

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: P332974-830

Luminaire Tested: **SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P332974-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

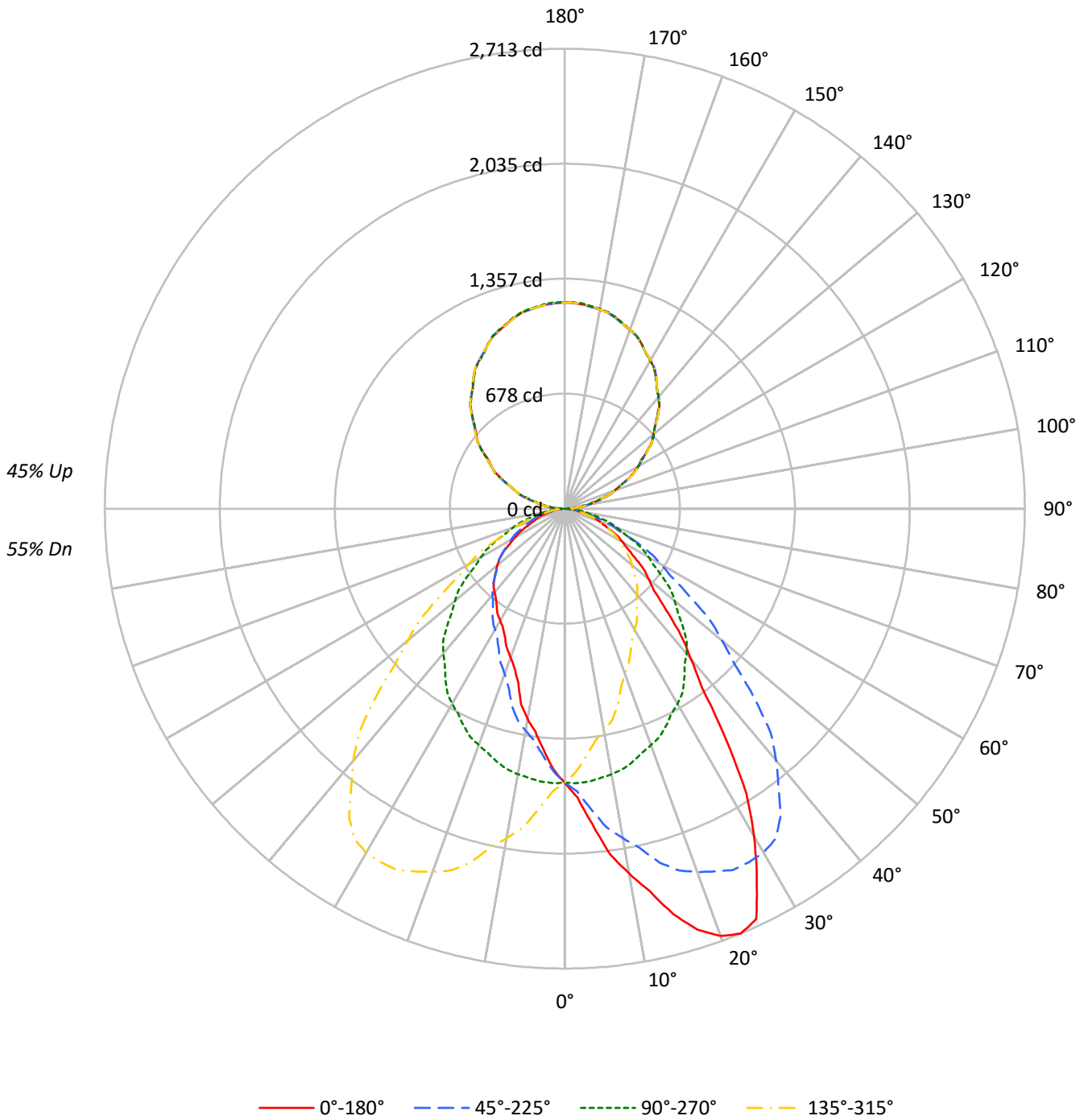
Lumens per Lamp: N/A  
Luminaire Lumens: 7466.5 lumens  
Efficiency: N/A  
Efficacy: 123.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 60.5  
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	95	91	88	92	89	85	82	76	74	72	65	63	62	54	53	52	47
2	91	84	78	73	84	78	73	68	67	63	60	57	55	52	48	46	45	40
3	83	74	67	61	77	69	63	58	60	55	51	51	48	45	43	41	39	35
4	76	66	58	52	71	62	55	49	53	48	44	46	42	39	39	36	34	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	30	26
6	65	53	45	39	60	50	43	37	43	38	34	38	33	30	32	29	26	23
7	60	48	40	35	56	45	38	33	40	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	29	36	31	27	31	27	24	27	24	21	19
9	52	40	33	28	48	38	31	26	33	28	24	29	25	21	25	22	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	19	23	20	17	15

