

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: P332829-930

Luminaire Tested: **S124DIW-S1020D1560U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332829-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D1560U930-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8843.6 lumens
Efficiency: N/A
Efficacy: 115.5 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

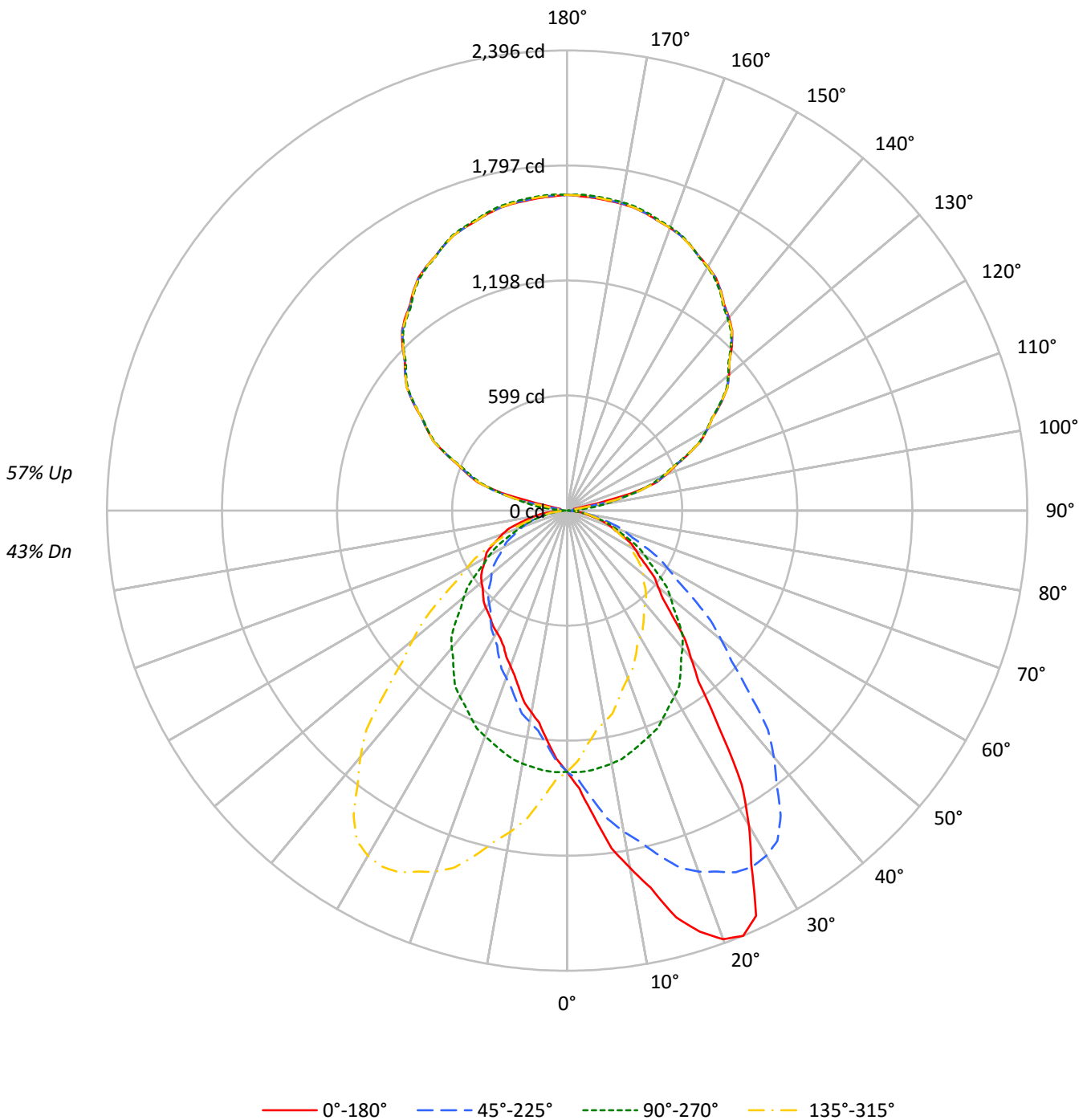
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36
2	88	81	75	70	80	74	69	64	61	58	54	50	47	45	39	37	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	34	32	30	26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	28	26	23
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23	20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	25	23	20	17
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	18	16	14
9	50	38	30	25	45	35	28	24	29	24	21	24	21	18	20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10984	10984	10984	10984
5°	12935	11012	9720	11012
10°	15488	10964	8751	10964
15°	18324	10853	8037	10853
20°	20405	10740	7399	10740
25°	20735	10573	6959	10573
30°	17643	10413	6820	10413
35°	13565	10154	6821	10154
40°	10572	9848	6949	9848
45°	8816	9388	7066	9388
50°	7759	8828	7304	8828
55°	7108	8155	7600	8155
60°	6660	7553	7953	7553
65°	6202	6879	8246	6879
70°	5667	6212	8434	6212
75°	5062	5468	8334	5468
80°	4245	4482	8071	4482
85°	3131	3242	7725	3242



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.5	1.5
10°-20°	408.6	4.6
20°-30°	647.9	7.3
30°-40°	721.0	8.2
40°-50°	656.3	7.4
50°-60°	536.3	6.1
60°-70°	382.9	4.3
70°-80°	210.8	2.4
80°-90°	62.3	0.7
90°-100°	56.2	0.6
100°-110°	358.5	4.1
110°-120°	685.8	7.8
120°-130°	870.5	9.8
130°-140°	931.4	10.5
140°-150°	871.0	9.8
150°-160°	702.4	7.9
160°-170°	453.0	5.1
170°-180°	156.1	1.8
0°-30°	1189.0	13.4
0°-40°	1910.0	21.6
0°-60°	3102.6	35.1
0°-90°	3758.6	42.5
90°-120°	1100.5	12.4
90°-150°	3773.4	42.7
90°-180°	5085.0	57.5
0°-180°	8843.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1361	1361	1361	1361	1361	
5°	1596	1359	1199	1359	1596	162
15°	2192	1299	962	1299	2192	619
25°	2328	1187	781	1187	2328	1026
35°	1376	1030	692	1030	1376	874
45°	772	822	619	822	772	608
55°	505	579	540	579	505	456
65°	325	360	432	360	325	321
75°	162	175	267	175	162	173
85°	34	35	83	35	34	42
90°	37	4	37	4	37	17
95°	36	68	36	68	36	28
105°	350	370	350	370	350	306
115°	696	691	696	691	696	689
125°	979	971	979	971	979	872
135°	1214	1205	1214	1205	1214	934
145°	1397	1389	1397	1389	1397	873
155°	1522	1523	1522	1523	1522	702
165°	1600	1607	1600	1607	1600	452
175°	1634	1644	1634	1644	1634	156
180°	1644	1644	1644	1644	1644	



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1448.1	1447.6	1443.1	1442.2	1439.0	1435.0	1434.1	1426.9	1412.4	1405.7	1403.9
5°	1596.2	1607.4	1592.8	1590.0	1588.3	1569.7	1560.1	1548.8	1522.9	1507.7	1495.8
7.5°	1772.9	1774.3	1767.9	1762.7	1748.3	1732.1	1707.8	1681.9	1651.0	1618.9	1594.6
10°	1889.3	1893.8	1886.4	1885.3	1856.6	1838.5	1802.5	1772.1	1737.1	1698.2	1662.7
12.5°	2011.9	2005.6	2001.9	1977.8	1972.5	1939.5	1897.6	1866.3	1812.4	1767.7	1720.4
15°	2192.5	2180.1	2172.2	2138.9	2122.6	2077.0	2032.4	1998.1	1927.6	1860.5	1809.8
17.5°	2298.4	2310.9	2292.6	2278.9	2236.7	2204.7	2159.2	2087.0	2031.9	1948.6	1884.6
20°	2375.1	2376.2	2366.1	2352.0	2318.7	2278.2	2228.5	2149.6	2083.7	2000.8	1912.9
22.5°	2395.8	2396.1	2391.8	2378.6	2353.4	2320.5	2270.5	2204.7	2124.8	2034.7	1946.8
25°	2327.8	2325.5	2330.6	2345.2	2335.7	2325.5	2296.8	2247.7	2173.3	2078.0	1983.4
27.5°	2074.8	2090.3	2119.0	2155.1	2189.8	2216.3	2223.7	2213.7	2167.6	2089.2	1990.1
30°	1892.6	1911.8	1933.2	1969.3	2039.1	2079.2	2123.2	2156.4	2137.8	2075.3	1982.8
32.5°	1692.5	1697.2	1729.0	1770.0	1834.0	1911.0	1980.7	2048.2	2070.6	2037.8	1960.7
35°	1376.4	1384.2	1418.6	1459.2	1537.6	1631.7	1736.5	1830.1	1907.3	1938.3	1898.8
37.5°	1123.2	1145.8	1170.1	1213.7	1282.7	1367.4	1476.3	1597.4	1712.5	1789.6	1802.7
40°	1003.2	1017.3	1034.8	1068.0	1126.7	1210.1	1303.7	1442.3	1564.6	1675.1	1711.2
42.5°	908.6	916.8	927.5	957.6	1002.2	1085.2	1170.6	1292.6	1415.4	1547.4	1607.9
45°	772.2	780.6	798.7	816.1	849.9	907.4	986.9	1087.2	1210.6	1338.1	1449.6
47.5°	673.6	679.1	689.7	708.5	737.2	775.1	839.8	923.6	1038.0	1161.6	1280.5
50°	617.8	622.2	630.7	647.6	669.6	703.4	756.4	834.7	924.3	1048.9	1165.6
52.5°	573.6	575.4	581.6	593.0	610.5	639.0	682.4	747.2	830.5	941.6	1057.8
55°	505.0	507.3	512.9	521.4	536.5	554.6	587.8	636.3	709.1	805.4	906.3
57.5°	448.7	450.2	454.9	458.2	470.8	485.4	510.9	545.6	600.7	682.4	772.5
60°	412.5	411.5	417.1	419.9	428.4	440.8	460.5	493.7	541.6	607.6	690.4
62.5°	377.4	375.9	380.6	384.3	389.1	399.7	415.8	441.9	480.8	540.4	612.0
65°	324.7	322.4	325.2	329.7	334.2	339.9	351.7	374.8	405.8	448.7	503.3
67.5°	271.7	274.0	274.5	276.7	279.3	287.0	295.1	311.4	333.3	367.6	413.9
70°	240.1	240.7	243.0	243.0	244.6	251.4	258.1	267.7	289.1	320.7	358.5
72.5°	208.6	210.9	210.0	211.8	213.0	217.5	222.5	231.6	249.9	273.4	305.2
