

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: P331729-830

Luminaire Tested: **SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331729-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

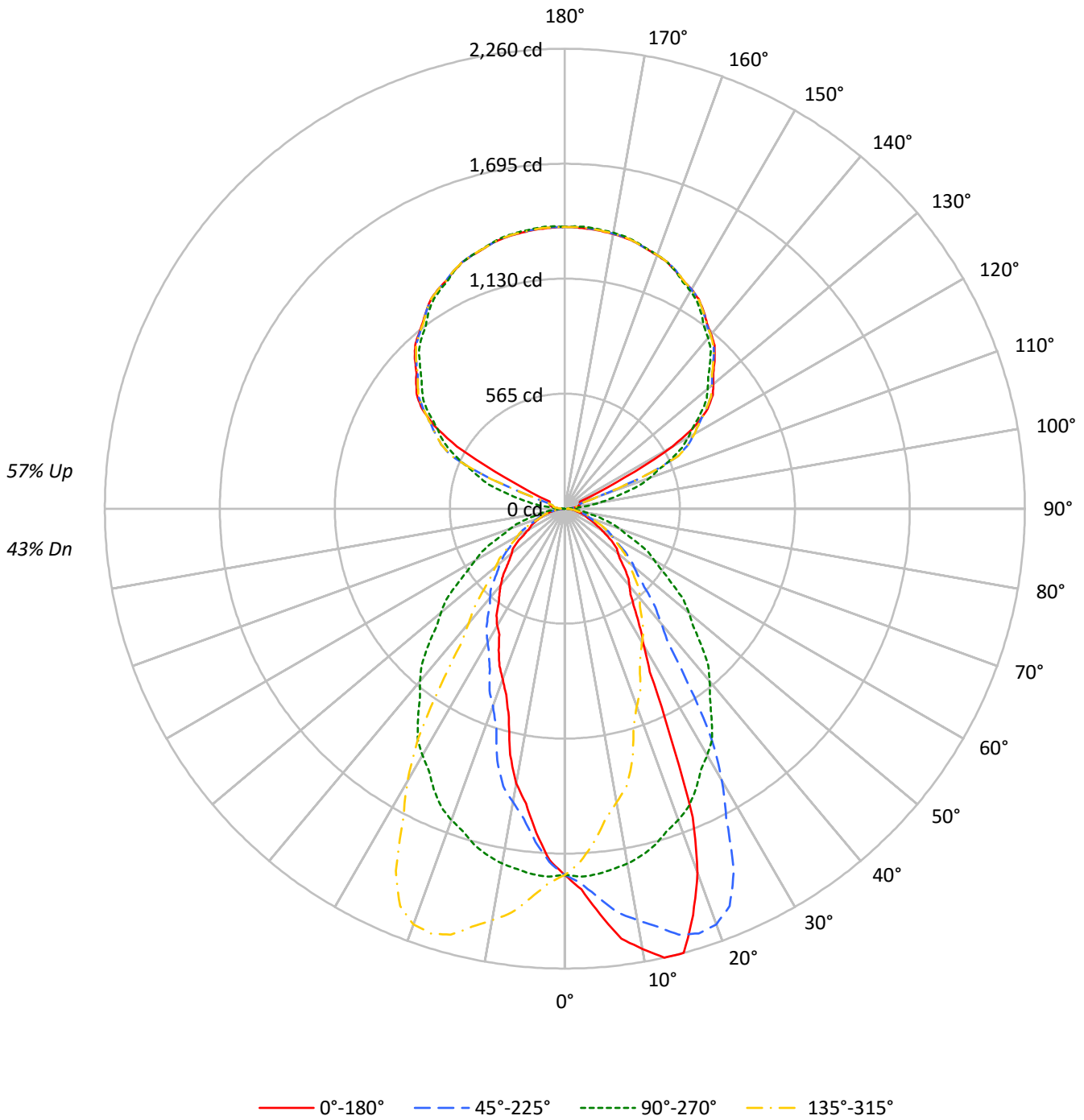
Lumens per Lamp: N/A
Luminaire Lumens: 7171.9 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P331729-830
CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

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	80	80	80	64	64	64	50	50	50	43
1	97	93	89	86	89	85	82	79	71	69	67	57	56	55	45	44	44	38
2	89	82	76	71	81	75	70	66	63	59	56	51	49	47	41	39	38	33
3	82	73	66	60	74	67	61	56	56	52	48	46	43	40	37	35	33	29
4	75	65	57	52	68	60	53	48	50	46	42	42	38	35	33	31	29	25
5	69	58	50	45	63	54	47	42	45	40	37	38	34	31	30	28	26	23
6	64	52	45	39	58	49	42	37	41	36	32	34	31	28	28	25	23	20
7	59	48	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18
8	55	43	36	31	51	40	34	29	35	29	26	29	25	22	24	21	19	17
9	51	40	33	28	47	37	31	26	32	27	23	27	23	20	22	19	17	15
10	48	37	30	25	44	34	28	24	29	25	21	25	21	19	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	29061	29061	29061	29061
5°	32456	29242	25929	29242
10°	36008	29037	22474	29037
15°	37778	28612	17708	28612
20°	32752	27981	15323	27981
25°	21480	27118	13682	27118
30°	14458	26071	12381	26071
35°	11710	24750	11168	24750
40°	10414	23317	10334	23317
45°	9423	21633	9225	21633
50°	8578	19964	8545	19964
55°	8062	18117	7958	18117
60°	6746	16417	6665	16417
65°	5685	14907	6449	14907
70°	5254	13312	6080	13312
75°	4916	11591	5614	11591
80°	4537	9530	5002	9530
85°	4168	7521	4409	7521



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.6	2.4
10°-20°	475.4	6.6
20°-30°	612.6	8.5
30°-40°	582.2	8.1
40°-50°	498.7	7.0
50°-60°	379.8	5.3
60°-70°	240.1	3.3
70°-80°	119.9	1.7
80°-90°	34.6	0.5
90°-100°	46.2	0.6
100°-110°	169.4	2.4
110°-120°	452.8	6.3
120°-130°	747.4	10.4
130°-140°	794.9	11.1
140°-150°	738.8	10.3
150°-160°	594.0	8.3
160°-170°	382.8	5.3
170°-180°	131.8	1.8
0°-30°	1258.6	17.5
0°-40°	1840.8	25.7
0°-60°	2719.4	37.9
0°-90°	3114.0	43.4
90°-120°	668.4	9.3
90°-150°	2949.4	41.1
90°-180°	4058.0	56.6
0°-180°	7171.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1800	1800	1800	1800	1800	
5°	2002	1804	1600	1804	2002	198
15°	2260	1712	1059	1712	2260	610
25°	1206	1522	768	1522	1206	572
35°	594	1256	567	1256	594	380
45°	413	947	404	947	413	319
55°	286	644	283	644	286	251
65°	149	390	169	390	149	152
75°	79	186	90	186	79	84
85°	22	41	24	41	22	25
90°	27	1	27	1	27	13
95°	43	65	43	65	43	40
105°	76	305	76	305	76	79
115°	82	576	82	576	82	206
125°	857	815	857	815	857	741
135°	1041	1008	1041	1008	1041	802
145°	1187	1169	1187	1169	1187	743
155°	1288	1288	1288	1288	1288	595
165°	1354	1357	1354	1357	1354	382
175°	1380	1388	1380	1388	1380	131
180°	1385	1385	1385	1385	1385	



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1872.9	1874.4	1875.9	1872.4	1872.4	1869.4	1862.9	1857.9	1843.9	1841.9	1841.9
5°	2002.5	2001.2	2003.8	1995.6	1984.3	1981.9	1970.0	1954.4	1938.1	1920.0	1916.2
7.5°	2131.3	2129.4	2124.4	2123.1	2114.4	2095.6	2076.4	2056.1	2029.0	2002.6	1989.3
10°	2196.3	2217.0	2204.5	2182.6	2187.0	2157.6	2141.9	2115.1	2092.5	2053.1	2044.4
12.5°	2260.4	2268.5	2264.6	2252.1	2246.6	2226.1	2205.0	2181.6	2140.0	2104.7	2073.9
15°	2260.1	2272.0	2275.1	2271.4	2274.5	2273.3	2262.0	2242.6	2206.4	2167.6	2133.8
17.5°	2093.3	2101.6	2122.0	2135.9	2153.4	2190.5	2208.8	2215.8	2210.5	2188.3	2164.5
20°	1906.2	1892.4	1949.9	1979.3	2004.3	2066.9	2120.7	2141.4	2174.4	2173.9	2167.6
