

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: P332830-940

Luminaire Tested: **S124DIW-S1020D1560U940-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332830-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D1560U940-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8934.3 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

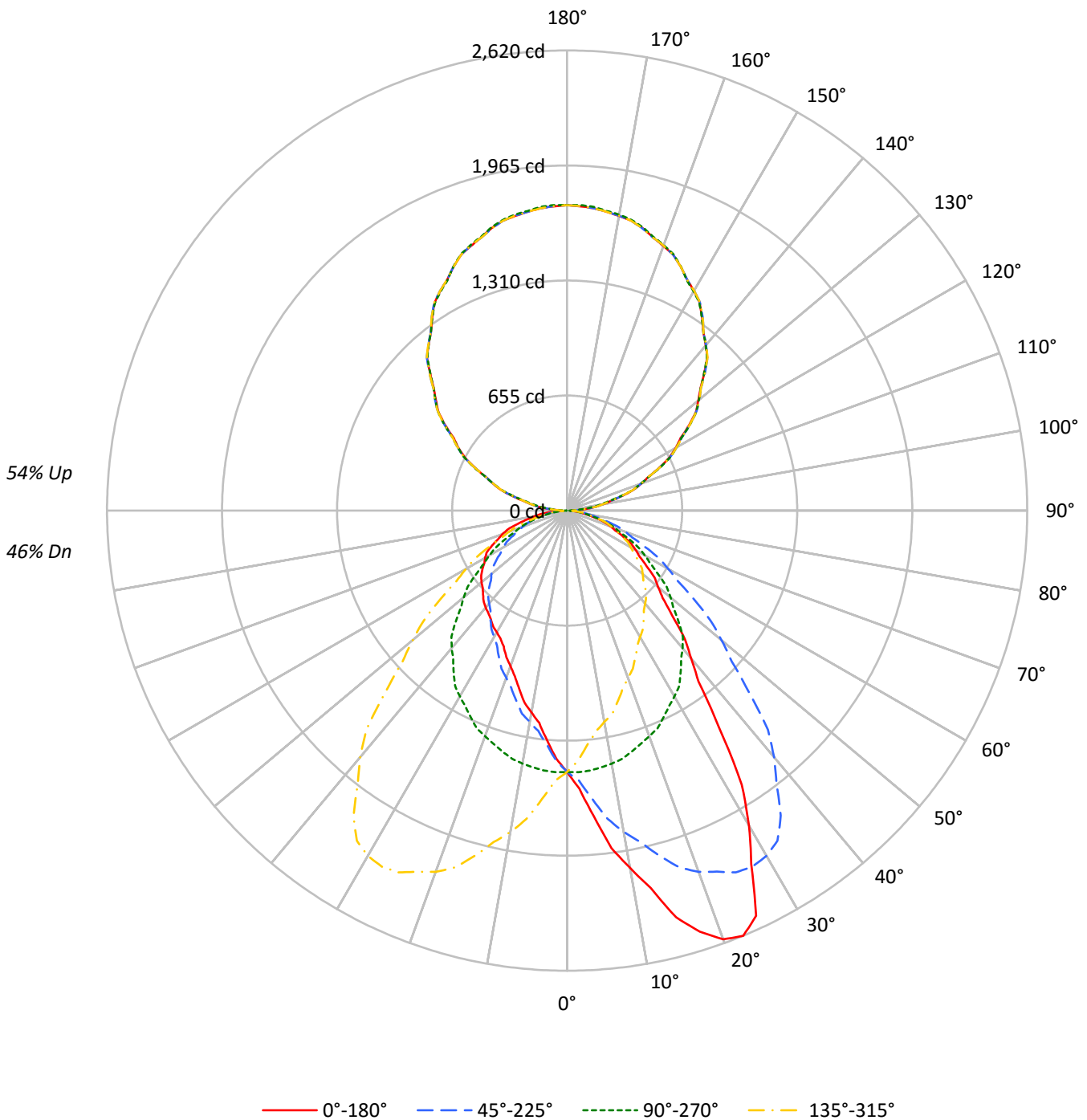
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46								
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	47	46	45	39								
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	40	38	33								
3	81	72	64	59	74	66	60	55	56	51	47	46	42	40	37	34	33	28								
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28	24								
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	21								
6	63	51	43	37	57	47	40	35	40	35	30	33	29	26	27	24	22	19								
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19	17								
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15								
9	50	38	31	26	46	35	29	24	30	25	21	26	21	19	21	18	16	14								
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	16	14	12								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12013	12013	12013	12013
5°	14148	12044	10631	12044
10°	16939	11992	9571	11992
15°	20042	11870	8790	11870
20°	22317	11747	8092	11747
25°	22678	11564	7611	11564
30°	19296	11389	7458	11389
35°	14836	11106	7460	11106
40°	11564	10771	7600	10771
45°	9642	10268	7728	10268
50°	8485	9654	7989	9654
55°	7773	8919	8313	8919
60°	7285	8262	8699	8262
65°	6783	7524	9020	7524
70°	6198	6793	9224	6793
75°	5536	5979	9114	5979
80°	4644	4900	8824	4900
85°	3427	3548	8448	3548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	1.6
10°-20°	446.9	5.0
20°-30°	708.6	7.9
30°-40°	788.6	8.8
40°-50°	717.8	8.0
50°-60°	586.6	6.6
60°-70°	418.8	4.7
70°-80°	230.6	2.6
80°-90°	68.2	0.8
90°-100°	114.7	1.3
100°-110°	339.7	3.8
110°-120°	576.5	6.5
120°-130°	760.2	8.5
130°-140°	853.8	9.6
140°-150°	839.0	9.4
150°-160°	705.6	7.9
160°-170°	469.5	5.3
170°-180°	164.4	1.8
0°-30°	1300.4	14.6
0°-40°	2089.0	23.4
0°-60°	3393.4	38.0
0°-90°	4110.9	46.0
90°-120°	1030.9	11.5
90°-150°	3483.9	39.0
90°-180°	4823.0	54.0
0°-180°	8934.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1488	1488	1488	1488	1488	
5°	1746	1486	1312	1486	1746	178
15°	2398	1420	1052	1420	2398	678
25°	2546	1298	854	1298	2546	1122
35°	1505	1127	757	1127	1505	956
45°	844	899	677	899	844	665
55°	552	634	591	634	552	499
65°	355	394	472	394	355	352
75°	178	192	292	192	178	189
85°	37	38	91	38	37	46
90°	40	4	40	4	40	22
95°	106	81	106	81	106	111
105°	328	313	328	313	328	346
115°	581	586	581	586	581	574
125°	847	854	847	854	847	756
135°	1102	1101	1102	1101	1102	851
145°	1339	1338	1339	1338	1339	838
155°	1531	1533	1531	1533	1531	705
165°	1665	1669	1665	1669	1665	469
175°	1728	1736	1728	1736	1728	164
180°	1738	1738	1738	1738	1738	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1583.8	1583.3	1578.3	1577.3	1573.9	1569.5	1568.5	1560.6	1544.8	1537.4	1535.4
5°	1745.8	1758.1	1742.0	1739.0	1737.1	1716.8	1706.3	1694.0	1665.6	1649.0	1636.0
7.5°	1939.1	1940.5	1933.6	1927.9	1912.2	1894.4	1867.9	1839.5	1805.7	1770.6	1744.0
10°	2066.4	2071.3	2063.2	2062.0	2030.6	2010.8	1971.4	1938.1	1899.9	1857.3	1818.6
12.5°	2200.5	2193.5	2189.5	2163.1	2157.3	2121.3	2075.5	2041.2	1982.3	1933.3	1881.6
15°	2398.0	2384.4	2375.8	2339.4	2321.6	2271.6	2222.9	2185.3	2108.3	2034.9	1979.4
17.5°	2513.8	2527.5	2507.5	2492.5	2446.3	2411.3	2361.5	2282.6	2222.3	2131.2	2061.2
20°	2597.7	2598.9	2587.8	2572.4	2536.0	2491.7	2437.4	2351.1	2279.0	2188.3	2092.2
22.5°	2620.4	2620.6	2615.9	2601.5	2574.0	2538.0	2483.3	2411.3	2323.9	2225.4	2129.2
25°	2545.9	2543.4	2549.0	2565.0	2554.6	2543.4	2512.0	2458.4	2377.0	2272.8	2169.3
27.5°	2269.2	2286.3	2317.6	2357.1	2395.0	2424.0	2432.1	2421.2	2370.7	2285.0	2176.6
30°	2070.0	2091.0	2114.4	2153.8	2230.3	2274.0	2322.2	2358.5	2338.2	2269.8	2168.6
32.5°	1851.1	1856.3	1891.1	1935.9	2005.9	2090.1	2166.3	2240.2	2264.7	2228.8	2144.5
35°	1505.4	1513.9	1551.6	1596.0	1681.7	1784.6	1899.3	2001.6	2086.1	2120.0	2076.8
37.5°	1228.4	1253.2	1279.8	1327.5	1402.9	1495.6	1614.7	1747.1	1873.0	1957.3	1971.7
40°	1097.3	1112.7	1131.8	1168.1	1232.3	1323.5	1425.8	1577.5	1711.3	1832.1	1871.5
42.5°	993.7	1002.7	1014.4	1047.3	1096.2	1186.9	1280.3	1413.7	1548.0	1692.5	1758.6
45°	844.5	853.8	873.5	892.6	929.6	992.5	1079.4	1189.1	1324.1	1463.5	1585.5
47.5°	736.7	742.7	754.4	774.9	806.3	847.7	918.5	1010.1	1135.2	1270.5	1400.5
50°	675.6	680.6	689.8	708.3	732.4	769.3	827.2	912.9	1010.9	1147.2	1274.8
52.5°	627.3	629.3	636.1	648.6	667.7	698.8	746.4	817.3	908.4	1029.8	1156.9
55°	552.3	554.8	561.0	570.2	586.8	606.5	642.9	696.0	775.5	880.9	991.2
57.5°	490.7	492.4	497.6	501.1	514.9	530.9	558.8	596.7	657.0	746.4	844.9
60°	451.2	450.0	456.2	459.2	468.5	482.1	503.6	540.0	592.4	664.5	755.1
62.5°	412.8	411.1	416.3	420.3	425.6	437.2	454.8	483.3	525.8	591.0	669.3
65°	355.1	352.6	355.7	360.6	365.5	371.8	384.7	409.9	443.8	490.7	550.5
67.5°	297.1	299.7	300.2	302.6	305.5	313.9	322.8	340.6	364.5	402.1	452.7
70°	262.6	263.2	265.7	265.7	267.5	274.9	282.3	292.8	316.2	350.8	392.1
72.5°	228.1	230.7	229.7	231.7	233.0	237.9	243.3	253.3	273.3	299.0	333.9
75°	177.5	179.4	179.4	180.0	181.8	183.7	188.0	195.4	209.6	228.7	252.7
77.5°	129.5	129.7	130.5	132.8	132.8	135.7	138.9	144.9	151.9	165.0	179.6
80°	99.9	101.1	100.5	101.7	101.7	104.2	105.4	112.8	115.9	124.5	136.3
82.5°	73.2	74.5	74.4	76.1	77.0	77.6	79.3	82.2	85.3	92.9	97.7
85°	37.0	38.3	37.0	38.3	40.0	40.7	42.5	43.2	45.7	47.4	51.8
87.5°	18.9	20.2	20.2	20.5	21.4	21.7	21.8	21.0	22.6	22.6	24.2
90°	40.3	39.8	39.1	38.5	38.0	36.7	35.0	33.2	31.4	29.6	27.2
92.5°	59.7	59.3	58.9	58.6	58.2	57.5	56.4	55.4	54.3	53.2	51.5
95°	106.2	106.2	106.2	106.2	106.2	105.8	104.9	104.0	103.1	102.2	100.1
97.5°	166.5	166.5	166.5	166.5	166.5	165.9	164.9	163.8	162.6	161.6	159.2
100°	208.4	208.4	208.4	208.4	208.4	208.1	207.5	206.9	206.3	205.7	203.0
