

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: P332979-830

Luminaire Tested: **SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

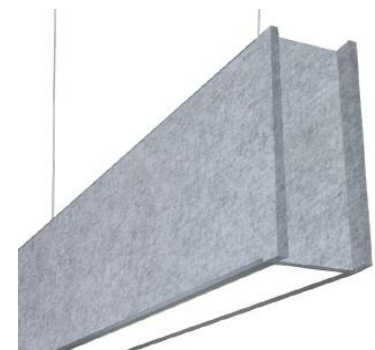
**Test Information**

Test Method: LM-79-08  
Report Number: P332979-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8621.6 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

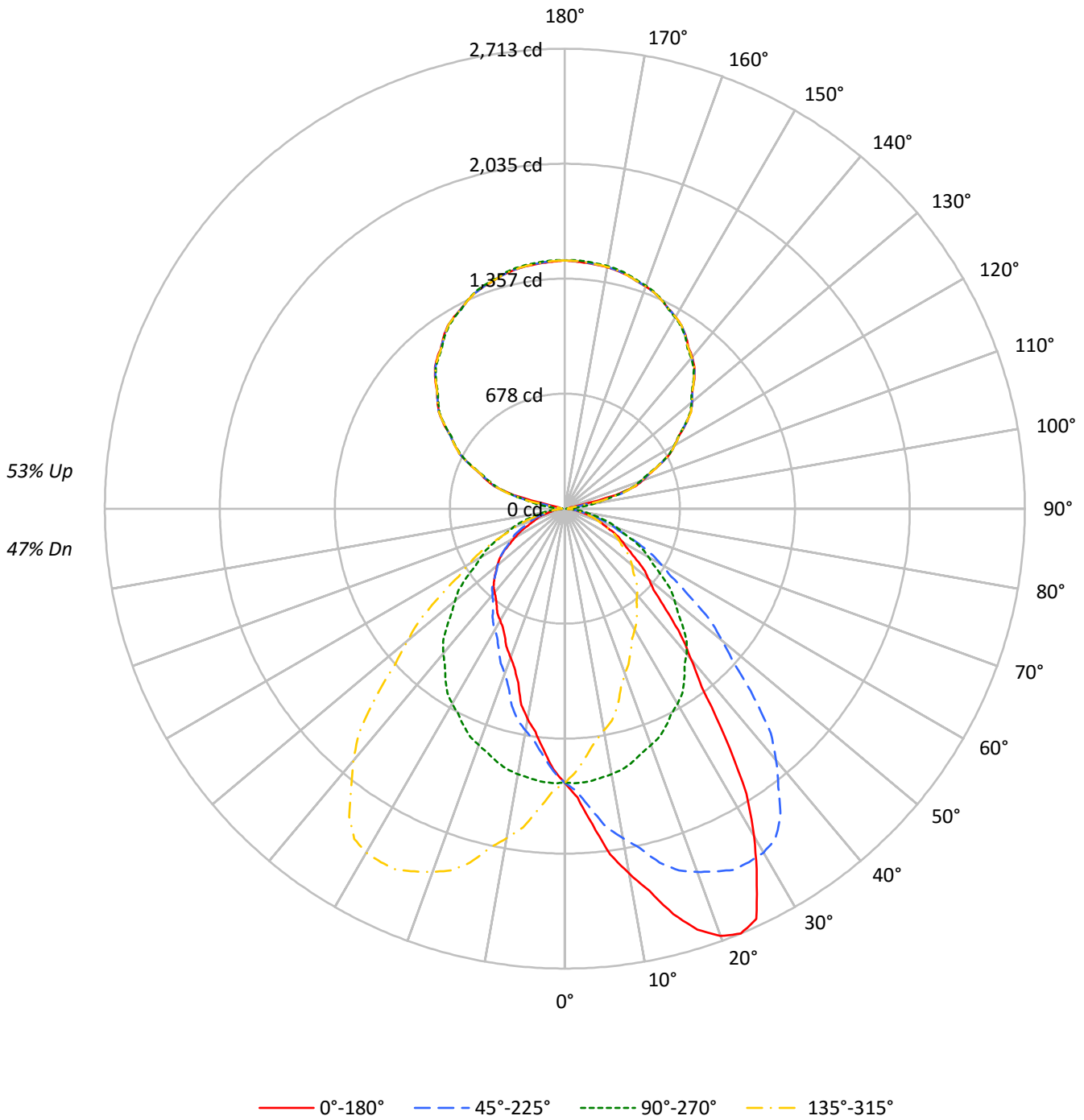
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	98	94	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	43	41	40	35
3	82	73	65	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	35	32	30	26
5	69	58	50	44	63	53	46	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	29	26	23	20
7	59	47	39	34	54	44	37	32	37	32	28	32	27	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	22	27	23	20	22	19	17	15
10	47	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	13056	13056	13056	13056
5°	15144	13095	11574	13095
10°	17915	13038	10330	13038
15°	20695	12918	8877	12918
20°	23040	12752	8027	12752
25°	23785	12588	7452	12588
30°	20821	12392	7106	12392
35°	16208	12098	6897	12098
40°	12154	11763	6785	11763
45°	9597	11226	6725	11226
50°	8102	10605	6531	10605
55°	7061	9923	6180	9923
60°	6353	9216	5470	9216
65°	5601	8451	4705	8451
70°	5044	7659	4244	7659
75°	4226	6787	3618	6787
80°	3575	5783	3394	5783
85°	3020	4520	3020	4520



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.7	1.8
10°-20°	472.7	5.5
20°-30°	739.3	8.6
30°-40°	821.9	9.5
40°-50°	729.2	8.5
50°-60°	568.2	6.6
60°-70°	372.0	4.3
70°-80°	182.9	2.1
80°-90°	49.4	0.6
90°-100°	50.1	0.6
100°-110°	319.3	3.7
110°-120°	610.8	7.1
120°-130°	775.4	9.0
130°-140°	829.7	9.6
140°-150°	775.8	9.0
150°-160°	625.7	7.3
160°-170°	403.5	4.7
170°-180°	139.1	1.6
0°-30°	1368.7	15.9
0°-40°	2190.5	25.4
0°-60°	3487.9	40.5
0°-90°	4092.2	47.5
90°-120°	980.2	11.4
90°-150°	3361.2	39.0
90°-180°	4529.0	52.5
0°-180°	8621.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1617	1617	1617	1617	1617	
5°	1869	1616	1428	1616	1869	189
15°	2476	1546	1062	1546	2476	704
25°	2670	1413	837	1413	2670	1185
35°	1645	1228	700	1228	1645	1031
45°	841	983	589	983	841	666
55°	502	705	439	705	502	456
65°	293	442	246	442	293	295
75°	136	218	116	218	136	149
85°	33	49	33	49	33	38
90°	33	3	33	3	33	16
95°	32	60	32	60	32	25
105°	312	330	312	330	312	272
115°	620	616	620	616	620	614
125°	872	865	872	865	872	776
135°	1081	1073	1081	1073	1081	832
145°	1244	1238	1244	1238	1244	777
155°	1356	1357	1356	1357	1356	625
165°	1425	1431	1425	1431	1425	402
175°	1456	1464	1456	1464	1456	139
180°	1464	1464	1464	1464	1464	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1705.8	1710.5	1705.8	1705.3	1700.2	1698.6	1696.5	1689.7	1677.2	1669.9	1671.4
5°	1868.8	1885.0	1875.9	1874.6	1860.3	1846.0	1836.8	1816.0	1793.8	1778.9	1766.4
7.5°	2057.2	2066.5	2060.9	2051.7	2028.5	2015.3	1994.2	1966.7	1927.0	1896.6	1868.9
10°	2185.4	2193.2	2190.7	2173.7	2156.7	2122.2	2102.6	2064.3	2014.0	1974.3	1937.1
12.5°	2311.6	2319.9	2297.0	2297.7	2265.7	2238.4	2207.4	2159.1	2101.1	2049.8	2003.4
15°	2476.1	2465.6	2465.6	2452.6	2416.7	2379.0	2347.0	2296.2	2223.2	2161.9	2097.4
17.5°	2604.8	2608.4	2603.1	2572.3	2544.2	2505.1	2446.6	2387.3	2319.5	2237.3	2171.3
20°	2681.9	2681.9	2676.1	2655.2	2618.8	2577.0	2513.9	2449.3	2363.3	2280.6	2206.3
22.5°	2713.2	2715.3	2708.4	2691.1	2658.3	2617.6	2563.8	2498.3	2409.7	2316.5	2224.5
25°	2670.2	2682.6	2683.9	2679.3	2669.6	2644.8	2598.5	2531.4	2451.9	2350.9	2251.8
27.5°	2451.6	2467.2	2480.9	2503.4	2533.4	2549.0	2551.1	2517.0	2447.6	2350.4	2250.7
30°	2233.6	2246.6	2289.1	2344.4	2387.4	2426.5	2460.4	2469.5	2430.4	2343.1	2238.2
32.5°	1991.8	2009.5	2051.8	2111.4	2183.0	2249.3	2325.3	2364.2	2363.1	2310.7	2213.7
35°	1644.6	1657.6	1696.8	1759.3	1845.3	1943.7	2064.3	2158.0	2221.9	2217.3	2158.0
37.5°	1326.3	1341.0	1380.5	1432.5	1515.9	1637.7	1754.4	1883.6	2001.7	2068.0	2048.1
40°	1153.3	1154.0	1192.4	1245.9	1324.0	1430.2	1557.3	1700.6	1832.2	1939.8	1960.6
42.5°	1016.7	1016.8	1042.3	1099.9	1156.2	1256.1	1377.4	1519.8	1673.8	1798.0	1853.2
45°	840.6	846.4	867.2	901.8	946.1	1030.8	1127.8	1260.2	1432.9	1580.1	1672.0
47.5°	711.8	720.4	733.7	761.9	797.1	853.6	933.9	1052.7	1193.2	1355.2	1485.9
50°	645.1	646.4	663.3	678.9	709.5	754.5	824.9	924.0	1052.9	1208.7	1354.0
52.5°	587.8	587.5	597.7	617.5	642.3	677.4	734.2	824.3	938.8	1078.4	1228.3
55°	501.7	505.0	512.8	528.4	547.3	572.1	617.1	684.9	774.8	894.0	1030.2
57.5°	436.3	438.0	444.1	450.7	468.1	486.1	519.8	566.8	642.7	740.4	867.2
60°	393.5	394.2	396.2	406.0	419.6	436.6	459.4	499.1	563.0	652.2	752.6
62.5°	351.9	353.0	356.0	363.2	373.7	385.5	409.3	441.3	494.2	570.4	660.8
65°	293.2	293.9	298.4	301.0	309.5	319.9	337.5	359.0	395.5	459.4	527.8
67.5°	245.0	245.0	245.2	248.7	254.7	261.6	272.1	289.3	316.8	356.0	416.3
70°	213.7	213.7	215.0	217.0	220.3	226.1	232.0	245.0	265.2	297.1	343.4
72.5°	184.5	185.0	186.3	186.7	188.4	193.2	197.6	205.9	220.9	245.0	282.4