75°	162.3	164.0	164.0	164.6	166.2	168.0	171.9	178.6	191.6	209.1	231.1
77.5°	118.4	118.6	119.4	121.4	121.4	124.1	127.0	132.5	138.8	150.8	164.2
80°	91.3	92.5	91.9	93.0	93.0	95.2	96.4	103.1	106.0	113.8	124.6
82.5°	66.9	68.1	68.0	69.5	70.4	70.9	72.5	75.2	78.0	85.0	89.4
85°	33.8	35.0	33.8	35.0	36.6	37.2	38.9	39.5	41.7	43.4	47.4
87.5°	17.3	18.5	18.4	18.8	19.6	19.8	19.9	19.2	20.6	20.7	22.1
90°	36.9	36.4	35.8	35.2	34.7	33.6	32.0	30.3	28.7	27.1	24.9
92.5°	33.9	33.8	33.8	33.6	33.5	32.6	31.0	29.4	27.7	26.1	23.9
95°	35.6	35.4	35.1	34.8	34.6	33.6	32.0	30.3	28.7	27.1	26.7
97.5°	34.4	34.2	33.9	33.6	33.3	33.1	32.9	32.8	32.6	32.4	62.9
100°	34.4	34.2	33.9	33.6	33.3	35.5	40.2	44.8	49.5	54.1	91.8
102.5°	35.4	35.4	35.3	35.2	35.2	60.3	110.3	160.5	210.5	260.7	265.5
105°	350.4	360.3	370.1	379.9	389.7	393.5	391.0	388.5	386.0	383.6	382.2
107.5°	488.4	487.3	486.2	485.3	484.2	483.1	481.9	480.7	479.5	478.3	476.4
110°	548.4	547.6	546.7	545.9	545.1	544.4	543.9	543.3	542.7	542.2	540.5



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	608.4	607.3	606.3	605.3	604.2	603.7	603.8	604.0	604.1	604.2	603.4
115°	695.9	695.9	695.9	695.9	695.9	695.6	695.0	694.6	694.0	693.4	693.7
117.5°	784.9	785.1	785.1	785.2	785.4	785.5	785.5	785.7	785.8	785.9	785.3
120°	841.0	841.6	842.0	842.6	843.2	843.2	842.6	842.0	841.6	841.0	841.2
122.5°	896.1	896.6	897.2	897.7	898.2	898.4	898.1	897.7	897.4	897.1	896.7
125°	978.7	978.4	978.1	977.9	977.6	977.1	976.2	975.4	974.6	973.8	974.3
127.5°	1051.2	1051.4	1051.7	1051.9	1052.1	1052.3	1052.5	1052.6	1052.8	1053.0	1051.7
130°	1100.4	1100.4	1100.4	1100.4	1100.4	1100.2	1100.0	1099.8	1099.4	1099.2	1098.4
132.5°	1145.7	1145.9	1146.1	1146.3	1146.6	1146.5	1146.2	1146.0	1145.7	1145.4	1144.4
135°	1213.5	1213.0	1212.4	1211.9	1211.4	1210.8	1210.2	1209.7	1209.2	1208.6	1207.5
137.5°	1271.5	1271.7	1271.9	1272.0	1272.2	1272.0	1271.4	1270.8	1270.2	1269.6	1268.4
140°	1311.9	1311.6	1311.3	1311.1	1310.8	1310.3	1309.5	1308.6	1307.8	1306.9	1306.4
142.5°	1345.3	1345.2	1345.2	1345.2	1345.1	1344.8	1344.2	1343.6	1343.0	1342.4	1342.1
145°	1396.7	1396.2	1395.6	1395.1	1394.6	1394.1	1393.8	1393.6	1393.3	1393.0	1393.0
147.5°	1439.2	1439.0	1438.7	1438.4	1438.2	1437.9	1437.7	1437.5	1437.3	1437.0	1437.3
150°	1466.8	1466.6	1466.2	1466.0	1465.7	1465.6	1465.6	1465.6	1465.6	1465.6	1465.8
152.5°	1490.4	1490.5	1490.7	1490.9	1491.0	1490.9	1490.4	1490.0	1489.6	1489.1	1489.6
155°	1522.2	1523.0	1523.8	1524.6	1525.4	1525.3	1524.2	1523.1	1522.0	1520.9	1521.8
157.5°	1548.7	1550.1	1551.5	1553.0	1554.4	1554.4	1553.0	1551.5	1550.1	1548.7	1549.6
160°	1566.4	1568.1	1569.7	1571.3	1573.0	1573.0	1571.3	1569.7	1568.1	1566.4	1566.7
162.5°	1580.1	1582.0	1583.9	1585.8	1587.6	1587.7	1586.1	1584.5	1582.7	1581.1	1581.4
165°	1599.6	1602.1	1604.5	1607.0	1609.4	1609.6	1607.4	1605.2	1603.0	1600.8	1600.8
167.5°	1614.1	1616.8	1619.6	1622.3	1625.1	1625.2	1622.8	1620.4	1618.0	1615.6	1615.8
170°	1622.9	1625.7	1628.4	1631.2	1633.9	1634.2	1632.0	1629.8	1627.6	1625.4	1625.1
172.5°	1627.8	1630.8	1633.8	1636.7	1639.6	1640.1	1637.9	1635.7	1633.5	1631.3	1631.0
175°	1634.0	1637.3	1640.5	1643.8	1647.1	1647.6	1645.1	1642.6	1640.1	1637.7	1637.4
177.5°	1637.9	1640.5	1643.2	1645.8	1648.5	1648.9	1647.1	1645.4	1643.6	1641.8	1641.4
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1404.4	1398.0	1393.5	1389.9	1380.0	1374.1	1369.6	1363.3	1356.1	1348.4	1339.0
5°	1484.0	1464.8	1450.7	1429.4	1409.1	1392.1	1374.7	1358.9	1339.7	1318.9	1303.7
7.5°	1567.7	1539.3	1502.8	1471.0	1435.4	1404.4	1376.7	1348.3	1318.7	1290.1	1263.9
10°	1621.0	1584.4	1543.8	1495.8	1450.7	1410.7	1373.5	1337.5	1302.5	1267.5	1237.7
12.5°	1678.2	1632.6	1572.6	1516.6	1466.1	1412.6	1367.7	1323.5	1281.3	1244.6	1209.7
15°	1755.1	1689.1	1619.8	1544.9	1478.4	1415.8	1354.4	1298.6	1251.2	1202.7	1169.0
17.5°	1802.4	1720.8	1641.5	1563.2	1482.6	1403.8	1337.5	1273.1	1213.8	1165.7	1123.1
20°	1833.4	1752.3	1653.7	1575.3	1479.5	1398.3	1321.7	1250.1	1188.1	1136.9	1092.8
22.5°	1860.5	1766.8	1668.1	1565.0	1469.6	1383.5	1299.6	1227.6	1164.2	1110.2	1068.0
25°	1875.2	1767.5	1660.4	1557.9	1449.6	1347.6	1271.5	1187.0	1119.3	1062.4	1017.3
27.5°	1876.7	1761.6	1640.5	1526.5	1414.8	1319.8	1223.8	1148.2	1078.0	1017.8	974.5
30°	1871.8	1751.8	1621.5	1498.1	1385.9	1282.8	1199.4	1117.1	1045.5	985.8	940.7
32.5°	1856.0	1731.0	1597.2	1466.6	1350.3	1249.4	1163.4	1085.1	1015.3	956.4	909.1
35°	1810.4	1686.9	1544.3	1408.5	1289.6	1187.6	1109.8	1030.3	960.4	904.6	859.0
37.5°	1739.0	1627.4	1482.5	1341.9	1225.1	1122.6	1045.5	973.7	910.7	854.0	807.2
40°	1676.7	1578.7	1433.3	1296.3	1170.1	1072.6	1000.5	934.5	872.0	818.4	773.9
42.5°	1605.1	1519.6	1385.5	1240.4	1118.7	1020.8	950.4	891.2	832.3	782.8	738.3
45°	1477.2	1420.9	1294.6	1160.5	1033.7	941.3	874.2	822.3	772.7	724.2	687.1
47.5°	1330.2	1302.3	1196.0	1068.6	948.3	857.1	799.0	751.1	707.6	666.5	633.7
50°	1231.5	1218.0	1126.1	1003.2	888.3	802.6	744.0	702.9	665.6	629.6	598.6
