

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: P332830-935

Luminaire Tested: **S124DIW-S1020D1560U935-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332830-935  
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-S1020D1560U935-4F0-1E-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: 8626.6 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

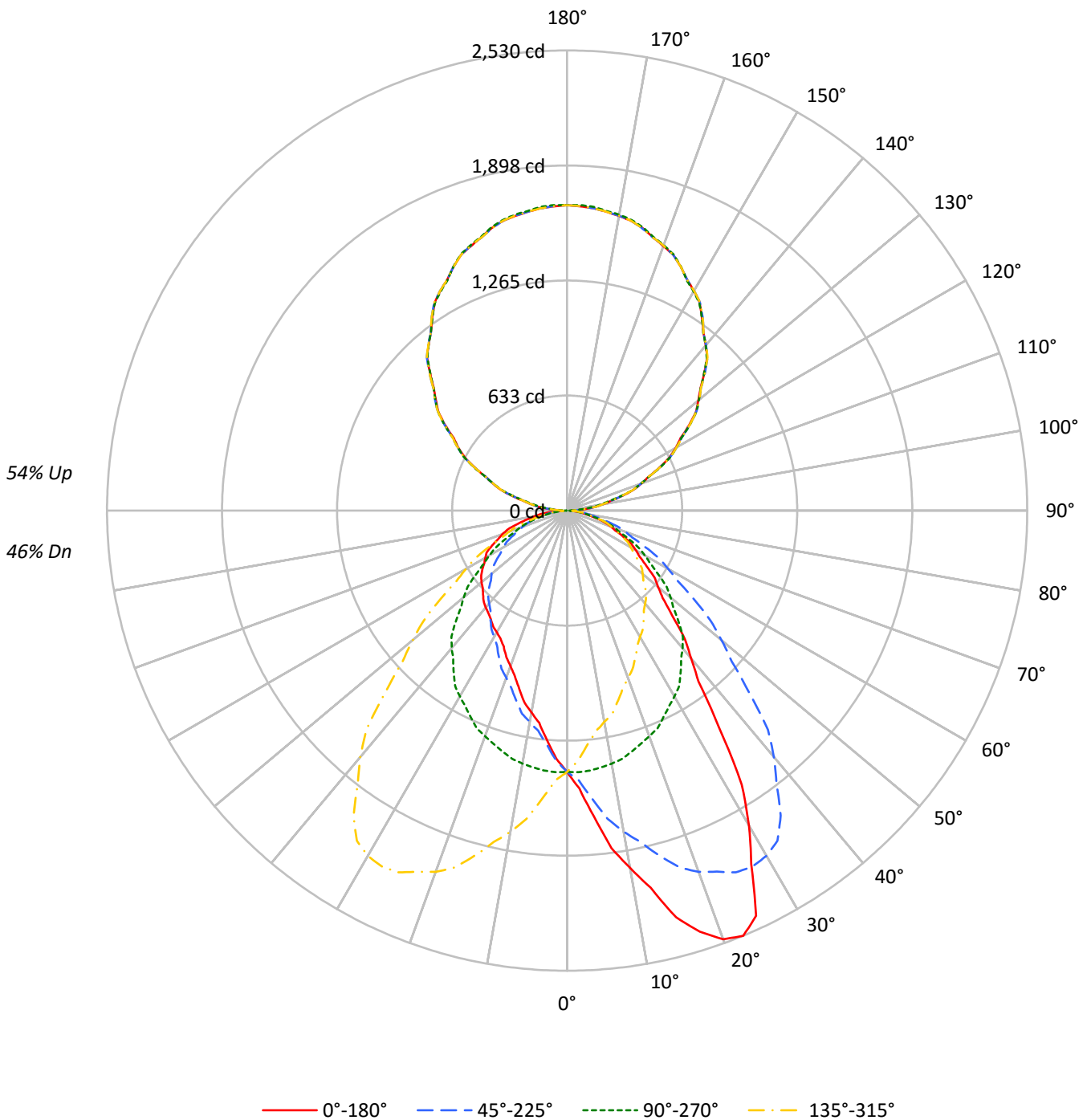
Input Watts (W): 76.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	11599	11599	11599	11599
5°	13661	11629	10264	11629
10°	16356	11579	9241	11579
15°	19351	11462	8487	11462
20°	21549	11342	7814	11342
25°	21896	11166	7349	11166
30°	18632	10997	7202	10997
35°	14325	10723	7203	10723
40°	11166	10400	7339	10400
45°	9310	9914	7462	9914
50°	8194	9323	7714	9323
55°	7506	8612	8025	8612
60°	7035	7976	8399	7976
65°	6550	7265	8709	7265
70°	5986	6559	8908	6559
75°	5346	5774	8799	5774
80°	4482	4733	8522	4733
85°	3307	3418	8160	3418



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.0	1.6
10°-20°	431.5	5.0
20°-30°	684.2	7.9
30°-40°	761.4	8.8
40°-50°	693.1	8.0
50°-60°	566.4	6.6
60°-70°	404.3	4.7
70°-80°	222.6	2.6
80°-90°	65.8	0.8
90°-100°	110.7	1.3
100°-110°	328.0	3.8
110°-120°	556.7	6.5
120°-130°	734.0	8.5
130°-140°	824.4	9.6
140°-150°	810.1	9.4
150°-160°	681.3	7.9
160°-170°	453.3	5.3
170°-180°	158.7	1.8
0°-30°	1255.6	14.6
0°-40°	2017.1	23.4
0°-60°	3276.5	38.0
0°-90°	3969.3	46.0
90°-120°	995.4	11.5
90°-150°	3363.9	39.0
90°-180°	4657.0	54.0
0°-180°	8626.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1437	1437	1437	1437	1437	
5°	1686	1435	1267	1435	1686	171
15°	2315	1371	1016	1371	2315	654
25°	2458	1254	825	1254	2458	1084
35°	1454	1088	731	1088	1454	923
45°	816	868	654	868	816	642
55°	533	612	570	612	533	482
65°	343	380	456	380	343	339
75°	171	185	282	185	171	182
85°	36	37	88	37	36	45
90°	39	4	39	4	39	21
95°	102	78	102	78	102	107
105°	317	302	317	302	317	334
115°	561	566	561	566	561	554
125°	818	824	818	824	818	730
135°	1064	1063	1064	1063	1064	822
145°	1293	1292	1293	1292	1293	809
155°	1479	1480	1479	1480	1479	681
165°	1607	1611	1607	1611	1607	453
175°	1668	1676	1668	1676	1668	158
180°	1679	1679	1679	1679	1679	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1529.2	1528.8	1524.0	1523.0	1519.7	1515.4	1514.5	1506.8	1491.6	1484.5	1482.6
5°	1685.7	1697.5	1682.0	1679.1	1677.3	1657.7	1647.5	1635.6	1608.3	1592.2	1579.7
7.5°	1872.3	1873.7	1867.0	1861.5	1846.3	1829.2	1803.5	1776.2	1743.5	1709.6	1683.9
10°	1995.2	1999.9	1992.2	1991.0	1960.7	1941.6	1903.5	1871.4	1834.4	1793.4	1755.9
12.5°	2124.7	2118.0	2114.1	2088.6	2083.0	2048.2	2004.0	1970.9	1914.0	1866.7	1816.8
15°	2315.4	2302.3	2294.0	2258.8	2241.6	2193.4	2146.3	2110.1	2035.7	1964.8	1911.2
17.5°	2427.2	2440.4	2421.1	2406.7	2362.1	2328.2	2280.2	2204.0	2145.8	2057.8	1990.2
20°	2508.3	2509.4	2498.7	2483.8	2448.7	2405.9	2353.5	2270.1	2200.5	2113.0	2020.2
22.5°	2530.1	2530.4	2525.8	2511.9	2485.4	2450.6	2397.8	2328.2	2243.9	2148.7	2055.9
25°	2458.2	2455.8	2461.3	2476.7	2466.6	2455.8	2425.5	2373.7	2295.2	2194.5	2094.6
27.5°	2191.1	2207.5	2237.7	2275.9	2312.6	2340.5	2348.4	2337.8	2289.1	2206.3	2101.6
30°	1998.7	2019.0	2041.6	2079.7	2153.4	2195.7	2242.2	2277.3	2257.6	2191.6	2094.0
32.5°	1787.3	1792.3	1825.9	1869.2	1936.8	2018.1	2091.7	2163.0	2186.7	2152.1	2070.6
35°	1453.5	1461.8	1498.1	1541.0	1623.8	1723.1	1833.8	1932.7	2014.2	2046.9	2005.3
37.5°	1186.1	1210.0	1235.7	1281.8	1354.6	1444.1	1559.1	1687.0	1808.5	1889.9	1903.8
40°	1059.5	1074.4	1092.8	1127.9	1189.8	1277.9	1376.7	1523.2	1652.3	1769.0	1807.1
42.5°	959.5	968.2	979.5	1011.2	1058.4	1146.0	1236.2	1365.0	1494.7	1634.2	1698.1
45°	815.5	824.4	843.4	861.9	897.6	958.3	1042.2	1148.1	1278.5	1413.1	1530.9
47.5°	711.4	717.1	728.4	748.2	778.5	818.6	886.8	975.3	1096.1	1226.8	1352.3
50°	652.4	657.1	666.1	683.9	707.1	742.8	798.7	881.5	976.1	1107.7	1230.9
52.5°	605.7	607.6	614.2	626.3	644.7	674.8	720.7	789.1	877.1	994.4	1117.1
55°	533.3	535.7	541.7	550.6	566.6	585.7	620.8	672.0	748.8	850.6	957.1
57.5°	473.8	475.4	480.4	483.9	497.1	512.6	539.6	576.2	634.4	720.7	815.8
60°	435.7	434.5	440.5	443.4	452.4	465.5	486.3	521.4	572.0	641.6	729.1
62.5°	398.6	396.9	401.9	405.8	411.0	422.1	439.1	466.7	507.7	570.7	646.3
65°	342.9	340.4	343.5	348.2	352.9	359.0	371.4	395.8	428.5	473.8	531.5
67.5°	286.9	289.4	289.9	292.2	295.0	303.1	311.7	328.9	352.0	388.2	437.1
70°	253.6	254.2	256.6	256.6	258.3	265.4	272.6	282.8	305.3	338.7	378.6
72.5°	220.2	222.7	221.8	223.7	225.0	229.7	235.0	244.6	263.9	288.7	322.4
75°	171.4	173.2	173.2	173.8	175.6	177.4	181.5	188.6	202.3	220.8	244.0
77.5°	125.0	125.3	126.1	128.2	128.2	131.0	134.1	139.9	146.6	159.3	173.4
80°	96.4	97.6	97.0	98.2	98.2	100.6	101.8	108.9	111.9	120.2	131.6
82.5°	70.7	71.9	71.8	73.4	74.4	74.9	76.5	79.4	82.4	89.7	94.4
85°	35.7	36.9	35.7	36.9	38.7	39.3	41.1	41.7	44.1	45.8	50.0
87.5°	18.3	19.5	19.5	19.8	20.7	20.9	21.0	20.2	21.8	21.9	23.3