75°	135.5	137.5	140.7	143.4	146.6	146.0	150.5	155.7	160.3	174.7	196.1
77.5°	100.9	99.8	100.2	102.5	102.8	103.5	106.7	110.7	114.1	120.9	128.7
80°	76.9	76.9	78.8	79.5	78.8	79.5	82.8	84.7	86.1	88.6	95.8
82.5°	58.2	59.2	58.5	59.2	59.6	60.2	63.0	63.3	64.7	65.7	68.7
85°	32.6	33.3	33.8	32.6	32.6	32.6	33.8	34.5	35.8	35.2	36.5
87.5°	18.0	17.4	17.8	17.7	18.2	17.4	17.7	18.5	17.1	17.3	17.0
90°	32.9	32.3	31.9	31.4	30.9	30.0	28.5	27.1	25.5	24.1	22.1
92.5°	30.3	30.2	30.1	30.0	29.9	29.0	27.6	26.1	24.7	23.2	21.3
95°	31.8	31.5	31.3	31.0	30.8	30.0	28.5	27.1	25.5	24.1	23.8
97.5°	30.6	30.4	30.2	30.0	29.7	29.5	29.3	29.2	29.0	28.9	56.1
100°	30.6	30.4	30.2	30.0	29.7	31.7	35.8	39.9	44.0	48.2	81.8
102.5°	31.6	31.5	31.5	31.4	31.4	53.6	98.3	142.9	187.6	232.1	236.6
105°	312.2	320.9	329.6	338.4	347.1	350.4	348.3	346.1	343.9	341.7	340.4
107.5°	435.0	434.0	433.2	432.3	431.3	430.3	429.2	428.2	427.1	426.0	424.3
110°	488.4	487.8	487.0	486.3	485.5	484.9	484.5	484.0	483.4	483.0	481.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	541.9	541.0	540.1	539.1	538.2	537.8	537.9	538.0	538.1	538.2	537.5
115°	619.9	619.9	619.9	619.9	619.9	619.6	619.2	618.7	618.2	617.6	617.9
117.5°	699.2	699.3	699.4	699.5	699.6	699.6	699.7	699.8	699.9	700.0	699.6
120°	749.1	749.6	750.1	750.5	751.0	751.0	750.5	750.1	749.6	749.1	749.3
122.5°	798.1	798.6	799.2	799.7	800.1	800.2	799.9	799.7	799.4	799.1	798.7
125°	871.8	871.6	871.3	871.0	870.8	870.3	869.6	868.8	868.1	867.4	867.9
127.5°	936.4	936.6	936.8	937.0	937.2	937.4	937.5	937.6	937.7	937.9	936.8
130°	980.1	980.1	980.1	980.1	980.1	980.1	979.9	979.6	979.3	979.1	978.4
132.5°	1020.5	1020.7	1020.9	1021.1	1021.2	1021.2	1021.1	1020.8	1020.5	1020.3	1019.4
135°	1080.9	1080.4	1080.0	1079.5	1079.0	1078.6	1078.0	1077.5	1077.0	1076.6	1075.6
137.5°	1132.7	1132.7	1132.9	1133.1	1133.2	1133.0	1132.5	1132.0	1131.4	1130.9	1129.8
140°	1168.6	1168.3	1168.1	1167.8	1167.6	1167.2	1166.4	1165.6	1164.9	1164.2	1163.7
142.5°	1198.3	1198.3	1198.3	1198.3	1198.2	1197.9	1197.3	1196.8	1196.3	1195.7	1195.4
145°	1244.2	1243.7	1243.1	1242.6	1242.2	1241.8	1241.6	1241.3	1241.1	1240.9	1240.9
147.5°	1282.0	1281.8	1281.6	1281.3	1281.0	1280.8	1280.6	1280.4	1280.3	1280.1	1280.3
150°	1306.6	1306.4	1306.1	1305.8	1305.6	1305.4	1305.4	1305.4	1305.4	1305.4	1305.7
152.5°	1327.6	1327.8	1327.9	1328.0	1328.1	1328.0	1327.7	1327.3	1326.9	1326.5	1326.9
155°	1355.8	1356.6	1357.3	1358.0	1358.8	1358.7	1357.6	1356.7	1355.8	1354.7	1355.5
157.5°	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6	1383.3	1382.1	1380.7	1379.5	1380.4
160°	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1	1399.7	1398.2	1396.8	1395.2	1395.5
162.5°	1407.5	1409.2	1410.9	1412.5	1414.2	1414.3	1412.8	1411.4	1409.9	1408.4	1408.6
165°	1424.8	1427.0	1429.2	1431.4	1433.6	1433.7	1431.8	1429.8	1427.9	1426.0	1426.0
167.5°	1437.8	1440.2	1442.7	1445.1	1447.5	1447.7	1445.5	1443.4	1441.2	1439.1	1439.3
170°	1445.7	1448.1	1450.5	1452.9	1455.4	1455.7	1453.7	1451.7	1449.8	1447.8	1447.6
172.5°	1450.0	1452.6	1455.3	1457.9	1460.6	1460.8	1459.0	1457.0	1455.0	1453.1	1452.8
175°	1455.5	1458.4	1461.3	1464.2	1467.2	1467.5	1465.4	1463.2	1460.9	1458.8	1458.6
177.5°	1459.1	1461.3	1463.7	1466.0	1468.4	1468.8	1467.2	1465.7	1464.1	1462.5	1462.2
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1666.2	1659.0	1655.3	1646.9	1637.0	1631.8	1627.1	1620.3	1611.5	1602.1	1595.3
5°	1750.8	1735.1	1715.6	1692.1	1671.3	1651.1	1633.5	1615.9	1595.7	1574.9	1554.1
7.5°	1837.6	1806.9	1773.6	1735.1	1697.8	1663.8	1632.5	1602.5	1568.6	1538.2	1510.6
10°	1898.1	1856.3	1810.1	1761.2	1712.3	1670.0	1628.3	1590.5	1548.8	1511.6	1480.4
12.5°	1947.1	1898.1	1842.4	1781.6	1722.8	1671.6	1623.6	1574.3	1526.9	1486.7	1444.9
15°	2028.4	1961.2	1886.3	1813.4	1737.1	1667.4	1602.9	1545.6	1491.5	1434.8	1395.1
17.5°	2084.2	2004.7	1913.5	1825.9	1735.8	1653.6	1579.1	1510.9	1448.5	1390.6	1343.3
20°	2117.6	2029.7	1928.7	1829.0	1728.0	1640.0	1559.9	1484.3	1419.8	1357.3	1308.3
22.5°	2136.4	2039.1	1928.7	1824.3	1719.7	1624.4	1536.4	1457.7	1387.5	1324.9	1270.8
25°	2142.4	2038.2	1925.4	1805.5	1690.8	1589.9	1498.6	1413.2	1335.1	1272.5	1215.2
27.5°	2134.1	2011.3	1895.8	1772.8	1654.5	1548.0	1452.3	1362.6	1284.3	1217.2	1158.4
30°	2121.6	1989.9	1866.1	1738.4	1618.5	1516.3	1415.2	1329.3	1247.7	1178.1	1118.8
32.5°	2094.4	1963.9	1830.7	1699.9	1578.4	1473.0	1377.1	1290.6	1210.8	1139.5	1076.6
35°	2040.8	1908.5	1763.9	1629.7	1510.3	1400.9	1311.0	1227.6	1151.3	1075.2	1008.6
37.5°	1970.0	1834.8	1691.0	1544.0	1424.7	1321.3	1238.8	1160.5	1086.1	1016.4	942.8
40°	1903.3	1780.1	1631.5	1485.6	1363.1	1263.4	1187.2	1116.2	1041.2	972.1	898.5
42.5°	1822.5	1717.6	1567.4	1421.0	1300.0	1204.0	1132.9	1063.5	995.3	928.4	851.6
45°	1687.6	1608.1	1467.4	1326.6	1204.8	1109.7	1044.5	983.3	923.3	859.4	787.1
47.5°	1533.0	1479.2	1357.7	1213.6	1100.9	1015.3	952.3	902.3	851.6	787.8	724.3
50°	1425.7	1391.1	1273.8	1142.3	1034.7	955.8	891.4	844.4	802.1	740.8	684.2
52.5°	1311.0	1292.6	1193.5	1067.7	963.8	886.6	831.4	789.2	746.3	695.5	642.4