22.5°	1641.0	1644.3	1698.8	1733.7	1806.8	1869.3	1930.6	2008.3	2072.4	2114.8	2139.6
25°	1205.7	1229.5	1283.9	1331.4	1412.8	1529.1	1634.7	1757.4	1873.0	1964.4	2051.3
27.5°	905.6	907.3	950.5	994.4	1042.6	1137.9	1271.0	1417.4	1582.3	1718.4	1875.0
30°	775.5	771.8	789.9	816.7	858.0	931.8	1031.9	1175.7	1340.2	1545.3	1728.0
32.5°	683.4	683.6	697.3	717.2	751.5	801.3	869.8	986.7	1142.1	1343.7	1557.8
35°	594.1	593.5	603.5	617.8	632.3	664.1	711.1	772.3	879.3	1067.5	1286.4
37.5°	530.1	532.8	537.7	546.7	562.6	580.3	608.5	649.7	725.9	837.2	1021.2
40°	494.1	495.3	502.2	509.7	519.1	532.8	556.0	589.1	644.8	733.6	868.0
42.5°	461.0	462.3	467.1	474.2	481.5	495.3	514.4	543.1	588.2	657.5	768.5
45°	412.7	412.7	417.2	420.3	428.4	440.9	456.6	480.3	511.5	562.9	636.7
47.5°	367.5	367.6	370.5	375.9	381.0	390.8	406.1	425.6	448.3	488.0	551.0
50°	341.5	342.0	343.9	348.4	351.5	360.2	372.1	389.0	412.7	443.4	496.0
52.5°	320.5	320.1	322.4	324.3	326.5	332.7	341.6	356.5	377.8	404.4	447.9
55°	286.4	283.9	287.7	290.8	292.7	295.2	300.2	309.5	327.7	350.2	382.8
57.5°	243.9	242.9	245.5	248.4	254.3	261.0	265.3	271.3	280.7	296.8	329.0
60°	208.9	208.9	214.5	216.4	223.3	232.1	240.8	245.8	255.1	265.8	289.5
62.5°	177.9	178.3	181.0	182.9	186.7	197.5	209.7	220.7	229.6	239.8	255.5
65°	148.8	150.1	150.1	151.4	153.8	156.4	161.4	170.1	185.8	200.1	212.0
67.5°	126.3	126.7	127.1	128.4	128.9	131.7	133.7	137.6	141.2	154.9	169.6
70°	111.3	113.2	112.5	113.9	114.4	115.6	118.2	120.1	125.7	128.8	137.6
72.5°	97.3	98.7	98.6	99.3	100.9	101.2	103.2	105.1	108.7	111.3	116.0
75°	78.8	78.1	78.8	80.0	80.7	81.3	81.3	83.8	85.7	88.2	91.3
77.5°	60.8	61.5	61.3	61.5	61.5	62.7	62.6	63.6	65.5	66.8	68.3
80°	48.8	49.4	48.8	49.4	50.0	50.6	50.0	50.6	52.5	53.8	53.8
82.5°	37.8	37.9	38.3	38.4	38.5	38.6	39.5	39.7	41.0	40.8	41.3
85°	22.5	21.9	21.9	21.9	22.5	23.1	22.5	22.5	23.1	23.1	23.1
87.5°	13.4	13.9	13.8	13.7	13.6	13.4	13.2	13.5	12.7	13.0	12.2
90°	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2	21.1	20.1	18.3
92.5°	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4	23.8	23.3	22.3
95°	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3	40.2	39.1	37.5
97.5°	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1	53.2	52.3	48.7
100°	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7	58.9	57.1	53.3
102.5°	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3	61.1	58.7	90.4
105°	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0	63.5	61.1	121.9
107.5°	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6	83.0	85.6	158.4
110°	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8	153.1	175.3	239.7



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8	361.1	442.2	458.2
115°	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0	515.1	618.2	612.7
117.5°	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9	659.8	684.8	680.9
120°	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8	737.1	734.4	730.5
122.5°	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9	783.3	781.7	777.4
125°	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8	848.2	846.7	842.4
127.5°	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7	907.5	905.2	902.0
130°	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7	945.3	942.8	940.4
132.5°	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7	982.6	980.5	978.1
135°	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5	1035.3	1033.0	1031.0
137.5°	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5	1084.3	1082.1	1079.9