90°	38.9	38.4	37.8	37.2	36.7	35.5	33.8	32.0	30.3	28.6	26.3
92.5°	57.6	57.3	56.9	56.6	56.2	55.5	54.5	53.5	52.4	51.4	49.8
95°	102.5	102.5	102.5	102.5	102.5	102.1	101.3	100.4	99.5	98.7	96.7
97.5°	160.7	160.7	160.7	160.7	160.7	160.2	159.2	158.2	157.0	156.0	153.7
100°	201.2	201.2	201.2	201.2	201.2	201.0	200.4	199.8	199.2	198.6	196.0
102.5°	246.9	246.7	246.5	246.2	246.0	245.5	244.7	243.8	243.1	242.3	239.9
105°	316.8	315.9	315.0	314.2	313.3	312.5	311.6	310.7	309.9	309.0	307.8
107.5°	384.8	384.9	385.0	385.0	385.0	384.7	383.8	383.1	382.2	381.4	381.3
110°	433.6	432.7	431.9	431.0	430.2	430.0	430.6	431.2	431.7	432.3	432.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.5	483.3	483.1	482.9	482.8	482.8	482.8	482.9	483.1	483.2	483.7
115°	560.9	561.1	561.5	561.7	562.0	562.3	562.6	562.8	563.2	563.4	564.0
117.5°	634.6	635.2	635.8	636.3	636.9	637.7	638.7	639.6	640.6	641.6	642.0
120°	690.7	690.1	689.5	689.0	688.4	688.8	690.3	691.6	693.1	694.6	695.4
122.5°	737.4	738.5	739.5	740.5	741.6	742.6	743.6	744.5	745.5	746.5	746.9
125°	817.9	818.5	819.1	819.6	820.2	820.8	821.4	821.9	822.5	823.1	823.4
127.5°	892.4	892.9	893.4	893.8	894.2	894.8	895.4	896.0	896.5	897.1	897.6
130°	941.2	942.4	943.6	944.7	945.8	946.7	947.3	947.9	948.5	949.0	949.0
132.5°	993.2	993.6	994.1	994.5	995.0	995.5	996.1	996.7	997.3	997.8	998.1
135°	1064.5	1065.4	1066.3	1067.1	1068.0	1068.8	1069.4	1069.9	1070.5	1071.1	1071.1
137.5°	1139.6	1139.4	1139.3	1139.1	1138.9	1139.2	1140.0	1140.7	1141.4	1142.2	1141.8
140°	1185.3	1185.6	1185.9	1186.2	1186.5	1186.7	1187.1	1187.3	1187.6	1187.9	1187.9
142.5°	1231.0	1231.1	1231.1	1231.1	1231.2	1231.3	1231.3	1231.4	1231.5	1231.5	1231.7
145°	1293.0	1293.9	1294.8	1295.6	1296.5	1297.1	1297.4	1297.7	1298.0	1298.2	1298.0
147.5°	1355.9	1356.2	1356.5	1356.8	1357.0	1357.3	1357.5	1357.8	1358.0	1358.2	1358.5
150°	1394.3	1394.6	1394.9	1395.2	1395.5	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6
152.5°	1429.6	1430.4	1431.2	1431.8	1432.6	1432.6	1431.9	1431.2	1430.6	1429.9	1429.7
155°	1478.7	1479.9	1481.0	1482.1	1483.3	1483.3	1482.1	1481.0	1479.9	1478.7	1479.0
157.5°	1522.6	1523.5	1524.6	1525.5	1526.5	1526.6	1525.7	1524.8	1524.0	1523.1	1523.2
160°	1547.5	1548.9	1550.4	1551.9	1553.2	1553.6	1552.7	1551.9	1551.0	1550.1	1550.4
162.5°	1573.5	1574.9	1576.4	1577.8	1579.2	1579.2	1577.6	1576.1	1574.5	1573.0	1573.2
165°	1607.2	1608.3	1609.6	1610.7	1611.9	1611.5	1609.8	1608.1	1606.4	1604.6	1605.2
167.5°	1631.3	1633.1	1635.0	1636.8	1638.6	1638.6	1636.8	1635.1	1633.4	1631.7	1631.6
170°	1644.9	1646.9	1648.9	1651.0	1652.9	1653.1	1651.4	1649.7	1647.9	1646.1	1645.9
172.5°	1656.3	1658.3	1660.4	1662.3	1664.4	1664.4	1662.4	1660.5	1658.5	1656.6	1656.5
175°	1668.3	1670.3	1672.3	1674.3	1676.4	1676.4	1674.3	1672.3	1670.3	1668.3	1668.5
177.5°	1674.5	1676.4	1678.2	1680.0	1681.9	1682.0	1680.3	1678.8	1677.1	1675.5	1675.5
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1483.1	1476.4	1471.6	1467.8	1457.3	1451.1	1446.4	1439.7	1432.1	1424.0	1414.0
5°	1567.2	1547.0	1532.1	1509.5	1488.1	1470.2	1451.7	1435.0	1414.8	1392.8	1376.7
7.5°	1655.6	1625.6	1587.0	1553.5	1515.9	1483.2	1453.9	1423.8	1392.7	1362.4	1334.7
10°	1711.8	1673.2	1630.3	1579.7	1532.1	1489.8	1450.5	1412.5	1375.5	1338.6	1307.1
12.5°	1772.3	1724.1	1660.8	1601.6	1548.3	1491.8	1444.3	1397.7	1353.1	1314.3	1277.6
15°	1853.5	1783.8	1710.6	1631.5	1561.3	1495.2	1430.3	1371.4	1321.4	1270.1	1234.5
17.5°	1903.4	1817.2	1733.5	1650.8	1565.7	1482.5	1412.5	1344.5	1281.9	1231.1	1186.0
20°	1936.2	1850.5	1746.4	1663.6	1562.5	1476.7	1395.8	1320.2	1254.7	1200.6	1154.1
22.5°	1964.8	1865.8	1761.6	1652.7	1552.0	1461.0	1372.4	1296.4	1229.5	1172.4	1127.9
25°	1980.3	1866.6	1753.5	1645.2	1530.9	1423.1	1342.8	1253.5	1182.1	1122.0	1074.4
27.5°	1981.9	1860.4	1732.4	1612.1	1494.1	1393.8	1292.4	1212.5	1138.4	1074.9	1029.2
30°	1976.7	1849.9	1712.4	1582.1	1463.6	1354.7	1266.6	1179.7	1104.1	1041.0	993.4
32.5°	1960.1	1828.0	1686.7	1548.8	1426.0	1319.5	1228.6	1145.9	1072.2	1010.0	960.1
35°	1911.9	1781.5	1630.9	1487.5	1361.8	1254.1	1172.0	1088.0	1014.3	955.3	907.1
37.5°	1836.5	1718.6	1565.6	1417.1	1293.7	1185.5	1104.1	1028.3	961.7	901.9	852.5
40°	1770.7	1667.2	1513.6	1369.0	1235.7	1132.7	1056.5	986.9	920.8	864.3	817.3
42.5°	1695.1	1604.8	1463.2	1309.9	1181.4	1078.0	1003.7	941.2	878.9	826.6	779.6
45°	1560.0	1500.6	1367.2	1225.5	1091.7	994.0	923.2	868.4	816.1	764.8	725.6
47.5°	1404.8	1375.3	1263.1	1128.5	1001.4	905.2	843.8	793.2	747.3	703.9	669.3
50°	1300.5	1286.2	1189.2	1059.5	938.1	847.6	785.7	742.3	702.9	664.9	632.1
52.5°	1197.7	1197.2	1109.7	990.9	878.6	791.4	730.0	689.4	655.3	624.4	595.0
55°	1040.4	1057.1	988.7	882.7	782.1	703.5	648.2	611.9	588.1	562.5	540.4
57.5°	896.0	923.7	867.2	773.9	690.0	617.6	569.4	542.1	516.8	501.3	485.3
60°	801.8	827.9	783.9	705.3	626.2	564.3	518.4	494.0	472.0	461.3	450.0
62.5°	718.0	741.3	708.7	635.8	567.1	507.6	468.9	445.5	430.6	418.9	411.4
