150.7	1150.0
157.5°	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4	1184.8	1183.1	1182.6
160°	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2	1204.7	1203.2	1203.0
162.5°	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1	1222.4	1220.8	1220.5
165°	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2	1245.5	1243.8	1243.8
167.5°	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2	1264.5	1262.8	1262.8
170°	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7	1275.0	1273.3	1273.6
172.5°	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6	1282.9	1281.2	1281.4
175°	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2	1291.5	1289.7	1290.2
177.5°	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8	1295.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



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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°	20.5	19.4	18.4	18.6	16.5	15.9	13.3	11.2	11.3	11.4	10.9
90°	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1	4.1	7.0	9.9
92.5°	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5	21.6	23.8	25.9
95°	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9	59.4	61.8	64.2
97.5°	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1	106.1	108.3	110.5
100°	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0	141.0	143.0	144.9
102.5°	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9	177.4	179.0	180.5
105°	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4	236.1	236.9	237.6
107.5°	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4	296.4	297.6	298.6
110°	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9	335.4	336.9	338.3



TEST NUMBER: P331412-830

CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0	377.4	378.9	380.3
115°	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9	439.4	440.8	442.3
117.5°	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6	501.6	503.6	505.5
120°	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	542.8	544.8	546.7
122.5°	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5	580.9	583.2	585.5
125°	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2	639.4	641.6	643.8
127.5°	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4	697.1	699.9	702.7
130°	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3	733.4	736.6	739.7
132.5°	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5	773.2	775.7	778.3
135°	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4	827.1	829.8	832.5
137.5°	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1	883.4	885.5	887.7
140°	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3	917.5	919.6	921.9
142.5°	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4	952.5	954.7	956.9
145°	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7	1002.4	1004.1	1005.8
147.5°	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6	1047.6	1049.6	1051.7
150°	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2	1077.7	1079.1	1080.6
152.5°	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3	1104.8	1106.3	1107.8
155°	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2	1144.8	1145.6	1146.3
157.5°	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9	1179.4	1179.9	1180.3
160°	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0	1200.4	1200.9	1201.4
162.5°	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2	1219.3	1219.4	1219.5
165°	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8	1244.6	1244.3	1244.1
167.5°	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3	1265.6	1264.8	1264.1
170°	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7	1277.0	1276.2	1275.4
172.5°	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5	1284.9	1284.1	1283.4
175°	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2	1294.5	1293.7	1293.0
177.5°	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1	1298.5	1298.0	1297.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331412-830
 CATALOG NUMBER: SA2XXDIP-C865D1080U830-4F0-1E-UDD-A1

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°	11.0	11.4	12.0	13.0	13.6	14.1	13.6	13.5	13.4	12.3	12.3
90°	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3	36.9	36.4	36.3
92.5°	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0	35.1	35.3	35.3
95°	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0	70.0	70.0	69.8
97.5°	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8	117.8	117.8	117.8
100°	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1	151.1	151.1	151.0
102.5°	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4	187.6	187.8	187.8
105°	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9	242.3	242.8	243.1
107.5°	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6	300.8	301.0	300.5
110°	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.2



TEST NUMBER: P331412-830

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5	379.9	379.4	378.8
115°	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9	441.6	441.3	440.8
117.5°	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1	500.6	500.0	499.4
120°	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8	540.8	540.8	540.5
122.5°	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7	581.2	580.5	580.0
125°	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3	641.6	640.8	640.4
127.5°	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2	700.2	699.4	698.5
130°	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3	740.8	740.4	739.6
132.5°	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4	779.4	778.4	777.4
135°	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2	837.9	837.6	837.2
137.5°	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4	893.2	893.1	892.5
140°	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6	930.6	930.6	930.1
142.5°	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3	964.5	964.7	964.3
145°	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4	1015.7	1015.9	1015.5
147.5°	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3	1060.7	1061.3	1061.1
150°	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1
152.5°	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9
155°	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1	1154.3	1155.6	1155.7
157.5°	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4	1188.1	1189.7	1190.0
160°	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2	1207.6	1209.1	1209.3
162.5°	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1	1225.7	1227.4	1227.6
165°	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2	1248.9	1250.6	1250.8
167.5°	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2	1267.9	1269.6	1269.8
170°	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7	1278.4	1280.1	1280.3
172.5°	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6	1286.3	1288.0	1288.1
175°	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2	1294.9	1296.6	1296.7
177.5°	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331412-830