140°	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2	1116.2	1114.2	1111.7
142.5°	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5	1145.7	1143.9	1141.0
145°	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5	1186.8	1185.3	1181.6
147.5°	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1	1222.9	1221.8	1218.0
150°	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1	1244.8	1243.4	1239.9
152.5°	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1	1264.8	1263.5	1260.1
155°	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2	1291.8	1290.5	1287.9
157.5°	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0	1314.5	1313.0	1311.1
160°	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3	1327.9	1326.6	1325.3
162.5°	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6	1340.1	1338.6	1337.5
165°	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7	1353.0
167.5°	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4	1367.8	1366.3	1365.6
170°	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8	1374.2	1372.7	1372.2
172.5°	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6	1379.0	1377.5	1377.1
175°	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8	1384.3	1382.7	1382.2
177.5°	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4	1385.2	1383.9	1383.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830
 CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1842.9	1838.9	1835.4	1826.4	1821.8	1811.8	1810.3	1809.9	1796.9	1784.3	1780.8
5°	1906.2	1896.2	1881.1	1863.7	1845.5	1826.7	1814.2	1804.2	1779.2	1755.5	1741.7
7.5°	1970.0	1948.4	1922.6	1889.4	1861.8	1830.8	1807.7	1787.1	1751.6	1717.6	1694.7
10°	2017.5	1982.4	1948.0	1902.4	1866.8	1831.7	1799.2	1771.1	1731.1	1686.0	1654.2
12.5°	2047.0	2008.5	1961.1	1916.5	1870.3	1825.7	1782.3	1746.1	1699.0	1652.6	1614.6
15°	2086.9	2045.6	1988.1	1924.3	1864.9	1806.8	1756.7	1711.7	1650.4	1594.7	1548.4
17.5°	2119.6	2062.8	2001.0	1927.2	1858.4	1784.5	1720.0	1662.6	1594.3	1527.2	1472.6
20°	2130.1	2073.8	2002.5	1928.7	1847.4	1760.5	1691.0	1628.5	1555.3	1482.1	1419.7
22.5°	2123.5	2079.8	2000.5	1912.1	1828.9	1738.0	1659.5	1587.0	1505.8	1431.2	1358.6
25°	2079.4	2064.4	1989.3	1893.0	1798.0	1692.3	1601.6	1522.2	1429.6	1349.6	1270.7
27.5°	1976.5	2008.8	1962.4	1859.7	1754.1	1640.8	1538.8	1448.4	1352.4	1262.3	1183.7
30°	1877.5	1951.8	1931.8	1836.7	1718.5	1607.2	1492.8	1398.4	1295.8	1203.2	1125.7
32.5°	1741.8	1864.7	1884.3	1804.8	1682.5	1560.2	1440.3	1346.3	1239.3	1141.7	1066.1
35°	1526.0	1709.8	1794.2	1743.6	1621.0	1489.0	1365.2	1255.7	1148.2	1051.9	976.9
37.5°	1268.4	1518.8	1659.5	1663.1	1550.6	1413.3	1278.6	1169.9	1059.8	965.3	884.0
40°	1101.3	1372.7	1555.9	1596.6	1501.6	1353.3	1217.0	1106.3	998.7	906.2	813.0
42.5°	951.2	1221.6	1446.9	1517.6	1442.0	1294.8	1158.0	1042.3	937.7	850.2	755.0
45°	769.2	1005.6	1253.9	1380.3	1338.3	1202.0	1057.5	947.4	849.2	773.6	682.3
47.5°	648.9	815.5	1055.7	1226.6	1225.9	1101.5	959.3	853.9	762.8	691.9	618.0
50°	580.3	725.5	928.7	1122.6	1138.8	1034.3	899.3	794.8	709.8	635.4	576.0
52.5°	518.8	638.4	821.1	1007.0	1053.3	962.8	831.8	735.4	652.8	584.4	533.5
55°	438.4	530.9	669.8	843.7	913.7	849.9	733.6	643.6	576.6	519.1	475.3
57.5°	370.9	440.3	551.7	691.6	773.3	733.1	637.2	564.0	506.7	454.7	420.1
60°	328.3	385.2	479.7	596.6	686.6	658.6	576.6	508.4	459.7	414.6	382.1
62.5°	288.3	337.2	418.1	513.0	595.6	584.0	517.1	459.9	417.2	376.1	348.6
65°	232.1	267.7	330.8	405.3	471.6	477.2	429.0	390.2	352.1	319.6	295.2