55°	1136.3	1146.1	1062.1	953.3	855.5	790.4	740.2	705.0	668.5	625.6	584.5
57.5°	957.8	993.5	937.1	841.6	750.0	689.8	652.0	622.4	591.7	556.1	521.0
60°	850.9	880.9	849.0	765.0	684.9	628.8	593.6	570.8	540.2	507.6	480.9
62.5°	746.7	778.7	759.9	692.0	617.6	569.4	538.4	517.1	494.3	465.9	438.1
65°	615.8	636.6	627.5	580.6	527.8	486.7	458.1	442.4	421.6	400.8	376.0
67.5°	471.6	511.9	506.5	481.6	436.0	404.0	385.2	371.4	352.4	336.9	320.1
70°	387.7	424.8	424.1	404.0	379.2	349.2	336.2	324.5	307.6	292.6	278.9
72.5°	317.4	351.4	356.4	340.9	324.0	301.3	288.8	280.7	264.3	254.0	242.9
75°	222.2	246.9	253.4	253.4	245.6	233.9	222.8	217.6	205.9	196.8	190.3
77.5°	145.7	161.4	171.5	173.8	175.0	171.1	162.0	158.3	149.3	146.1	139.9
80°	102.9	113.4	125.1	129.0	132.2	131.0	127.1	124.4	116.0	112.7	110.1
82.5°	71.2	76.9	86.5	95.1	94.3	97.6	94.3	92.2	85.8	84.5	82.0
85°	37.1	37.8	39.1	45.0	48.3	49.5	50.1	48.8	46.9	46.9	42.3
87.5°	16.6	15.6	16.3	15.8	15.8	17.3	18.4	18.4	17.3	16.3	15.3
90°	20.2	18.3	16.3	13.9	11.3	8.7	5.9	3.3	5.9	8.7	11.3
92.5°	19.3	17.3	15.5	14.4	14.2	14.1	13.9	13.8	13.9	14.1	14.2
95°	23.6	23.4	23.1	27.1	35.4	43.6	51.9	60.2	51.9	43.6	35.4
97.5°	83.2	110.4	137.5	148.5	143.4	138.3	133.1	127.9	133.1	138.3	143.4
100°	115.4	148.9	182.6	197.2	192.7	188.4	184.0	179.6	184.0	188.4	192.7
102.5°	240.9	245.3	249.7	250.2	247.0	243.8	240.6	237.4	240.6	243.8	247.0
105°	339.2	338.1	336.9	335.5	334.0	332.5	331.1	329.6	331.1	332.5	334.0
107.5°	422.7	421.0	419.4	418.2	417.5	416.8	416.0	415.3	416.0	416.8	417.5
110°	480.0	478.6	477.1	476.1	475.3	474.6	473.8	473.2	473.8	474.6	475.3





TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	536.8	536.1	535.5	534.4	533.1	531.8	530.6	529.2	530.6	531.8	533.1
115°	618.2	618.4	618.7	618.4	617.6	617.0	616.2	615.5	616.2	617.0	617.6
117.5°	699.0	698.4	697.9	697.1	696.2	695.2	694.2	693.2	694.2	695.2	696.2
120°	749.6	749.9	750.1	749.7	748.8	747.8	746.8	745.8	746.8	747.8	748.8
122.5°	798.3	798.1	797.7	797.2	796.6	796.1	795.5	794.8	795.5	796.1	796.6
125°	868.4	868.8	869.3	869.1	868.1	867.1	866.2	865.2	866.2	867.1	868.1
127.5°	935.7	934.5	933.4	932.7	932.6	932.3	932.0	931.8	932.0	932.3	932.6
130°	977.6	976.9	976.2	975.7	975.4	975.2	975.0	974.7	975.0	975.2	975.4
132.5°	1018.4	1017.5	1016.6	1015.9	1015.5	1015.0	1014.6	1014.2	1014.6	1015.0	1015.5
135°	1074.6	1073.7	1072.7	1072.3	1072.5	1072.8	1073.1	1073.3	1073.1	1072.8	1072.5
137.5°	1128.8	1127.7	1126.6	1126.1	1126.0	1125.9	1125.8	1125.7	1125.8	1125.9	1126.0
140°	1163.2	1162.7	1162.2	1161.8	1161.3	1160.7	1160.3	1159.8	1160.3	1160.7	1161.3
142.5°	1195.1	1194.9	1194.6	1194.0	1193.1	1192.2	1191.4	1190.4	1191.4	1192.2	1193.1
145°	1240.9	1240.9	1240.9	1240.5	1239.7	1239.1	1238.3	1237.6	1238.3	1239.1	1239.7
147.5°	1280.5	1280.8	1281.0	1280.4	1279.1	1277.7	1276.4	1275.0	1276.4	1277.7	1279.1
150°	1306.0	1306.2	1306.5	1306.1	1305.1	1304.1	1303.2	1302.2	1303.2	1304.1	1305.1
152.5°	1327.4	1327.9	1328.2	1328.0	1327.3	1326.5	1325.8	1324.9	1325.8	1326.5	1327.3
155°	1356.2	1357.0	1357.6	1357.9	1357.6	1357.4	1357.2	1357.0	1357.2	1357.4	1357.6
157.5°	1381.2	1382.0	1382.8	1383.3	1383.5	1383.6	1383.7	1383.8	1383.7	1383.6	1383.5
160°	1395.7	1396.0	1396.3	1396.8	1397.5	1398.2	1398.9	1399.7	1398.9	1398.2	1397.5
162.5°	1408.9	1409.1	1409.4	1409.9	1410.9	1411.8	1412.8	1413.6	1412.8	1411.8	1410.9
165°	1426.0	1426.0	1426.0	1426.5	1427.8	1429.0	1430.2	1431.4	1430.2	1429.0	1427.8
167.5°	1439.4	1439.5	1439.6	1440.4	1441.6	1442.9	1444.2	1445.4	1444.2	1442.9	1441.6
170°	1447.4	1447.1	1446.9	1447.5	1449.0	1450.4	1451.9	1453.3	1451.9	1450.4	1449.0
172.5°	1452.6	1452.4	1452.1	1452.7	1454.2	1455.7	1457.1	1458.6	1457.1	1455.7	1454.2
175°	1458.3	1458.0	1457.8	1458.4	1459.9	1461.3	1462.8	1464.2	1462.8	1461.3	1459.9
177.5°	1461.7	1461.3	1460.9	1461.4	1462.8	1464.1	1465.6	1466.9	1465.6	1464.1	1462.8
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1588.0	1582.8	1576.0	1568.2	1558.9	1550.5	1546.9	1550.0	1551.5	1547.4	1546.9
5°	1539.7	1523.4	1510.3	1490.8	1475.2	1462.2	1453.0	1449.2	1450.4	1440.0	1437.4
7.5°	1485.4	1466.0	1444.7	1421.4	1399.9	1380.7	1370.6	1365.2	1354.2	1349.4	1341.5
10°	1450.4	1424.4	1403.5	1376.1	1351.4	1328.6	1317.5	1308.3	1297.3	1292.1	1281.0
12.5°	1414.5	1384.2	1361.3	1332.8	1307.6	1280.1	1269.5	1252.6	1235.3	1224.4	1210.1
15°	1363.8	1327.3	1299.3	1265.4	1235.4	1204.1	1176.1	1144.8	1133.1	1108.3	1094.0
17.5°	1304.5	1267.4	1232.8	1187.3	1141.0	1102.2	1072.3	1042.4	1024.4	1008.6	1001.4
20°	1265.4	1231.5	1183.3	1130.5	1079.0	1036.0	1011.9	992.4	972.8	961.8	953.9
22.5°	1228.3	1185.1	1129.1	1072.1	1020.7	987.0	966.6	946.5	930.6	920.0	909.6
25°	1166.3	1109.7	1050.4	985.2	950.0	920.7	898.5	882.2	872.5	858.8	853.6
27.5°	1102.6	1034.0	968.6	924.7	888.1	861.3	842.0	829.7	817.4	808.6	801.8
30°	1053.6	983.9	925.3	883.5	846.4	824.3	808.6	794.3	784.5	777.3	772.1
32.5°	1005.1	935.4	886.2	841.3	812.0	790.4	773.7	763.0	755.4	746.0	742.9