**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	2.1
10°-20°	472.7	6.3
20°-30°	739.3	9.9
30°-40°	821.9	11.0
40°-50°	729.2	9.8
50°-60°	568.2	7.6
60°-70°	372.0	5.0
70°-80°	182.9	2.4
80°-90°	48.8	0.7
90°-100°	80.2	1.1
100°-110°	237.7	3.2
110°-120°	403.4	5.4
120°-130°	531.9	7.1
130°-140°	597.4	8.0
140°-150°	587.0	7.9
150°-160°	493.7	6.6
160°-170°	328.5	4.4
170°-180°	115.0	1.5
0°-30°	1368.7	18.3
0°-40°	2190.5	29.3
0°-60°	3487.9	46.7
0°-90°	4091.6	54.8
90°-120°	721.3	9.7
90°-150°	2437.7	32.6
90°-180°	3375.0	45.2
0°-180°	7466.5	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	37
90°	28	3	28	3	28	16
95°	74	56	74	56	74	77
105°	230	219	230	219	230	242
115°	406	410	406	410	406	402
125°	593	597	593	597	593	529
135°	772	770	772	770	772	596
145°	937	936	937	936	937	586
155°	1072	1072	1072	1072	1072	493
165°	1165	1168	1165	1168	1165	328
175°	1209	1215	1209	1215	1209	115
180°	1216	1216	1216	1216	1216	



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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°	17.2	16.5	17.0	16.9	17.3	16.6	16.9	17.7	16.4	16.7	16.3
90°	28.2	27.8	27.4	27.0	26.6	25.7	24.5	23.2	22.0	20.7	19.0
92.5°	41.8	41.6	41.3	41.0	40.8	40.2	39.5	38.7	38.0	37.2	36.1
95°	74.4	74.4	74.4	74.4	74.4	74.0	73.4	72.8	72.1	71.5	70.0
97.5°	116.5	116.5	116.5	116.5	116.5	116.1	115.4	114.6	113.9	113.1	111.4
100°	145.8	145.8	145.8	145.8	145.8	145.6	145.2	144.8	144.4	143.9	142.0
102.5°	178.9	178.8	178.6	178.4	178.2	177.9	177.3	176.7	176.2	175.6	173.8
105°	229.5	228.9	228.3	227.6	227.1	226.4	225.8	225.2	224.5	223.9	223.1
107.5°	278.8	278.9	278.9	279.0	279.0	278.7	278.1	277.6	277.0	276.4	276.3
110°	314.2	313.6	312.9	312.4	311.7	311.6	312.0	312.5	312.8	313.3	313.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	350.3	350.2	350.1	350.0	349.9	349.9	349.9	350.0	350.1	350.2	350.5
115°	406.4	406.6	406.8	407.1	407.3	407.5	407.6	407.8	408.1	408.3	408.7
117.5°	459.9	460.2	460.7	461.1	461.6	462.1	462.8	463.5	464.2	465.0	465.2
120°	500.5	500.1	499.6	499.3	498.8	499.2	500.2	501.2	502.3	503.3	504.0
122.5°	534.3	535.1	535.8	536.6	537.3	538.1	538.9	539.5	540.3	540.9	541.2
125°	592.7	593.1	593.5	594.0	594.4	594.7	595.2	595.6	596.1	596.4	596.6
127.5°	646.7	647.1	647.3	647.7	648.0	648.4	648.8	649.2	649.7	650.1	650.4
130°	682.0	682.9	683.7	684.6	685.4	686.1	686.5	686.9	687.3	687.7	687.7
132.5°	719.7	720.0	720.4	720.7	721.0	721.4	721.8	722.3	722.6	723.1	723.2
135°	771.5	772.0	772.7	773.4	773.9	774.5	774.9	775.3	775.7	776.2	776.2
137.5°	825.9	825.7	825.6	825.5	825.3	825.6	826.0	826.6	827.2	827.7	827.4
140°	858.9	859.1	859.3	859.6	859.8	860.0	860.2	860.4	860.6	860.8	860.8
142.5°	892.0	892.1	892.1	892.2	892.2	892.3	892.3	892.3	892.4	892.4	892.6
145°	937.0	937.6	938.3	938.9	939.5	939.9	940.2	940.4	940.6	940.8	940.6
147.5°	982.6	982.8	983.0	983.2	983.4	983.5	983.7	983.9	984.1	984.3	984.4
150°	1010.4	1010.6	1010.8	1011.1	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3
152.5°	1035.9	1036.5	1037.1	1037.6	1038.2	1038.2	1037.6	1037.2	1036.7	1036.1	1036.0
155°	1071.6	1072.4	1073.3	1074.0	1074.9	1074.9	1074.0	1073.3	1072.4	1071.6	1071.8
157.5°	1103.3	1104.1	1104.8	1105.5	1106.2	1106.3	1105.6	1104.9	1104.4	1103.7	1103.8
160°	1121.4	1122.5	1123.5	1124.5	1125.6	1125.8	1125.2	1124.5	1123.9	1123.3	1123.5
162.5°	1140.2	1141.3	1142.4	1143.4	1144.4	1144.3	1143.2	1142.1	1140.9	1139.8	1140.1
165°	1164.7	1165.5	1166.4	1167.2	1168.0	1167.8	1166.6	1165.4	1164.0	1162.8	1163.2
167.5°	1182.2	1183.5	1184.8	1186.1	1187.4	1187.4	1186.2	1184.9	1183.6	1182.4	1182.3
170°	1191.9	1193.4	1194.9	1196.4	1197.8	1198.0	1196.7	1195.4	1194.2	1192.9	1192.7
172.5°	1200.2	1201.7	1203.2	1204.7	1206.1	1206.2	1204.7	1203.2	1201.8	1200.4	1200.4
175°	1208.9	1210.4	1211.8	1213.3	1214.7	1214.7	1213.3	1211.8	1210.4	1208.9	1209.1
177.5°	1213.4	1214.7	1216.1	1217.5	1218.8	1218.9	1217.7	1216.5	1215.3	1214.2	1214.2
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