67.5°	184.7	208.0	252.5	315.2	364.9	382.6	353.2	323.6	293.3	268.2	247.0
70°	155.7	174.5	207.0	257.7	303.3	322.1	305.2	282.0	255.8	235.2	217.0
72.5°	126.2	144.5	168.4	205.7	244.8	265.0	259.2	242.5	221.2	204.2	187.0
75°	95.1	100.7	117.0	141.9	172.6	190.1	194.5	185.8	168.8	155.7	145.7
77.5°	70.3	73.7	81.4	94.5	114.6	130.2	136.6	135.5	123.9	116.3	107.0
80°	56.3	58.2	61.9	67.6	82.6	98.2	102.5	102.5	94.4	91.3	81.9
82.5°	42.8	44.1	46.4	49.5	56.6	70.1	75.0	76.1	70.9	66.8	59.4
85°	24.4	23.8	25.0	26.9	28.2	31.9	39.4	40.6	39.4	34.4	32.5
87.5°	11.8	12.0	11.6	10.7	10.7	10.7	12.7	14.7	13.2	12.2	11.7
90°	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0	3.5	5.9	8.4
92.5°	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3	20.0	19.8	19.6
95°	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1	57.8	50.4	43.1
97.5°	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2	108.6	87.8	67.1
100°	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4	146.8	116.3	85.9
102.5°	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3	223.8	217.4	210.8
105°	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6	311.3	317.9	324.6
107.5°	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4	394.7	400.1	405.5
110°	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8	448.6	453.3	457.9



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2	499.4	503.4	507.6
115°	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2	579.9	583.7	587.5
117.5°	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5	652.7	657.0	661.2
120°	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3	704.7	708.0	711.4
122.5°	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3	749.8	753.3	756.9
125°	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6	817.5	820.4	823.3
127.5°	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6	879.8	883.0	886.2
130°	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8	919.4	922.9	926.5
132.5°	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8	958.9	962.0	965.0
135°	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0	1011.5	1015.1	1018.7
137.5°	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6	1063.2	1065.6	1068.2
140°	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1	1096.9	1098.7	1100.5
142.5°	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0	1125.6	1127.2	1128.8
145°	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3	1169.0	1168.8	1168.7
147.5°	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8	1208.0	1207.1	1206.3
150°	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4	1232.8	1231.3	1229.7
152.5°	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0	1254.3	1252.5	1250.8
155°	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5	1285.5	1283.6	1281.5
157.5°	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2	1310.5	1308.8	1307.1
160°	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1325.3	1323.9	1322.6
162.5°	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4	1338.1	1336.7	1335.4
165°	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7	1355.3	1354.0	1352.6
167.5°	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5	1368.2	1366.8	1365.5
170°	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7	1375.4	1374.0	1372.7
172.5°	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5	1380.2	1378.8	1377.5
175°	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7	1386.2	1384.6	1383.1
177.5°	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7	1387.5	1386.2	1385.0