52.5°	1134.1	1133.7	1050.8	938.3	831.9	749.4	691.2	652.8	620.5	591.3	563.4
55°	985.2	1001.0	936.2	835.8	740.6	666.2	613.8	579.4	556.8	532.6	511.8
57.5°	848.5	874.7	821.2	732.8	653.4	584.8	539.2	513.3	489.3	474.7	459.5
60°	759.2	784.0	742.3	667.9	593.0	534.3	490.9	467.8	446.9	436.8	426.1
62.5°	679.9	702.0	671.1	602.1	537.0	480.6	444.0	421.8	407.7	396.6	389.6
65°	566.5	585.1	558.6	508.4	452.6	407.5	377.6	360.1	346.7	342.1	334.2
67.5°	457.9	474.8	460.5	417.8	373.1	339.0	315.6	298.8	290.8	286.9	281.3
70°	393.4	410.3	395.1	357.9	323.5	294.8	272.8	263.2	254.8	253.1	245.2
72.5°	338.8	350.3	335.2	306.1	276.6	252.4	235.4	225.3	220.9	217.9	213.6
75°	254.2	264.3	254.2	231.6	210.8	193.9	179.2	175.3	170.2	168.5	165.7
77.5°	179.9	188.7	180.9	166.8	151.2	138.2	130.3	125.2	124.1	121.2	122.5
80°	137.5	143.2	135.8	126.3	113.8	104.8	99.2	96.4	93.0	91.9	94.1
82.5°	98.7	101.3	97.5	91.1	81.9	76.0	72.2	68.9	68.2	68.4	68.4
85°	51.3	50.7	50.1	44.5	41.7	37.7	35.5	35.0	34.4	35.5	36.6
87.5°	21.7	21.7	20.8	18.5	16.6	14.6	13.5	12.5	13.5	14.6	15.7
90°	22.7	20.5	18.3	15.7	12.7	9.7	6.7	3.7	6.7	9.7	12.7
92.5°	21.7	19.5	17.3	16.1	16.0	15.8	15.7	15.5	15.7	15.8	16.0
95°	26.5	26.3	25.9	30.5	39.8	49.1	58.3	67.6	58.3	49.1	39.8
97.5°	93.4	123.9	154.4	166.8	161.0	155.2	149.4	143.6	149.4	155.2	161.0
100°	129.5	167.2	204.9	221.3	216.4	211.5	206.6	201.6	206.6	211.5	216.4
102.5°	270.5	275.4	280.3	281.0	277.4	273.8	270.2	266.5	270.2	273.8	277.4
105°	380.9	379.5	378.1	376.7	375.0	373.3	371.7	370.1	371.7	373.3	375.0
107.5°	474.6	472.7	470.8	469.5	468.7	467.9	467.1	466.2	467.1	467.9	468.7
110°	538.9	537.3	535.7	534.4	533.6	532.8	532.0	531.2	532.0	532.8	533.6



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	602.7	601.9	601.1	600.0	598.5	597.0	595.6	594.1	595.6	597.0	598.5
115°	694.0	694.2	694.6	694.2	693.4	692.6	691.8	691.0	691.8	692.6	693.4
117.5°	784.7	784.1	783.5	782.7	781.5	780.5	779.3	778.3	779.3	780.5	781.5
120°	841.6	841.8	842.0	841.6	840.6	839.5	838.4	837.3	838.4	839.5	840.6
122.5°	896.3	895.9	895.5	895.0	894.3	893.6	893.0	892.3	893.0	893.6	894.3
125°	974.9	975.4	975.9	975.7	974.6	973.5	972.4	971.3	972.4	973.5	974.6
127.5°	1050.4	1049.2	1047.9	1047.2	1046.8	1046.6	1046.4	1046.0	1046.4	1046.6	1046.8
130°	1097.6	1096.7	1095.9	1095.4	1095.1	1094.8	1094.5	1094.3	1094.5	1094.8	1095.1
132.5°	1143.3	1142.3	1141.3	1140.5	1140.0	1139.5	1139.0	1138.5	1139.0	1139.5	1140.0
135°	1206.4	1205.3	1204.2	1203.8	1204.1	1204.4	1204.6	1204.9	1204.6	1204.4	1204.1
137.5°	1267.2	1266.0	1264.8	1264.1	1264.0	1263.9	1263.8	1263.7	1263.8	1263.9	1264.0
140°	1305.9	1305.3	1304.8	1304.2	1303.7	1303.2	1302.6	1302.0	1302.6	1303.2	1303.7
142.5°	1341.7	1341.4	1341.1	1340.4	1339.5	1338.5	1337.4	1336.4	1337.4	1338.5	1339.5
145°	1393.0	1393.0	1393.0	1392.6	1391.8	1391.0	1390.2	1389.4	1390.2	1391.0	1391.8
147.5°	1437.6	1437.9	1438.1	1437.5	1436.0	1434.4	1432.9	1431.4	1432.9	1434.4	1436.0
150°	1466.2	1466.4	1466.6	1466.2	1465.2	1464.0	1463.0	1461.9	1463.0	1464.0	1465.2
152.5°	1490.1	1490.6	1491.2	1490.9	1490.0	1489.2	1488.3	1487.4	1488.3	1489.2	1490.0
155°	1522.6	1523.4	1524.2	1524.4	1524.2	1523.9	1523.6	1523.4	1523.6	1523.9	1524.2
157.5°	1550.5	1551.4	1552.4	1553.0	1553.1	1553.3	1553.5	1553.6	1553.5	1553.3	1553.1
160°	1566.9	1567.2	1567.5	1568.1	1568.9	1569.7	1570.5	1571.3	1570.5	1569.7	1568.9
162.5°	1581.7	1581.9	1582.3	1582.9	1584.0	1584.9	1586.0	1587.1	1586.0	1584.9	1584.0
165°	1600.8	1600.8	1600.8	1601.5	1602.9	1604.3	1605.6	1607.0	1605.6	1604.3	1602.9
167.5°	1615.9	1616.1	1616.2	1617.0	1618.5	1619.8	1621.3	1622.7	1621.3	1619.8	1618.5
170°	1624.9	1624.6	1624.3	1625.0	1626.6	1628.2	1629.9	1631.6	1629.9	1628.2	1626.6
172.5°	1630.8	1630.5	1630.2	1630.9	1632.6	1634.2	1635.8	1637.4	1635.8	1634.2	1632.6
175°	1637.1	1636.9	1636.6	1637.3	1638.9	1640.5	1642.2	1643.8	1642.2	1640.5	1638.9
177.5°	1641.0	1640.5	1640.1	1640.7	1642.2	1643.7	1645.3	1646.8	1645.3	1643.7	1642.2
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1334.4	1330.4	1324.5	1316.4	1309.6	1302.4	1300.6	1297.9	1303.3	1298.8	1297.5
5°	1290.7	1278.9	1263.6	1246.2	1236.0	1221.4	1218.5	1212.9	1207.3	1206.7	1201.1
7.5°	1244.4	1227.0	1207.1	1189.3	1172.8	1156.7	1146.3	1144.0	1135.7	1130.8	1125.2
10°	1214.6	1193.2	1170.1	1153.2	1134.0	1117.1	1105.3	1098.5	1092.8	1086.6	1081.0
12.5°	1179.4	1156.7	1137.6	1119.3	1096.6	1083.7	1064.2	1052.5	1051.4	1051.5	1036.8
15°	1138.5	1116.0	1086.6	1060.7	1048.3	1023.5	1012.8	999.3	990.8	982.4	975.7
17.5°	1091.8	1063.6	1040.8	1011.1	987.3	967.6	953.6	945.4	932.7	920.7	912.1
20°	1062.4	1032.6	1008.3	976.7	950.8	926.6	914.8	903.5	893.9	883.8	874.2
22.5°	1032.7	1001.4	971.8	941.1	917.0	891.4	880.0	864.7	855.6	849.9	840.3
25°	985.8	951.9	918.1	888.8	864.1	841.5	826.3	814.4	804.3	799.8	793.6
27.5°	934.8	901.2	868.5	835.3	807.1	790.8	778.6	769.6	763.9	757.8	755.0
30°	902.4	867.4	832.5	801.4	775.5	759.2	748.0	741.8	737.2	734.4	731.6
32.5°	869.4	834.9	798.2	769.9	746.7	732.1	723.6	717.4	715.1	714.1	713.1