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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°	16.0	15.1	15.8	15.5	15.5	17.2	18.2	18.3	17.2	16.1	15.0
90°	17.3	15.6	14.0	12.1	9.7	7.4	5.1	2.8	5.1	7.4	9.7
92.5°	34.9	33.7	32.6	30.6	28.0	25.4	22.8	20.2	22.8	25.4	28.0
95°	68.6	67.1	65.6	64.0	62.1	60.2	58.3	56.5	58.3	60.2	62.1
97.5°	109.6	107.9	106.2	104.6	103.1	101.6	100.1	98.6	100.1	101.6	103.1
100°	140.2	138.3	136.4	135.1	134.2	133.4	132.5	131.7	132.5	133.4	134.2
102.5°	172.1	170.4	168.7	167.7	167.3	167.0	166.6	166.4	166.6	167.0	167.3
105°	222.3	221.4	220.6	220.1	219.8	219.6	219.4	219.2	219.4	219.6	219.8
107.5°	276.2	276.1	275.9	275.7	275.5	275.2	274.9	274.8	274.9	275.2	275.5
110°	313.7	313.9	314.1	314.1	313.6	313.2	312.7	312.4	312.7	313.2	313.6





TEST NUMBER: P332974-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	350.9	351.3	351.7	351.9	351.8	351.7	351.6	351.5	351.6	351.7	351.8
115°	409.2	409.5	410.0	410.2	410.2	410.2	410.2	410.2	410.2	410.2	410.2
117.5°	465.5	465.8	466.1	466.2	466.0	465.8	465.7	465.5	465.7	465.8	466.0
120°	504.5	505.2	505.9	505.8	504.9	504.1	503.2	502.4	503.2	504.1	504.9
122.5°	541.5	541.9	542.2	542.1	541.8	541.4	541.1	540.7	541.1	541.4	541.8
125°	596.9	597.1	597.3	597.4	597.4	597.4	597.4	597.4	597.4	597.4	597.4
127.5°	650.7	651.1	651.4	651.3	650.6	650.0	649.4	648.8	649.4	650.0	650.6
130°	687.7	687.7	687.7	687.4	686.7	686.2	685.5	684.9	685.5	686.2	686.7
132.5°	723.4	723.6	723.8	723.6	723.1	722.6	722.3	721.8	722.3	722.6	723.1
135°	776.2	776.2	776.2	775.5	774.3	773.0	771.8	770.5	771.8	773.0	774.3
137.5°	827.1	826.7	826.3	826.0	825.3	824.7	824.2	823.6	824.2	824.7	825.3
140°	860.8	860.8	860.8	860.6	860.2	859.8	859.3	858.9	859.3	859.8	860.2
142.5°	892.8	893.0	893.1	893.0	892.6	892.1	891.7	891.3	891.7	892.1	892.6
145°	940.4	940.2	939.9	939.4	938.6	937.7	936.9	936.0	936.9	937.7	938.6
147.5°	984.6	984.8	985.0	984.5	983.5	982.5	981.5	980.5	981.5	982.5	983.5
150°	1011.3	1011.3	1011.3	1011.0	1010.1	1009.3	1008.4	1007.6	1008.4	1009.3	1010.1
152.5°	1035.9	1035.7	1035.5	1035.2	1034.7	1034.2	1033.7	1033.2	1033.7	1034.2	1034.7
155°	1072.0	1072.1	1072.4	1072.5	1072.5	1072.5	1072.5	1072.5	1072.5	1072.5	1072.5
157.5°	1103.8	1103.8	1103.9	1104.1	1104.5	1104.8	1105.2	1105.6	1105.2	1104.8	1104.5
160°	1123.7	1123.9	1124.2	1124.4	1124.5	1124.7	1124.9	1125.2	1124.9	1124.7	1124.5
162.5°	1140.3	1140.5	1140.7	1141.0	1141.6	1142.2	1142.7	1143.2	1142.7	1142.2	1141.6
165°	1163.7	1164.0	1164.5	1165.0	1165.6	1166.3	1166.9	1167.5	1166.9	1166.3	1165.6
167.5°	1182.3	1182.2	1182.2	1182.6	1183.6	1184.4	1185.2	1186.2	1185.2	1184.4	1183.6
170°	1192.5	1192.3	1192.0	1192.5	1193.5	1194.6	1195.6	1196.7	1195.6	1194.6	1193.5
172.5°	1200.3	1200.3	1200.2	1200.7	1201.6	1202.5	1203.3	1204.2	1203.3	1202.5	1201.6
175°	1209.3	1209.6	1209.8	1210.4	1211.4	1212.5	1213.5	1214.6	1213.5	1212.5	1211.4
177.5°	1214.2	1214.2	1214.2	1214.6	1215.4	1216.3	1217.1	1218.0	1217.1	1216.3	1215.4
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