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1774.3	1770.8	1764.3	1754.4	1748.3	1737.9	1730.8	1734.8	1735.8	1734.8	1733.8
5°	1726.6	1713.5	1695.4	1677.9	1661.6	1644.2	1634.1	1629.8	1621.0	1616.0	1613.5
7.5°	1669.1	1646.4	1620.7	1590.3	1564.3	1537.2	1523.3	1516.5	1498.5	1488.7	1480.3
10°	1626.0	1590.4	1564.7	1524.7	1500.3	1464.6	1440.3	1440.9	1416.5	1402.7	1392.7
12.5°	1578.5	1539.4	1496.7	1460.7	1426.7	1398.1	1368.8	1356.8	1331.0	1317.7	1290.6
15°	1499.7	1454.1	1409.0	1360.2	1325.8	1281.4	1238.9	1186.9	1145.1	1108.8	1098.8
17.5°	1413.6	1357.1	1311.9	1254.6	1195.7	1121.1	1071.8	1041.6	1016.3	997.2	983.0
20°	1354.6	1297.0	1248.9	1162.6	1083.2	1032.6	996.3	973.1	946.9	926.2	914.9
22.5°	1292.5	1232.5	1166.9	1070.5	1008.6	968.0	935.7	909.1	891.3	875.2	864.9
25°	1204.5	1138.8	1030.7	964.3	914.3	871.8	849.2	833.0	814.3	792.4	782.3
27.5°	1111.4	1007.0	929.3	880.1	832.3	804.6	784.4	760.1	743.3	733.5	723.0
30°	1041.9	937.5	876.8	823.0	789.2	758.6	734.8	721.0	704.8	688.0	681.1
32.5°	964.3	880.9	822.7	778.0	743.7	717.6	698.8	676.6	664.8	654.4	640.0
35°	868.0	804.8	751.7	715.5	683.0	661.7	639.8	626.6	605.4	596.6	591.0
37.5°	786.5	731.7	692.0	653.7	628.0	604.5	591.1	570.2	561.0	548.8	537.0
40°	740.5	686.6	648.6	617.3	588.5	571.0	554.1	537.2	523.5	517.8	503.4
42.5°	693.4	649.7	611.5	577.2	558.0	539.4	518.1	505.7	491.4	482.3	473.4
45°	628.5	589.7	557.2	529.0	507.8	488.4	474.7	454.0	445.9	427.7	420.3
47.5°	571.5	535.5	504.4	477.7	456.9	444.3	424.1	408.0	395.0	383.9	374.2
50°	530.9	501.0	470.9	447.1	428.4	410.3	389.6	381.4	361.5	355.8	350.2
52.5°	493.9	465.4	437.9	414.6	395.9	378.2	360.1	349.5	335.9	330.4	326.2
55°	442.1	414.6	388.3	367.7	348.9	330.8	319.6	306.4	300.2	295.8	290.8
57.5°	390.1	365.3	345.3	324.3	305.5	291.1	278.1	270.1	263.6	257.9	251.9
60°	357.1	333.3	315.2	295.8	276.4	264.6	254.5	245.2	237.6	228.8	226.4
62.5°	322.1	301.3	284.6	265.8	248.9	238.0	228.5	219.6	210.7	197.8	194.4
65°	273.9	257.7	240.2	224.5	209.5	198.9	185.1	175.1	171.4	170.1	169.5
67.5°	230.4	215.0	200.0	184.0	170.3	160.5	153.4	151.9	149.3	148.5	146.8
70°	201.3	187.0	172.0	156.9	143.8	141.9	139.5	137.0	133.8	132.6	131.3
72.5°	175.3	160.5	145.4	133.5	127.8	125.5	122.9	120.5	118.3	117.1	116.3
75°	134.5	120.7	110.7	106.3	103.2	101.3	97.6	95.7	94.4	92.6	91.9
77.5°	96.8	89.1	84.5	81.7	78.4	76.4	74.3	72.4	71.1	70.7	69.7
80°	73.8	70.0	66.9	63.2	61.9	59.4	58.8	56.9	57.5	55.7	55.7
82.5°	57.3	52.5	49.9	48.2	46.9	44.9	44.3	43.4	43.5	42.1	42.1
85°	29.4	28.2	26.9	25.6	25.6	23.8	24.4	23.8	23.8	22.5	21.9
87.5°	11.7	11.6	10.9	11.3	11.7	11.5	11.8	11.5	11.7	11.9	11.6
90°	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2	23.4	24.5	25.3
92.5°	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4	25.0	25.5	26.0
95°	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3	42.4	43.5	44.0
97.5°	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1	55.0	55.9	56.5
100°	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7	62.5	64.3	65.3
102.5°	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3	65.7	68.0	69.5
105°	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0	68.4	70.9	72.6
107.5°	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6	78.0	75.6	74.8
110°	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8	108.6	86.2	75.6



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8	198.6	117.3	77.1
115°	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0	309.0	205.9	146.3
117.5°	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9	609.9	585.0	546.2