102.5°	255.7	255.5	255.3	255.0	254.8	254.2	253.4	252.5	251.7	250.9	248.4
105°	328.1	327.2	326.3	325.4	324.5	323.6	322.7	321.8	320.9	320.0	318.8
107.5°	398.5	398.6	398.7	398.7	398.8	398.4	397.5	396.7	395.8	395.0	394.8
110°	449.1	448.2	447.3	446.4	445.5	445.3	445.9	446.6	447.1	447.7	448.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	500.7	500.5	500.3	500.2	500.0	500.0	500.1	500.2	500.3	500.4	501.0
115°	580.9	581.1	581.5	581.8	582.0	582.4	582.6	582.9	583.3	583.5	584.2
117.5°	657.2	657.8	658.4	659.0	659.6	660.4	661.5	662.5	663.4	664.5	664.9
120°	715.3	714.7	714.1	713.5	712.9	713.4	714.9	716.3	717.8	719.3	720.2
122.5°	763.8	764.8	765.9	767.0	768.0	769.1	770.1	771.1	772.1	773.1	773.6
125°	847.0	847.7	848.3	848.8	849.4	850.1	850.7	851.2	851.9	852.5	852.7
127.5°	924.3	924.7	925.2	925.7	926.1	926.7	927.3	927.9	928.4	929.1	929.6
130°	974.8	976.0	977.2	978.4	979.5	980.4	981.1	981.7	982.3	982.8	982.8
132.5°	1028.6	1029.0	1029.6	1030.0	1030.5	1031.0	1031.6	1032.2	1032.9	1033.4	1033.7
135°	1102.5	1103.4	1104.3	1105.2	1106.1	1106.9	1107.5	1108.0	1108.7	1109.3	1109.3
137.5°	1180.3	1180.1	1179.9	1179.7	1179.6	1179.8	1180.6	1181.4	1182.1	1182.9	1182.5
140°	1227.6	1227.9	1228.2	1228.5	1228.8	1229.0	1229.4	1229.7	1229.9	1230.3	1230.3
142.5°	1274.9	1275.0	1275.1	1275.1	1275.1	1275.2	1275.2	1275.3	1275.4	1275.4	1275.7
145°	1339.2	1340.1	1341.0	1341.8	1342.7	1343.4	1343.6	1344.0	1344.3	1344.5	1344.3
147.5°	1404.3	1404.5	1404.9	1405.2	1405.4	1405.7	1406.0	1406.2	1406.4	1406.7	1406.9
150°	1444.0	1444.4	1444.7	1444.9	1445.3	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4
152.5°	1480.6	1481.4	1482.2	1482.9	1483.7	1483.7	1483.0	1482.3	1481.6	1480.9	1480.7
155°	1531.4	1532.7	1533.8	1535.0	1536.2	1536.2	1535.0	1533.8	1532.7	1531.4	1531.8
157.5°	1576.9	1577.9	1579.0	1579.9	1580.9	1581.0	1580.1	1579.2	1578.3	1577.4	1577.5
160°	1602.7	1604.2	1605.7	1607.2	1608.6	1609.0	1608.1	1607.2	1606.3	1605.4	1605.7
162.5°	1629.6	1631.1	1632.6	1634.1	1635.6	1635.5	1633.9	1632.3	1630.7	1629.1	1629.3
165°	1664.6	1665.7	1667.0	1668.1	1669.4	1669.0	1667.2	1665.4	1663.7	1661.9	1662.5
167.5°	1689.5	1691.4	1693.3	1695.1	1697.0	1697.0	1695.2	1693.4	1691.7	1689.9	1689.8
170°	1703.5	1705.7	1707.7	1709.9	1711.9	1712.1	1710.3	1708.5	1706.6	1704.9	1704.6
172.5°	1715.4	1717.4	1719.6	1721.6	1723.8	1723.8	1721.7	1719.8	1717.7	1715.7	1715.6
175°	1727.8	1729.8	1732.0	1734.0	1736.2	1736.2	1734.0	1732.0	1729.8	1727.8	1728.0
177.5°	1734.2	1736.2	1738.0	1739.9	1741.9	1742.0	1740.3	1738.7	1737.0	1735.3	1735.3
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1536.0	1529.0	1524.1	1520.2	1509.3	1502.9	1498.0	1491.0	1483.2	1474.8	1464.5
5°	1623.1	1602.1	1586.7	1563.3	1541.1	1522.6	1503.5	1486.2	1465.3	1442.5	1425.8
7.5°	1714.7	1683.6	1643.6	1608.9	1569.9	1536.1	1505.7	1474.6	1442.3	1411.0	1382.3
10°	1772.9	1732.9	1688.5	1636.0	1586.7	1542.9	1502.3	1462.9	1424.6	1386.3	1353.7
12.5°	1835.5	1785.6	1720.0	1658.8	1603.5	1545.0	1495.8	1447.5	1401.4	1361.2	1323.1
15°	1919.6	1847.4	1771.7	1689.7	1616.9	1548.5	1481.3	1420.3	1368.5	1315.5	1278.5
17.5°	1971.3	1882.0	1795.4	1709.7	1621.6	1535.3	1462.9	1392.4	1327.6	1275.0	1228.3
20°	2005.3	1916.6	1808.7	1723.0	1618.2	1529.4	1445.6	1367.3	1299.5	1243.4	1195.2
22.5°	2034.9	1932.3	1824.4	1711.6	1607.3	1513.1	1421.4	1342.6	1273.4	1214.2	1168.1
25°	2050.9	1933.1	1816.1	1703.9	1585.5	1473.9	1390.7	1298.2	1224.2	1162.0	1112.7
27.5°	2052.6	1926.7	1794.2	1669.6	1547.4	1443.5	1338.5	1255.8	1179.0	1113.2	1065.9
30°	2047.2	1915.9	1773.5	1638.5	1515.8	1403.0	1311.8	1221.8	1143.5	1078.2	1028.9
32.5°	2030.0	1893.2	1746.9	1604.0	1476.9	1366.5	1272.4	1186.8	1110.4	1046.1	994.3
35°	1980.0	1845.0	1689.1	1540.5	1410.4	1298.9	1213.8	1126.9	1050.4	989.4	939.5
37.5°	1902.0	1779.9	1621.4	1467.7	1339.9	1227.8	1143.5	1065.0	996.0	934.1	882.9
40°	1833.9	1726.6	1567.6	1417.8	1279.8	1173.1	1094.2	1022.1	953.7	895.1	846.4
42.5°	1755.5	1662.1	1515.4	1356.6	1223.5	1116.4	1039.5	974.7	910.3	856.1	807.4
45°	1615.7	1554.1	1415.9	1269.3	1130.6	1029.5	956.1	899.4	845.2	792.1	751.4
47.5°	1454.9	1424.3	1308.1	1168.8	1037.1	937.5	873.9	821.4	773.9	729.0	693.1
50°	1346.9	1332.1	1231.6	1097.3	971.5	877.8	813.7	768.7	728.0	688.6	654.7
52.5°	1240.4	1239.9	1149.3	1026.3	909.9	819.7	756.0	714.0	678.7	646.7	616.2
55°	1077.5	1094.8	1024.0	914.2	810.0	728.6	671.3	633.7	609.0	582.6	559.7
57.5°	928.0	956.6	898.1	801.5	714.6	639.6	589.7	561.4	535.2	519.2	502.6
60°	830.4	857.5	811.9	730.5	648.5	584.4	536.9	511.7	488.8	477.8	466.0
62.5°	743.6	767.8	734.0	658.5	587.4	525.7	485.6	461.4	445.9	433.8	426.1
65°	619.6	639.9	610.9	556.1	495.0	445.7	413.0	393.9	379.2	374.2	365.5
67.5°	500.8	519.3	503.6	457.0	408.0	370.8	345.2	326.8	318.1	313.8	307.6
70°	430.3	448.8	432.1	391.5	353.8	322.4	298.4	287.8	278.7	276.8	268.1
72.5°	370.6	383.2	366.6	334.7	302.6	276.1	257.4	246.5	241.7	238.4	233.6
75°	278.0	289.1	278.0	253.3	230.5	212.0	196.0	191.7	186.2	184.3	181.2
77.5°	196.8	206.3	197.9	182.4	165.4	151.1	142.5	137.0	135.7	132.5	134.0
80°	150.4	156.6	148.6	138.1	124.5	114.7	108.5	105.4	101.7	100.5	102.9
82.5°	108.0	110.8	106.6	99.6	89.5	83.1	78.9	75.3	74.5	74.8	74.8
85°	56.1	55.5	54.8	48.7	45.7	41.3	38.9	38.3	37.6	38.9	40.0
87.5°	23.7	23.7	22.7	20.2	18.1	16.0	14.8	13.6	14.8	16.0	17.1
90°	24.8	22.4	20.1	17.2	13.9	10.6	7.3	4.0	7.3	10.6	13.9
92.5°	49.9	48.2	46.5	43.9	40.0	36.3	32.5	28.8	32.5	36.3	40.0
95°	98.0	95.9	93.8	91.4	88.7	86.1	83.4	80.7	83.4	86.1	88.7
97.5°	156.7	154.3	151.9	149.5	147.4	145.2	143.0	140.9	143.0	145.2	147.4
100°	200.4	197.7	194.9	193.1	191.8	190.6	189.4	188.2	189.4	190.6	191.8
102.5°	246.0	243.5	241.1	239.6	239.2	238.7	238.2	237.7	238.2	238.7	239.2
105°	317.6	316.4	315.2	314.5	314.1	313.9	313.6	313.3	313.6	313.9	314.1
107.5°	394.7	394.5	394.3	394.0	393.7	393.3	393.0	392.6	393.0	393.3	393.7
110°	448.4	448.6	449.0	448.8	448.2	447.5	447.0	446.4	447.0	447.5	448.2