35°	816.7	781.7	748.0	722.6	700.6	695.0	687.6	684.2	683.1	687.1	688.8
37.5°	765.6	733.2	702.1	677.4	663.1	654.8	652.3	652.5	656.5	660.0	664.1
40°	732.7	701.2	671.8	650.4	636.9	631.9	630.7	633.5	638.1	642.0	646.5
42.5°	700.7	669.6	642.9	622.9	613.4	608.8	609.5	612.3	618.6	623.5	630.2
45°	651.0	625.1	599.2	582.8	574.9	576.0	576.0	581.1	587.3	594.6	601.9
47.5°	604.2	578.0	556.8	543.0	538.9	537.9	541.1	547.7	556.6	565.7	575.9
50°	572.7	547.8	529.2	516.8	512.3	514.0	518.5	524.7	535.4	546.7	557.4
52.5°	540.6	518.0	500.8	489.3	486.2	489.3	493.7	503.5	512.9	525.1	538.0
55°	490.9	471.7	458.2	449.8	448.7	450.4	455.4	466.1	479.6	494.9	507.3
57.5°	441.4	425.4	413.0	407.2	407.7	409.3	417.7	430.4	444.8	461.1	477.0
60°	408.1	393.4	383.3	378.8	379.3	382.7	392.8	404.7	422.7	438.5	455.4
62.5°	376.5	363.6	353.9	349.9	349.1	356.5	366.2	378.5	396.6	414.2	432.4
65°	325.8	315.6	307.8	305.5	307.2	312.8	325.2	341.5	356.8	375.4	394.5
67.5°	276.1	267.8	262.4	263.4	265.5	273.8	284.2	298.2	315.5	334.8	353.8
70°	244.6	236.7	232.2	232.8	236.2	246.3	255.4	269.4	288.0	307.8	323.5
72.5°	212.1	206.9	202.9	205.3	208.6	215.6	226.9	241.0	257.4	275.7	292.4
75°	162.9	162.9	160.6	162.3	167.4	174.1	182.6	197.3	213.6	228.3	241.8
77.5°	120.8	119.6	121.1	123.1	126.0	134.0	143.7	154.2	166.5	181.2	192.3
80°	92.5	93.0	95.8	99.2	100.4	106.6	116.7	126.3	135.8	148.2	158.9
82.5°	69.5	70.0	71.5	75.7	76.9	83.6	90.1	99.6	108.4	116.7	125.6
85°	37.7	37.7	40.6	42.2	45.1	49.6	53.6	59.2	67.1	72.7	81.1
87.5°	17.6	18.1	20.3	21.7	23.5	26.2	27.4	32.7	34.8	37.4	41.7
90°	15.7	18.3	20.5	22.7	24.9	27.1	28.7	30.3	32.0	33.6	34.7
92.5°	16.1	17.3	19.5	21.7	23.9	26.1	27.7	29.4	31.0	32.6	33.5
95°	30.5	25.9	26.3	26.5	26.7	27.1	28.7	30.3	32.0	33.6	34.6
97.5°	166.8	154.4	123.9	93.4	62.9	32.4	32.6	32.8	32.9	33.1	33.3
100°	221.3	204.9	167.2	129.5	91.8	54.1	49.5	44.8	40.2	35.5	33.3
102.5°	281.0	280.3	275.4	270.5	265.5	260.7	210.5	160.5	110.3	60.3	35.2
105°	376.7	378.1	379.5	380.9	382.2	383.6	386.0	388.5	391.0	393.5	389.7
107.5°	469.5	470.8	472.7	474.6	476.4	478.3	479.5	480.7	481.9	483.1	484.2
110°	534.4	535.7	537.3	538.9	540.5	542.2	542.7	543.3	543.9	544.4	545.1



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	600.0	601.1	601.9	602.7	603.4	604.2	604.1	604.0	603.8	603.7	604.2
115°	694.2	694.6	694.2	694.0	693.7	693.4	694.0	694.6	695.0	695.6	695.9
117.5°	782.7	783.5	784.1	784.7	785.3	785.9	785.8	785.7	785.5	785.5	785.4
120°	841.6	842.0	841.8	841.6	841.2	841.0	841.6	842.0	842.6	843.2	843.2
122.5°	895.0	895.5	895.9	896.3	896.7	897.1	897.4	897.7	898.1	898.4	898.2
125°	975.7	975.9	975.4	974.9	974.3	973.8	974.6	975.4	976.2	977.1	977.6
127.5°	1047.2	1047.9	1049.2	1050.4	1051.7	1053.0	1052.8	1052.6	1052.5	1052.3	1052.1
130°	1095.4	1095.9	1096.7	1097.6	1098.4	1099.2	1099.4	1099.8	1100.0	1100.2	1100.4
132.5°	1140.5	1141.3	1142.3	1143.3	1144.4	1145.4	1145.7	1146.0	1146.2	1146.5	1146.6
135°	1203.8	1204.2	1205.3	1206.4	1207.5	1208.6	1209.2	1209.7	1210.2	1210.8	1211.4
137.5°	1264.1	1264.8	1266.0	1267.2	1268.4	1269.6	1270.2	1270.8	1271.4	1272.0	1272.2
140°	1304.2	1304.8	1305.3	1305.9	1306.4	1306.9	1307.8	1308.6	1309.5	1310.3	1310.8
142.5°	1340.4	1341.1	1341.4	1341.7	1342.1	1342.4	1343.0	1343.6	1344.2	1344.8	1345.1
145°	1392.6	1393.0	1393.0	1393.0	1393.0	1393.0	1393.3	1393.6	1393.8	1394.1	1394.6
147.5°	1437.5	1438.1	1437.9	1437.6	1437.3	1437.0	1437.3	1437.5	1437.7	1437.9	1438.2
150°	1466.2	1466.6	1466.4	1466.2	1465.8	1465.6	1465.6	1465.6	1465.6	1465.6	1465.7
152.5°	1490.9	1491.2	1490.6	1490.1	1489.6	1489.1	1489.6	1490.0	1490.4	1490.9	1491.0
155°	1524.4	1524.2	1523.4	1522.6	1521.8	1520.9	1522.0	1523.1	1524.2	1525.3	1525.4
157.5°	1553.0	1552.4	1551.4	1550.5	1549.6	1548.7	1550.1	1551.5	1553.0	1554.4	1554.4
160°	1568.1	1567.5	1567.2	1566.9	1566.7	1566.4	1568.1	1569.7	1571.3	1573.0	1573.0
162.5°	1582.9	1582.3	1581.9	1581.7	1581.4	1581.1	1582.7	1584.5	1586.1	1587.7	1587.6
165°	1601.5	1600.8	1600.8	1600.8	1600.8	1600.8	1603.0	1605.2	1607.4	1609.6	1609.4
167.5°	1617.0	1616.2	1616.1	1615.9	1615.8	1615.6	1618.0	1620.4	1622.8	1625.2	1625.1
170°	1625.0	1624.3	1624.6	1624.9	1625.1	1625.4	1627.6	1629.8	1632.0	1634.2	1633.9
172.5°	1630.9	1630.2	1630.5	1630.8	1631.0	1631.3	1633.5	1635.7	1637.9	1640.1	1639.6
175°	1637.3	1636.6	1636.9	1637.1	1637.4	1637.7	1640.1	1642.6	1645.1	1647.6	1647.1
177.5°	1640.7	1640.1	1640.5	1641.0	1641.4	1641.8	1643.6	1645.4	1647.1	1648.9	1648.5
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1296.6	1295.7	1292.5	1292.1	1292.5	1295.7	1296.6	1297.5	1298.8	1303.3	1297.9
5°	1197.7	1194.9	1193.2	1199.4	1193.2	1194.9	1197.7	1201.1	1206.7	1207.3	1212.9
7.5°	1123.2	1121.0	1116.0	1114.4	1116.0	1121.0	1123.2	1125.2	1130.8	1135.7	1144.0
10°	1075.4	1073.1	1068.6	1067.5	1068.6	1073.1	1075.4	1081.0	1086.6	1092.8	1098.5
12.5°	1029.4	1024.9	1024.0	1025.1	1024.0	1024.9	1029.4	1036.8	1051.5	1051.4	1052.5
15°	968.3	966.0	959.9	961.6	959.9	966.0	968.3	975.7	982.4	990.8	999.3
17.5°	908.1	905.4	897.9	904.5	897.9	905.4	908.1	912.1	920.7	932.7	945.4