120°	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8	742.4	745.2	731.4
122.5°	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9	786.6	788.2	786.0
125°	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8	851.3	852.9	854.0
127.5°	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7	912.0	914.3	915.5
130°	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7	950.2	952.6	953.8
132.5°	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7	986.8	988.9	989.9
135°	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5	1039.7	1041.9	1042.8
137.5°	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5	1088.6	1090.8	1091.6
140°	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2	1120.2	1122.2	1122.7
142.5°	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5	1149.3	1151.1	1151.5
145°	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5	1190.0	1191.6	1191.8
147.5°	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1	1225.3	1226.4	1226.5
150°	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1	1247.5	1248.8	1248.9
152.5°	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1	1267.5	1268.9	1268.8
155°	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2	1294.6	1295.9	1295.6
157.5°	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0	1317.5	1319.0	1318.9
160°	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3	1330.6	1331.9	1331.8
162.5°	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6	1343.1	1344.7	1344.4
165°	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9
167.5°	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4	1370.9	1372.5	1372.2
170°	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8	1377.3	1378.9	1378.7
172.5°	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6	1382.1	1383.7	1383.6
175°	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8	1387.4	1388.9	1388.6
177.5°	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4	1387.6	1388.9	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830
 CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1728.3	1729.3	1727.8	1728.8	1727.8	1729.3	1728.3	1733.8	1734.8	1735.8	1734.8
5°	1610.3	1602.9	1601.6	1599.8	1601.6	1602.9	1610.3	1613.5	1616.0	1621.0	1629.8
7.5°	1469.5	1468.4	1465.3	1460.9	1465.3	1468.4	1469.5	1480.3	1488.7	1498.5	1516.5
10°	1378.9	1375.8	1375.3	1370.8	1375.3	1375.8	1378.9	1392.7	1402.7	1416.5	1440.9
12.5°	1272.9	1252.7	1250.7	1239.7	1250.7	1252.7	1272.9	1290.6	1317.7	1331.0	1356.8
15°	1083.8	1080.1	1067.5	1059.4	1067.5	1080.1	1083.8	1098.8	1108.8	1145.1	1186.9
17.5°	975.7	963.5	959.6	957.8	959.6	963.5	975.7	983.0	997.2	1016.3	1041.6
20°	906.2	894.9	893.1	891.8	893.1	894.9	906.2	914.9	926.2	946.9	973.1
22.5°	858.2	846.4	841.5	837.7	841.5	846.4	858.2	864.9	875.2	891.3	909.1
25°	776.1	771.8	769.2	768.0	769.2	771.8	776.1	782.3	792.4	814.3	833.0
27.5°	711.9	702.3	700.4	697.2	700.4	702.3	711.9	723.0	733.5	743.3	760.1
30°	675.4	672.3	667.9	664.1	667.9	672.3	675.4	681.1	688.0	704.8	721.0
32.5°	632.4	629.8	625.8	624.2	625.8	629.8	632.4	640.0	654.4	664.8	676.6
35°	584.8	576.0	572.2	566.6	572.2	576.0	584.8	591.0	596.6	605.4	626.6
37.5°	534.3	529.7	524.4	526.3	524.4	529.7	534.3	537.0	548.8	561.0	570.2
40°	495.3	492.2	491.0	490.3	491.0	492.2	495.3	503.4	517.8	523.5	537.2
42.5°	464.3	455.6	452.4	452.2	452.4	455.6	464.3	473.4	482.3	491.4	505.7
45°	417.2	409.0	403.4	404.0	403.4	409.0	417.2	420.3	427.7	445.9	454.0
47.5°	368.8	368.6	365.1	366.3	365.1	368.6	368.8	374.2	383.9	395.0	408.0