TEST NUMBER: P332830-940

CATALOG NUMBER: S124DIW-S1020D1560U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	501.5	502.0	502.6	502.8	502.7	502.6	502.5	502.3	502.5	502.6	502.7
115°	584.7	585.3	585.9	586.2	586.2	586.2	586.2	586.2	586.2	586.2	586.2
117.5°	665.3	665.8	666.2	666.3	666.0	665.8	665.5	665.3	665.5	665.8	666.0
120°	721.1	722.0	722.9	722.7	721.6	720.4	719.2	718.0	719.2	720.4	721.6
122.5°	773.9	774.4	774.8	774.7	774.3	773.8	773.3	772.8	773.3	773.8	774.3
125°	853.0	853.4	853.6	853.8	853.8	853.8	853.8	853.8	853.8	853.8	853.8
127.5°	930.1	930.5	931.0	930.8	929.9	929.0	928.1	927.2	928.1	929.0	929.9
130°	982.8	982.8	982.8	982.4	981.5	980.6	979.7	978.8	979.7	980.6	981.5
132.5°	1033.9	1034.1	1034.4	1034.2	1033.5	1032.9	1032.2	1031.5	1032.2	1032.9	1033.5
135°	1109.3	1109.3	1109.3	1108.4	1106.6	1104.7	1103.0	1101.2	1103.0	1104.7	1106.6
137.5°	1182.0	1181.5	1181.1	1180.4	1179.6	1178.7	1177.9	1177.1	1177.9	1178.7	1179.6
140°	1230.3	1230.3	1230.3	1229.9	1229.4	1228.8	1228.2	1227.6	1228.2	1228.8	1229.4
142.5°	1275.9	1276.1	1276.4	1276.2	1275.6	1275.1	1274.4	1273.8	1274.4	1275.1	1275.6
145°	1344.0	1343.6	1343.4	1342.6	1341.4	1340.2	1339.0	1337.8	1339.0	1340.2	1341.4
147.5°	1407.1	1407.4	1407.7	1407.0	1405.6	1404.2	1402.8	1401.3	1402.8	1404.2	1405.6
150°	1445.4	1445.4	1445.4	1444.8	1443.6	1442.4	1441.2	1440.0	1441.2	1442.4	1443.6
152.5°	1480.4	1480.2	1480.0	1479.4	1478.7	1478.0	1477.3	1476.6	1477.3	1478.0	1478.7
155°	1532.0	1532.3	1532.7	1532.8	1532.8	1532.8	1532.8	1532.8	1532.8	1532.8	1532.8
157.5°	1577.5	1577.6	1577.7	1578.0	1578.5	1579.0	1579.6	1580.1	1579.6	1579.0	1578.5
160°	1606.0	1606.3	1606.6	1606.9	1607.2	1607.5	1607.8	1608.1	1607.8	1607.5	1607.2
162.5°	1629.7	1630.0	1630.2	1630.8	1631.6	1632.4	1633.2	1633.9	1633.2	1632.4	1631.6
165°	1663.0	1663.7	1664.3	1665.0	1665.9	1666.8	1667.7	1668.6	1667.7	1666.8	1665.9
167.5°	1689.7	1689.7	1689.6	1690.2	1691.5	1692.7	1694.0	1695.2	1694.0	1692.7	1691.5
170°	1704.3	1704.0	1703.7	1704.3	1705.8	1707.3	1708.8	1710.3	1708.8	1707.3	1705.8
172.5°	1715.6	1715.5	1715.4	1716.0	1717.3	1718.5	1719.8	1721.0	1719.8	1718.5	1717.3
175°	1728.3	1728.7	1728.9	1729.8	1731.3	1732.9	1734.3	1735.8	1734.3	1732.9	1731.3
177.5°	1735.3	1735.3	1735.3	1735.9	1737.1	1738.3	1739.5	1740.6	1739.5	1738.3	1737.1
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