35°	935.0	873.1	830.1	789.8	759.8	740.2	727.2	716.0	709.5	707.0	705.0
37.5°	867.6	817.0	770.7	737.6	710.9	695.5	680.1	674.7	670.2	665.5	667.6
40°	824.9	777.3	736.3	701.1	679.6	662.7	653.6	647.1	643.1	643.1	643.1
42.5°	787.9	741.4	701.3	669.9	648.3	634.0	623.9	618.3	617.1	616.5	619.6
45°	730.5	687.4	647.1	620.9	602.8	588.3	582.5	578.0	578.0	580.6	581.2
47.5°	673.4	633.2	600.8	571.6	554.9	545.9	540.8	538.5	538.8	541.3	544.3
50°	638.6	598.8	566.8	540.8	525.2	516.7	512.2	510.9	512.2	512.2	516.7
52.5°	600.5	565.0	533.5	511.6	493.9	486.0	483.4	481.6	482.4	484.6	486.4
55°	544.7	512.8	482.9	461.9	448.9	443.7	437.9	438.5	437.2	438.5	438.5
57.5°	488.8	460.1	432.3	415.8	404.3	396.7	390.3	392.1	390.2	389.9	388.9
60°	452.9	421.6	399.4	384.5	371.4	364.9	359.0	360.3	358.4	357.0	354.5
62.5°	413.8	387.7	366.6	352.1	341.7	334.1	328.3	327.0	322.4	318.0	312.3
65°	357.0	335.5	316.7	303.0	293.2	287.4	282.8	278.9	269.1	258.6	253.4
67.5°	302.0	286.4	268.8	257.2	249.3	241.6	232.9	226.2	217.1	211.4	208.1
70°	266.5	251.5	236.5	225.5	217.0	209.8	200.0	195.5	189.0	186.3	183.1
72.5°	232.6	218.7	204.7	194.7	185.7	180.1	172.4	167.9	164.9	163.9	160.7
75°	181.2	170.0	159.7	150.5	143.4	139.4	136.2	132.9	131.6	125.7	122.5
77.5°	132.1	124.9	118.3	111.8	106.7	104.2	97.8	94.1	91.9	89.2	88.5
80°	102.9	97.7	91.2	87.3	80.1	77.6	74.9	74.3	73.6	73.0	72.3
82.5°	77.4	72.2	65.7	63.3	61.4	59.9	58.2	57.6	56.9	57.3	57.2
85°	39.1	36.5	36.5	35.8	35.2	34.5	33.8	33.8	33.3	33.8	33.3
87.5°	15.8	15.7	16.1	15.6	16.4	16.8	16.6	16.9	17.7	17.0	17.2
90°	13.9	16.3	18.3	20.2	22.1	24.1	25.5	27.1	28.5	30.0	30.9
92.5°	14.4	15.5	17.3	19.3	21.3	23.2	24.7	26.1	27.6	29.0	29.9
95°	27.1	23.1	23.4	23.6	23.8	24.1	25.5	27.1	28.5	30.0	30.8
97.5°	148.5	137.5	110.4	83.2	56.1	28.9	29.0	29.2	29.3	29.5	29.7
100°	197.2	182.6	148.9	115.4	81.8	48.2	44.0	39.9	35.8	31.7	29.7
102.5°	250.2	249.7	245.3	240.9	236.6	232.1	187.6	142.9	98.3	53.6	31.4
105°	335.5	336.9	338.1	339.2	340.4	341.7	343.9	346.1	348.3	350.4	347.1
107.5°	418.2	419.4	421.0	422.7	424.3	426.0	427.1	428.2	429.2	430.3	431.3
110°	476.1	477.1	478.6	480.0	481.5	483.0	483.4	484.0	484.5	484.9	485.5



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	534.4	535.5	536.1	536.8	537.5	538.2	538.1	538.0	537.9	537.8	538.2
115°	618.4	618.7	618.4	618.2	617.9	617.6	618.2	618.7	619.2	619.6	619.9
117.5°	697.1	697.9	698.4	699.0	699.6	700.0	699.9	699.8	699.7	699.6	699.6
120°	749.7	750.1	749.9	749.6	749.3	749.1	749.6	750.1	750.5	751.0	751.0
122.5°	797.2	797.7	798.1	798.3	798.7	799.1	799.4	799.7	799.9	800.2	800.1
125°	869.1	869.3	868.8	868.4	867.9	867.4	868.1	868.8	869.6	870.3	870.8
127.5°	932.7	933.4	934.5	935.7	936.8	937.9	937.7	937.6	937.5	937.4	937.2
130°	975.7	976.2	976.9	977.6	978.4	979.1	979.3	979.6	979.9	980.1	980.1
132.5°	1015.9	1016.6	1017.5	1018.4	1019.4	1020.3	1020.5	1020.8	1021.1	1021.2	1021.2
135°	1072.3	1072.7	1073.7	1074.6	1075.6	1076.6	1077.0	1077.5	1078.0	1078.6	1079.0
137.5°	1126.1	1126.6	1127.7	1128.8	1129.8	1130.9	1131.4	1132.0	1132.5	1133.0	1133.2
140°	1161.8	1162.2	1162.7	1163.2	1163.7	1164.2	1164.9	1165.6	1166.4	1167.2	1167.6
142.5°	1194.0	1194.6	1194.9	1195.1	1195.4	1195.7	1196.3	1196.8	1197.3	1197.9	1198.2
145°	1240.5	1240.9	1240.9	1240.9	1240.9	1240.9	1241.1	1241.3	1241.6	1241.8	1242.2
147.5°	1280.4	1281.0	1280.8	1280.5	1280.3	1280.1	1280.3	1280.4	1280.6	1280.8	1281.0
150°	1306.1	1306.5	1306.2	1306.0	1305.7	1305.4	1305.4	1305.4	1305.4	1305.4	1305.6
152.5°	1328.0	1328.2	1327.9	1327.4	1326.9	1326.5	1326.9	1327.3	1327.7	1328.0	1328.1
155°	1357.9	1357.6	1357.0	1356.2	1355.5	1354.7	1355.8	1356.7	1357.6	1358.7	1358.8
157.5°	1383.3	1382.8	1382.0	1381.2	1380.4	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6
160°	1396.8	1396.3	1396.0	1395.7	1395.5	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1
162.5°	1409.9	1409.4	1409.1	1408.9	1408.6	1408.4	1409.9	1411.4	1412.8	1414.3	1414.2
165°	1426.5	1426.0	1426.0	1426.0	1426.0	1426.0	1427.9	1429.8	1431.8	1433.7	1433.6
167.5°	1440.4	1439.6	1439.5	1439.4	1439.3	1439.1	1441.2	1443.4	1445.5	1447.7	1447.5
170°	1447.5	1446.9	1447.1	1447.4	1447.6	1447.8	1449.8	1451.7	1453.7	1455.7	1455.4
172.5°	1452.7	1452.1	1452.4	1452.6	1452.8	1453.1	1455.0	1457.0	1459.0	1460.8	1460.6
175°	1458.4	1457.8	1458.0	1458.3	1458.6	1458.8	1460.9	1463.2	1465.4	1467.5	1467.2
177.5°	1461.4	1460.9	1461.3	1461.7	1462.2	1462.5	1464.1	1465.7	1467.2	1468.8	1468.4
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1543.7	1544.7	1541.2	1540.1	1541.2	1544.7	1543.7	1546.9	1547.4	1551.5	1550.0
5°	1432.2	1430.9	1427.6	1428.2	1427.6	1430.9	1432.2	1437.4	1440.0	1450.4	1449.2
7.5°	1336.8	1331.7	1333.1	1327.9	1333.1	1331.7	1336.8	1341.5	1349.4	1354.2	1365.2
10°	1278.4	1271.2	1265.4	1260.2	1265.4	1271.2	1278.4	1281.0	1292.1	1297.3	1308.3
12.5°	1198.6	1192.5	1184.6	1186.2	1184.6	1192.5	1198.6	1210.1	1224.4	1235.3	1252.6
15°	1085.5	1075.7	1060.2	1062.1	1060.2	1075.7	1085.5	1094.0	1108.3	1133.1	1144.8
17.5°	989.8	989.9	982.7	984.4	982.7	989.9	989.8	1001.4	1008.6	1024.4	1042.4