TEST NUMBER: P332974-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1

**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°	15.5	15.3	15.6	14.9	15.8	16.1	15.8	16.1	16.9	16.1	16.2
90°	12.1	14.0	15.6	17.3	19.0	20.7	22.0	23.2	24.5	25.7	26.6
92.5°	30.6	32.6	33.7	34.9	36.1	37.2	38.0	38.7	39.5	40.2	40.8
95°	64.0	65.6	67.1	68.6	70.0	71.5	72.1	72.8	73.4	74.0	74.4
97.5°	104.6	106.2	107.9	109.6	111.4	113.1	113.9	114.6	115.4	116.1	116.5
100°	135.1	136.4	138.3	140.2	142.0	143.9	144.4	144.8	145.2	145.6	145.8
102.5°	167.7	168.7	170.4	172.1	173.8	175.6	176.2	176.7	177.3	177.9	178.2
105°	220.1	220.6	221.4	222.3	223.1	223.9	224.5	225.2	225.8	226.4	227.1
107.5°	275.7	275.9	276.1	276.2	276.3	276.4	277.0	277.6	278.1	278.7	279.0
110°	314.1	314.1	313.9	313.7	313.5	313.3	312.8	312.5	312.0	311.6	311.7



TEST NUMBER: P332974-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	351.9	351.7	351.3	350.9	350.5	350.2	350.1	350.0	349.9	349.9	349.9
115°	410.2	410.0	409.5	409.2	408.7	408.3	408.1	407.8	407.6	407.5	407.3
117.5°	466.2	466.1	465.8	465.5	465.2	465.0	464.2	463.5	462.8	462.1	461.6
120°	505.8	505.9	505.2	504.5	504.0	503.3	502.3	501.2	500.2	499.2	498.8
122.5°	542.1	542.2	541.9	541.5	541.2	540.9	540.3	539.5	538.9	538.1	537.3
125°	597.4	597.3	597.1	596.9	596.6	596.4	596.1	595.6	595.2	594.7	594.4
127.5°	651.3	651.4	651.1	650.7	650.4	650.1	649.7	649.2	648.8	648.4	648.0
130°	687.4	687.7	687.7	687.7	687.7	687.7	687.3	686.9	686.5	686.1	685.4
132.5°	723.6	723.8	723.6	723.4	723.2	723.1	722.6	722.3	721.8	721.4	721.0
135°	775.5	776.2	776.2	776.2	776.2	776.2	775.7	775.3	774.9	774.5	773.9
137.5°	826.0	826.3	826.7	827.1	827.4	827.7	827.2	826.6	826.0	825.6	825.3
140°	860.6	860.8	860.8	860.8	860.8	860.8	860.6	860.4	860.2	860.0	859.8
142.5°	893.0	893.1	893.0	892.8	892.6	892.4	892.4	892.3	892.3	892.3	892.2
145°	939.4	939.9	940.2	940.4	940.6	940.8	940.6	940.4	940.2	939.9	939.5
147.5°	984.5	985.0	984.8	984.6	984.4	984.3	984.1	983.9	983.7	983.5	983.4
150°	1011.0	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3
152.5°	1035.2	1035.5	1035.7	1035.9	1036.0	1036.1	1036.7	1037.2	1037.6	1038.2	1038.2
155°	1072.5	1072.4	1072.1	1072.0	1071.8	1071.6	1072.4	1073.3	1074.0	1074.9	1074.9
157.5°	1104.1	1103.9	1103.8	1103.8	1103.8	1103.7	1104.4	1104.9	1105.6	1106.3	1106.2
160°	1124.4	1124.2	1123.9	1123.7	1123.5	1123.3	1123.9	1124.5	1125.2	1125.8	1125.6
162.5°	1141.0	1140.7	1140.5	1140.3	1140.1	1139.8	1140.9	1142.1	1143.2	1144.3	1144.4
165°	1165.0	1164.5	1164.0	1163.7	1163.2	1162.8	1164.0	1165.4	1166.6	1167.8	1168.0
167.5°	1182.6	1182.2	1182.2	1182.3	1182.3	1182.4	1183.6	1184.9	1186.2	1187.4	1187.4
170°	1192.5	1192.0	1192.3	1192.5	1192.7	1192.9	1194.2	1195.4	1196.7	1198.0	1197.8
172.5°	1200.7	1200.2	1200.3	1200.3	1200.4	1200.4	1201.8	1203.2	1204.7	1206.2	1206.1
175°	1210.4	1209.8	1209.6	1209.3	1209.1	1208.9	1210.4	1211.8	1213.3	1214.7	1214.7
177.5°	1214.6	1214.2	1214.2	1214.2	1214.2	1214.2	1215.3	1216.5	1217.7	1218.9	1218.8
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