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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°	12.3	11.9	11.9	11.4	11.9	11.9	12.3	12.3	12.3	13.4	13.5
90°	36.5	36.8	36.9	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3
92.5°	35.3	35.3	35.4	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0
95°	69.4	68.9	68.3	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0
97.5°	117.7	117.7	117.6	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8
100°	150.7	150.5	150.2	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1
102.5°	187.5	187.3	187.0	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4
105°	243.1	243.1	243.1	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9
107.5°	299.4	298.3	297.2	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6
110°	339.4	338.7	337.9	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5



TEST NUMBER: P331412-830

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	378.2	377.7	377.2	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5
115°	440.2	439.4	438.7	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9
117.5°	498.6	497.9	497.1	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1
120°	539.8	539.0	538.3	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8
122.5°	579.5	578.9	578.4	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7
125°	640.1	639.9	639.6	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3
127.5°	697.8	697.0	696.3	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2
130°	738.7	737.6	736.7	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3
132.5°	776.7	775.8	775.1	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4
135°	836.4	835.8	835.0	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2
137.5°	891.5	890.5	889.6	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4
140°	929.2	928.2	927.2	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6
142.5°	963.3	962.3	961.4	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3
145°	1014.6	1013.6	1012.6	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4
147.5°	1060.2	1059.2	1058.3	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3
150°	1089.4	1088.6	1087.9	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6
152.5°	1117.9	1117.1	1116.2	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1
155°	1155.1	1154.3	1153.6	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1
157.5°	1188.7	1187.6	1186.5	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4
160°	1208.3	1207.4	1206.4	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2
162.5°	1226.4	1225.3	1224.1	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1
165°	1249.6	1248.4	1247.2	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2
167.5°	1268.6	1267.2	1266.0	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2
170°	1278.7	1277.3	1275.8	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7
172.5°	1286.7	1285.2	1283.7	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6
175°	1295.2	1293.7	1292.3	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2
177.5°	1298.3	1297.1	1295.9	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331412-830

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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°	13.6	14.1	13.6	13.0	12.0	11.4	11.0	10.9	11.4	11.3	11.2
90°	37.8	38.4	33.0	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1
92.5°	34.9	34.8	33.6	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5
95°	70.0	70.0	69.6	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9
97.5°	117.8	117.8	116.9	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1
100°	151.1	151.1	150.3	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0
102.5°	187.2	187.0	186.1	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9
105°	241.4	240.8	240.3	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4
107.5°	300.4	300.2	300.2	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4
110°	340.5	340.5	340.5	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9



TEST NUMBER: P331412-830

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	381.1	381.6	381.8	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0
115°	442.1	442.3	442.8	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9
117.5°	501.7	502.3	503.7	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6
120°	540.8	540.8	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8
122.5°	582.3	582.9	584.3	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5
125°	643.0	643.8	644.5	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2
127.5°	702.0	702.9	703.8	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4
130°	741.8	742.3	742.8	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3
132.5°	781.6	782.6	782.5	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5
135°	838.4	838.7	838.2	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4
137.5°	893.6	893.8	893.2	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1
140°	930.6	930.6	929.4	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3
142.5°	964.1	963.9	963.1	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4
145°	1015.1	1014.9	1013.4	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7
147.5°	1059.7	1059.1	1058.2	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6
150°	1087.9	1087.2	1086.2	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2
152.5°	1116.2	1115.2	1114.1	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3
155°	1151.9	1150.7	1150.0	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2
157.5°	1184.8	1183.1	1182.6	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9
160°	1204.7	1203.2	1203.0	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0
162.5°	1222.4	1220.8	1220.5	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2
165°	1245.5	1243.8	1243.8	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8
167.5°	1264.5	1262.8	1262.8	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3
170°	1275.0	1273.3	1273.6	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7
172.5°	1282.9	1281.2	1281.4	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5
175°	1291.5	1289.7	1290.2	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2
177.5°	1295.9	1294.8	1295.1	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331412-830