TEST NUMBER: P332830-940

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1459.5	1455.1	1448.7	1439.8	1432.4	1424.5	1422.5	1419.5	1425.5	1420.5	1419.1
5°	1411.7	1398.7	1382.1	1363.0	1351.8	1335.9	1332.8	1326.6	1320.4	1319.8	1313.7
7.5°	1361.0	1342.0	1320.2	1300.7	1282.7	1265.2	1253.7	1251.2	1242.2	1236.8	1230.7
10°	1328.5	1305.0	1279.8	1261.2	1240.3	1221.8	1208.9	1201.5	1195.2	1188.5	1182.3
12.5°	1289.9	1265.1	1244.2	1224.2	1199.4	1185.3	1164.0	1151.1	1150.0	1150.0	1134.0
15°	1245.2	1220.6	1188.5	1160.1	1146.6	1119.5	1107.8	1093.0	1083.7	1074.4	1067.1
17.5°	1194.1	1163.3	1138.4	1105.8	1079.9	1058.3	1042.9	1034.0	1020.1	1007.0	997.6
20°	1162.0	1129.4	1102.8	1068.3	1039.9	1013.4	1000.5	988.2	977.7	966.6	956.1
22.5°	1129.4	1095.3	1062.8	1029.3	1003.0	975.0	962.5	945.7	935.8	929.6	919.1
25°	1078.2	1041.2	1004.2	972.1	945.0	920.3	903.7	890.7	879.7	874.8	868.0
27.5°	1022.4	985.7	949.9	913.6	882.8	864.9	851.6	841.8	835.4	828.8	825.8
30°	986.9	948.7	910.5	876.6	848.2	830.4	818.1	811.3	806.3	803.3	800.1
32.5°	950.9	913.2	873.0	842.0	816.6	800.8	791.4	784.6	782.1	781.0	779.9
35°	893.2	855.0	818.1	790.3	766.2	760.1	752.1	748.3	747.2	751.4	753.3
37.5°	837.4	801.9	767.9	740.9	725.2	716.2	713.5	713.6	718.0	721.8	726.3
40°	801.4	766.9	734.8	711.4	696.6	691.1	689.8	692.9	697.9	702.1	707.0
42.5°	766.3	732.4	703.2	681.3	670.9	665.8	666.6	669.7	676.6	681.9	689.3
45°	712.0	683.7	655.3	637.4	628.7	630.0	630.0	635.5	642.3	650.3	658.4
47.5°	660.8	632.2	608.9	593.9	589.4	588.4	591.8	599.1	608.8	618.7	629.9
50°	626.3	599.1	578.8	565.3	560.4	562.2	567.1	573.9	585.6	598.0	609.7
52.5°	591.3	566.6	547.8	535.2	531.7	535.1	540.0	550.7	561.0	574.3	588.4
55°	536.9	515.9	501.1	492.0	490.7	492.6	498.1	509.8	524.6	541.3	554.8
57.5°	482.8	465.3	451.7	445.3	445.9	447.6	456.8	470.7	486.5	504.3	521.7
60°	446.3	430.3	419.2	414.3	414.8	418.6	429.6	442.6	462.4	479.6	498.1
62.5°	411.8	397.7	387.1	382.7	381.8	389.9	400.6	414.0	433.7	453.0	473.0
65°	356.3	345.2	336.6	334.1	336.0	342.1	355.7	373.5	390.2	410.5	431.5
67.5°	302.0	292.9	287.0	288.1	290.3	299.4	310.9	326.2	345.1	366.1	386.9
70°	267.5	258.9	254.0	254.6	258.3	269.4	279.3	294.6	315.0	336.6	353.8
72.5°	232.0	226.3	221.9	224.5	228.2	235.9	248.2	263.6	281.5	301.6	319.8
75°	178.2	178.2	175.7	177.5	183.1	190.5	199.7	215.8	233.6	249.7	264.5
77.5°	132.2	130.8	132.4	134.6	137.9	146.6	157.2	168.6	182.1	198.1	210.4
80°	101.1	101.7	104.8	108.5	109.8	116.5	127.6	138.1	148.6	162.1	173.8
82.5°	76.0	76.6	78.2	82.8	84.1	91.4	98.5	109.0	118.5	127.6	137.3
85°	41.3	41.3	44.4	46.2	49.3	54.2	58.6	64.7	73.4	79.5	88.7
87.5°	19.3	19.8	22.2	23.7	25.7	28.6	30.0	35.8	38.1	40.8	45.6
90°	17.2	20.1	22.4	24.8	27.2	29.6	31.4	33.2	35.0	36.7	38.0
92.5°	43.9	46.5	48.2	49.9	51.5	53.2	54.3	55.4	56.4	57.5	58.2
95°	91.4	93.8	95.9	98.0	100.1	102.2	103.1	104.0	104.9	105.8	106.2
97.5°	149.5	151.9	154.3	156.7	159.2	161.6	162.6	163.8	164.9	165.9	166.5
100°	193.1	194.9	197.7	200.4	203.0	205.7	206.3	206.9	207.5	208.1	208.4
102.5°	239.6	241.1	243.5	246.0	248.4	250.9	251.7	252.5	253.4	254.2	254.8
105°	314.5	315.2	316.4	317.6	318.8	320.0	320.9	321.8	322.7	323.6	324.5
107.5°	394.0	394.3	394.5	394.7	394.8	395.0	395.8	396.7	397.5	398.4	398.8
110°	448.8	449.0	448.6	448.4	448.0	447.7	447.1	446.6	445.9	445.3	445.5



TEST NUMBER: P332830-940

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	502.8	502.6	502.0	501.5	501.0	500.4	500.3	500.2	500.1	500.0	500.0
115°	586.2	585.9	585.3	584.7	584.2	583.5	583.3	582.9	582.6	582.4	582.0
117.5°	666.3	666.2	665.8	665.3	664.9	664.5	663.4	662.5	661.5	660.4	659.6
120°	722.7	722.9	722.0	721.1	720.2	719.3	717.8	716.3	714.9	713.4	712.9
122.5°	774.7	774.8	774.4	773.9	773.6	773.1	772.1	771.1	770.1	769.1	768.0
125°	853.8	853.6	853.4	853.0	852.7	852.5	851.9	851.2	850.7	850.1	849.4
127.5°	930.8	931.0	930.5	930.1	929.6	929.1	928.4	927.9	927.3	926.7	926.1
130°	982.4	982.8	982.8	982.8	982.8	982.8	982.3	981.7	981.1	980.4	979.5
132.5°	1034.2	1034.4	1034.1	1033.9	1033.7	1033.4	1032.9	1032.2	1031.6	1031.0	1030.5
135°	1108.4	1109.3	1109.3	1109.3	1109.3	1109.3	1108.7	1108.0	1107.5	1106.9	1106.1
137.5°	1180.4	1181.1	1181.5	1182.0	1182.5	1182.9	1182.1	1181.4	1180.6	1179.8	1179.6
140°	1229.9	1230.3	1230.3	1230.3	1230.3	1230.3	1229.9	1229.7	1229.4	1229.0	1228.8
142.5°	1276.2	1276.4	1276.1	1275.9	1275.7	1275.4	1275.4	1275.3	1275.2	1275.2	1275.1
145°	1342.6	1343.4	1343.6	1344.0	1344.3	1344.5	1344.3	1344.0	1343.6	1343.4	1342.7
147.5°	1407.0	1407.7	1407.4	1407.1	1406.9	1406.7	1406.4	1406.2	1406.0	1405.7	1405.4
150°	1444.8	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1445.3
152.5°	1479.4	1480.0	1480.2	1480.4	1480.7	1480.9	1481.6	1482.3	1483.0	1483.7	1483.7
155°	1532.8	1532.7	1532.3	1532.0	1531.8	1531.4	1532.7	1533.8	1535.0	1536.2	1536.2
157.5°	1578.0	1577.7	1577.6	1577.5	1577.5	1577.4	1578.3	1579.2	1580.1	1581.0	1580.9
160°	1606.9	1606.6	1606.3	1606.0	1605.7	1605.4	1606.3	1607.2	1608.1	1609.0	1608.6
162.5°	1630.8	1630.2	1630.0	1629.7	1629.3	1629.1	1630.7	1632.3	1633.9	1635.5	1635.6
165°	1665.0	1664.3	1663.7	1663.0	1662.5	1661.9	1663.7	1665.4	1667.2	1669.0	1669.4
167.5°	1690.2	1689.6	1689.7	1689.7	1689.8	1689.9	1691.7	1693.4	1695.2	1697.0	1697.0
170°	1704.3	1703.7	1704.0	1704.3	1704.6	1704.9	1706.6	1708.5	1710.3	1712.1	1711.9
172.5°	1716.0	1715.4	1715.5	1715.6	1715.6	1715.7	1717.7	1719.8	1721.7	1723.8	1723.8
175°	1729.8	1728.9	1728.7	1728.3	1728.0	1727.8	1729.8	1732.0	1734.0	1736.2	1736.2
177.5°	1735.9	1735.3	1735.3	1735.3	1735.3	1735.3	1737.0	1738.7	1740.3	1742.0	1741.9
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