20°	940.3	935.7	936.3	934.3	936.3	935.7	940.3	953.9	961.8	972.8	992.4
22.5°	905.9	900.2	895.7	891.6	895.7	900.2	905.9	909.6	920.0	930.6	946.5
25°	847.7	843.8	837.9	836.6	837.9	843.8	847.7	853.6	858.8	872.5	882.2
27.5°	796.6	795.9	793.5	790.5	793.5	795.9	796.6	801.8	808.6	817.4	829.7
30°	766.9	765.6	764.3	762.3	764.3	765.6	766.9	772.1	777.3	784.5	794.3
32.5°	740.4	739.5	738.2	738.4	738.2	739.5	740.4	742.9	746.0	755.4	763.0
35°	702.4	701.7	700.5	699.8	700.5	701.7	702.4	705.0	707.0	709.5	716.0
37.5°	666.9	668.6	667.9	667.7	667.9	668.6	666.9	667.6	665.5	670.2	674.7
40°	642.4	643.1	644.4	643.8	644.4	643.1	642.4	643.1	643.1	643.1	647.1
42.5°	622.2	622.3	624.1	621.9	624.1	622.3	622.2	619.6	616.5	617.1	618.3
45°	585.8	589.7	589.0	589.0	589.0	589.7	585.8	581.2	580.6	578.0	578.0
47.5°	546.0	549.4	550.4	550.2	550.4	549.4	546.0	544.3	541.3	538.8	538.5
50°	520.0	518.7	520.7	520.0	520.7	518.7	520.0	516.7	512.2	512.2	510.9
52.5°	488.1	488.4	488.3	487.7	488.3	488.4	488.1	486.4	484.6	482.4	481.6
55°	439.1	439.8	438.5	439.1	438.5	439.8	439.1	438.5	438.5	437.2	438.5
57.5°	386.0	382.9	384.2	382.6	384.2	382.9	386.0	388.9	389.9	390.2	392.1
60°	348.0	342.7	341.4	338.8	341.4	342.7	348.0	354.5	357.0	358.4	360.3
62.5°	305.2	301.5	297.1	299.2	297.1	301.5	305.2	312.3	318.0	322.4	327.0
65°	248.3	245.6	243.6	246.3	243.6	245.6	248.3	253.4	258.6	269.1	278.9
67.5°	205.5	204.1	204.1	202.7	204.1	204.1	205.5	208.1	211.4	217.1	226.2
70°	183.1	181.2	181.2	179.8	181.2	181.2	183.1	183.1	186.3	189.0	195.5
72.5°	160.1	158.2	158.7	158.0	158.7	158.2	160.1	160.7	163.9	164.9	167.9
75°	118.6	115.4	115.4	116.0	115.4	115.4	118.6	122.5	125.7	131.6	132.9
77.5°	88.5	87.8	88.8	87.6	88.8	87.8	88.5	88.5	89.2	91.9	94.1
80°	72.3	71.6	71.1	73.0	71.1	71.6	72.3	72.3	73.0	73.6	74.3
82.5°	56.2	56.1	55.9	58.3	55.9	56.1	56.2	57.2	57.3	56.9	57.6
85°	33.8	32.6	33.8	32.6	33.8	32.6	33.8	33.3	33.8	33.3	33.8
87.5°	18.3	17.8	17.4	18.0	17.4	17.8	18.3	17.2	17.0	17.7	16.9
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.0	28.5	27.1
92.5°	30.0	30.1	30.2	30.3	30.2	30.1	30.0	29.9	29.0	27.6	26.1
95°	31.0	31.3	31.5	31.8	31.5	31.3	31.0	30.8	30.0	28.5	27.1
97.5°	30.0	30.2	30.4	30.6	30.4	30.2	30.0	29.7	29.5	29.3	29.2
100°	30.0	30.2	30.4	30.6	30.4	30.2	30.0	29.7	31.7	35.8	39.9
102.5°	31.4	31.5	31.5	31.6	31.5	31.5	31.4	31.4	53.6	98.3	142.9
105°	338.4	329.6	320.9	312.2	320.9	329.6	338.4	347.1	350.4	348.3	346.1
107.5°	432.3	433.2	434.0	435.0	434.0	433.2	432.3	431.3	430.3	429.2	428.2
110°	486.3	487.0	487.8	488.4	487.8	487.0	486.3	485.5	484.9	484.5	484.0



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	539.1	540.1	541.0	541.9	541.0	540.1	539.1	538.2	537.8	537.9	538.0
115°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.6	619.2	618.7
117.5°	699.5	699.4	699.3	699.2	699.3	699.4	699.5	699.6	699.6	699.7	699.8
120°	750.5	750.1	749.6	749.1	749.6	750.1	750.5	751.0	751.0	750.5	750.1
122.5°	799.7	799.2	798.6	798.1	798.6	799.2	799.7	800.1	800.2	799.9	799.7
125°	871.0	871.3	871.6	871.8	871.6	871.3	871.0	870.8	870.3	869.6	868.8
127.5°	937.0	936.8	936.6	936.4	936.6	936.8	937.0	937.2	937.4	937.5	937.6
130°	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	979.9	979.6
132.5°	1021.1	1020.9	1020.7	1020.5	1020.7	1020.9	1021.1	1021.2	1021.2	1021.1	1020.8
135°	1079.5	1080.0	1080.4	1080.9	1080.4	1080.0	1079.5	1079.0	1078.6	1078.0	1077.5
137.5°	1133.1	1132.9	1132.7	1132.7	1132.7	1132.9	1133.1	1133.2	1133.0	1132.5	1132.0
140°	1167.8	1168.1	1168.3	1168.6	1168.3	1168.1	1167.8	1167.6	1167.2	1166.4	1165.6
142.5°	1198.3	1198.3	1198.3	1198.3	1198.3	1198.3	1198.3	1198.2	1197.9	1197.3	1196.8
145°	1242.6	1243.1	1243.7	1244.2	1243.7	1243.1	1242.6	1242.2	1241.8	1241.6	1241.3
147.5°	1281.3	1281.6	1281.8	1282.0	1281.8	1281.6	1281.3	1281.0	1280.8	1280.6	1280.4
150°	1305.8	1306.1	1306.4	1306.6	1306.4	1306.1	1305.8	1305.6	1305.4	1305.4	1305.4
152.5°	1328.0	1327.9	1327.8	1327.6	1327.8	1327.9	1328.0	1328.1	1328.0	1327.7	1327.3
155°	1358.0	1357.3	1356.6	1355.8	1356.6	1357.3	1358.0	1358.8	1358.7	1357.6	1356.7
157.5°	1383.3	1382.1	1380.7	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6	1383.3	1382.1
160°	1399.7	1398.2	1396.8	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1	1399.7	1398.2
162.5°	1412.5	1410.9	1409.2	1407.5	1409.2	1410.9	1412.5	1414.2	1414.3	1412.8	1411.4
165°	1431.4	1429.2	1427.0	1424.8	1427.0	1429.2	1431.4	1433.6	1433.7	1431.8	1429.8
167.5°	1445.1	1442.7	1440.2	1437.8	1440.2	1442.7	1445.1	1447.5	1447.7	1445.5	1443.4
170°	1452.9	1450.5	1448.1	1445.7	1448.1	1450.5	1452.9	1455.4	1455.7	1453.7	1451.7
172.5°	1457.9	1455.3	1452.6	1450.0	1452.6	1455.3	1457.9	1460.6	1460.8	1459.0	1457.0
175°	1464.2	1461.3	1458.4	1455.5	1458.4	1461.3	1464.2	1467.2	1467.5	1465.4	1463.2
177.5°	1466.0	1463.7	1461.3	1459.1	1461.3	1463.7	1466.0	1468.4	1468.8	1467.2	1465.7
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1546.9	1550.5	1558.9	1568.2	1576.0	1582.8	1588.0	1595.3	1602.1	1611.5	1620.3