65°	598.2	617.9	589.9	536.9	477.9	430.3	398.8	380.3	366.1	361.3	352.9
67.5°	483.5	501.4	486.3	441.3	394.0	358.0	333.3	315.6	307.1	303.0	297.0
70°	415.4	433.3	417.2	378.0	341.6	311.3	288.1	277.9	269.1	267.3	258.9
72.5°	357.8	370.0	354.0	323.2	292.1	266.6	248.6	238.0	233.3	230.1	225.6
75°	268.5	279.1	268.5	244.6	222.6	204.7	189.2	185.1	179.8	178.0	175.0
77.5°	190.0	199.2	191.1	176.2	159.7	145.9	137.6	132.2	131.0	127.9	129.4
80°	145.3	151.2	143.4	133.4	120.2	110.7	104.8	101.8	98.2	97.0	99.4
82.5°	104.3	106.9	103.0	96.2	86.4	80.2	76.2	72.8	72.0	72.2	72.2
85°	54.2	53.6	53.0	47.0	44.1	39.9	37.5	36.9	36.3	37.5	38.7
87.5°	22.9	22.9	22.0	19.5	17.5	15.4	14.3	13.2	14.3	15.4	16.5
90°	23.9	21.6	19.4	16.6	13.4	10.2	7.1	3.9	7.1	10.2	13.4
92.5°	48.2	46.6	44.9	42.4	38.7	35.0	31.4	27.8	31.4	35.0	38.7
95°	94.6	92.6	90.6	88.3	85.7	83.1	80.5	77.9	80.5	83.1	85.7
97.5°	151.3	149.0	146.6	144.4	142.3	140.2	138.1	136.0	138.1	140.2	142.3
100°	193.5	190.9	188.2	186.4	185.2	184.1	182.9	181.8	182.9	184.1	185.2
102.5°	237.5	235.1	232.8	231.4	230.9	230.5	230.0	229.5	230.0	230.5	230.9
105°	306.7	305.5	304.4	303.7	303.3	303.1	302.8	302.5	302.8	303.1	303.3
107.5°	381.1	380.9	380.7	380.5	380.1	379.8	379.4	379.1	379.4	379.8	380.1
110°	432.9	433.2	433.5	433.3	432.7	432.1	431.6	431.0	431.6	432.1	432.7





TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	484.2	484.7	485.3	485.5	485.3	485.3	485.2	485.0	485.2	485.3	485.3
115°	564.6	565.2	565.8	566.0	566.0	566.0	566.0	566.0	566.0	566.0	566.0
117.5°	642.4	642.8	643.3	643.3	643.1	642.8	642.6	642.4	642.6	642.8	643.1
120°	696.3	697.2	698.0	697.8	696.7	695.6	694.4	693.3	694.4	695.6	696.7
122.5°	747.3	747.7	748.1	748.0	747.6	747.2	746.7	746.2	746.7	747.2	747.6
125°	823.6	824.0	824.2	824.4	824.4	824.4	824.4	824.4	824.4	824.4	824.4
127.5°	898.0	898.5	899.0	898.7	897.9	897.0	896.1	895.3	896.1	897.0	897.9
130°	949.0	949.0	949.0	948.6	947.7	946.8	946.0	945.1	946.0	946.8	947.7
132.5°	998.3	998.5	998.8	998.6	997.9	997.3	996.7	996.0	996.7	997.3	997.9
135°	1071.1	1071.1	1071.1	1070.2	1068.5	1066.7	1065.0	1063.2	1065.0	1066.7	1068.5
137.5°	1141.3	1140.8	1140.4	1139.7	1138.9	1138.1	1137.3	1136.5	1137.3	1138.1	1138.9
140°	1187.9	1187.9	1187.9	1187.6	1187.1	1186.5	1185.9	1185.3	1185.9	1186.5	1187.1
142.5°	1232.0	1232.2	1232.4	1232.3	1231.7	1231.1	1230.5	1229.9	1230.5	1231.1	1231.7
145°	1297.7	1297.4	1297.1	1296.4	1295.2	1294.1	1292.9	1291.8	1292.9	1294.1	1295.2
147.5°	1358.7	1358.9	1359.2	1358.6	1357.2	1355.8	1354.4	1353.1	1354.4	1355.8	1357.2
150°	1395.6	1395.6	1395.6	1395.1	1393.9	1392.8	1391.5	1390.4	1391.5	1392.8	1393.9
152.5°	1429.4	1429.2	1429.0	1428.5	1427.8	1427.1	1426.4	1425.7	1426.4	1427.1	1427.8
155°	1479.3	1479.5	1479.9	1480.0	1480.0	1480.0	1480.0	1480.0	1480.0	1480.0	1480.0
157.5°	1523.2	1523.3	1523.4	1523.6	1524.1	1524.7	1525.2	1525.7	1525.2	1524.7	1524.1
160°	1550.7	1551.0	1551.3	1551.5	1551.9	1552.1	1552.4	1552.7	1552.4	1552.1	1551.9
162.5°	1573.6	1573.8	1574.1	1574.6	1575.4	1576.1	1576.9	1577.6	1576.9	1576.1	1575.4
165°	1605.8	1606.4	1607.0	1607.7	1608.5	1609.4	1610.2	1611.1	1610.2	1609.4	1608.5
167.5°	1631.5	1631.5	1631.4	1632.0	1633.2	1634.4	1635.6	1636.8	1635.6	1634.4	1633.2
170°	1645.6	1645.3	1645.0	1645.6	1647.0	1648.5	1649.9	1651.4	1649.9	1648.5	1647.0
172.5°	1656.5	1656.4	1656.3	1656.9	1658.1	1659.3	1660.5	1661.7	1660.5	1659.3	1658.1
175°	1668.8	1669.1	1669.4	1670.3	1671.7	1673.2	1674.6	1676.0	1674.6	1673.2	1671.7
177.5°	1675.5	1675.5	1675.5	1676.1	1677.2	1678.4	1679.6	1680.7	1679.6	1678.4	1677.2
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1409.2	1405.0	1398.8	1390.2	1383.0	1375.4	1373.6	1370.6	1376.4	1371.6	1370.2
5°	1363.0	1350.6	1334.5	1316.0	1305.3	1289.9	1286.9	1280.9	1275.0	1274.4	1268.4
7.5°	1314.1	1295.8	1274.7	1255.9	1238.5	1221.6	1210.6	1208.2	1199.4	1194.2	1188.3
10°	1282.7	1260.1	1235.7	1217.8	1197.6	1179.7	1167.3	1160.1	1154.1	1147.5	1141.6
12.5°	1245.5	1221.5	1201.4	1182.1	1158.0	1144.4	1123.9	1111.5	1110.3	1110.4	1094.9
15°	1202.3	1178.5	1147.5	1120.2	1107.1	1080.9	1069.6	1055.3	1046.4	1037.4	1030.4
17.5°	1153.0	1123.3	1099.2	1067.7	1042.7	1021.8	1007.0	998.4	985.0	972.3	963.2
20°	1122.0	1090.5	1064.8	1031.5	1004.1	978.5	966.0	954.2	944.0	933.3	923.2
22.5°	1090.5	1057.6	1026.2	993.9	968.5	941.4	929.4	913.2	903.5	897.6	887.4
25°	1041.0	1005.3	969.6	938.7	912.5	888.6	872.6	860.1	849.4	844.6	838.1
27.5°	987.2	951.7	917.2	882.1	852.4	835.1	822.3	812.8	806.7	800.3	797.4
30°	953.0	916.0	879.2	846.4	819.0	801.8	789.9	783.3	778.5	775.6	772.6
32.5°	918.2	881.8	842.9	813.0	788.5	773.2	764.1	757.6	755.2	754.1	753.0
35°	862.5	825.5	789.9	763.1	739.9	733.9	726.2	722.6	721.4	725.6	727.4
37.5°	808.6	774.3	741.4	715.4	700.3	691.6	688.9	689.1	693.3	697.0	701.3
40°	773.8	740.5	709.5	686.9	672.6	667.3	666.1	669.0	673.8	678.0	682.7
42.5°	739.9	707.1	679.0	657.8	647.8	642.9	643.7	646.6	653.3	658.4	665.6
45°	687.5	660.1	632.7	615.4	607.1	608.3	608.3	613.6	620.2	627.9	635.7