TEST NUMBER: P332830-940

CATALOG NUMBER: S124DIW-S1020D1560U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1418.1	1417.1	1413.6	1413.2	1413.6	1417.1	1418.1	1419.1	1420.5	1425.5	1419.5
5°	1309.9	1306.9	1305.0	1311.8	1305.0	1306.9	1309.9	1313.7	1319.8	1320.4	1326.6
7.5°	1228.4	1226.0	1220.6	1218.9	1220.6	1226.0	1228.4	1230.7	1236.8	1242.2	1251.2
10°	1176.2	1173.7	1168.8	1167.5	1168.8	1173.7	1176.2	1182.3	1188.5	1195.2	1201.5
12.5°	1125.9	1121.0	1120.0	1121.1	1120.0	1121.0	1125.9	1134.0	1150.0	1150.0	1151.1
15°	1059.1	1056.6	1049.8	1051.7	1049.8	1056.6	1059.1	1067.1	1074.4	1083.7	1093.0
17.5°	993.2	990.2	982.0	989.3	982.0	990.2	993.2	997.6	1007.0	1020.1	1034.0
20°	951.8	946.8	942.5	941.9	942.5	946.8	951.8	956.1	966.6	977.7	988.2
22.5°	912.3	907.9	907.5	903.5	907.5	907.9	912.3	919.1	929.6	935.8	945.7
25°	863.0	858.7	857.5	854.4	857.5	858.7	863.0	868.0	874.8	879.7	890.7
27.5°	825.2	823.0	820.8	821.8	820.8	823.0	825.2	825.8	828.8	835.4	841.8
30°	802.0	801.4	800.1	800.1	800.1	801.4	802.0	800.1	803.3	806.3	811.3
32.5°	782.7	782.7	783.4	783.4	783.4	782.7	782.7	779.9	781.0	782.1	784.6
35°	755.7	757.6	758.8	757.0	758.8	757.6	755.7	753.3	751.4	747.2	748.3
37.5°	731.4	733.2	734.9	737.0	734.9	733.2	731.4	726.3	721.8	718.0	713.6
40°	712.6	716.9	718.2	721.2	718.2	716.9	712.6	707.0	702.1	697.9	692.9
42.5°	694.8	699.6	702.8	703.5	702.8	699.6	694.8	689.3	681.9	676.6	669.7
45°	667.6	672.5	676.9	676.9	676.9	672.5	667.6	658.4	650.3	642.3	635.5
47.5°	639.4	646.5	650.9	651.9	650.9	646.5	639.4	629.9	618.7	608.8	599.1
50°	620.2	628.7	633.1	636.1	633.1	628.7	620.2	609.7	598.0	585.6	573.9
52.5°	601.4	610.0	615.8	617.4	615.8	610.0	601.4	588.4	574.3	561.0	550.7
55°	569.0	581.3	588.1	590.6	588.1	581.3	569.0	554.8	541.3	524.6	509.8
57.5°	538.4	549.7	557.7	559.5	557.7	549.7	538.4	521.7	504.3	486.5	470.7
60°	514.7	527.1	536.9	538.8	536.9	527.1	514.7	498.1	479.6	462.4	442.6
62.5°	490.5	503.4	512.3	517.1	512.3	503.4	490.5	473.0	453.0	433.7	414.0
65°	448.8	461.7	470.4	472.2	470.4	461.7	448.8	431.5	410.5	390.2	373.5
67.5°	403.1	416.1	421.8	425.3	421.8	416.1	403.1	386.9	366.1	345.1	326.2
70°	371.1	381.6	387.7	390.8	387.7	381.6	371.1	353.8	336.6	315.0	294.6
72.5°	334.6	345.5	352.8	353.4	352.8	345.5	334.6	319.8	301.6	281.5	263.6
75°	278.7	288.5	292.2	292.2	292.2	288.5	278.7	264.5	249.7	233.6	215.8
77.5°	220.5	225.6	230.3	231.3	230.3	225.6	220.5	210.4	198.1	182.1	168.6
80°	183.1	186.2	189.8	189.8	189.8	186.2	183.1	173.8	162.1	148.6	138.1
82.5°	144.6	147.2	150.9	150.4	150.9	147.2	144.6	137.3	127.6	118.5	109.0
85°	87.6	93.1	92.5	91.2	92.5	93.1	87.6	88.7	79.5	73.4	64.7
87.5°	47.2	47.8	49.4	50.5	49.4	47.8	47.2	45.6	40.8	38.1	35.8
90°	38.5	39.1	39.8	40.3	39.8	39.1	38.5	38.0	36.7	35.0	33.2
92.5°	58.6	58.9	59.3	59.7	59.3	58.9	58.6	58.2	57.5	56.4	55.4
95°	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	105.8	104.9	104.0
97.5°	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	165.9	164.9	163.8
100°	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.4	208.1	207.5	206.9
102.5°	255.0	255.3	255.5	255.7	255.5	255.3	255.0	254.8	254.2	253.4	252.5
105°	325.4	326.3	327.2	328.1	327.2	326.3	325.4	324.5	323.6	322.7	321.8
107.5°	398.7	398.7	398.6	398.5	398.6	398.7	398.7	398.8	398.4	397.5	396.7
110°	446.4	447.3	448.2	449.1	448.2	447.3	446.4	445.5	445.3	445.9	446.6



TEST NUMBER: P332830-940

CATALOG NUMBER: S124DIW-S1020D1560U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	500.2	500.3	500.5	500.7	500.5	500.3	500.2	500.0	500.0	500.1	500.2
115°	581.8	581.5	581.1	580.9	581.1	581.5	581.8	582.0	582.4	582.6	582.9
117.5°	659.0	658.4	657.8	657.2	657.8	658.4	659.0	659.6	660.4	661.5	662.5
120°	713.5	714.1	714.7	715.3	714.7	714.1	713.5	712.9	713.4	714.9	716.3
122.5°	767.0	765.9	764.8	763.8	764.8	765.9	767.0	768.0	769.1	770.1	771.1
125°	848.8	848.3	847.7	847.0	847.7	848.3	848.8	849.4	850.1	850.7	851.2
127.5°	925.7	925.2	924.7	924.3	924.7	925.2	925.7	926.1	926.7	927.3	927.9
130°	978.4	977.2	976.0	974.8	976.0	977.2	978.4	979.5	980.4	981.1	981.7
132.5°	1030.0	1029.6	1029.0	1028.6	1029.0	1029.6	1030.0	1030.5	1031.0	1031.6	1032.2
135°	1105.2	1104.3	1103.4	1102.5	1103.4	1104.3	1105.2	1106.1	1106.9	1107.5	1108.0
137.5°	1179.7	1179.9	1180.1	1180.3	1180.1	1179.9	1179.7	1179.6	1179.8	1180.6	1181.4
140°	1228.5	1228.2	1227.9	1227.6	1227.9	1228.2	1228.5	1228.8	1229.0	1229.4	1229.7
142.5°	1275.1	1275.1	1275.0	1274.9	1275.0	1275.1	1275.1	1275.1	1275.2	1275.2	1275.3
145°	1341.8	1341.0	1340.1	1339.2	1340.1	1341.0	1341.8	1342.7	1343.4	1343.6	1344.0
147.5°	1405.2	1404.9	1404.5	1404.3	1404.5	1404.9	1405.2	1405.4	1405.7	1406.0	1406.2
150°	1444.9	1444.7	1444.4	1444.0	1444.4	1444.7	1444.9	1445.3	1445.4	1445.4	1445.4
152.5°	1482.9	1482.2	1481.4	1480.6	1481.4	1482.2	1482.9	1483.7	1483.7	1483.0	1482.3
155°	1535.0	1533.8	1532.7	1531.4	1532.7	1533.8	1535.0	1536.2	1536.2	1535.0	1533.8
157.5°	1579.9	1579.0	1577.9	1576.9	1577.9	1579.0	1579.9	1580.9	1581.0	1580.1	1579.2
160°	1607.2	1605.7	1604.2	1602.7	1604.2	1605.7	1607.2	1608.6	1609.0	1608.1	1607.2
162.5°	1634.1	1632.6	1631.1	1629.6	1631.1	1632.6	1634.1	1635.6	1635.5	1633.9	1632.3
165°	1668.1	1667.0	1665.7	1664.6	1665.7	1667.0	1668.1	1669.4	1669.0	1667.2	1665.4
167.5°	1695.1	1693.3	1691.4	1689.5	1691.4	1693.3	1695.1	1697.0	1697.0	1695.2	1693.4
170°	1709.9	1707.7	1705.7	1703.5	1705.7	1707.7	1709.9	1711.9	1712.1	1710.3	1708.5
172.5°	1721.6	1719.6	1717.4	1715.4	1717.4	1719.6	1721.6	1723.8	1723.8	1721.7	1719.8
175°	1734.0	1732.0	1729.8	1727.8	1729.8	1732.0	1734.0	1736.2	1736.2	1734.0	1732.0
177.5°	1739.9	1738.0	1736.2	1734.2	1736.2	1738.0	1739.9	1741.9	1742.0	1740.3	1738.7
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