5°	1453.0	1462.2	1475.2	1490.8	1510.3	1523.4	1539.7	1554.1	1574.9	1595.7	1615.9
7.5°	1370.6	1380.7	1399.9	1421.4	1444.7	1466.0	1485.4	1510.6	1538.2	1568.6	1602.5
10°	1317.5	1328.6	1351.4	1376.1	1403.5	1424.4	1450.4	1480.4	1511.6	1548.8	1590.5
12.5°	1269.5	1280.1	1307.6	1332.8	1361.3	1384.2	1414.5	1444.9	1486.7	1526.9	1574.3
15°	1176.1	1204.1	1235.4	1265.4	1299.3	1327.3	1363.8	1395.1	1434.8	1491.5	1545.6
17.5°	1072.3	1102.2	1141.0	1187.3	1232.8	1267.4	1304.5	1343.3	1390.6	1448.5	1510.9
20°	1011.9	1036.0	1079.0	1130.5	1183.3	1231.5	1265.4	1308.3	1357.3	1419.8	1484.3
22.5°	966.6	987.0	1020.7	1072.1	1129.1	1185.1	1228.3	1270.8	1324.9	1387.5	1457.7
25°	898.5	920.7	950.0	985.2	1050.4	1109.7	1166.3	1215.2	1272.5	1335.1	1413.2
27.5°	842.0	861.3	888.1	924.7	968.6	1034.0	1102.6	1158.4	1217.2	1284.3	1362.6
30°	808.6	824.3	846.4	883.5	925.3	983.9	1053.6	1118.8	1178.1	1247.7	1329.3
32.5°	773.7	790.4	812.0	841.3	886.2	935.4	1005.1	1076.6	1139.5	1210.8	1290.6
35°	727.2	740.2	759.8	789.8	830.1	873.1	935.0	1008.6	1075.2	1151.3	1227.6
37.5°	680.1	695.5	710.9	737.6	770.7	817.0	867.6	942.8	1016.4	1086.1	1160.5
40°	653.6	662.7	679.6	701.1	736.3	777.3	824.9	898.5	972.1	1041.2	1116.2
42.5°	623.9	634.0	648.3	669.9	701.3	741.4	787.9	851.6	928.4	995.3	1063.5
45°	582.5	588.3	602.8	620.9	647.1	687.4	730.5	787.1	859.4	923.3	983.3
47.5°	540.8	545.9	554.9	571.6	600.8	633.2	673.4	724.3	787.8	851.6	902.3
50°	512.2	516.7	525.2	540.8	566.8	598.8	638.6	684.2	740.8	802.1	844.4
52.5°	483.4	486.0	493.9	511.6	533.5	565.0	600.5	642.4	695.5	746.3	789.2
55°	437.9	443.7	448.9	461.9	482.9	512.8	544.7	584.5	625.6	668.5	705.0
57.5°	390.3	396.7	404.3	415.8	432.3	460.1	488.8	521.0	556.1	591.7	622.4
60°	359.0	364.9	371.4	384.5	399.4	421.6	452.9	480.9	507.6	540.2	570.8
62.5°	328.3	334.1	341.7	352.1	366.6	387.7	413.8	438.1	465.9	494.3	517.1
65°	282.8	287.4	293.2	303.0	316.7	335.5	357.0	376.0	400.8	421.6	442.4
67.5°	232.9	241.6	249.3	257.2	268.8	286.4	302.0	320.1	336.9	352.4	371.4
70°	200.0	209.8	217.0	225.5	236.5	251.5	266.5	278.9	292.6	307.6	324.5
72.5°	172.4	180.1	185.7	194.7	204.7	218.7	232.6	242.9	254.0	264.3	280.7
75°	136.2	139.4	143.4	150.5	159.7	170.0	181.2	190.3	196.8	205.9	217.6
77.5°	97.8	104.2	106.7	111.8	118.3	124.9	132.1	139.9	146.1	149.3	158.3
80°	74.9	77.6	80.1	87.3	91.2	97.7	102.9	110.1	112.7	116.0	124.4
82.5°	58.2	59.9	61.4	63.3	65.7	72.2	77.4	82.0	84.5	85.8	92.2
85°	33.8	34.5	35.2	35.8	36.5	36.5	39.1	42.3	46.9	46.9	48.8
87.5°	16.6	16.8	16.4	15.6	16.1	15.7	15.8	15.3	16.3	17.3	18.4
90°	25.5	24.1	22.1	20.2	18.3	16.3	13.9	11.3	8.7	5.9	3.3
92.5°	24.7	23.2	21.3	19.3	17.3	15.5	14.4	14.2	14.1	13.9	13.8
95°	25.5	24.1	23.8	23.6	23.4	23.1	27.1	35.4	43.6	51.9	60.2
97.5°	29.0	28.9	56.1	83.2	110.4	137.5	148.5	143.4	138.3	133.1	127.9
100°	44.0	48.2	81.8	115.4	148.9	182.6	197.2	192.7	188.4	184.0	179.6
102.5°	187.6	232.1	236.6	240.9	245.3	249.7	250.2	247.0	243.8	240.6	237.4
105°	343.9	341.7	340.4	339.2	338.1	336.9	335.5	334.0	332.5	331.1	329.6
107.5°	427.1	426.0	424.3	422.7	421.0	419.4	418.2	417.5	416.8	416.0	415.3
110°	483.4	483.0	481.5	480.0	478.6	477.1	476.1	475.3	474.6	473.8	473.2



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	538.1	538.2	537.5	536.8	536.1	535.5	534.4	533.1	531.8	530.6	529.2
115°	618.2	617.6	617.9	618.2	618.4	618.7	618.4	617.6	617.0	616.2	615.5
117.5°	699.9	700.0	699.6	699.0	698.4	697.9	697.1	696.2	695.2	694.2	693.2
120°	749.6	749.1	749.3	749.6	749.9	750.1	749.7	748.8	747.8	746.8	745.8
122.5°	799.4	799.1	798.7	798.3	798.1	797.7	797.2	796.6	796.1	795.5	794.8
125°	868.1	867.4	867.9	868.4	868.8	869.3	869.1	868.1	867.1	866.2	865.2
127.5°	937.7	937.9	936.8	935.7	934.5	933.4	932.7	932.6	932.3	932.0	931.8
130°	979.3	979.1	978.4	977.6	976.9	976.2	975.7	975.4	975.2	975.0	974.7
132.5°	1020.5	1020.3	1019.4	1018.4	1017.5	1016.6	1015.9	1015.5	1015.0	1014.6	1014.2
135°	1077.0	1076.6	1075.6	1074.6	1073.7	1072.7	1072.3	1072.5	1072.8	1073.1	1073.3
137.5°	1131.4	1130.9	1129.8	1128.8	1127.7	1126.6	1126.1	1126.0	1125.9	1125.8	1125.7
140°	1164.9	1164.2	1163.7	1163.2	1162.7	1162.2	1161.8	1161.3	1160.7	1160.3	1159.8
142.5°	1196.3	1195.7	1195.4	1195.1	1194.9	1194.6	1194.0	1193.1	1192.2	1191.4	1190.4
145°	1241.1	1240.9	1240.9	1240.9	1240.9	1240.9	1240.5	1239.7	1239.1	1238.3	1237.6
147.5°	1280.3	1280.1	1280.3	1280.5	1280.8	1281.0	1280.4	1279.1	1277.7	1276.4	1275.0
150°	1305.4	1305.4	1305.7	1306.0	1306.2	1306.5	1306.1	1305.1	1304.1	1303.2	1302.2
152.5°	1326.9	1326.5	1326.9	1327.4	1327.9	1328.2	1328.0	1327.3	1326.5	1325.8	1324.9
155°	1355.8	1354.7	1355.5	1356.2	1357.0	1357.6	1357.9	1357.6	1357.4	1357.2	1357.0
157.5°	1380.7	1379.5	1380.4	1381.2	1382.0	1382.8	1383.3	1383.5	1383.6	1383.7	1383.8
160°	1396.8	1395.2	1395.5	1395.7	1396.0	1396.3	1396.8	1397.5	1398.2	1398.9	1399.7
162.5°	1409.9	1408.4	1408.6	1408.9	1409.1	1409.4	1409.9	1410.9	1411.8	1412.8	1413.6
165°	1427.9	1426.0	1426.0	1426.0	1426.0	1426.0	1426.5	1427.8	1429.0	1430.2	1431.4