20°	870.3	865.7	861.8	861.2	861.8	865.7	870.3	874.2	883.8	893.9	903.5
22.5°	834.1	830.1	829.7	826.1	829.7	830.1	834.1	840.3	849.9	855.6	864.7
25°	789.0	785.1	784.0	781.2	784.0	785.1	789.0	793.6	799.8	804.3	814.4
27.5°	754.5	752.5	750.5	751.4	750.5	752.5	754.5	755.0	757.8	763.9	769.6
30°	733.3	732.7	731.6	731.6	731.6	732.7	733.3	731.6	734.4	737.2	741.8
32.5°	715.7	715.6	716.2	716.2	716.2	715.6	715.7	713.1	714.1	715.1	717.4
35°	691.0	692.7	693.8	692.1	693.8	692.7	691.0	688.8	687.1	683.1	684.2
37.5°	668.7	670.3	672.0	673.8	672.0	670.3	668.7	664.1	660.0	656.5	652.5
40°	651.5	655.5	656.6	659.4	656.6	655.5	651.5	646.5	642.0	638.1	633.5
42.5°	635.3	639.7	642.6	643.2	642.6	639.7	635.3	630.2	623.5	618.6	612.3
45°	610.4	614.9	618.9	618.9	618.9	614.9	610.4	601.9	594.6	587.3	581.1
47.5°	584.6	591.1	595.1	596.1	595.1	591.1	584.6	575.9	565.7	556.6	547.7
50°	567.0	574.9	578.9	581.6	578.9	574.9	567.0	557.4	546.7	535.4	524.7
52.5°	549.8	557.7	563.0	564.5	563.0	557.7	549.8	538.0	525.1	512.9	503.5
55°	520.2	531.5	537.7	540.0	537.7	531.5	520.2	507.3	494.9	479.6	466.1
57.5°	492.3	502.6	509.9	511.5	509.9	502.6	492.3	477.0	461.1	444.8	430.4
60°	470.6	481.9	490.9	492.6	490.9	481.9	470.6	455.4	438.5	422.7	404.7
62.5°	448.5	460.2	468.4	472.8	468.4	460.2	448.5	432.4	414.2	396.6	378.5
65°	410.3	422.2	430.1	431.7	430.1	422.2	410.3	394.5	375.4	356.8	341.5
67.5°	368.6	380.4	385.6	388.9	385.6	380.4	368.6	353.8	334.8	315.5	298.2
70°	339.3	348.9	354.5	357.3	354.5	348.9	339.3	323.5	307.8	288.0	269.4
72.5°	305.9	315.9	322.5	323.1	322.5	315.9	305.9	292.4	275.7	257.4	241.0
75°	254.8	263.7	267.2	267.2	267.2	263.7	254.8	241.8	228.3	213.6	197.3
77.5°	201.6	206.3	210.6	211.5	210.6	206.3	201.6	192.3	181.2	166.5	154.2
80°	167.4	170.2	173.6	173.6	173.6	170.2	167.4	158.9	148.2	135.8	126.3
82.5°	132.2	134.6	137.9	137.5	137.9	134.6	132.2	125.6	116.7	108.4	99.6
85°	80.1	85.1	84.5	83.4	84.5	85.1	80.1	81.1	72.7	67.1	59.2
87.5°	43.1	43.7	45.2	46.1	45.2	43.7	43.1	41.7	37.4	34.8	32.7
90°	35.2	35.8	36.4	36.9	36.4	35.8	35.2	34.7	33.6	32.0	30.3
92.5°	33.6	33.8	33.8	33.9	33.8	33.8	33.6	33.5	32.6	31.0	29.4
95°	34.8	35.1	35.4	35.6	35.4	35.1	34.8	34.6	33.6	32.0	30.3
97.5°	33.6	33.9	34.2	34.4	34.2	33.9	33.6	33.3	33.1	32.9	32.8
100°	33.6	33.9	34.2	34.4	34.2	33.9	33.6	33.3	35.5	40.2	44.8
102.5°	35.2	35.3	35.4	35.4	35.4	35.3	35.2	35.2	60.3	110.3	160.5
105°	379.9	370.1	360.3	350.4	360.3	370.1	379.9	389.7	393.5	391.0	388.5
107.5°	485.3	486.2	487.3	488.4	487.3	486.2	485.3	484.2	483.1	481.9	480.7
110°	545.9	546.7	547.6	548.4	547.6	546.7	545.9	545.1	544.4	543.9	543.3



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	605.3	606.3	607.3	608.4	607.3	606.3	605.3	604.2	603.7	603.8	604.0
115°	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.9	695.6	695.0	694.6
117.5°	785.2	785.1	785.1	784.9	785.1	785.1	785.2	785.4	785.5	785.5	785.7
120°	842.6	842.0	841.6	841.0	841.6	842.0	842.6	843.2	843.2	842.6	842.0
122.5°	897.7	897.2	896.6	896.1	896.6	897.2	897.7	898.2	898.4	898.1	897.7
125°	977.9	978.1	978.4	978.7	978.4	978.1	977.9	977.6	977.1	976.2	975.4
127.5°	1051.9	1051.7	1051.4	1051.2	1051.4	1051.7	1051.9	1052.1	1052.3	1052.5	1052.6
130°	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.4	1100.2	1100.0	1099.8
132.5°	1146.3	1146.1	1145.9	1145.7	1145.9	1146.1	1146.3	1146.6	1146.5	1146.2	1146.0
135°	1211.9	1212.4	1213.0	1213.5	1213.0	1212.4	1211.9	1211.4	1210.8	1210.2	1209.7
137.5°	1272.0	1271.9	1271.7	1271.5	1271.7	1271.9	1272.0	1272.2	1272.0	1271.4	1270.8
140°	1311.1	1311.3	1311.6	1311.9	1311.6	1311.3	1311.1	1310.8	1310.3	1309.5	1308.6
142.5°	1345.2	1345.2	1345.2	1345.3	1345.2	1345.2	1345.2	1345.1	1344.8	1344.2	1343.6
145°	1395.1	1395.6	1396.2	1396.7	1396.2	1395.6	1395.1	1394.6	1394.1	1393.8	1393.6
147.5°	1438.4	1438.7	1439.0	1439.2	1439.0	1438.7	1438.4	1438.2	1437.9	1437.7	1437.5
150°	1466.0	1466.2	1466.6	1466.8	1466.6	1466.2	1466.0	1465.7	1465.6	1465.6	1465.6
152.5°	1490.9	1490.7	1490.5	1490.4	1490.5	1490.7	1490.9	1491.0	1490.9	1490.4	1490.0
155°	1524.6	1523.8	1523.0	1522.2	1523.0	1523.8	1524.6	1525.4	1525.3	1524.2	1523.1
157.5°	1553.0	1551.5	1550.1	1548.7	1550.1	1551.5	1553.0	1554.4	1554.4	1553.0	1551.5
160°	1571.3	1569.7	1568.1	1566.4	1568.1	1569.7	1571.3	1573.0	1573.0	1571.3	1569.7
162.5°	1585.8	1583.9	1582.0	1580.1	1582.0	1583.9	1585.8	1587.6	1587.7	1586.1	1584.5
165°	1607.0	1604.5	1602.1	1599.6	1602.1	1604.5	1607.0	1609.4	1609.6	1607.4	1605.2
167.5°	1622.3	1619.6	1616.8	1614.1	1616.8	1619.6	1622.3	1625.1	1625.2	1622.8	1620.4
170°	1631.2	1628.4	1625.7	1622.9	1625.7	1628.4	1631.2	1633.9	1634.2	1632.0	1629.8
172.5°	1636.7	1633.8	1630.8	1627.8	1630.8	1633.8	1636.7	1639.6	1640.1	1637.9	1635.7
175°	1643.8	1640.5	1637.3	1634.0	1637.3	1640.5	1643.8	1647.1	1647.6	1645.1	1642.6
177.5°	1645.8	1643.2	1640.5	1637.9	1640.5	1643.2	1645.8	1648.5	1648.9	1647.1	1645.4
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1300.6	1302.4	1309.6	1316.4	1324.5	1330.4	1334.4	1339.0	1348.4	1356.1	1363.3