TEST NUMBER: P332830-940

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1422.5	1424.5	1432.4	1439.8	1448.7	1455.1	1459.5	1464.5	1474.8	1483.2	1491.0
5°	1332.8	1335.9	1351.8	1363.0	1382.1	1398.7	1411.7	1425.8	1442.5	1465.3	1486.2
7.5°	1253.7	1265.2	1282.7	1300.7	1320.2	1342.0	1361.0	1382.3	1411.0	1442.3	1474.6
10°	1208.9	1221.8	1240.3	1261.2	1279.8	1305.0	1328.5	1353.7	1386.3	1424.6	1462.9
12.5°	1164.0	1185.3	1199.4	1224.2	1244.2	1265.1	1289.9	1323.1	1361.2	1401.4	1447.5
15°	1107.8	1119.5	1146.6	1160.1	1188.5	1220.6	1245.2	1278.5	1315.5	1368.5	1420.3
17.5°	1042.9	1058.3	1079.9	1105.8	1138.4	1163.3	1194.1	1228.3	1275.0	1327.6	1392.4
20°	1000.5	1013.4	1039.9	1068.3	1102.8	1129.4	1162.0	1195.2	1243.4	1299.5	1367.3
22.5°	962.5	975.0	1003.0	1029.3	1062.8	1095.3	1129.4	1168.1	1214.2	1273.4	1342.6
25°	903.7	920.3	945.0	972.1	1004.2	1041.2	1078.2	1112.7	1162.0	1224.2	1298.2
27.5°	851.6	864.9	882.8	913.6	949.9	985.7	1022.4	1065.9	1113.2	1179.0	1255.8
30°	818.1	830.4	848.2	876.6	910.5	948.7	986.9	1028.9	1078.2	1143.5	1221.8
32.5°	791.4	800.8	816.6	842.0	873.0	913.2	950.9	994.3	1046.1	1110.4	1186.8
35°	752.1	760.1	766.2	790.3	818.1	855.0	893.2	939.5	989.4	1050.4	1126.9
37.5°	713.5	716.2	725.2	740.9	767.9	801.9	837.4	882.9	934.1	996.0	1065.0
40°	689.8	691.1	696.6	711.4	734.8	766.9	801.4	846.4	895.1	953.7	1022.1
42.5°	666.6	665.8	670.9	681.3	703.2	732.4	766.3	807.4	856.1	910.3	974.7
45°	630.0	630.0	628.7	637.4	655.3	683.7	712.0	751.4	792.1	845.2	899.4
47.5°	591.8	588.4	589.4	593.9	608.9	632.2	660.8	693.1	729.0	773.9	821.4
50°	567.1	562.2	560.4	565.3	578.8	599.1	626.3	654.7	688.6	728.0	768.7
52.5°	540.0	535.1	531.7	535.2	547.8	566.6	591.3	616.2	646.7	678.7	714.0
55°	498.1	492.6	490.7	492.0	501.1	515.9	536.9	559.7	582.6	609.0	633.7
57.5°	456.8	447.6	445.9	445.3	451.7	465.3	482.8	502.6	519.2	535.2	561.4
60°	429.6	418.6	414.8	414.3	419.2	430.3	446.3	466.0	477.8	488.8	511.7
62.5°	400.6	389.9	381.8	382.7	387.1	397.7	411.8	426.1	433.8	445.9	461.4
65°	355.7	342.1	336.0	334.1	336.6	345.2	356.3	365.5	374.2	379.2	393.9
67.5°	310.9	299.4	290.3	288.1	287.0	292.9	302.0	307.6	313.8	318.1	326.8
70°	279.3	269.4	258.3	254.6	254.0	258.9	267.5	268.1	276.8	278.7	287.8
72.5°	248.2	235.9	228.2	224.5	221.9	226.3	232.0	233.6	238.4	241.7	246.5
75°	199.7	190.5	183.1	177.5	175.7	178.2	178.2	181.2	184.3	186.2	191.7
77.5°	157.2	146.6	137.9	134.6	132.4	130.8	132.2	134.0	132.5	135.7	137.0
80°	127.6	116.5	109.8	108.5	104.8	101.7	101.1	102.9	100.5	101.7	105.4
82.5°	98.5	91.4	84.1	82.8	78.2	76.6	76.0	74.8	74.8	74.5	75.3
85°	58.6	54.2	49.3	46.2	44.4	41.3	41.3	40.0	38.9	37.6	38.3
87.5°	30.0	28.6	25.7	23.7	22.2	19.8	19.3	17.1	16.0	14.8	13.6
90°	31.4	29.6	27.2	24.8	22.4	20.1	17.2	13.9	10.6	7.3	4.0
92.5°	54.3	53.2	51.5	49.9	48.2	46.5	43.9	40.0	36.3	32.5	28.8
95°	103.1	102.2	100.1	98.0	95.9	93.8	91.4	88.7	86.1	83.4	80.7
97.5°	162.6	161.6	159.2	156.7	154.3	151.9	149.5	147.4	145.2	143.0	140.9
100°	206.3	205.7	203.0	200.4	197.7	194.9	193.1	191.8	190.6	189.4	188.2
102.5°	251.7	250.9	248.4	246.0	243.5	241.1	239.6	239.2	238.7	238.2	237.7
105°	320.9	320.0	318.8	317.6	316.4	315.2	314.5	314.1	313.9	313.6	313.3
107.5°	395.8	395.0	394.8	394.7	394.5	394.3	394.0	393.7	393.3	393.0	392.6
110°	447.1	447.7	448.0	448.4	448.6	449.0	448.8	448.2	447.5	447.0	446.4



TEST NUMBER: P332830-940

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	500.3	500.4	501.0	501.5	502.0	502.6	502.8	502.7	502.6	502.5	502.3
115°	583.3	583.5	584.2	584.7	585.3	585.9	586.2	586.2	586.2	586.2	586.2
117.5°	663.4	664.5	664.9	665.3	665.8	666.2	666.3	666.0	665.8	665.5	665.3
120°	717.8	719.3	720.2	721.1	722.0	722.9	722.7	721.6	720.4	719.2	718.0
122.5°	772.1	773.1	773.6	773.9	774.4	774.8	774.7	774.3	773.8	773.3	772.8
125°	851.9	852.5	852.7	853.0	853.4	853.6	853.8	853.8	853.8	853.8	853.8
127.5°	928.4	929.1	929.6	930.1	930.5	931.0	930.8	929.9	929.0	928.1	927.2
130°	982.3	982.8	982.8	982.8	982.8	982.8	982.4	981.5	980.6	979.7	978.8
132.5°	1032.9	1033.4	1033.7	1033.9	1034.1	1034.4	1034.2	1033.5	1032.9	1032.2	1031.5
135°	1108.7	1109.3	1109.3	1109.3	1109.3	1109.3	1108.4	1106.6	1104.7	1103.0	1101.2
137.5°	1182.1	1182.9	1182.5	1182.0	1181.5	1181.1	1180.4	1179.6	1178.7	1177.9	1177.1
140°	1229.9	1230.3	1230.3	1230.3	1230.3	1230.3	1229.9	1229.4	1228.8	1228.2	1227.6
142.5°	1275.4	1275.4	1275.7	1275.9	1276.1	1276.4	1276.2	1275.6	1275.1	1274.4	1273.8
145°	1344.3	1344.5	1344.3	1344.0	1343.6	1343.4	1342.6	1341.4	1340.2	1339.0	1337.8
147.5°	1406.4	1406.7	1406.9	1407.1	1407.4	1407.7	1407.0	1405.6	1404.2	1402.8	1401.3
150°	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1444.8	1443.6	1442.4	1441.2	1440.0
152.5°	1481.6	1480.9	1480.7	1480.4	1480.2	1480.0	1479.4	1478.7	1478.0	1477.3	1476.6
155°	1532.7	1531.4	1531.8	1532.0	1532.3	1532.7	1532.8	1532.8	1532.8	1532.8	1532.8
157.5°	1578.3	1577.4	1577.5	1577.5	1577.6	1577.7	1578.0	1578.5	1579.0	1579.6	1580.1
160°	1606.3	1605.4	1605.7	1606.0	1606.3	1606.6	1606.9	1607.2	1607.5	1607.8	1608.1
162.5°	1630.7	1629.1	1629.3	1629.7	1630.0	1630.2	1630.8	1631.6	1632.4	1633.2	1633.9
165°	1663.7	1661.9	1662.5	1663.0	1663.7	1664.3	1665.0	1665.9	1666.8	1667.7	1668.6
167.5°	1691.7	1689.9	1689.8	1689.7	1689.7	1689.6	1690.2	1691.5	1692.7	1694.0	1695.2
170°	1706.6	1704.9	1704.6	1704.3	1704.0	1703.7	1704.3	1705.8	1707.3	1708.8	1710.3
172.5°	1717.7	1715.7	1715.6	1715.6	1715.5	1715.4	1716.0	1717.3	1718.5	1719.8	1721.0
175°	1729.8	1727.8	1728.0	1728.3	1728.7	1728.9	1729.8	1731.3	1732.9	1734.3	1735.8
177.5°	1737.0	1735.3	1735.3	1735.3	1735.3	1735.3	1735.9	1737.1	1738.3	1739.5	1740.6
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