TEST NUMBER: P332974-830  
 CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1

**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°	17.3	17.0	16.5	17.2	16.5	17.0	17.3	16.2	16.1	16.9	16.1
90°	27.0	27.4	27.8	28.2	27.8	27.4	27.0	26.6	25.7	24.5	23.2
92.5°	41.0	41.3	41.6	41.8	41.6	41.3	41.0	40.8	40.2	39.5	38.7
95°	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.0	73.4	72.8
97.5°	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.5	116.1	115.4	114.6
100°	145.8	145.8	145.8	145.8	145.8	145.8	145.8	145.8	145.6	145.2	144.8
102.5°	178.4	178.6	178.8	178.9	178.8	178.6	178.4	178.2	177.9	177.3	176.7
105°	227.6	228.3	228.9	229.5	228.9	228.3	227.6	227.1	226.4	225.8	225.2
107.5°	279.0	278.9	278.9	278.8	278.9	278.9	279.0	279.0	278.7	278.1	277.6
110°	312.4	312.9	313.6	314.2	313.6	312.9	312.4	311.7	311.6	312.0	312.5



TEST NUMBER: P332974-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	350.0	350.1	350.2	350.3	350.2	350.1	350.0	349.9	349.9	349.9	350.0
115°	407.1	406.8	406.6	406.4	406.6	406.8	407.1	407.3	407.5	407.6	407.8
117.5°	461.1	460.7	460.2	459.9	460.2	460.7	461.1	461.6	462.1	462.8	463.5
120°	499.3	499.6	500.1	500.5	500.1	499.6	499.3	498.8	499.2	500.2	501.2
122.5°	536.6	535.8	535.1	534.3	535.1	535.8	536.6	537.3	538.1	538.9	539.5
125°	594.0	593.5	593.1	592.7	593.1	593.5	594.0	594.4	594.7	595.2	595.6
127.5°	647.7	647.3	647.1	646.7	647.1	647.3	647.7	648.0	648.4	648.8	649.2
130°	684.6	683.7	682.9	682.0	682.9	683.7	684.6	685.4	686.1	686.5	686.9
132.5°	720.7	720.4	720.0	719.7	720.0	720.4	720.7	721.0	721.4	721.8	722.3
135°	773.4	772.7	772.0	771.5	772.0	772.7	773.4	773.9	774.5	774.9	775.3
137.5°	825.5	825.6	825.7	825.9	825.7	825.6	825.5	825.3	825.6	826.0	826.6
140°	859.6	859.3	859.1	858.9	859.1	859.3	859.6	859.8	860.0	860.2	860.4
142.5°	892.2	892.1	892.1	892.0	892.1	892.1	892.2	892.2	892.3	892.3	892.3
145°	938.9	938.3	937.6	937.0	937.6	938.3	938.9	939.5	939.9	940.2	940.4
147.5°	983.2	983.0	982.8	982.6	982.8	983.0	983.2	983.4	983.5	983.7	983.9
150°	1011.1	1010.8	1010.6	1010.4	1010.6	1010.8	1011.1	1011.3	1011.3	1011.3	1011.3
152.5°	1037.6	1037.1	1036.5	1035.9	1036.5	1037.1	1037.6	1038.2	1038.2	1037.6	1037.2
155°	1074.0	1073.3	1072.4	1071.6	1072.4	1073.3	1074.0	1074.9	1074.9	1074.0	1073.3
157.5°	1105.5	1104.8	1104.1	1103.3	1104.1	1104.8	1105.5	1106.2	1106.3	1105.6	1104.9
160°	1124.5	1123.5	1122.5	1121.4	1122.5	1123.5	1124.5	1125.6	1125.8	1125.2	1124.5
162.5°	1143.4	1142.4	1141.3	1140.2	1141.3	1142.4	1143.4	1144.4	1144.3	1143.2	1142.1
165°	1167.2	1166.4	1165.5	1164.7	1165.5	1166.4	1167.2	1168.0	1167.8	1166.6	1165.4
167.5°	1186.1	1184.8	1183.5	1182.2	1183.5	1184.8	1186.1	1187.4	1187.4	1186.2	1184.9
170°	1196.4	1194.9	1193.4	1191.9	1193.4	1194.9	1196.4	1197.8	1198.0	1196.7	1195.4
172.5°	1204.7	1203.2	1201.7	1200.2	1201.7	1203.2	1204.7	1206.1	1206.2	1204.7	1203.2
175°	1213.3	1211.8	1210.4	1208.9	1210.4	1211.8	1213.3	1214.7	1214.7	1213.3	1211.8
177.5°	1217.5	1216.1	1214.7	1213.4	1214.7	1216.1	1217.5	1218.8	1218.9	1217.7	1216.5
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