5°	1218.5	1221.4	1236.0	1246.2	1263.6	1278.9	1290.7	1303.7	1318.9	1339.7	1358.9
7.5°	1146.3	1156.7	1172.8	1189.3	1207.1	1227.0	1244.4	1263.9	1290.1	1318.7	1348.3
10°	1105.3	1117.1	1134.0	1153.2	1170.1	1193.2	1214.6	1237.7	1267.5	1302.5	1337.5
12.5°	1064.2	1083.7	1096.6	1119.3	1137.6	1156.7	1179.4	1209.7	1244.6	1281.3	1323.5
15°	1012.8	1023.5	1048.3	1060.7	1086.6	1116.0	1138.5	1169.0	1202.7	1251.2	1298.6
17.5°	953.6	967.6	987.3	1011.1	1040.8	1063.6	1091.8	1123.1	1165.7	1213.8	1273.1
20°	914.8	926.6	950.8	976.7	1008.3	1032.6	1062.4	1092.8	1136.9	1188.1	1250.1
22.5°	880.0	891.4	917.0	941.1	971.8	1001.4	1032.7	1068.0	1110.2	1164.2	1227.6
25°	826.3	841.5	864.1	888.8	918.1	951.9	985.8	1017.3	1062.4	1119.3	1187.0
27.5°	778.6	790.8	807.1	835.3	868.5	901.2	934.8	974.5	1017.8	1078.0	1148.2
30°	748.0	759.2	775.5	801.4	832.5	867.4	902.4	940.7	985.8	1045.5	1117.1
32.5°	723.6	732.1	746.7	769.9	798.2	834.9	869.4	909.1	956.4	1015.3	1085.1
35°	687.6	695.0	700.6	722.6	748.0	781.7	816.7	859.0	904.6	960.4	1030.3
37.5°	652.3	654.8	663.1	677.4	702.1	733.2	765.6	807.2	854.0	910.7	973.7
40°	630.7	631.9	636.9	650.4	671.8	701.2	732.7	773.9	818.4	872.0	934.5
42.5°	609.5	608.8	613.4	622.9	642.9	669.6	700.7	738.3	782.8	832.3	891.2
45°	576.0	576.0	574.9	582.8	599.2	625.1	651.0	687.1	724.2	772.7	822.3
47.5°	541.1	537.9	538.9	543.0	556.8	578.0	604.2	633.7	666.5	707.6	751.1
50°	518.5	514.0	512.3	516.8	529.2	547.8	572.7	598.6	629.6	665.6	702.9
52.5°	493.7	489.3	486.2	489.3	500.8	518.0	540.6	563.4	591.3	620.5	652.8
55°	455.4	450.4	448.7	449.8	458.2	471.7	490.9	511.8	532.6	556.8	579.4
57.5°	417.7	409.3	407.7	407.2	413.0	425.4	441.4	459.5	474.7	489.3	513.3
60°	392.8	382.7	379.3	378.8	383.3	393.4	408.1	426.1	436.8	446.9	467.8
62.5°	366.2	356.5	349.1	349.9	353.9	363.6	376.5	389.6	396.6	407.7	421.8
65°	325.2	312.8	307.2	305.5	307.8	315.6	325.8	334.2	342.1	346.7	360.1
67.5°	284.2	273.8	265.5	263.4	262.4	267.8	276.1	281.3	286.9	290.8	298.8
70°	255.4	246.3	236.2	232.8	232.2	236.7	244.6	245.2	253.1	254.8	263.2
72.5°	226.9	215.6	208.6	205.3	202.9	206.9	212.1	213.6	217.9	220.9	225.3
75°	182.6	174.1	167.4	162.3	160.6	162.9	162.9	165.7	168.5	170.2	175.3
77.5°	143.7	134.0	126.0	123.1	121.1	119.6	120.8	122.5	121.2	124.1	125.2
80°	116.7	106.6	100.4	99.2	95.8	93.0	92.5	94.1	91.9	93.0	96.4
82.5°	90.1	83.6	76.9	75.7	71.5	70.0	69.5	68.4	68.4	68.2	68.9
85°	53.6	49.6	45.1	42.2	40.6	37.7	37.7	36.6	35.5	34.4	35.0
87.5°	27.4	26.2	23.5	21.7	20.3	18.1	17.6	15.7	14.6	13.5	12.5
90°	28.7	27.1	24.9	22.7	20.5	18.3	15.7	12.7	9.7	6.7	3.7
92.5°	27.7	26.1	23.9	21.7	19.5	17.3	16.1	16.0	15.8	15.7	15.5
95°	28.7	27.1	26.7	26.5	26.3	25.9	30.5	39.8	49.1	58.3	67.6
97.5°	32.6	32.4	62.9	93.4	123.9	154.4	166.8	161.0	155.2	149.4	143.6
100°	49.5	54.1	91.8	129.5	167.2	204.9	221.3	216.4	211.5	206.6	201.6
102.5°	210.5	260.7	265.5	270.5	275.4	280.3	281.0	277.4	273.8	270.2	266.5
105°	386.0	383.6	382.2	380.9	379.5	378.1	376.7	375.0	373.3	371.7	370.1
107.5°	479.5	478.3	476.4	474.6	472.7	470.8	469.5	468.7	467.9	467.1	466.2
110°	542.7	542.2	540.5	538.9	537.3	535.7	534.4	533.6	532.8	532.0	531.2



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	604.1	604.2	603.4	602.7	601.9	601.1	600.0	598.5	597.0	595.6	594.1
115°	694.0	693.4	693.7	694.0	694.2	694.6	694.2	693.4	692.6	691.8	691.0
117.5°	785.8	785.9	785.3	784.7	784.1	783.5	782.7	781.5	780.5	779.3	778.3
120°	841.6	841.0	841.2	841.6	841.8	842.0	841.6	840.6	839.5	838.4	837.3
122.5°	897.4	897.1	896.7	896.3	895.9	895.5	895.0	894.3	893.6	893.0	892.3
125°	974.6	973.8	974.3	974.9	975.4	975.9	975.7	974.6	973.5	972.4	971.3
127.5°	1052.8	1053.0	1051.7	1050.4	1049.2	1047.9	1047.2	1046.8	1046.6	1046.4	1046.0
130°	1099.4	1099.2	1098.4	1097.6	1096.7	1095.9	1095.4	1095.1	1094.8	1094.5	1094.3
132.5°	1145.7	1145.4	1144.4	1143.3	1142.3	1141.3	1140.5	1140.0	1139.5	1139.0	1138.5
135°	1209.2	1208.6	1207.5	1206.4	1205.3	1204.2	1203.8	1204.1	1204.4	1204.6	1204.9
137.5°	1270.2	1269.6	1268.4	1267.2	1266.0	1264.8	1264.1	1264.0	1263.9	1263.8	1263.7
140°	1307.8	1306.9	1306.4	1305.9	1305.3	1304.8	1304.2	1303.7	1303.2	1302.6	1302.0
142.5°	1343.0	1342.4	1342.1	1341.7	1341.4	1341.1	1340.4	1339.5	1338.5	1337.4	1336.4
145°	1393.3	1393.0	1393.0	1393.0	1393.0	1393.0	1392.6	1391.8	1391.0	1390.2	1389.4
147.5°	1437.3	1437.0	1437.3	1437.6	1437.9	1438.1	1437.5	1436.0	1434.4	1432.9	1431.4
150°	1465.6	1465.6	1465.8	1466.2	1466.4	1466.6	1466.2	1465.2	1464.0	1463.0	1461.9
152.5°	1489.6	1489.1	1489.6	1490.1	1490.6	1491.2	1490.9	1490.0	1489.2	1488.3	1487.4
155°	1522.0	1520.9	1521.8	1522.6	1523.4	1524.2	1524.4	1524.2	1523.9	1523.6	1523.4
157.5°	1550.1	1548.7	1549.6	1550.5	1551.4	1552.4	1553.0	1553.1	1553.3	1553.5	1553.6
160°	1568.1	1566.4	1566.7	1566.9	1567.2	1567.5	1568.1	1568.9	1569.7	1570.5	1571.3
162.5°	1582.7	1581.1	1581.4	1581.7	1581.9	1582.3	1582.9	1584.0	1584.9	1586.0	1587.1
165°	1603.0	1600.8	1600.8	1600.8	1600.8	1600.8	1601.5	1602.9	1604.3	1605.6	1607.0