167.5°	1441.2	1439.1	1439.3	1439.4	1439.5	1439.6	1440.4	1441.6	1442.9	1444.2	1445.4
170°	1449.8	1447.8	1447.6	1447.4	1447.1	1446.9	1447.5	1449.0	1450.4	1451.9	1453.3
172.5°	1455.0	1453.1	1452.8	1452.6	1452.4	1452.1	1452.7	1454.2	1455.7	1457.1	1458.6
175°	1460.9	1458.8	1458.6	1458.3	1458.0	1457.8	1458.4	1459.9	1461.3	1462.8	1464.2
177.5°	1464.1	1462.5	1462.2	1461.7	1461.3	1460.9	1461.4	1462.8	1464.1	1465.6	1466.9
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332979-830

CATALOG NUMBER: SA4XXRDIP-C1020D1205U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1627.1	1631.8	1637.0	1646.9	1655.3	1659.0	1666.2	1671.4	1669.9	1677.2	1689.7
5°	1633.5	1651.1	1671.3	1692.1	1715.6	1735.1	1750.8	1766.4	1778.9	1793.8	1816.0
7.5°	1632.5	1663.8	1697.8	1735.1	1773.6	1806.9	1837.6	1868.9	1896.6	1927.0	1966.7
10°	1628.3	1670.0	1712.3	1761.2	1810.1	1856.3	1898.1	1937.1	1974.3	2014.0	2064.3
12.5°	1623.6	1671.6	1722.8	1781.6	1842.4	1898.1	1947.1	2003.4	2049.8	2101.1	2159.1
15°	1602.9	1667.4	1737.1	1813.4	1886.3	1961.2	2028.4	2097.4	2161.9	2223.2	2296.2
17.5°	1579.1	1653.6	1735.8	1825.9	1913.5	2004.7	2084.2	2171.3	2237.3	2319.5	2387.3
20°	1559.9	1640.0	1728.0	1829.0	1928.7	2029.7	2117.6	2206.3	2280.6	2363.3	2449.3
22.5°	1536.4	1624.4	1719.7	1824.3	1928.7	2039.1	2136.4	2224.5	2316.5	2409.7	2498.3
25°	1498.6	1589.9	1690.8	1805.5	1925.4	2038.2	2142.4	2251.8	2350.9	2451.9	2531.4
27.5°	1452.3	1548.0	1654.5	1772.8	1895.8	2011.3	2134.1	2250.7	2350.4	2447.6	2517.0
30°	1415.2	1516.3	1618.5	1738.4	1866.1	1989.9	2121.6	2238.2	2343.1	2430.4	2469.5
32.5°	1377.1	1473.0	1578.4	1699.9	1830.7	1963.9	2094.4	2213.7	2310.7	2363.1	2364.2
35°	1311.0	1400.9	1510.3	1629.7	1763.9	1908.5	2040.8	2158.0	2217.3	2221.9	2158.0
37.5°	1238.8	1321.3	1424.7	1544.0	1691.0	1834.8	1970.0	2048.1	2068.0	2001.7	1883.6
40°	1187.2	1263.4	1363.1	1485.6	1631.5	1780.1	1903.3	1960.6	1939.8	1832.2	1700.6
42.5°	1132.9	1204.0	1300.0	1421.0	1567.4	1717.6	1822.5	1853.2	1798.0	1673.8	1519.8
45°	1044.5	1109.7	1204.8	1326.6	1467.4	1608.1	1687.6	1672.0	1580.1	1432.9	1260.2
47.5°	952.3	1015.3	1100.9	1213.6	1357.7	1479.2	1533.0	1485.9	1355.2	1193.2	1052.7
50°	891.4	955.8	1034.7	1142.3	1273.8	1391.1	1425.7	1354.0	1208.7	1052.9	924.0
52.5°	831.4	886.6	963.8	1067.7	1193.5	1292.6	1311.0	1228.3	1078.4	938.8	824.3
55°	740.2	790.4	855.5	953.3	1062.1	1146.1	1136.3	1030.2	894.0	774.8	684.9
57.5°	652.0	689.8	750.0	841.6	937.1	993.5	957.8	867.2	740.4	642.7	566.8
60°	593.6	628.8	684.9	765.0	849.0	880.9	850.9	752.6	652.2	563.0	499.1
62.5°	538.4	569.4	617.6	692.0	759.9	778.7	746.7	660.8	570.4	494.2	441.3
65°	458.1	486.7	527.8	580.6	627.5	636.6	615.8	527.8	459.4	395.5	359.0
67.5°	385.2	404.0	436.0	481.6	506.5	511.9	471.6	416.3	356.0	316.8	289.3
70°	336.2	349.2	379.2	404.0	424.1	424.8	387.7	343.4	297.1	265.2	245.0
72.5°	288.8	301.3	324.0	340.9	356.4	351.4	317.4	282.4	245.0	220.9	205.9
75°	222.8	233.9	245.6	253.4	253.4	246.9	222.2	196.1	174.7	160.3	155.7
77.5°	162.0	171.1	175.0	173.8	171.5	161.4	145.7	128.7	120.9	114.1	110.7
80°	127.1	131.0	132.2	129.0	125.1	113.4	102.9	95.8	88.6	86.1	84.7
82.5°	94.3	97.6	94.3	95.1	86.5	76.9	71.2	68.7	65.7	64.7	63.3
85°	50.1	49.5	48.3	45.0	39.1	37.8	37.1	36.5	35.2	35.8	34.5
87.5°	18.4	17.3	15.8	15.8	16.3	15.6	16.6	17.0	17.3	17.1	18.5
90°	5.9	8.7	11.3	13.9	16.3	18.3	20.2	22.1	24.1	25.5	27.1
92.5°	13.9	14.1	14.2	14.4	15.5	17.3	19.3	21.3	23.2	24.7	26.1
95°	51.9	43.6	35.4	27.1	23.1	23.4	23.6	23.8	24.1	25.5	27.1
97.5°	133.1	138.3	143.4	148.5	137.5	110.4	83.2	56.1	28.9	29.0	29.2
100°	184.0	188.4	192.7	197.2	182.6	148.9	115.4	81.8	48.2	44.0	39.9
102.5°	240.6	243.8	247.0	250.2	249.7	245.3	240.9	236.6	232.1	187.6	142.9
105°	331.1	332.5	334.0	335.5	336.9	338.1	339.2	340.4	341.7	343.9	346.1
107.5°	416.0	416.8	417.5	418.2	419.4	421.0	422.7	424.3	426.0	427.1	428.2
110°	473.8	474.6	475.3	476.1	477.1	478.6	480.0	481.5	483.0	483.4	484.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.6	531.8	533.1	534.4	535.5	536.1	536.8	537.5	538.2	538.1	538.0
115°	616.2	617.0	617.6	618.4	618.7	618.4	618.2	617.9	617.6	618.2	618.7
117.5°	694.2	695.2	696.2	697.1	697.9	698.4	699.0	699.6	700.0	699.9	699.8
120°	746.8	747.8	748.8	749.7	750.1	749.9	749.6	749.3	749.1	749.6	750.1
122.5°	795.5	796.1	796.6	797.2	797.7	798.1	798.3	798.7	799.1	799.4	799.7
125°	866.2	867.1	868.1	869.1	869.3	868.8	868.4	867.9	867.4	868.1	868.8
127.5°	932.0	932.3	932.6	932.7	933.4	934.5	935.7	936.8	937.9	937.7	937.6
130°	975.0	975.2	975.4	975.7	976.2	976.9	977.6	978.4	979.1	979.3	979.6
132.5°	1014.6	1015.0	1015.5	1015.9	1016.6	1017.5	1018.4	1019.4	1020.3	1020.5	1020.8
135°	1073.1	1072.8	1072.5	1072.3	1072.7	1073.7	1074.6	1075.6	1076.6	1077.0	1077.5
137.5°	1125.8	1125.9	1126.0	1126.1	1126.6	1127.7	1128.8	1129.8	1130.9	1131.4	1132.0
140°	1160.3	1160.7	1161.3	1161.8	1162.2	1162.7	1163.2	1163.7	1164.2	1164.9	1165.6
142.5°	1191.4	1192.2	1193.1	1194.0	1194.6	1194.9	1195.1	1195.4	1195.7	1196.3	1196.8