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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°	13.3	15.9	16.5	18.6	18.4	19.4	20.5	21.1	21.7	21.1	20.5
90°	4.1	7.0	9.9	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3
92.5°	21.6	23.8	25.9	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0
95°	59.4	61.8	64.2	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0
97.5°	106.1	108.3	110.5	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8
100°	141.0	143.0	144.9	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1
102.5°	177.4	179.0	180.5	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4
105°	236.1	236.9	237.6	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9
107.5°	296.4	297.6	298.6	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6
110°	335.4	336.9	338.3	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	377.4	378.9	380.3	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5
115°	439.4	440.8	442.3	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9
117.5°	501.6	503.6	505.5	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1
120°	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8
122.5°	580.9	583.2	585.5	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7
125°	639.4	641.6	643.8	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3
127.5°	697.1	699.9	702.7	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2
130°	733.4	736.6	739.7	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3
132.5°	773.2	775.7	778.3	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4
135°	827.1	829.8	832.5	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2
137.5°	883.4	885.5	887.7	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4
140°	917.5	919.6	921.9	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6
142.5°	952.5	954.7	956.9	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3
145°	1002.4	1004.1	1005.8	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4
147.5°	1047.6	1049.6	1051.7	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3
150°	1077.7	1079.1	1080.6	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6
152.5°	1104.8	1106.3	1107.8	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1
155°	1144.8	1145.6	1146.3	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1
157.5°	1179.4	1179.9	1180.3	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4
160°	1200.4	1200.9	1201.4	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2
162.5°	1219.3	1219.4	1219.5	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1
165°	1244.6	1244.3	1244.1	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2
167.5°	1265.6	1264.8	1264.1	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2
170°	1277.0	1276.2	1275.4	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7
172.5°	1284.9	1284.1	1283.4	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6
175°	1294.5	1293.7	1293.0	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2
177.5°	1298.5	1298.0	1297.4	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



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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°	20.9	20.8	20.3	20.3	20.8	20.4	20.5
90°	36.9	36.4	36.3	36.5	36.8	36.9	37.2
92.5°	35.1	35.3	35.3	35.3	35.3	35.4	35.4
95°	70.0	70.0	69.8	69.4	68.9	68.3	67.9
97.5°	117.8	117.8	117.8	117.7	117.7	117.6	117.6
100°	151.1	151.1	151.0	150.7	150.5	150.2	150.0
102.5°	187.6	187.8	187.8	187.5	187.3	187.0	186.8
105°	242.3	242.8	243.1	243.1	243.1	243.1	243.1
107.5°	300.8	301.0	300.5	299.4	298.3	297.2	296.1
110°	340.5	340.5	340.2	339.4	338.7	337.9	337.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	379.9	379.4	378.8	378.2	377.7	377.2	376.6
115°	441.6	441.3	440.8	440.2	439.4	438.7	437.9
117.5°	500.6	500.0	499.4	498.6	497.9	497.1	496.4
120°	540.8	540.8	540.5	539.8	539.0	538.3	537.5
122.5°	581.2	580.5	580.0	579.5	578.9	578.4	577.9
125°	641.6	640.8	640.4	640.1	639.9	639.6	639.4
127.5°	700.2	699.4	698.5	697.8	697.0	696.3	695.4
130°	740.8	740.4	739.6	738.7	737.6	736.7	735.7
132.5°	779.4	778.4	777.4	776.7	775.8	775.1	774.3
135°	837.9	837.6	837.2	836.4	835.8	835.0	834.2
137.5°	893.2	893.1	892.5	891.5	890.5	889.6	888.5
140°	930.6	930.6	930.1	929.2	928.2	927.2	926.2
142.5°	964.5	964.7	964.3	963.3	962.3	961.4	960.4
145°	1015.7	1015.9	1015.5	1014.6	1013.6	1012.6	1011.6
147.5°	1060.7	1061.3	1061.1	1060.2	1059.2	1058.3	1057.4
150°	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2
152.5°	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2
155°	1154.3	1155.6	1155.7	1155.1	1154.3	1153.6	1152.8
157.5°	1188.1	1189.7	1190.0	1188.7	1187.6	1186.5	1185.2
160°	1207.6	1209.1	1209.3	1208.3	1207.4	1206.4	1205.4
162.5°	1225.7	1227.4	1227.6	1226.4	1225.3	1224.1	1222.9
165°	1248.9	1250.6	1250.8	1249.6	1248.4	1247.2	1245.9
167.5°	1267.9	1269.6	1269.8	1268.6	1267.2	1266.0	1264.8
170°	1278.4	1280.1	1280.3	1278.7	1277.3	1275.8	1274.4
172.5°	1286.3	1288.0	1288.1	1286.7	1285.2	1283.7	1282.2
175°	1294.9	1296.6	1296.7	1295.2	1293.7	1292.3	1290.8
177.5°	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4

(END OF REPORT)