167.5°	1618.0	1615.6	1615.8	1615.9	1616.1	1616.2	1617.0	1618.5	1619.8	1621.3	1622.7
170°	1627.6	1625.4	1625.1	1624.9	1624.6	1624.3	1625.0	1626.6	1628.2	1629.9	1631.6
172.5°	1633.5	1631.3	1631.0	1630.8	1630.5	1630.2	1630.9	1632.6	1634.2	1635.8	1637.4
175°	1640.1	1637.7	1637.4	1637.1	1636.9	1636.6	1637.3	1638.9	1640.5	1642.2	1643.8
177.5°	1643.6	1641.8	1641.4	1641.0	1640.5	1640.1	1640.7	1642.2	1643.7	1645.3	1646.8
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1369.6	1374.1	1380.0	1389.9	1393.5	1398.0	1404.4	1403.9	1405.7	1412.4	1426.9
5°	1374.7	1392.1	1409.1	1429.4	1450.7	1464.8	1484.0	1495.8	1507.7	1522.9	1548.8
7.5°	1376.7	1404.4	1435.4	1471.0	1502.8	1539.3	1567.7	1594.6	1618.9	1651.0	1681.9
10°	1373.5	1410.7	1450.7	1495.8	1543.8	1584.4	1621.0	1662.7	1698.2	1737.1	1772.1
12.5°	1367.7	1412.6	1466.1	1516.6	1572.6	1632.6	1678.2	1720.4	1767.7	1812.4	1866.3
15°	1354.4	1415.8	1478.4	1544.9	1619.8	1689.1	1755.1	1809.8	1860.5	1927.6	1998.1
17.5°	1337.5	1403.8	1482.6	1563.2	1641.5	1720.8	1802.4	1884.6	1948.6	2031.9	2087.0
20°	1321.7	1398.3	1479.5	1575.3	1653.7	1752.3	1833.4	1912.9	2000.8	2083.7	2149.6
22.5°	1299.6	1383.5	1469.6	1565.0	1668.1	1766.8	1860.5	1946.8	2034.7	2124.8	2204.7
25°	1271.5	1347.6	1449.6	1557.9	1660.4	1767.5	1875.2	1983.4	2078.0	2173.3	2247.7
27.5°	1223.8	1319.8	1414.8	1526.5	1640.5	1761.6	1876.7	1990.1	2089.2	2167.6	2213.7
30°	1199.4	1282.8	1385.9	1498.1	1621.5	1751.8	1871.8	1982.8	2075.3	2137.8	2156.4
32.5°	1163.4	1249.4	1350.3	1466.6	1597.2	1731.0	1856.0	1960.7	2037.8	2070.6	2048.2
35°	1109.8	1187.6	1289.6	1408.5	1544.3	1686.9	1810.4	1898.8	1938.3	1907.3	1830.1
37.5°	1045.5	1122.6	1225.1	1341.9	1482.5	1627.4	1739.0	1802.7	1789.6	1712.5	1597.4
40°	1000.5	1072.6	1170.1	1296.3	1433.3	1578.7	1676.7	1711.2	1675.1	1564.6	1442.3
42.5°	950.4	1020.8	1118.7	1240.4	1385.5	1519.6	1605.1	1607.9	1547.4	1415.4	1292.6
45°	874.2	941.3	1033.7	1160.5	1294.6	1420.9	1477.2	1449.6	1338.1	1210.6	1087.2
47.5°	799.0	857.1	948.3	1068.6	1196.0	1302.3	1330.2	1280.5	1161.6	1038.0	923.6
50°	744.0	802.6	888.3	1003.2	1126.1	1218.0	1231.5	1165.6	1048.9	924.3	834.7
52.5°	691.2	749.4	831.9	938.3	1050.8	1133.7	1134.1	1057.8	941.6	830.5	747.2
55°	613.8	666.2	740.6	835.8	936.2	1001.0	985.2	906.3	805.4	709.1	636.3
57.5°	539.2	584.8	653.4	732.8	821.2	874.7	848.5	772.5	682.4	600.7	545.6
60°	490.9	534.3	593.0	667.9	742.3	784.0	759.2	690.4	607.6	541.6	493.7
62.5°	444.0	480.6	537.0	602.1	671.1	702.0	679.9	612.0	540.4	480.8	441.9
65°	377.6	407.5	452.6	508.4	558.6	585.1	566.5	503.3	448.7	405.8	374.8
67.5°	315.6	339.0	373.1	417.8	460.5	474.8	457.9	413.9	367.6	333.3	311.4
70°	272.8	294.8	323.5	357.9	395.1	410.3	393.4	358.5	320.7	289.1	267.7
72.5°	235.4	252.4	276.6	306.1	335.2	350.3	338.8	305.2	273.4	249.9	231.6
75°	179.2	193.9	210.8	231.6	254.2	264.3	254.2	231.1	209.1	191.6	178.6
77.5°	130.3	138.2	151.2	166.8	180.9	188.7	179.9	164.2	150.8	138.8	132.5
80°	99.2	104.8	113.8	126.3	135.8	143.2	137.5	124.6	113.8	106.0	103.1
82.5°	72.2	76.0	81.9	91.1	97.5	101.3	98.7	89.4	85.0	78.0	75.2
85°	35.5	37.7	41.7	44.5	50.1	50.7	51.3	47.4	43.4	41.7	39.5
87.5°	13.5	14.6	16.6	18.5	20.8	21.7	21.7	22.1	20.7	20.6	19.2
90°	6.7	9.7	12.7	15.7	18.3	20.5	22.7	24.9	27.1	28.7	30.3
92.5°	15.7	15.8	16.0	16.1	17.3	19.5	21.7	23.9	26.1	27.7	29.4
95°	58.3	49.1	39.8	30.5	25.9	26.3	26.5	26.7	27.1	28.7	30.3
97.5°	149.4	155.2	161.0	166.8	154.4	123.9	93.4	62.9	32.4	32.6	32.8
100°	206.6	211.5	216.4	221.3	204.9	167.2	129.5	91.8	54.1	49.5	44.8
102.5°	270.2	273.8	277.4	281.0	280.3	275.4	270.5	265.5	260.7	210.5	160.5
105°	371.7	373.3	375.0	376.7	378.1	379.5	380.9	382.2	383.6	386.0	388.5
107.5°	467.1	467.9	468.7	469.5	470.8	472.7	474.6	476.4	478.3	479.5	480.7
110°	532.0	532.8	533.6	534.4	535.7	537.3	538.9	540.5	542.2	542.7	543.3



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	595.6	597.0	598.5	600.0	601.1	601.9	602.7	603.4	604.2	604.1	604.0
115°	691.8	692.6	693.4	694.2	694.6	694.2	694.0	693.7	693.4	694.0	694.6
117.5°	779.3	780.5	781.5	782.7	783.5	784.1	784.7	785.3	785.9	785.8	785.7
120°	838.4	839.5	840.6	841.6	842.0	841.8	841.6	841.2	841.0	841.6	842.0
122.5°	893.0	893.6	894.3	895.0	895.5	895.9	896.3	896.7	897.1	897.4	897.7
125°	972.4	973.5	974.6	975.7	975.9	975.4	974.9	974.3	973.8	974.6	975.4
127.5°	1046.4	1046.6	1046.8	1047.2	1047.9	1049.2	1050.4	1051.7	1053.0	1052.8	1052.6
130°	1094.5	1094.8	1095.1	1095.4	1095.9	1096.7	1097.6	1098.4	1099.2	1099.4	1099.8
132.5°	1139.0	1139.5	1140.0	1140.5	1141.3	1142.3	1143.3	1144.4	1145.4	1145.7	1146.0
135°	1204.6	1204.4	1204.1	1203.8	1204.2	1205.3	1206.4	1207.5	1208.6	1209.2	1209.7
137.5°	1263.8	1263.9	1264.0	1264.1	1264.8	1266.0	1267.2	1268.4	1269.6	1270.2	1270.8
140°	1302.6	1303.2	1303.7	1304.2	1304.8	1305.3	1305.9	1306.4	1306.9	1307.8	1308.6
142.5°	1337.4	1338.5	1339.5	1340.4	1341.1	1341.4	1341.7	1342.1	1342.4	1343.0	1343.6
145°	1390.2	1391.0	1391.8	1392.6	1393.0	1393.0	1393.0	1393.0	1393.0	1393.3	1393.6