47.5°	638.1	610.4	588.0	573.4	569.1	568.1	571.4	578.4	587.8	597.4	608.2
50°	604.8	578.5	558.9	545.8	541.1	542.9	547.6	554.1	565.4	577.4	588.7
52.5°	570.9	547.1	528.9	516.8	513.4	516.7	521.4	531.8	541.7	554.5	568.2
55°	518.4	498.2	483.9	475.0	473.8	475.6	481.0	492.2	506.5	522.6	535.7
57.5°	466.1	449.3	436.2	430.0	430.6	432.2	441.1	454.5	469.8	486.9	503.8
60°	430.9	415.4	404.8	400.0	400.5	404.2	414.8	427.4	446.4	463.0	481.0
62.5°	397.6	384.0	373.8	369.5	368.7	376.5	386.8	399.8	418.8	437.4	456.7
65°	344.1	333.3	325.0	322.6	324.4	330.4	343.5	360.7	376.8	396.4	416.6
67.5°	291.6	282.8	277.2	278.2	280.3	289.1	300.1	315.0	333.2	353.5	373.6
70°	258.3	249.9	245.2	245.8	249.4	260.1	269.7	284.5	304.2	325.0	341.6
72.5°	224.0	218.5	214.3	216.8	220.3	227.7	239.6	254.5	271.8	291.2	308.8
75°	172.0	172.0	169.6	171.4	176.8	183.9	192.9	208.4	225.6	241.1	255.4
77.5°	127.6	126.3	127.9	130.0	133.1	141.5	151.8	162.8	175.8	191.3	203.1
80°	97.6	98.2	101.2	104.8	106.0	112.5	123.2	133.4	143.4	156.5	167.8
82.5°	73.4	74.0	75.5	80.0	81.2	88.3	95.1	105.2	114.4	123.2	132.6
85°	39.9	39.9	42.9	44.6	47.6	52.3	56.6	62.5	70.9	76.8	85.7
87.5°	18.6	19.1	21.4	22.9	24.8	27.6	28.9	34.5	36.8	39.4	44.0
90°	16.6	19.4	21.6	23.9	26.3	28.6	30.3	32.0	33.8	35.5	36.7
92.5°	42.4	44.9	46.6	48.2	49.8	51.4	52.4	53.5	54.5	55.5	56.2
95°	88.3	90.6	92.6	94.6	96.7	98.7	99.5	100.4	101.3	102.1	102.5
97.5°	144.4	146.6	149.0	151.3	153.7	156.0	157.0	158.2	159.2	160.2	160.7
100°	186.4	188.2	190.9	193.5	196.0	198.6	199.2	199.8	200.4	201.0	201.2
102.5°	231.4	232.8	235.1	237.5	239.9	242.3	243.1	243.8	244.7	245.5	246.0
105°	303.7	304.4	305.5	306.7	307.8	309.0	309.9	310.7	311.6	312.5	313.3
107.5°	380.5	380.7	380.9	381.1	381.3	381.4	382.2	383.1	383.8	384.7	385.0
110°	433.3	433.5	433.2	432.9	432.6	432.3	431.7	431.2	430.6	430.0	430.2



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	485.5	485.3	484.7	484.2	483.7	483.2	483.1	482.9	482.8	482.8	482.8
115°	566.0	565.8	565.2	564.6	564.0	563.4	563.2	562.8	562.6	562.3	562.0
117.5°	643.3	643.3	642.8	642.4	642.0	641.6	640.6	639.6	638.7	637.7	636.9
120°	697.8	698.0	697.2	696.3	695.4	694.6	693.1	691.6	690.3	688.8	688.4
122.5°	748.0	748.1	747.7	747.3	746.9	746.5	745.5	744.5	743.6	742.6	741.6
125°	824.4	824.2	824.0	823.6	823.4	823.1	822.5	821.9	821.4	820.8	820.2
127.5°	898.7	899.0	898.5	898.0	897.6	897.1	896.5	896.0	895.4	894.8	894.2
130°	948.6	949.0	949.0	949.0	949.0	949.0	948.5	947.9	947.3	946.7	945.8
132.5°	998.6	998.8	998.5	998.3	998.1	997.8	997.3	996.7	996.1	995.5	995.0
135°	1070.2	1071.1	1071.1	1071.1	1071.1	1071.1	1070.5	1069.9	1069.4	1068.8	1068.0
137.5°	1139.7	1140.4	1140.8	1141.3	1141.8	1142.2	1141.4	1140.7	1140.0	1139.2	1138.9
140°	1187.6	1187.9	1187.9	1187.9	1187.9	1187.9	1187.6	1187.3	1187.1	1186.7	1186.5
142.5°	1232.3	1232.4	1232.2	1232.0	1231.7	1231.5	1231.5	1231.4	1231.3	1231.3	1231.2
145°	1296.4	1297.1	1297.4	1297.7	1298.0	1298.2	1298.0	1297.7	1297.4	1297.1	1296.5
147.5°	1358.6	1359.2	1358.9	1358.7	1358.5	1358.2	1358.0	1357.8	1357.5	1357.3	1357.0
150°	1395.1	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.5
152.5°	1428.5	1429.0	1429.2	1429.4	1429.7	1429.9	1430.6	1431.2	1431.9	1432.6	1432.6
155°	1480.0	1479.9	1479.5	1479.3	1479.0	1478.7	1479.9	1481.0	1482.1	1483.3	1483.3
157.5°	1523.6	1523.4	1523.3	1523.2	1523.2	1523.1	1524.0	1524.8	1525.7	1526.6	1526.5
160°	1551.5	1551.3	1551.0	1550.7	1550.4	1550.1	1551.0	1551.9	1552.7	1553.6	1553.2
162.5°	1574.6	1574.1	1573.8	1573.6	1573.2	1573.0	1574.5	1576.1	1577.6	1579.2	1579.2
165°	1607.7	1607.0	1606.4	1605.8	1605.2	1604.6	1606.4	1608.1	1609.8	1611.5	1611.9
167.5°	1632.0	1631.4	1631.5	1631.5	1631.6	1631.7	1633.4	1635.1	1636.8	1638.6	1638.6
170°	1645.6	1645.0	1645.3	1645.6	1645.9	1646.1	1647.9	1649.7	1651.4	1653.1	1652.9
172.5°	1656.9	1656.3	1656.4	1656.5	1656.5	1656.6	1658.5	1660.5	1662.4	1664.4	1664.4
175°	1670.3	1669.4	1669.1	1668.8	1668.5	1668.3	1670.3	1672.3	1674.3	1676.4	1676.4
177.5°	1676.1	1675.5	1675.5	1675.5	1675.5	1675.5	1677.1	1678.8	1680.3	1682.0	1681.9
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1369.2	1368.3	1364.9	1364.5	1364.9	1368.3	1369.2	1370.2	1371.6	1376.4	1370.6
5°	1264.8	1261.9	1260.1	1266.6	1260.1	1261.9	1264.8	1268.4	1274.4	1275.0	1280.9
7.5°	1186.1	1183.8	1178.5	1176.9	1178.5	1183.8	1186.1	1188.3	1194.2	1199.4	1208.2
10°	1135.7	1133.2	1128.5	1127.3	1128.5	1133.2	1135.7	1141.6	1147.5	1154.1	1160.1
12.5°	1087.1	1082.4	1081.4	1082.5	1081.4	1082.4	1087.1	1094.9	1110.4	1110.3	1111.5
15°	1022.6	1020.2	1013.7	1015.5	1013.7	1020.2	1022.6	1030.4	1037.4	1046.4	1055.3
17.5°	959.0	956.1	948.2	955.2	948.2	956.1	959.0	963.2	972.3	985.0	998.4
20°	919.0	914.2	910.1	909.5	910.1	914.2	919.0	923.2	933.3	944.0	954.2
22.5°	880.9	876.7	876.2	872.4	876.2	876.7	880.9	887.4	897.6	903.5	913.2
25°	833.3	829.1	827.9	825.0	827.9	829.1	833.3	838.1	844.6	849.4	860.1