50°	345.8	342.0	339.6	340.2	339.6	342.0	345.8	350.2	355.8	361.5	381.4
52.5°	323.9	320.6	318.6	321.2	318.6	320.6	323.9	326.2	330.4	335.9	349.5
55°	287.7	283.9	283.3	282.7	283.3	283.9	287.7	290.8	295.8	300.2	306.4
57.5°	247.3	244.8	241.0	239.4	241.0	244.8	247.3	251.9	257.9	263.6	270.1
60°	218.3	213.3	207.0	206.4	207.0	213.3	218.3	226.4	228.8	237.6	245.2
62.5°	191.7	190.8	189.5	189.4	189.5	190.8	191.7	194.4	197.8	210.7	219.6
65°	168.2	167.6	168.2	168.8	168.2	167.6	168.2	169.5	170.1	171.4	175.1
67.5°	146.6	145.4	144.3	144.9	144.3	145.4	146.6	146.8	148.5	149.3	151.9
70°	130.1	129.4	128.8	128.8	128.8	129.4	130.1	131.3	132.6	133.8	137.0
72.5°	114.0	114.0	113.3	112.8	113.3	114.0	114.0	116.3	117.1	118.3	120.5
75°	91.3	90.0	90.0	90.0	90.0	90.0	91.3	91.9	92.6	94.4	95.7
77.5°	69.6	68.9	68.3	67.8	68.3	68.9	69.6	69.7	70.7	71.1	72.4
80°	55.0	54.4	53.8	53.8	53.8	54.4	55.0	55.7	55.7	57.5	56.9
82.5°	42.0	41.4	41.3	40.8	41.3	41.4	42.0	42.1	42.1	43.5	43.4
85°	22.5	23.1	22.5	23.8	22.5	23.1	22.5	21.9	22.5	23.8	23.8
87.5°	11.7	11.2	11.8	11.4	11.8	11.2	11.7	11.6	11.9	11.7	11.5
90°	25.7	26.2	26.6	27.1	26.6	26.2	25.7	25.3	24.5	23.4	22.2
92.5°	26.3	26.5	26.8	27.1	26.8	26.5	26.3	26.0	25.5	25.0	24.4
95°	43.7	43.5	43.3	43.1	43.3	43.5	43.7	44.0	43.5	42.4	41.3
97.5°	56.7	57.0	57.2	57.5	57.2	57.0	56.7	56.5	55.9	55.0	54.1
100°	65.8	66.3	66.7	67.1	66.7	66.3	65.8	65.3	64.3	62.5	60.7
102.5°	70.0	70.7	71.4	71.9	71.4	70.7	70.0	69.5	68.0	65.7	63.3
105°	73.5	74.4	75.2	76.2	75.2	74.4	73.5	72.6	70.9	68.4	66.0
107.5°	75.7	76.5	77.5	78.3	77.5	76.5	75.7	74.8	75.6	78.0	80.6
110°	76.4	77.4	78.2	79.2	78.2	77.4	76.4	75.6	86.2	108.6	130.8



TEST NUMBER: P331729-830
 CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	77.9	78.5	79.3	79.9	79.3	78.5	77.9	77.1	117.3	198.6	279.8
115°	130.3	114.2	98.2	82.2	98.2	114.2	130.3	146.3	205.9	309.0	412.0
117.5°	493.5	440.8	388.1	335.5	388.1	440.8	493.5	546.2	585.0	609.9	634.9
120°	701.3	671.3	641.2	611.2	641.2	671.3	701.3	731.4	745.2	742.4	739.8
122.5°	780.2	774.4	768.5	762.7	768.5	774.4	780.2	786.0	788.2	786.6	784.9
125°	854.7	855.4	856.0	856.7	856.0	855.4	854.7	854.0	852.9	851.3	849.8
127.5°	915.6	915.8	915.9	916.0	915.9	915.8	915.6	915.5	914.3	912.0	909.7
130°	953.6	953.3	953.1	952.9	953.1	953.3	953.6	953.8	952.6	950.2	947.7
132.5°	989.6	989.4	989.2	988.9	989.2	989.4	989.6	989.9	988.9	986.8	984.7
135°	1042.4	1041.9	1041.5	1041.0	1041.5	1041.9	1042.4	1042.8	1041.9	1039.7	1037.5
137.5°	1090.8	1090.1	1089.3	1088.5	1089.3	1090.1	1090.8	1091.6	1090.8	1088.6	1086.5
140°	1121.5	1120.4	1119.3	1118.2	1119.3	1120.4	1121.5	1122.7	1122.2	1120.2	1118.2
142.5°	1150.4	1149.2	1148.2	1147.1	1148.2	1149.2	1150.4	1151.5	1151.1	1149.3	1147.5
145°	1190.7	1189.6	1188.5	1187.3	1188.5	1189.6	1190.7	1191.8	1191.6	1190.0	1188.5
147.5°	1225.6	1224.6	1223.7	1222.8	1223.7	1224.6	1225.6	1226.5	1226.4	1225.3	1224.1
150°	1247.7	1246.7	1245.6	1244.4	1245.6	1246.7	1247.7	1248.9	1248.8	1247.5	1246.1
152.5°	1267.2	1265.8	1264.3	1262.9	1264.3	1265.8	1267.2	1268.8	1268.9	1267.5	1266.1
155°	1293.8	1292.1	1290.3	1288.5	1290.3	1292.1	1293.8	1295.6	1295.9	1294.6	1293.2
157.5°	1317.2	1315.4	1313.7	1311.9	1313.7	1315.4	1317.2	1318.9	1319.0	1317.5	1316.0
160°	1330.3	1328.7	1327.2	1325.6	1327.2	1328.7	1330.3	1331.8	1331.9	1330.6	1329.3
162.5°	1342.6	1340.7	1338.7	1336.8	1338.7	1340.7	1342.6	1344.4	1344.7	1343.1	1341.6
165°	1358.3	1356.8	1355.2	1353.7	1355.2	1356.8	1358.3	1359.9	1359.9	1358.3	1356.8
167.5°	1370.3	1368.3	1366.3	1364.2	1366.3	1368.3	1370.3	1372.2	1372.5	1370.9	1369.4