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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°	15.8	16.1	15.8	14.9	15.6	15.3	15.5	15.0	16.1	17.2	18.3
90°	22.0	20.7	19.0	17.3	15.6	14.0	12.1	9.7	7.4	5.1	2.8
92.5°	38.0	37.2	36.1	34.9	33.7	32.6	30.6	28.0	25.4	22.8	20.2
95°	72.1	71.5	70.0	68.6	67.1	65.6	64.0	62.1	60.2	58.3	56.5
97.5°	113.9	113.1	111.4	109.6	107.9	106.2	104.6	103.1	101.6	100.1	98.6
100°	144.4	143.9	142.0	140.2	138.3	136.4	135.1	134.2	133.4	132.5	131.7
102.5°	176.2	175.6	173.8	172.1	170.4	168.7	167.7	167.3	167.0	166.6	166.4
105°	224.5	223.9	223.1	222.3	221.4	220.6	220.1	219.8	219.6	219.4	219.2
107.5°	277.0	276.4	276.3	276.2	276.1	275.9	275.7	275.5	275.2	274.9	274.8
110°	312.8	313.3	313.5	313.7	313.9	314.1	314.1	313.6	313.2	312.7	312.4



TEST NUMBER: P332974-830

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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	350.1	350.2	350.5	350.9	351.3	351.7	351.9	351.8	351.7	351.6	351.5
115°	408.1	408.3	408.7	409.2	409.5	410.0	410.2	410.2	410.2	410.2	410.2
117.5°	464.2	465.0	465.2	465.5	465.8	466.1	466.2	466.0	465.8	465.7	465.5
120°	502.3	503.3	504.0	504.5	505.2	505.9	505.8	504.9	504.1	503.2	502.4
122.5°	540.3	540.9	541.2	541.5	541.9	542.2	542.1	541.8	541.4	541.1	540.7
125°	596.1	596.4	596.6	596.9	597.1	597.3	597.4	597.4	597.4	597.4	597.4
127.5°	649.7	650.1	650.4	650.7	651.1	651.4	651.3	650.6	650.0	649.4	648.8
130°	687.3	687.7	687.7	687.7	687.7	687.7	687.4	686.7	686.2	685.5	684.9
132.5°	722.6	723.1	723.2	723.4	723.6	723.8	723.6	723.1	722.6	722.3	721.8
135°	775.7	776.2	776.2	776.2	776.2	776.2	775.5	774.3	773.0	771.8	770.5
137.5°	827.2	827.7	827.4	827.1	826.7	826.3	826.0	825.3	824.7	824.2	823.6
140°	860.6	860.8	860.8	860.8	860.8	860.8	860.6	860.2	859.8	859.3	858.9
142.5°	892.4	892.4	892.6	892.8	893.0	893.1	893.0	892.6	892.1	891.7	891.3
145°	940.6	940.8	940.6	940.4	940.2	939.9	939.4	938.6	937.7	936.9	936.0
147.5°	984.1	984.3	984.4	984.6	984.8	985.0	984.5	983.5	982.5	981.5	980.5
150°	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.0	1010.1	1009.3	1008.4	1007.6
152.5°	1036.7	1036.1	1036.0	1035.9	1035.7	1035.5	1035.2	1034.7	1034.2	1033.7	1033.2
155°	1072.4	1071.6	1071.8	1072.0	1072.1	1072.4	1072.5	1072.5	1072.5	1072.5	1072.5
157.5°	1104.4	1103.7	1103.8	1103.8	1103.8	1103.9	1104.1	1104.5	1104.8	1105.2	1105.6
160°	1123.9	1123.3	1123.5	1123.7	1123.9	1124.2	1124.4	1124.5	1124.7	1124.9	1125.2
162.5°	1140.9	1139.8	1140.1	1140.3	1140.5	1140.7	1141.0	1141.6	1142.2	1142.7	1143.2
165°	1164.0	1162.8	1163.2	1163.7	1164.0	1164.5	1165.0	1165.6	1166.3	1166.9	1167.5
167.5°	1183.6	1182.4	1182.3	1182.3	1182.2	1182.2	1182.6	1183.6	1184.4	1185.2	1186.2
170°	1194.2	1192.9	1192.7	1192.5	1192.3	1192.0	1192.5	1193.5	1194.6	1195.6	1196.7
172.5°	1201.8	1200.4	1200.4	1200.3	1200.3	1200.2	1200.7	1201.6	1202.5	1203.3	1204.2
175°	1210.4	1208.9	1209.1	1209.3	1209.6	1209.8	1210.4	1211.4	1212.5	1213.5	1214.6
177.5°	1215.3	1214.2	1214.2	1214.2	1214.2	1214.2	1214.6	1215.4	1216.3	1217.1	1218.0
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