27.5°	796.8	794.7	792.6	793.5	792.6	794.7	796.8	797.4	800.3	806.7	812.8
30°	774.4	773.8	772.6	772.6	772.6	773.8	774.4	772.6	775.6	778.5	783.3
32.5°	755.8	755.7	756.4	756.4	756.4	755.7	755.8	753.0	754.1	755.2	757.6
35°	729.7	731.5	732.7	730.9	732.7	731.5	729.7	727.4	725.6	721.4	722.6
37.5°	706.2	707.9	709.6	711.6	709.6	707.9	706.2	701.3	697.0	693.3	689.1
40°	688.0	692.2	693.4	696.4	693.4	692.2	688.0	682.7	678.0	673.8	669.0
42.5°	670.9	675.5	678.6	679.2	678.6	675.5	670.9	665.6	658.4	653.3	646.6
45°	644.6	649.4	653.6	653.6	653.6	649.4	644.6	635.7	627.9	620.2	613.6
47.5°	617.3	624.2	628.4	629.5	628.4	624.2	617.3	608.2	597.4	587.8	578.4
50°	598.8	607.1	611.3	614.2	611.3	607.1	598.8	588.7	577.4	565.4	554.1
52.5°	580.7	589.0	594.6	596.2	594.6	589.0	580.7	568.2	554.5	541.7	531.8
55°	549.4	561.3	567.8	570.2	567.8	561.3	549.4	535.7	522.6	506.5	492.2
57.5°	519.9	530.8	538.5	540.2	538.5	530.8	519.9	503.8	486.9	469.8	454.5
60°	497.0	508.9	518.4	520.2	518.4	508.9	497.0	481.0	463.0	446.4	427.4
62.5°	473.6	486.0	494.6	499.3	494.6	486.0	473.6	456.7	437.4	418.8	399.8
65°	433.3	445.8	454.2	455.9	454.2	445.8	433.3	416.6	396.4	376.8	360.7
67.5°	389.3	401.7	407.3	410.7	407.3	401.7	389.3	373.6	353.5	333.2	315.0
70°	358.3	368.4	374.4	377.4	374.4	368.4	358.3	341.6	325.0	304.2	284.5
72.5°	323.0	333.6	340.6	341.2	340.6	333.6	323.0	308.8	291.2	271.8	254.5
75°	269.1	278.5	282.1	282.1	282.1	278.5	269.1	255.4	241.1	225.6	208.4
77.5°	212.9	217.8	222.4	223.3	222.4	217.8	212.9	203.1	191.3	175.8	162.8
80°	176.8	179.8	183.3	183.3	183.3	179.8	176.8	167.8	156.5	143.4	133.4
82.5°	139.7	142.2	145.7	145.3	145.7	142.2	139.7	132.6	123.2	114.4	105.2
85°	84.6	89.9	89.3	88.1	89.3	89.9	84.6	85.7	76.8	70.9	62.5
87.5°	45.5	46.1	47.7	48.7	47.7	46.1	45.5	44.0	39.4	36.8	34.5
90°	37.2	37.8	38.4	38.9	38.4	37.8	37.2	36.7	35.5	33.8	32.0
92.5°	56.6	56.9	57.3	57.6	57.3	56.9	56.6	56.2	55.5	54.5	53.5
95°	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.1	101.3	100.4
97.5°	160.7	160.7	160.7	160.7	160.7	160.7	160.7	160.7	160.2	159.2	158.2
100°	201.2	201.2	201.2	201.2	201.2	201.2	201.2	201.2	201.0	200.4	199.8
102.5°	246.2	246.5	246.7	246.9	246.7	246.5	246.2	246.0	245.5	244.7	243.8
105°	314.2	315.0	315.9	316.8	315.9	315.0	314.2	313.3	312.5	311.6	310.7
107.5°	385.0	385.0	384.9	384.8	384.9	385.0	385.0	385.0	384.7	383.8	383.1
110°	431.0	431.9	432.7	433.6	432.7	431.9	431.0	430.2	430.0	430.6	431.2



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	482.9	483.1	483.3	483.5	483.3	483.1	482.9	482.8	482.8	482.8	482.9
115°	561.7	561.5	561.1	560.9	561.1	561.5	561.7	562.0	562.3	562.6	562.8
117.5°	636.3	635.8	635.2	634.6	635.2	635.8	636.3	636.9	637.7	638.7	639.6
120°	689.0	689.5	690.1	690.7	690.1	689.5	689.0	688.4	688.8	690.3	691.6
122.5°	740.5	739.5	738.5	737.4	738.5	739.5	740.5	741.6	742.6	743.6	744.5
125°	819.6	819.1	818.5	817.9	818.5	819.1	819.6	820.2	820.8	821.4	821.9
127.5°	893.8	893.4	892.9	892.4	892.9	893.4	893.8	894.2	894.8	895.4	896.0
130°	944.7	943.6	942.4	941.2	942.4	943.6	944.7	945.8	946.7	947.3	947.9
132.5°	994.5	994.1	993.6	993.2	993.6	994.1	994.5	995.0	995.5	996.1	996.7
135°	1067.1	1066.3	1065.4	1064.5	1065.4	1066.3	1067.1	1068.0	1068.8	1069.4	1069.9
137.5°	1139.1	1139.3	1139.4	1139.6	1139.4	1139.3	1139.1	1138.9	1139.2	1140.0	1140.7
140°	1186.2	1185.9	1185.6	1185.3	1185.6	1185.9	1186.2	1186.5	1186.7	1187.1	1187.3
142.5°	1231.1	1231.1	1231.1	1231.0	1231.1	1231.1	1231.1	1231.2	1231.3	1231.3	1231.4
145°	1295.6	1294.8	1293.9	1293.0	1293.9	1294.8	1295.6	1296.5	1297.1	1297.4	1297.7
147.5°	1356.8	1356.5	1356.2	1355.9	1356.2	1356.5	1356.8	1357.0	1357.3	1357.5	1357.8
150°	1395.2	1394.9	1394.6	1394.3	1394.6	1394.9	1395.2	1395.5	1395.6	1395.6	1395.6
152.5°	1431.8	1431.2	1430.4	1429.6	1430.4	1431.2	1431.8	1432.6	1432.6	1431.9	1431.2
155°	1482.1	1481.0	1479.9	1478.7	1479.9	1481.0	1482.1	1483.3	1483.3	1482.1	1481.0
157.5°	1525.5	1524.6	1523.5	1522.6	1523.5	1524.6	1525.5	1526.5	1526.6	1525.7	1524.8
160°	1551.9	1550.4	1548.9	1547.5	1548.9	1550.4	1551.9	1553.2	1553.6	1552.7	1551.9
162.5°	1577.8	1576.4	1574.9	1573.5	1574.9	1576.4	1577.8	1579.2	1579.2	1577.6	1576.1
165°	1610.7	1609.6	1608.3	1607.2	1608.3	1609.6	1610.7	1611.9	1611.5	1609.8	1608.1
167.5°	1636.8	1635.0	1633.1	1631.3	1633.1	1635.0	1636.8	1638.6	1638.6	1636.8	1635.1
170°	1651.0	1648.9	1646.9	1644.9	1646.9	1648.9	1651.0	1652.9	1653.1	1651.4	1649.7
172.5°	1662.3	1660.4	1658.3	1656.3	1658.3	1660.4	1662.3	1664.4	1664.4	1662.4	1660.5
175°	1674.3	1672.3	1670.3	1668.3	1670.3	1672.3	1674.3	1676.4	1676.4	1674.3	1672.3
177.5°	1680.0	1678.2	1676.4	1674.5	1676.4	1678.2	1680.0	1681.9	1682.0	1680.3	1678.8
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1373.6	1375.4	1383.0	1390.2	1398.8	1405.0	1409.2	1414.0	1424.0	1432.1	1439.7
5°	1286.9	1289.9	1305.3	1316.0	1334.5	1350.6	1363.0	1376.7	1392.8	1414.8	1435.0
7.5°	1210.6	1221.6	1238.5	1255.9	1274.7	1295.8	1314.1	1334.7	1362.4	1392.7	1423.8