TEST NUMBER: P332830-940

CATALOG NUMBER: S124DIW-S1020D1560U940-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1498.0	1502.9	1509.3	1520.2	1524.1	1529.0	1536.0	1535.4	1537.4	1544.8	1560.6
5°	1503.5	1522.6	1541.1	1563.3	1586.7	1602.1	1623.1	1636.0	1649.0	1665.6	1694.0
7.5°	1505.7	1536.1	1569.9	1608.9	1643.6	1683.6	1714.7	1744.0	1770.6	1805.7	1839.5
10°	1502.3	1542.9	1586.7	1636.0	1688.5	1732.9	1772.9	1818.6	1857.3	1899.9	1938.1
12.5°	1495.8	1545.0	1603.5	1658.8	1720.0	1785.6	1835.5	1881.6	1933.3	1982.3	2041.2
15°	1481.3	1548.5	1616.9	1689.7	1771.7	1847.4	1919.6	1979.4	2034.9	2108.3	2185.3
17.5°	1462.9	1535.3	1621.6	1709.7	1795.4	1882.0	1971.3	2061.2	2131.2	2222.3	2282.6
20°	1445.6	1529.4	1618.2	1723.0	1808.7	1916.6	2005.3	2092.2	2188.3	2279.0	2351.1
22.5°	1421.4	1513.1	1607.3	1711.6	1824.4	1932.3	2034.9	2129.2	2225.4	2323.9	2411.3
25°	1390.7	1473.9	1585.5	1703.9	1816.1	1933.1	2050.9	2169.3	2272.8	2377.0	2458.4
27.5°	1338.5	1443.5	1547.4	1669.6	1794.2	1926.7	2052.6	2176.6	2285.0	2370.7	2421.2
30°	1311.8	1403.0	1515.8	1638.5	1773.5	1915.9	2047.2	2168.6	2269.8	2338.2	2358.5
32.5°	1272.4	1366.5	1476.9	1604.0	1746.9	1893.2	2030.0	2144.5	2228.8	2264.7	2240.2
35°	1213.8	1298.9	1410.4	1540.5	1689.1	1845.0	1980.0	2076.8	2120.0	2086.1	2001.6
37.5°	1143.5	1227.8	1339.9	1467.7	1621.4	1779.9	1902.0	1971.7	1957.3	1873.0	1747.1
40°	1094.2	1173.1	1279.8	1417.8	1567.6	1726.6	1833.9	1871.5	1832.1	1711.3	1577.5
42.5°	1039.5	1116.4	1223.5	1356.6	1515.4	1662.1	1755.5	1758.6	1692.5	1548.0	1413.7
45°	956.1	1029.5	1130.6	1269.3	1415.9	1554.1	1615.7	1585.5	1463.5	1324.1	1189.1
47.5°	873.9	937.5	1037.1	1168.8	1308.1	1424.3	1454.9	1400.5	1270.5	1135.2	1010.1
50°	813.7	877.8	971.5	1097.3	1231.6	1332.1	1346.9	1274.8	1147.2	1010.9	912.9
52.5°	756.0	819.7	909.9	1026.3	1149.3	1239.9	1240.4	1156.9	1029.8	908.4	817.3
55°	671.3	728.6	810.0	914.2	1024.0	1094.8	1077.5	991.2	880.9	775.5	696.0
57.5°	589.7	639.6	714.6	801.5	898.1	956.6	928.0	844.9	746.4	657.0	596.7
60°	536.9	584.4	648.5	730.5	811.9	857.5	830.4	755.1	664.5	592.4	540.0
62.5°	485.6	525.7	587.4	658.5	734.0	767.8	743.6	669.3	591.0	525.8	483.3
65°	413.0	445.7	495.0	556.1	610.9	639.9	619.6	550.5	490.7	443.8	409.9
67.5°	345.2	370.8	408.0	457.0	503.6	519.3	500.8	452.7	402.1	364.5	340.6
70°	298.4	322.4	353.8	391.5	432.1	448.8	430.3	392.1	350.8	316.2	292.8
72.5°	257.4	276.1	302.6	334.7	366.6	383.2	370.6	333.9	299.0	273.3	253.3
75°	196.0	212.0	230.5	253.3	278.0	289.1	278.0	252.7	228.7	209.6	195.4
77.5°	142.5	151.1	165.4	182.4	197.9	206.3	196.8	179.6	165.0	151.9	144.9
80°	108.5	114.7	124.5	138.1	148.6	156.6	150.4	136.3	124.5	115.9	112.8
82.5°	78.9	83.1	89.5	99.6	106.6	110.8	108.0	97.7	92.9	85.3	82.2
85°	38.9	41.3	45.7	48.7	54.8	55.5	56.1	51.8	47.4	45.7	43.2
87.5°	14.8	16.0	18.1	20.2	22.7	23.7	23.7	24.2	22.6	22.6	21.0
90°	7.3	10.6	13.9	17.2	20.1	22.4	24.8	27.2	29.6	31.4	33.2
92.5°	32.5	36.3	40.0	43.9	46.5	48.2	49.9	51.5	53.2	54.3	55.4
95°	83.4	86.1	88.7	91.4	93.8	95.9	98.0	100.1	102.2	103.1	104.0
97.5°	143.0	145.2	147.4	149.5	151.9	154.3	156.7	159.2	161.6	162.6	163.8
100°	189.4	190.6	191.8	193.1	194.9	197.7	200.4	203.0	205.7	206.3	206.9
102.5°	238.2	238.7	239.2	239.6	241.1	243.5	246.0	248.4	250.9	251.7	252.5
105°	313.6	313.9	314.1	314.5	315.2	316.4	317.6	318.8	320.0	320.9	321.8
107.5°	393.0	393.3	393.7	394.0	394.3	394.5	394.7	394.8	395.0	395.8	396.7
110°	447.0	447.5	448.2	448.8	449.0	448.6	448.4	448.0	447.7	447.1	446.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	502.5	502.6	502.7	502.8	502.6	502.0	501.5	501.0	500.4	500.3	500.2
115°	586.2	586.2	586.2	586.2	585.9	585.3	584.7	584.2	583.5	583.3	582.9
117.5°	665.5	665.8	666.0	666.3	666.2	665.8	665.3	664.9	664.5	663.4	662.5
120°	719.2	720.4	721.6	722.7	722.9	722.0	721.1	720.2	719.3	717.8	716.3
122.5°	773.3	773.8	774.3	774.7	774.8	774.4	773.9	773.6	773.1	772.1	771.1
125°	853.8	853.8	853.8	853.8	853.6	853.4	853.0	852.7	852.5	851.9	851.2
127.5°	928.1	929.0	929.9	930.8	931.0	930.5	930.1	929.6	929.1	928.4	927.9
130°	979.7	980.6	981.5	982.4	982.8	982.8	982.8	982.8	982.8	982.3	981.7
132.5°	1032.2	1032.9	1033.5	1034.2	1034.4	1034.1	1033.9	1033.7	1033.4	1032.9	1032.2
135°	1103.0	1104.7	1106.6	1108.4	1109.3	1109.3	1109.3	1109.3	1109.3	1108.7	1108.0
137.5°	1177.9	1178.7	1179.6	1180.4	1181.1	1181.5	1182.0	1182.5	1182.9	1182.1	1181.4
140°	1228.2	1228.8	1229.4	1229.9	1230.3	1230.3	1230.3	1230.3	1230.3	1229.9	1229.7
142.5°	1274.4	1275.1	1275.6	1276.2	1276.4	1276.1	1275.9	1275.7	1275.4	1275.4	1275.3
145°	1339.0	1340.2	1341.4	1342.6	1343.4	1343.6	1344.0	1344.3	1344.5	1344.3	1344.0
147.5°	1402.8	1404.2	1405.6	1407.0	1407.7	1407.4	1407.1	1406.9	1406.7	1406.4	1406.2
150°	1441.2	1442.4	1443.6	1444.8	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4	1445.4