TEST NUMBER: P332974-830

CATALOG NUMBER: SA4XXRDIP-C1020D1035U830-4F0-1E-UDD-A1

**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°	18.2	17.2	15.5	15.5	15.8	15.1	16.0	16.3	16.7	16.4	17.7
90°	5.1	7.4	9.7	12.1	14.0	15.6	17.3	19.0	20.7	22.0	23.2
92.5°	22.8	25.4	28.0	30.6	32.6	33.7	34.9	36.1	37.2	38.0	38.7
95°	58.3	60.2	62.1	64.0	65.6	67.1	68.6	70.0	71.5	72.1	72.8
97.5°	100.1	101.6	103.1	104.6	106.2	107.9	109.6	111.4	113.1	113.9	114.6
100°	132.5	133.4	134.2	135.1	136.4	138.3	140.2	142.0	143.9	144.4	144.8
102.5°	166.6	167.0	167.3	167.7	168.7	170.4	172.1	173.8	175.6	176.2	176.7
105°	219.4	219.6	219.8	220.1	220.6	221.4	222.3	223.1	223.9	224.5	225.2
107.5°	274.9	275.2	275.5	275.7	275.9	276.1	276.2	276.3	276.4	277.0	277.6
110°	312.7	313.2	313.6	314.1	314.1	313.9	313.7	313.5	313.3	312.8	312.5





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	351.6	351.7	351.8	351.9	351.7	351.3	350.9	350.5	350.2	350.1	350.0
115°	410.2	410.2	410.2	410.2	410.0	409.5	409.2	408.7	408.3	408.1	407.8
117.5°	465.7	465.8	466.0	466.2	466.1	465.8	465.5	465.2	465.0	464.2	463.5
120°	503.2	504.1	504.9	505.8	505.9	505.2	504.5	504.0	503.3	502.3	501.2
122.5°	541.1	541.4	541.8	542.1	542.2	541.9	541.5	541.2	540.9	540.3	539.5
125°	597.4	597.4	597.4	597.4	597.3	597.1	596.9	596.6	596.4	596.1	595.6
127.5°	649.4	650.0	650.6	651.3	651.4	651.1	650.7	650.4	650.1	649.7	649.2
130°	685.5	686.2	686.7	687.4	687.7	687.7	687.7	687.7	687.7	687.3	686.9
132.5°	722.3	722.6	723.1	723.6	723.8	723.6	723.4	723.2	723.1	722.6	722.3
135°	771.8	773.0	774.3	775.5	776.2	776.2	776.2	776.2	776.2	775.7	775.3
137.5°	824.2	824.7	825.3	826.0	826.3	826.7	827.1	827.4	827.7	827.2	826.6
140°	859.3	859.8	860.2	860.6	860.8	860.8	860.8	860.8	860.8	860.6	860.4
142.5°	891.7	892.1	892.6	893.0	893.1	893.0	892.8	892.6	892.4	892.4	892.3
145°	936.9	937.7	938.6	939.4	939.9	940.2	940.4	940.6	940.8	940.6	940.4
147.5°	981.5	982.5	983.5	984.5	985.0	984.8	984.6	984.4	984.3	984.1	983.9
150°	1008.4	1009.3	1010.1	1011.0	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3	1011.3
152.5°	1033.7	1034.2	1034.7	1035.2	1035.5	1035.7	1035.9	1036.0	1036.1	1036.7	1037.2
155°	1072.5	1072.5	1072.5	1072.5	1072.4	1072.1	1072.0	1071.8	1071.6	1072.4	1073.3
157.5°	1105.2	1104.8	1104.5	1104.1	1103.9	1103.8	1103.8	1103.8	1103.7	1104.4	1104.9
160°	1124.9	1124.7	1124.5	1124.4	1124.2	1123.9	1123.7	1123.5	1123.3	1123.9	1124.5
162.5°	1142.7	1142.2	1141.6	1141.0	1140.7	1140.5	1140.3	1140.1	1139.8	1140.9	1142.1
165°	1166.9	1166.3	1165.6	1165.0	1164.5	1164.0	1163.7	1163.2	1162.8	1164.0	1165.4
167.5°	1185.2	1184.4	1183.6	1182.6	1182.2	1182.2	1182.3	1182.3	1182.4	1183.6	1184.9
170°	1195.6	1194.6	1193.5	1192.5	1192.0	1192.3	1192.5	1192.7	1192.9	1194.2	1195.4
172.5°	1203.3	1202.5	1201.6	1200.7	1200.2	1200.3	1200.3	1200.4	1200.4	1201.8	1203.2
175°	1213.5	1212.5	1211.4	1210.4	1209.8	1209.6	1209.3	1209.1	1208.9	1210.4	1211.8
177.5°	1217.1	1216.3	1215.4	1214.6	1214.2	1214.2	1214.2	1214.2	1214.2	1215.3	1216.5
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4