10°	1167.3	1179.7	1197.6	1217.8	1235.7	1260.1	1282.7	1307.1	1338.6	1375.5	1412.5
12.5°	1123.9	1144.4	1158.0	1182.1	1201.4	1221.5	1245.5	1277.6	1314.3	1353.1	1397.7
15°	1069.6	1080.9	1107.1	1120.2	1147.5	1178.5	1202.3	1234.5	1270.1	1321.4	1371.4
17.5°	1007.0	1021.8	1042.7	1067.7	1099.2	1123.3	1153.0	1186.0	1231.1	1281.9	1344.5
20°	966.0	978.5	1004.1	1031.5	1064.8	1090.5	1122.0	1154.1	1200.6	1254.7	1320.2
22.5°	929.4	941.4	968.5	993.9	1026.2	1057.6	1090.5	1127.9	1172.4	1229.5	1296.4
25°	872.6	888.6	912.5	938.7	969.6	1005.3	1041.0	1074.4	1122.0	1182.1	1253.5
27.5°	822.3	835.1	852.4	882.1	917.2	951.7	987.2	1029.2	1074.9	1138.4	1212.5
30°	789.9	801.8	819.0	846.4	879.2	916.0	953.0	993.4	1041.0	1104.1	1179.7
32.5°	764.1	773.2	788.5	813.0	842.9	881.8	918.2	960.1	1010.0	1072.2	1145.9
35°	726.2	733.9	739.9	763.1	789.9	825.5	862.5	907.1	955.3	1014.3	1088.0
37.5°	688.9	691.6	700.3	715.4	741.4	774.3	808.6	852.5	901.9	961.7	1028.3
40°	666.1	667.3	672.6	686.9	709.5	740.5	773.8	817.3	864.3	920.8	986.9
42.5°	643.7	642.9	647.8	657.8	679.0	707.1	739.9	779.6	826.6	878.9	941.2
45°	608.3	608.3	607.1	615.4	632.7	660.1	687.5	725.6	764.8	816.1	868.4
47.5°	571.4	568.1	569.1	573.4	588.0	610.4	638.1	669.3	703.9	747.3	793.2
50°	547.6	542.9	541.1	545.8	558.9	578.5	604.8	632.1	664.9	702.9	742.3
52.5°	521.4	516.7	513.4	516.8	528.9	547.1	570.9	595.0	624.4	655.3	689.4
55°	481.0	475.6	473.8	475.0	483.9	498.2	518.4	540.4	562.5	588.1	611.9
57.5°	441.1	432.2	430.6	430.0	436.2	449.3	466.1	485.3	501.3	516.8	542.1
60°	414.8	404.2	400.5	400.0	404.8	415.4	430.9	450.0	461.3	472.0	494.0
62.5°	386.8	376.5	368.7	369.5	373.8	384.0	397.6	411.4	418.9	430.6	445.5
65°	343.5	330.4	324.4	322.6	325.0	333.3	344.1	352.9	361.3	366.1	380.3
67.5°	300.1	289.1	280.3	278.2	277.2	282.8	291.6	297.0	303.0	307.1	315.6
70°	269.7	260.1	249.4	245.8	245.2	249.9	258.3	258.9	267.3	269.1	277.9
72.5°	239.6	227.7	220.3	216.8	214.3	218.5	224.0	225.6	230.1	233.3	238.0
75°	192.9	183.9	176.8	171.4	169.6	172.0	172.0	175.0	178.0	179.8	185.1
77.5°	151.8	141.5	133.1	130.0	127.9	126.3	127.6	129.4	127.9	131.0	132.2
80°	123.2	112.5	106.0	104.8	101.2	98.2	97.6	99.4	97.0	98.2	101.8
82.5°	95.1	88.3	81.2	80.0	75.5	74.0	73.4	72.2	72.2	72.0	72.8
85°	56.6	52.3	47.6	44.6	42.9	39.9	39.9	38.7	37.5	36.3	36.9
87.5°	28.9	27.6	24.8	22.9	21.4	19.1	18.6	16.5	15.4	14.3	13.2
90°	30.3	28.6	26.3	23.9	21.6	19.4	16.6	13.4	10.2	7.1	3.9
92.5°	52.4	51.4	49.8	48.2	46.6	44.9	42.4	38.7	35.0	31.4	27.8
95°	99.5	98.7	96.7	94.6	92.6	90.6	88.3	85.7	83.1	80.5	77.9
97.5°	157.0	156.0	153.7	151.3	149.0	146.6	144.4	142.3	140.2	138.1	136.0
100°	199.2	198.6	196.0	193.5	190.9	188.2	186.4	185.2	184.1	182.9	181.8
102.5°	243.1	242.3	239.9	237.5	235.1	232.8	231.4	230.9	230.5	230.0	229.5
105°	309.9	309.0	307.8	306.7	305.5	304.4	303.7	303.3	303.1	302.8	302.5
107.5°	382.2	381.4	381.3	381.1	380.9	380.7	380.5	380.1	379.8	379.4	379.1
110°	431.7	432.3	432.6	432.9	433.2	433.5	433.3	432.7	432.1	431.6	431.0



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	483.1	483.2	483.7	484.2	484.7	485.3	485.5	485.3	485.3	485.2	485.0
115°	563.2	563.4	564.0	564.6	565.2	565.8	566.0	566.0	566.0	566.0	566.0
117.5°	640.6	641.6	642.0	642.4	642.8	643.3	643.3	643.1	642.8	642.6	642.4
120°	693.1	694.6	695.4	696.3	697.2	698.0	697.8	696.7	695.6	694.4	693.3
122.5°	745.5	746.5	746.9	747.3	747.7	748.1	748.0	747.6	747.2	746.7	746.2
125°	822.5	823.1	823.4	823.6	824.0	824.2	824.4	824.4	824.4	824.4	824.4
127.5°	896.5	897.1	897.6	898.0	898.5	899.0	898.7	897.9	897.0	896.1	895.3
130°	948.5	949.0	949.0	949.0	949.0	949.0	948.6	947.7	946.8	946.0	945.1
132.5°	997.3	997.8	998.1	998.3	998.5	998.8	998.6	997.9	997.3	996.7	996.0
135°	1070.5	1071.1	1071.1	1071.1	1071.1	1071.1	1070.2	1068.5	1066.7	1065.0	1063.2
137.5°	1141.4	1142.2	1141.8	1141.3	1140.8	1140.4	1139.7	1138.9	1138.1	1137.3	1136.5
140°	1187.6	1187.9	1187.9	1187.9	1187.9	1187.9	1187.6	1187.1	1186.5	1185.9	1185.3
142.5°	1231.5	1231.5	1231.7	1232.0	1232.2	1232.4	1232.3	1231.7	1231.1	1230.5	1229.9
145°	1298.0	1298.2	1298.0	1297.7	1297.4	1297.1	1296.4	1295.2	1294.1	1292.9	1291.8
147.5°	1358.0	1358.2	1358.5	1358.7	1358.9	1359.2	1358.6	1357.2	1355.8	1354.4	1353.1
150°	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.1	1393.9	1392.8	1391.5	1390.4
152.5°	1430.6	1429.9	1429.7	1429.4	1429.2	1429.0	1428.5	1427.8	1427.1	1426.4	1425.7
155°	1479.9	1478.7	1479.0	1479.3	1479.5	1479.9	1480.0	1480.0	1480.0	1480.0	1480.0
157.5°	1524.0	1523.1	1523.2	1523.2	1523.3	1523.4	1523.6	1524.1	1524.7	1525.2	1525.7
160°	1551.0	1550.1	1550.4	1550.7	1551.0	1551.3	1551.5	1551.9	1552.1	1552.4	1552.7
162.5°	1574.5	1573.0	1573.2	1573.6	1573.8	1574.1	1574.6	1575.4	1576.1	1576.9	1577.6
165°	1606.4	1604.6	1605.2	1605.8	1606.4	1607.0	1607.7	1608.5	1609.4	1610.2	1611.1
167.5°	1633.4	1631.7	1631.6	1631.5	1631.5	1631.4	1632.0	1633.2	1634.4	1635.6	1636.8
170°	1647.9	1646.1	1645.9	1645.6	1645.3	1645.0	1645.6	1647.0	1648.5	1649.9	1651.4