145°	1238.3	1239.1	1239.7	1240.5	1240.9	1240.9	1240.9	1240.9	1240.9	1241.1	1241.3
147.5°	1276.4	1277.7	1279.1	1280.4	1281.0	1280.8	1280.5	1280.3	1280.1	1280.3	1280.4
150°	1303.2	1304.1	1305.1	1306.1	1306.5	1306.2	1306.0	1305.7	1305.4	1305.4	1305.4
152.5°	1325.8	1326.5	1327.3	1328.0	1328.2	1327.9	1327.4	1326.9	1326.5	1326.9	1327.3
155°	1357.2	1357.4	1357.6	1357.9	1357.6	1357.0	1356.2	1355.5	1354.7	1355.8	1356.7
157.5°	1383.7	1383.6	1383.5	1383.3	1382.8	1382.0	1381.2	1380.4	1379.5	1380.7	1382.1
160°	1398.9	1398.2	1397.5	1396.8	1396.3	1396.0	1395.7	1395.5	1395.2	1396.8	1398.2
162.5°	1412.8	1411.8	1410.9	1409.9	1409.4	1409.1	1408.9	1408.6	1408.4	1409.9	1411.4
165°	1430.2	1429.0	1427.8	1426.5	1426.0	1426.0	1426.0	1426.0	1426.0	1427.9	1429.8
167.5°	1444.2	1442.9	1441.6	1440.4	1439.6	1439.5	1439.4	1439.3	1439.1	1441.2	1443.4
170°	1451.9	1450.4	1449.0	1447.5	1446.9	1447.1	1447.4	1447.6	1447.8	1449.8	1451.7
172.5°	1457.1	1455.7	1454.2	1452.7	1452.1	1452.4	1452.6	1452.8	1453.1	1455.0	1457.0
175°	1462.8	1461.3	1459.9	1458.4	1457.8	1458.0	1458.3	1458.6	1458.8	1460.9	1463.2
177.5°	1465.6	1464.1	1462.8	1461.4	1460.9	1461.3	1461.7	1462.2	1462.5	1464.1	1465.7
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1696.5	1698.6	1700.2	1705.3	1705.8	1710.5	1705.8
5°	1836.8	1846.0	1860.3	1874.6	1875.9	1885.0	1868.8
7.5°	1994.2	2015.3	2028.5	2051.7	2060.9	2066.5	2057.2
10°	2102.6	2122.2	2156.7	2173.7	2190.7	2193.2	2185.4
12.5°	2207.4	2238.4	2265.7	2297.7	2297.0	2319.9	2311.6
15°	2347.0	2379.0	2416.7	2452.6	2465.6	2465.6	2476.1
17.5°	2446.6	2505.1	2544.2	2572.3	2603.1	2608.4	2604.8
20°	2513.9	2577.0	2618.8	2655.2	2676.1	2681.9	2681.9
22.5°	2563.8	2617.6	2658.3	2691.1	2708.4	2715.3	2713.2
25°	2598.5	2644.8	2669.6	2679.3	2683.9	2682.6	2670.2
27.5°	2551.1	2549.0	2533.4	2503.4	2480.9	2467.2	2451.6
30°	2460.4	2426.5	2387.4	2344.4	2289.1	2246.6	2233.6
32.5°	2325.3	2249.3	2183.0	2111.4	2051.8	2009.5	1991.8
35°	2064.3	1943.7	1845.3	1759.3	1696.8	1657.6	1644.6
37.5°	1754.4	1637.7	1515.9	1432.5	1380.5	1341.0	1326.3
40°	1557.3	1430.2	1324.0	1245.9	1192.4	1154.0	1153.3
42.5°	1377.4	1256.1	1156.2	1099.9	1042.3	1016.8	1016.7
45°	1127.8	1030.8	946.1	901.8	867.2	846.4	840.6
47.5°	933.9	853.6	797.1	761.9	733.7	720.4	711.8
50°	824.9	754.5	709.5	678.9	663.3	646.4	645.1
52.5°	734.2	677.4	642.3	617.5	597.7	587.5	587.8
55°	617.1	572.1	547.3	528.4	512.8	505.0	501.7
57.5°	519.8	486.1	468.1	450.7	444.1	438.0	436.3
60°	459.4	436.6	419.6	406.0	396.2	394.2	393.5
62.5°	409.3	385.5	373.7	363.2	356.0	353.0	351.9
65°	337.5	319.9	309.5	301.0	298.4	293.9	293.2
67.5°	272.1	261.6	254.7	248.7	245.2	245.0	245.0
70°	232.0	226.1	220.3	217.0	215.0	213.7	213.7
72.5°	197.6	193.2	188.4	186.7	186.3	185.0	184.5
75°	150.5	146.0	146.6	143.4	140.7	137.5	135.5
77.5°	106.7	103.5	102.8	102.5	100.2	99.8	100.9
80°	82.8	79.5	78.8	79.5	78.8	76.9	76.9
82.5°	63.0	60.2	59.6	59.2	58.5	59.2	58.2
85°	33.8	32.6	32.6	32.6	33.8	33.3	32.6
87.5°	17.7	17.4	18.2	17.7	17.8	17.4	18.0
90°	28.5	30.0	30.9	31.4	31.9	32.3	32.9
92.5°	27.6	29.0	29.9	30.0	30.1	30.2	30.3
95°	28.5	30.0	30.8	31.0	31.3	31.5	31.8
97.5°	29.3	29.5	29.7	30.0	30.2	30.4	30.6
100°	35.8	31.7	29.7	30.0	30.2	30.4	30.6
102.5°	98.3	53.6	31.4	31.4	31.5	31.5	31.6
105°	348.3	350.4	347.1	338.4	329.6	320.9	312.2
107.5°	429.2	430.3	431.3	432.3	433.2	434.0	435.0
110°	484.5	484.9	485.5	486.3	487.0	487.8	488.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	537.9	537.8	538.2	539.1	540.1	541.0	541.9
115°	619.2	619.6	619.9	619.9	619.9	619.9	619.9
117.5°	699.7	699.6	699.6	699.5	699.4	699.3	699.2
120°	750.5	751.0	751.0	750.5	750.1	749.6	749.1
122.5°	799.9	800.2	800.1	799.7	799.2	798.6	798.1
125°	869.6	870.3	870.8	871.0	871.3	871.6	871.8
127.5°	937.5	937.4	937.2	937.0	936.8	936.6	936.4
130°	979.9	980.1	980.1	980.1	980.1	980.1	980.1
132.5°	1021.1	1021.2	1021.2	1021.1	1020.9	1020.7	1020.5
135°	1078.0	1078.6	1079.0	1079.5	1080.0	1080.4	1080.9
137.5°	1132.5	1133.0	1133.2	1133.1	1132.9	1132.7	1132.7
140°	1166.4	1167.2	1167.6	1167.8	1168.1	1168.3	1168.6
142.5°	1197.3	1197.9	1198.2	1198.3	1198.3	1198.3	1198.3
145°	1241.6	1241.8	1242.2	1242.6	1243.1	1243.7	1244.2
147.5°	1280.6	1280.8	1281.0	1281.3	1281.6	1281.8	1282.0
150°	1305.4	1305.4	1305.6	1305.8	1306.1	1306.4	1306.6
152.5°	1327.7	1328.0	1328.1	1328.0	1327.9	1327.8	1327.6
155°	1357.6	1358.7	1358.8	1358.0	1357.3	1356.6	1355.8
157.5°	1383.3	1384.6	1384.6	1383.3	1382.1	1380.7	1379.5
160°	1399.7	1401.1	1401.1	1399.7	1398.2	1396.8	1395.2
162.5°	1412.8	1414.3	1414.2	1412.5	1410.9	1409.2	1407.5
165°	1431.8	1433.7	1433.6	1431.4	1429.2	1427.0	1424.8
167.5°	1445.5	1447.7	1447.5	1445.1	1442.7	1440.2	1437.8
170°	1453.7	1455.7	1455.4	1452.9	1450.5	1448.1	1445.7
172.5°	1459.0	1460.8	1460.6	1457.9	1455.3	1452.6	1450.0
175°	1465.4	1467.5	1467.2	1464.2	1461.3	1458.4	1455.5
177.5°	1467.2	1468.8	1468.4	1466.0	1463.7	1461.3	1459.1
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2

(END OF REPORT)