152.5°	1477.3	1478.0	1478.7	1479.4	1480.0	1480.2	1480.4	1480.7	1480.9	1481.6	1482.3
155°	1532.8	1532.8	1532.8	1532.8	1532.7	1532.3	1532.0	1531.8	1531.4	1532.7	1533.8
157.5°	1579.6	1579.0	1578.5	1578.0	1577.7	1577.6	1577.5	1577.5	1577.4	1578.3	1579.2
160°	1607.8	1607.5	1607.2	1606.9	1606.6	1606.3	1606.0	1605.7	1605.4	1606.3	1607.2
162.5°	1633.2	1632.4	1631.6	1630.8	1630.2	1630.0	1629.7	1629.3	1629.1	1630.7	1632.3
165°	1667.7	1666.8	1665.9	1665.0	1664.3	1663.7	1663.0	1662.5	1661.9	1663.7	1665.4
167.5°	1694.0	1692.7	1691.5	1690.2	1689.6	1689.7	1689.7	1689.8	1689.9	1691.7	1693.4
170°	1708.8	1707.3	1705.8	1704.3	1703.7	1704.0	1704.3	1704.6	1704.9	1706.6	1708.5
172.5°	1719.8	1718.5	1717.3	1716.0	1715.4	1715.5	1715.6	1715.6	1715.7	1717.7	1719.8
175°	1734.3	1732.9	1731.3	1729.8	1728.9	1728.7	1728.3	1728.0	1727.8	1729.8	1732.0
177.5°	1739.5	1738.3	1737.1	1735.9	1735.3	1735.3	1735.3	1735.3	1735.3	1737.0	1738.7
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1568.5	1569.5	1573.9	1577.3	1578.3	1583.3	1583.8
5°	1706.3	1716.8	1737.1	1739.0	1742.0	1758.1	1745.8
7.5°	1867.9	1894.4	1912.2	1927.9	1933.6	1940.5	1939.1
10°	1971.4	2010.8	2030.6	2062.0	2063.2	2071.3	2066.4
12.5°	2075.5	2121.3	2157.3	2163.1	2189.5	2193.5	2200.5
15°	2222.9	2271.6	2321.6	2339.4	2375.8	2384.4	2398.0
17.5°	2361.5	2411.3	2446.3	2492.5	2507.5	2527.5	2513.8
20°	2437.4	2491.7	2536.0	2572.4	2587.8	2598.9	2597.7
22.5°	2483.3	2538.0	2574.0	2601.5	2615.9	2620.6	2620.4
25°	2512.0	2543.4	2554.6	2565.0	2549.0	2543.4	2545.9
27.5°	2432.1	2424.0	2395.0	2357.1	2317.6	2286.3	2269.2
30°	2322.2	2274.0	2230.3	2153.8	2114.4	2091.0	2070.0
32.5°	2166.3	2090.1	2005.9	1935.9	1891.1	1856.3	1851.1
35°	1899.3	1784.6	1681.7	1596.0	1551.6	1513.9	1505.4
37.5°	1614.7	1495.6	1402.9	1327.5	1279.8	1253.2	1228.4
40°	1425.8	1323.5	1232.3	1168.1	1131.8	1112.7	1097.3
42.5°	1280.3	1186.9	1096.2	1047.3	1014.4	1002.7	993.7
45°	1079.4	992.5	929.6	892.6	873.5	853.8	844.5
47.5°	918.5	847.7	806.3	774.9	754.4	742.7	736.7
50°	827.2	769.3	732.4	708.3	689.8	680.6	675.6
52.5°	746.4	698.8	667.7	648.6	636.1	629.3	627.3
55°	642.9	606.5	586.8	570.2	561.0	554.8	552.3
57.5°	558.8	530.9	514.9	501.1	497.6	492.4	490.7
60°	503.6	482.1	468.5	459.2	456.2	450.0	451.2
62.5°	454.8	437.2	425.6	420.3	416.3	411.1	412.8
65°	384.7	371.8	365.5	360.6	355.7	352.6	355.1
67.5°	322.8	313.9	305.5	302.6	300.2	299.7	297.1
70°	282.3	274.9	267.5	265.7	265.7	263.2	262.6
72.5°	243.3	237.9	233.0	231.7	229.7	230.7	228.1
75°	188.0	183.7	181.8	180.0	179.4	179.4	177.5
77.5°	138.9	135.7	132.8	132.8	130.5	129.7	129.5
80°	105.4	104.2	101.7	101.7	100.5	101.1	99.9
82.5°	79.3	77.6	77.0	76.1	74.4	74.5	73.2
85°	42.5	40.7	40.0	38.3	37.0	38.3	37.0
87.5°	21.8	21.7	21.4	20.5	20.2	20.2	18.9
90°	35.0	36.7	38.0	38.5	39.1	39.8	40.3
92.5°	56.4	57.5	58.2	58.6	58.9	59.3	59.7
95°	104.9	105.8	106.2	106.2	106.2	106.2	106.2
97.5°	164.9	165.9	166.5	166.5	166.5	166.5	166.5
100°	207.5	208.1	208.4	208.4	208.4	208.4	208.4
102.5°	253.4	254.2	254.8	255.0	255.3	255.5	255.7
105°	322.7	323.6	324.5	325.4	326.3	327.2	328.1
107.5°	397.5	398.4	398.8	398.7	398.7	398.6	398.5
110°	445.9	445.3	445.5	446.4	447.3	448.2	449.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	500.1	500.0	500.0	500.2	500.3	500.5	500.7
115°	582.6	582.4	582.0	581.8	581.5	581.1	580.9
117.5°	661.5	660.4	659.6	659.0	658.4	657.8	657.2
120°	714.9	713.4	712.9	713.5	714.1	714.7	715.3
122.5°	770.1	769.1	768.0	767.0	765.9	764.8	763.8
125°	850.7	850.1	849.4	848.8	848.3	847.7	847.0
127.5°	927.3	926.7	926.1	925.7	925.2	924.7	924.3
130°	981.1	980.4	979.5	978.4	977.2	976.0	974.8
132.5°	1031.6	1031.0	1030.5	1030.0	1029.6	1029.0	1028.6
135°	1107.5	1106.9	1106.1	1105.2	1104.3	1103.4	1102.5
137.5°	1180.6	1179.8	1179.6	1179.7	1179.9	1180.1	1180.3
140°	1229.4	1229.0	1228.8	1228.5	1228.2	1227.9	1227.6
142.5°	1275.2	1275.2	1275.1	1275.1	1275.1	1275.0	1274.9
145°	1343.6	1343.4	1342.7	1341.8	1341.0	1340.1	1339.2
147.5°	1406.0	1405.7	1405.4	1405.2	1404.9	1404.5	1404.3
150°	1445.4	1445.4	1445.3	1444.9	1444.7	1444.4	1444.0
152.5°	1483.0	1483.7	1483.7	1482.9	1482.2	1481.4	1480.6
155°	1535.0	1536.2	1536.2	1535.0	1533.8	1532.7	1531.4
157.5°	1580.1	1581.0	1580.9	1579.9	1579.0	1577.9	1576.9
160°	1608.1	1609.0	1608.6	1607.2	1605.7	1604.2	1602.7
162.5°	1633.9	1635.5	1635.6	1634.1	1632.6	1631.1	1629.6
165°	1667.2	1669.0	1669.4	1668.1	1667.0	1665.7	1664.6
167.5°	1695.2	1697.0	1697.0	1695.1	1693.3	1691.4	1689.5
170°	1710.3	1712.1	1711.9	1709.9	1707.7	1705.7	1703.5
172.5°	1721.7	1723.8	1723.8	1721.6	1719.6	1717.4	1715.4
175°	1734.0	1736.2	1736.2	1734.0	1732.0	1729.8	1727.8
177.5°	1740.3	1742.0	1741.9	1739.9	1738.0	1736.2	1734.2
180°	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5

(END OF REPORT)