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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°	16.9	16.6	17.3	16.9	17.0	16.5	17.2
90°	24.5	25.7	26.6	27.0	27.4	27.8	28.2
92.5°	39.5	40.2	40.8	41.0	41.3	41.6	41.8
95°	73.4	74.0	74.4	74.4	74.4	74.4	74.4
97.5°	115.4	116.1	116.5	116.5	116.5	116.5	116.5
100°	145.2	145.6	145.8	145.8	145.8	145.8	145.8
102.5°	177.3	177.9	178.2	178.4	178.6	178.8	178.9
105°	225.8	226.4	227.1	227.6	228.3	228.9	229.5
107.5°	278.1	278.7	279.0	279.0	278.9	278.9	278.8
110°	312.0	311.6	311.7	312.4	312.9	313.6	314.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	349.9	349.9	349.9	350.0	350.1	350.2	350.3
115°	407.6	407.5	407.3	407.1	406.8	406.6	406.4
117.5°	462.8	462.1	461.6	461.1	460.7	460.2	459.9
120°	500.2	499.2	498.8	499.3	499.6	500.1	500.5
122.5°	538.9	538.1	537.3	536.6	535.8	535.1	534.3
125°	595.2	594.7	594.4	594.0	593.5	593.1	592.7
127.5°	648.8	648.4	648.0	647.7	647.3	647.1	646.7
130°	686.5	686.1	685.4	684.6	683.7	682.9	682.0
132.5°	721.8	721.4	721.0	720.7	720.4	720.0	719.7
135°	774.9	774.5	773.9	773.4	772.7	772.0	771.5
137.5°	826.0	825.6	825.3	825.5	825.6	825.7	825.9
140°	860.2	860.0	859.8	859.6	859.3	859.1	858.9
142.5°	892.3	892.3	892.2	892.2	892.1	892.1	892.0
145°	940.2	939.9	939.5	938.9	938.3	937.6	937.0
147.5°	983.7	983.5	983.4	983.2	983.0	982.8	982.6
150°	1011.3	1011.3	1011.3	1011.1	1010.8	1010.6	1010.4
152.5°	1037.6	1038.2	1038.2	1037.6	1037.1	1036.5	1035.9
155°	1074.0	1074.9	1074.9	1074.0	1073.3	1072.4	1071.6
157.5°	1105.6	1106.3	1106.2	1105.5	1104.8	1104.1	1103.3
160°	1125.2	1125.8	1125.6	1124.5	1123.5	1122.5	1121.4
162.5°	1143.2	1144.3	1144.4	1143.4	1142.4	1141.3	1140.2
165°	1166.6	1167.8	1168.0	1167.2	1166.4	1165.5	1164.7
167.5°	1186.2	1187.4	1187.4	1186.1	1184.8	1183.5	1182.2
170°	1196.7	1198.0	1197.8	1196.4	1194.9	1193.4	1191.9
172.5°	1204.7	1206.2	1206.1	1204.7	1203.2	1201.7	1200.2
175°	1213.3	1214.7	1214.7	1213.3	1211.8	1210.4	1208.9
177.5°	1217.7	1218.9	1218.8	1217.5	1216.1	1214.7	1213.4
180°	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4	1216.4

(END OF REPORT)