147.5°	1432.9	1434.4	1436.0	1437.5	1438.1	1437.9	1437.6	1437.3	1437.0	1437.3	1437.5
150°	1463.0	1464.0	1465.2	1466.2	1466.6	1466.4	1466.2	1465.8	1465.6	1465.6	1465.6
152.5°	1488.3	1489.2	1490.0	1490.9	1491.2	1490.6	1490.1	1489.6	1489.1	1489.6	1490.0
155°	1523.6	1523.9	1524.2	1524.4	1524.2	1523.4	1522.6	1521.8	1520.9	1522.0	1523.1
157.5°	1553.5	1553.3	1553.1	1553.0	1552.4	1551.4	1550.5	1549.6	1548.7	1550.1	1551.5
160°	1570.5	1569.7	1568.9	1568.1	1567.5	1567.2	1566.9	1566.7	1566.4	1568.1	1569.7
162.5°	1586.0	1584.9	1584.0	1582.9	1582.3	1581.9	1581.7	1581.4	1581.1	1582.7	1584.5
165°	1605.6	1604.3	1602.9	1601.5	1600.8	1600.8	1600.8	1600.8	1600.8	1603.0	1605.2
167.5°	1621.3	1619.8	1618.5	1617.0	1616.2	1616.1	1615.9	1615.8	1615.6	1618.0	1620.4
170°	1629.9	1628.2	1626.6	1625.0	1624.3	1624.6	1624.9	1625.1	1625.4	1627.6	1629.8
172.5°	1635.8	1634.2	1632.6	1630.9	1630.2	1630.5	1630.8	1631.0	1631.3	1633.5	1635.7
175°	1642.2	1640.5	1638.9	1637.3	1636.6	1636.9	1637.1	1637.4	1637.7	1640.1	1642.6
177.5°	1645.3	1643.7	1642.2	1640.7	1640.1	1640.5	1641.0	1641.4	1641.8	1643.6	1645.4
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1434.1	1435.0	1439.0	1442.2	1443.1	1447.6	1448.1
5°	1560.1	1569.7	1588.3	1590.0	1592.8	1607.4	1596.2
7.5°	1707.8	1732.1	1748.3	1762.7	1767.9	1774.3	1772.9
10°	1802.5	1838.5	1856.6	1885.3	1886.4	1893.8	1889.3
12.5°	1897.6	1939.5	1972.5	1977.8	2001.9	2005.6	2011.9
15°	2032.4	2077.0	2122.6	2138.9	2172.2	2180.1	2192.5
17.5°	2159.2	2204.7	2236.7	2278.9	2292.6	2310.9	2298.4
20°	2228.5	2278.2	2318.7	2352.0	2366.1	2376.2	2375.1
22.5°	2270.5	2320.5	2353.4	2378.6	2391.8	2396.1	2395.8
25°	2296.8	2325.5	2335.7	2345.2	2330.6	2325.5	2327.8
27.5°	2223.7	2216.3	2189.8	2155.1	2119.0	2090.3	2074.8
30°	2123.2	2079.2	2039.1	1969.3	1933.2	1911.8	1892.6
32.5°	1980.7	1911.0	1834.0	1770.0	1729.0	1697.2	1692.5
35°	1736.5	1631.7	1537.6	1459.2	1418.6	1384.2	1376.4
37.5°	1476.3	1367.4	1282.7	1213.7	1170.1	1145.8	1123.2
40°	1303.7	1210.1	1126.7	1068.0	1034.8	1017.3	1003.2
42.5°	1170.6	1085.2	1002.2	957.6	927.5	916.8	908.6
45°	986.9	907.4	849.9	816.1	798.7	780.6	772.2
47.5°	839.8	775.1	737.2	708.5	689.7	679.1	673.6
50°	756.4	703.4	669.6	647.6	630.7	622.2	617.8
52.5°	682.4	639.0	610.5	593.0	581.6	575.4	573.6
55°	587.8	554.6	536.5	521.4	512.9	507.3	505.0
57.5°	510.9	485.4	470.8	458.2	454.9	450.2	448.7
60°	460.5	440.8	428.4	419.9	417.1	411.5	412.5
62.5°	415.8	399.7	389.1	384.3	380.6	375.9	377.4
65°	351.7	339.9	334.2	329.7	325.2	322.4	324.7
67.5°	295.1	287.0	279.3	276.7	274.5	274.0	271.7
70°	258.1	251.4	244.6	243.0	243.0	240.7	240.1
72.5°	222.5	217.5	213.0	211.8	210.0	210.9	208.6
75°	171.9	168.0	166.2	164.6	164.0	164.0	162.3
77.5°	127.0	124.1	121.4	121.4	119.4	118.6	118.4
80°	96.4	95.2	93.0	93.0	91.9	92.5	91.3
82.5°	72.5	70.9	70.4	69.5	68.0	68.1	66.9
85°	38.9	37.2	36.6	35.0	33.8	35.0	33.8
87.5°	19.9	19.8	19.6	18.8	18.4	18.5	17.3
90°	32.0	33.6	34.7	35.2	35.8	36.4	36.9
92.5°	31.0	32.6	33.5	33.6	33.8	33.8	33.9
95°	32.0	33.6	34.6	34.8	35.1	35.4	35.6
97.5°	32.9	33.1	33.3	33.6	33.9	34.2	34.4
100°	40.2	35.5	33.3	33.6	33.9	34.2	34.4
102.5°	110.3	60.3	35.2	35.2	35.3	35.4	35.4
105°	391.0	393.5	389.7	379.9	370.1	360.3	350.4
107.5°	481.9	483.1	484.2	485.3	486.2	487.3	488.4
110°	543.9	544.4	545.1	545.9	546.7	547.6	548.4



TEST NUMBER: P332829-930

CATALOG NUMBER: S124DIW-S1020D1560U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	603.8	603.7	604.2	605.3	606.3	607.3	608.4
115°	695.0	695.6	695.9	695.9	695.9	695.9	695.9
117.5°	785.5	785.5	785.4	785.2	785.1	785.1	784.9
120°	842.6	843.2	843.2	842.6	842.0	841.6	841.0
122.5°	898.1	898.4	898.2	897.7	897.2	896.6	896.1
125°	976.2	977.1	977.6	977.9	978.1	978.4	978.7
127.5°	1052.5	1052.3	1052.1	1051.9	1051.7	1051.4	1051.2
130°	1100.0	1100.2	1100.4	1100.4	1100.4	1100.4	1100.4
132.5°	1146.2	1146.5	1146.6	1146.3	1146.1	1145.9	1145.7
135°	1210.2	1210.8	1211.4	1211.9	1212.4	1213.0	1213.5
137.5°	1271.4	1272.0	1272.2	1272.0	1271.9	1271.7	1271.5
140°	1309.5	1310.3	1310.8	1311.1	1311.3	1311.6	1311.9
142.5°	1344.2	1344.8	1345.1	1345.2	1345.2	1345.2	1345.3
145°	1393.8	1394.1	1394.6	1395.1	1395.6	1396.2	1396.7
147.5°	1437.7	1437.9	1438.2	1438.4	1438.7	1439.0	1439.2
150°	1465.6	1465.6	1465.7	1466.0	1466.2	1466.6	1466.8
152.5°	1490.4	1490.9	1491.0	1490.9	1490.7	1490.5	1490.4
155°	1524.2	1525.3	1525.4	1524.6	1523.8	1523.0	1522.2
157.5°	1553.0	1554.4	1554.4	1553.0	1551.5	1550.1	1548.7
160°	1571.3	1573.0	1573.0	1571.3	1569.7	1568.1	1566.4
162.5°	1586.1	1587.7	1587.6	1585.8	1583.9	1582.0	1580.1
165°	1607.4	1609.6	1609.4	1607.0	1604.5	1602.1	1599.6
167.5°	1622.8	1625.2	1625.1	1622.3	1619.6	1616.8	1614.1
170°	1632.0	1634.2	1633.9	1631.2	1628.4	1625.7	1622.9
172.5°	1637.9	1640.1	1639.6	1636.7	1633.8	1630.8	1627.8
175°	1645.1	1647.6	1647.1	1643.8	1640.5	1637.3	1634.0
177.5°	1647.1	1648.9	1648.5	1645.8	1643.2	1640.5	1637.9
180°	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8	1643.8

(END OF REPORT)