172.5°	1658.5	1656.6	1656.5	1656.5	1656.4	1656.3	1656.9	1658.1	1659.3	1660.5	1661.7
175°	1670.3	1668.3	1668.5	1668.8	1669.1	1669.4	1670.3	1671.7	1673.2	1674.6	1676.0
177.5°	1677.1	1675.5	1675.5	1675.5	1675.5	1675.5	1676.1	1677.2	1678.4	1679.6	1680.7
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



TEST NUMBER: P332830-935

CATALOG NUMBER: S124DIW-S1020D1560U935-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1446.4	1451.1	1457.3	1467.8	1471.6	1476.4	1483.1	1482.6	1484.5	1491.6	1506.8
5°	1451.7	1470.2	1488.1	1509.5	1532.1	1547.0	1567.2	1579.7	1592.2	1608.3	1635.6
7.5°	1453.9	1483.2	1515.9	1553.5	1587.0	1625.6	1655.6	1683.9	1709.6	1743.5	1776.2
10°	1450.5	1489.8	1532.1	1579.7	1630.3	1673.2	1711.8	1755.9	1793.4	1834.4	1871.4
12.5°	1444.3	1491.8	1548.3	1601.6	1660.8	1724.1	1772.3	1816.8	1866.7	1914.0	1970.9
15°	1430.3	1495.2	1561.3	1631.5	1710.6	1783.8	1853.5	1911.2	1964.8	2035.7	2110.1
17.5°	1412.5	1482.5	1565.7	1650.8	1733.5	1817.2	1903.4	1990.2	2057.8	2145.8	2204.0
20°	1395.8	1476.7	1562.5	1663.6	1746.4	1850.5	1936.2	2020.2	2113.0	2200.5	2270.1
22.5°	1372.4	1461.0	1552.0	1652.7	1761.6	1865.8	1964.8	2055.9	2148.7	2243.9	2328.2
25°	1342.8	1423.1	1530.9	1645.2	1753.5	1866.6	1980.3	2094.6	2194.5	2295.2	2373.7
27.5°	1292.4	1393.8	1494.1	1612.1	1732.4	1860.4	1981.9	2101.6	2206.3	2289.1	2337.8
30°	1266.6	1354.7	1463.6	1582.1	1712.4	1849.9	1976.7	2094.0	2191.6	2257.6	2277.3
32.5°	1228.6	1319.5	1426.0	1548.8	1686.7	1828.0	1960.1	2070.6	2152.1	2186.7	2163.0
35°	1172.0	1254.1	1361.8	1487.5	1630.9	1781.5	1911.9	2005.3	2046.9	2014.2	1932.7
37.5°	1104.1	1185.5	1293.7	1417.1	1565.6	1718.6	1836.5	1903.8	1889.9	1808.5	1687.0
40°	1056.5	1132.7	1235.7	1369.0	1513.6	1667.2	1770.7	1807.1	1769.0	1652.3	1523.2
42.5°	1003.7	1078.0	1181.4	1309.9	1463.2	1604.8	1695.1	1698.1	1634.2	1494.7	1365.0
45°	923.2	994.0	1091.7	1225.5	1367.2	1500.6	1560.0	1530.9	1413.1	1278.5	1148.1
47.5°	843.8	905.2	1001.4	1128.5	1263.1	1375.3	1404.8	1352.3	1226.8	1096.1	975.3
50°	785.7	847.6	938.1	1059.5	1189.2	1286.2	1300.5	1230.9	1107.7	976.1	881.5
52.5°	730.0	791.4	878.6	990.9	1109.7	1197.2	1197.7	1117.1	994.4	877.1	789.1
55°	648.2	703.5	782.1	882.7	988.7	1057.1	1040.4	957.1	850.6	748.8	672.0
57.5°	569.4	617.6	690.0	773.9	867.2	923.7	896.0	815.8	720.7	634.4	576.2
60°	518.4	564.3	626.2	705.3	783.9	827.9	801.8	729.1	641.6	572.0	521.4
62.5°	468.9	507.6	567.1	635.8	708.7	741.3	718.0	646.3	570.7	507.7	466.7
65°	398.8	430.3	477.9	536.9	589.9	617.9	598.2	531.5	473.8	428.5	395.8
67.5°	333.3	358.0	394.0	441.3	486.3	501.4	483.5	437.1	388.2	352.0	328.9
70°	288.1	311.3	341.6	378.0	417.2	433.3	415.4	378.6	338.7	305.3	282.8
72.5°	248.6	266.6	292.1	323.2	354.0	370.0	357.8	322.4	288.7	263.9	244.6
75°	189.2	204.7	222.6	244.6	268.5	279.1	268.5	244.0	220.8	202.3	188.6
77.5°	137.6	145.9	159.7	176.2	191.1	199.2	190.0	173.4	159.3	146.6	139.9
80°	104.8	110.7	120.2	133.4	143.4	151.2	145.3	131.6	120.2	111.9	108.9
82.5°	76.2	80.2	86.4	96.2	103.0	106.9	104.3	94.4	89.7	82.4	79.4
85°	37.5	39.9	44.1	47.0	53.0	53.6	54.2	50.0	45.8	44.1	41.7
87.5°	14.3	15.4	17.5	19.5	22.0	22.9	22.9	23.3	21.9	21.8	20.2
90°	7.1	10.2	13.4	16.6	19.4	21.6	23.9	26.3	28.6	30.3	32.0
92.5°	31.4	35.0	38.7	42.4	44.9	46.6	48.2	49.8	51.4	52.4	53.5
95°	80.5	83.1	85.7	88.3	90.6	92.6	94.6	96.7	98.7	99.5	100.4
97.5°	138.1	140.2	142.3	144.4	146.6	149.0	151.3	153.7	156.0	157.0	158.2
100°	182.9	184.1	185.2	186.4	188.2	190.9	193.5	196.0	198.6	199.2	199.8
102.5°	230.0	230.5	230.9	231.4	232.8	235.1	237.5	239.9	242.3	243.1	243.8
105°	302.8	303.1	303.3	303.7	304.4	305.5	306.7	307.8	309.0	309.9	310.7
107.5°	379.4	379.8	380.1	380.5	380.7	380.9	381.1	381.3	381.4	382.2	383.1
110°	431.6	432.1	432.7	433.3	433.5	433.2	432.9	432.6	432.3	431.7	431.2





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	485.2	485.3	485.3	485.5	485.3	484.7	484.2	483.7	483.2	483.1	482.9
115°	566.0	566.0	566.0	566.0	565.8	565.2	564.6	564.0	563.4	563.2	562.8
117.5°	642.6	642.8	643.1	643.3	643.3	642.8	642.4	642.0	641.6	640.6	639.6
120°	694.4	695.6	696.7	697.8	698.0	697.2	696.3	695.4	694.6	693.1	691.6
122.5°	746.7	747.2	747.6	748.0	748.1	747.7	747.3	746.9	746.5	745.5	744.5
125°	824.4	824.4	824.4	824.4	824.2	824.0	823.6	823.4	823.1	822.5	821.9
127.5°	896.1	897.0	897.9	898.7	899.0	898.5	898.0	897.6	897.1	896.5	896.0
130°	946.0	946.8	947.7	948.6	949.0	949.0	949.0	949.0	949.0	948.5	947.9
132.5°	996.7	997.3	997.9	998.6	998.8	998.5	998.3	998.1	997.8	997.3	996.7
135°	1065.0	1066.7	1068.5	1070.2	1071.1	1071.1	1071.1	1071.1	1071.1	1070.5	1069.9
137.5°	1137.3	1138.1	1138.9	1139.7	1140.4	1140.8	1141.3	1141.8	1142.2	1141.4	1140.7
140°	1185.9	1186.5	1187.1	1187.6	1187.9	1187.9	1187.9	1187.9	1187.9	1187.6	1187.3
142.5°	1230.5	1231.1	1231.7	1232.3	1232.4	1232.2	1232.0	1231.7	1231.5	1231.5	1231.4
145°	1292.9	1294.1	1295.2	1296.4	1297.1	1297.4	1297.7	1298.0	1298.2	1298.0	1297.7
147.5°	1354.4	1355.8	1357.2	1358.6	1359.2	1358.9	1358.7	1358.5	1358.2	1358.0	1357.8
150°	1391.5	1392.8	1393.9	1395.1	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6	1395.6
152.5°	1426.4	1427.1	1427.8	1428.5	1429.0	1429.2	1429.4	1429.7	1429.9	1430.6	1431.2
155°	1480.0	1480.0	1480.0	1480.0	1479.9	1479.5	1479.3	1479.0	1478.7	1479.9	1481.0
157.5°	1525.2	1524.7	1524.1	1523.6	1523.4	1523.3	1523.2	1523.2	1523.1	1524.0	1524.8
160°	1552.4	1552.1	1551.9	1551.5	1551.3	1551.0	1550.7	1550.4	1550.1	1551.0	1551.9
162.5°	1576.9	1576.1	1575.4	1574.6	1574.1	1573.8	1573.6	1573.2	1573.0	1574.5	1576.1
165°	1610.2	1609.4	1608.5	1607.7	1607.0	1606.4	1605.8	1605.2	1604.6	1606.4	1608.1
167.5°	1635.6	1634.4	1633.2	1632.0	1631.4	1631.5	1631.5	1631.6	1631.7	1633.4	1635.1
170°	1649.9	1648.5	1647.0	1645.6	1645.0	1645.3	1645.6	1645.9	1646.1	1647.9	1649.7
172.5°	1660.5	1659.3	1658.1	1656.9	1656.3	1656.4	1656.5	1656.5	1656.6	1658.5	1660.5
175°	1674.6	1673.2	1671.7	1670.3	1669.4	1669.1	1668.8	1668.5	1668.3	1670.3	1672.3
177.5°	1679.6	1678.4	1677.2	1676.1	1675.5	1675.5	1675.5	1675.5	1675.5	1677.1	1678.8
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1514.5	1515.4	1519.7	1523.0	1524.0	1528.8	1529.2
5°	1647.5	1657.7	1677.3	1679.1	1682.0	1697.5	1685.7
7.5°	1803.5	1829.2	1846.3	1861.5	1867.0	1873.7	1872.3
10°	1903.5	1941.6	1960.7	1991.0	1992.2	1999.9	1995.2
12.5°	2004.0	2048.2	2083.0	2088.6	2114.1	2118.0	2124.7
15°	2146.3	2193.4	2241.6	2258.8	2294.0	2302.3	2315.4
17.5°	2280.2	2328.2	2362.1	2406.7	2421.1	2440.4	2427.2
20°	2353.5	2405.9	2448.7	2483.8	2498.7	2509.4	2508.3
22.5°	2397.8	2450.6	2485.4	2511.9	2525.8	2530.4	2530.1
25°	2425.5	2455.8	2466.6	2476.7	2461.3	2455.8	2458.2
27.5°	2348.4	2340.5	2312.6	2275.9	2237.7	2207.5	2191.1
30°	2242.2	2195.7	2153.4	2079.7	2041.6	2019.0	1998.7
32.5°	2091.7	2018.1	1936.8	1869.2	1825.9	1792.3	1787.3
35°	1833.8	1723.1	1623.8	1541.0	1498.1	1461.8	1453.5
37.5°	1559.1	1444.1	1354.6	1281.8	1235.7	1210.0	1186.1
40°	1376.7	1277.9	1189.8	1127.9	1092.8	1074.4	1059.5
42.5°	1236.2	1146.0	1058.4	1011.2	979.5	968.2	959.5
45°	1042.2	958.3	897.6	861.9	843.4	824.4	815.5
47.5°	886.8	818.6	778.5	748.2	728.4	717.1	711.4
50°	798.7	742.8	707.1	683.9	666.1	657.1	652.4
52.5°	720.7	674.8	644.7	626.3	614.2	607.6	605.7
55°	620.8	585.7	566.6	550.6	541.7	535.7	533.3
57.5°	539.6	512.6	497.1	483.9	480.4	475.4	473.8
60°	486.3	465.5	452.4	443.4	440.5	434.5	435.7
62.5°	439.1	422.1	411.0	405.8	401.9	396.9	398.6
65°	371.4	359.0	352.9	348.2	343.5	340.4	342.9
67.5°	311.7	303.1	295.0	292.2	289.9	289.4	286.9
70°	272.6	265.4	258.3	256.6	256.6	254.2	253.6
72.5°	235.0	229.7	225.0	223.7	221.8	222.7	220.2
75°	181.5	177.4	175.6	173.8	173.2	173.2	171.4
77.5°	134.1	131.0	128.2	128.2	126.1	125.3	125.0
80°	101.8	100.6	98.2	98.2	97.0	97.6	96.4
82.5°	76.5	74.9	74.4	73.4	71.8	71.9	70.7
85°	41.1	39.3	38.7	36.9	35.7	36.9	35.7
87.5°	21.0	20.9	20.7	19.8	19.5	19.5	18.3
90°	33.8	35.5	36.7	37.2	37.8	38.4	38.9
92.5°	54.5	55.5	56.2	56.6	56.9	57.3	57.6
95°	101.3	102.1	102.5	102.5	102.5	102.5	102.5
97.5°	159.2	160.2	160.7	160.7	160.7	160.7	160.7
100°	200.4	201.0	201.2	201.2	201.2	201.2	201.2
102.5°	244.7	245.5	246.0	246.2	246.5	246.7	246.9
105°	311.6	312.5	313.3	314.2	315.0	315.9	316.8
107.5°	383.8	384.7	385.0	385.0	385.0	384.9	384.8
110°	430.6	430.0	430.2	431.0	431.9	432.7	433.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	482.8	482.8	482.8	482.9	483.1	483.3	483.5
115°	562.6	562.3	562.0	561.7	561.5	561.1	560.9
117.5°	638.7	637.7	636.9	636.3	635.8	635.2	634.6
120°	690.3	688.8	688.4	689.0	689.5	690.1	690.7
122.5°	743.6	742.6	741.6	740.5	739.5	738.5	737.4
125°	821.4	820.8	820.2	819.6	819.1	818.5	817.9
127.5°	895.4	894.8	894.2	893.8	893.4	892.9	892.4
130°	947.3	946.7	945.8	944.7	943.6	942.4	941.2
132.5°	996.1	995.5	995.0	994.5	994.1	993.6	993.2
135°	1069.4	1068.8	1068.0	1067.1	1066.3	1065.4	1064.5
137.5°	1140.0	1139.2	1138.9	1139.1	1139.3	1139.4	1139.6
140°	1187.1	1186.7	1186.5	1186.2	1185.9	1185.6	1185.3
142.5°	1231.3	1231.3	1231.2	1231.1	1231.1	1231.1	1231.0
145°	1297.4	1297.1	1296.5	1295.6	1294.8	1293.9	1293.0
147.5°	1357.5	1357.3	1357.0	1356.8	1356.5	1356.2	1355.9
150°	1395.6	1395.6	1395.5	1395.2	1394.9	1394.6	1394.3
152.5°	1431.9	1432.6	1432.6	1431.8	1431.2	1430.4	1429.6
155°	1482.1	1483.3	1483.3	1482.1	1481.0	1479.9	1478.7
157.5°	1525.7	1526.6	1526.5	1525.5	1524.6	1523.5	1522.6
160°	1552.7	1553.6	1553.2	1551.9	1550.4	1548.9	1547.5
162.5°	1577.6	1579.2	1579.2	1577.8	1576.4	1574.9	1573.5
165°	1609.8	1611.5	1611.9	1610.7	1609.6	1608.3	1607.2
167.5°	1636.8	1638.6	1638.6	1636.8	1635.0	1633.1	1631.3
170°	1651.4	1653.1	1652.9	1651.0	1648.9	1646.9	1644.9
172.5°	1662.4	1664.4	1664.4	1662.3	1660.4	1658.3	1656.3
175°	1674.3	1676.4	1676.4	1674.3	1672.3	1670.3	1668.3
177.5°	1680.3	1682.0	1681.9	1680.0	1678.2	1676.4	1674.5
180°	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6	1678.6

(END OF REPORT)