170°	1376.7	1374.7	1372.7	1370.6	1372.7	1374.7	1376.7	1378.7	1378.9	1377.3	1375.8
172.5°	1381.5	1379.5	1377.5	1375.5	1377.5	1379.5	1381.5	1383.6	1383.7	1382.1	1380.6
175°	1386.4	1384.1	1382.0	1379.7	1382.0	1384.1	1386.4	1388.6	1388.9	1387.4	1385.8
177.5°	1387.1	1385.5	1383.9	1382.3	1383.9	1385.5	1387.1	1388.7	1388.9	1387.6	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830
 CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1730.8	1737.9	1748.3	1754.4	1764.3	1770.8	1774.3	1780.8	1784.3	1796.9	1809.9
5°	1634.1	1644.2	1661.6	1677.9	1695.4	1713.5	1726.6	1741.7	1755.5	1779.2	1804.2
7.5°	1523.3	1537.2	1564.3	1590.3	1620.7	1646.4	1669.1	1694.7	1717.6	1751.6	1787.1
10°	1440.3	1464.6	1500.3	1524.7	1564.7	1590.4	1626.0	1654.2	1686.0	1731.1	1771.1
12.5°	1368.8	1398.1	1426.7	1460.7	1496.7	1539.4	1578.5	1614.6	1652.6	1699.0	1746.1
15°	1238.9	1281.4	1325.8	1360.2	1409.0	1454.1	1499.7	1548.4	1594.7	1650.4	1711.7
17.5°	1071.8	1121.1	1195.7	1254.6	1311.9	1357.1	1413.6	1472.6	1527.2	1594.3	1662.6
20°	996.3	1032.6	1083.2	1162.6	1248.9	1297.0	1354.6	1419.7	1482.1	1555.3	1628.5
22.5°	935.7	968.0	1008.6	1070.5	1166.9	1232.5	1292.5	1358.6	1431.2	1505.8	1587.0
25°	849.2	871.8	914.3	964.3	1030.7	1138.8	1204.5	1270.7	1349.6	1429.6	1522.2
27.5°	784.4	804.6	832.3	880.1	929.3	1007.0	1111.4	1183.7	1262.3	1352.4	1448.4
30°	734.8	758.6	789.2	823.0	876.8	937.5	1041.9	1125.7	1203.2	1295.8	1398.4
32.5°	698.8	717.6	743.7	778.0	822.7	880.9	964.3	1066.1	1141.7	1239.3	1346.3
35°	639.8	661.7	683.0	715.5	751.7	804.8	868.0	976.9	1051.9	1148.2	1255.7
37.5°	591.1	604.5	628.0	653.7	692.0	731.7	786.5	884.0	965.3	1059.8	1169.9
40°	554.1	571.0	588.5	617.3	648.6	686.6	740.5	813.0	906.2	998.7	1106.3
42.5°	518.1	539.4	558.0	577.2	611.5	649.7	693.4	755.0	850.2	937.7	1042.3
45°	474.7	488.4	507.8	529.0	557.2	589.7	628.5	682.3	773.6	849.2	947.4
47.5°	424.1	444.3	456.9	477.7	504.4	535.5	571.5	618.0	691.9	762.8	853.9
50°	389.6	410.3	428.4	447.1	470.9	501.0	530.9	576.0	635.4	709.8	794.8
52.5°	360.1	378.2	395.9	414.6	437.9	465.4	493.9	533.5	584.4	652.8	735.4
55°	319.6	330.8	348.9	367.7	388.3	414.6	442.1	475.3	519.1	576.6	643.6
57.5°	278.1	291.1	305.5	324.3	345.3	365.3	390.1	420.1	454.7	506.7	564.0
60°	254.5	264.6	276.4	295.8	315.2	333.3	357.1	382.1	414.6	459.7	508.4
62.5°	228.5	238.0	248.9	265.8	284.6	301.3	322.1	348.6	376.1	417.2	459.9
65°	185.1	198.9	209.5	224.5	240.2	257.7	273.9	295.2	319.6	352.1	390.2
67.5°	153.4	160.5	170.3	184.0	200.0	215.0	230.4	247.0	268.2	293.3	323.6
70°	139.5	141.9	143.8	156.9	172.0	187.0	201.3	217.0	235.2	255.8	282.0
72.5°	122.9	125.5	127.8	133.5	145.4	160.5	175.3	187.0	204.2	221.2	242.5
75°	97.6	101.3	103.2	106.3	110.7	120.7	134.5	145.7	155.7	168.8	185.8
77.5°	74.3	76.4	78.4	81.7	84.5	89.1	96.8	107.0	116.3	123.9	135.5
80°	58.8	59.4	61.9	63.2	66.9	70.0	73.8	81.9	91.3	94.4	102.5
82.5°	44.3	44.9	46.9	48.2	49.9	52.5	57.3	59.4	66.8	70.9	76.1
85°	24.4	23.8	25.6	25.6	26.9	28.2	29.4	32.5	34.4	39.4	40.6
87.5°	11.8	11.5	11.7	11.3	10.9	11.6	11.7	11.7	12.2	13.2	14.7
90°	21.1	20.1	18.3	16.5	14.7	12.9	10.8	8.4	5.9	3.5	1.0
92.5°	23.8	23.3	22.3	21.5	20.5	19.7	19.3	19.6	19.8	20.0	20.3
95°	40.2	39.1	37.5	36.0	34.4	32.8	35.7	43.1	50.4	57.8	65.1
97.5°	53.2	52.3	48.7	45.1	41.5	37.9	46.5	67.1	87.8	108.6	129.2
100°	58.9	57.1	53.3	49.6	45.7	41.9	55.3	85.9	116.3	146.8	177.4
102.5°	61.1	58.7	90.4	122.1	153.7	185.4	204.4	210.8	217.4	223.8	230.3
105°	63.5	61.1	121.9	182.7	243.5	304.3	331.3	324.6	317.9	311.3	304.6
107.5°	83.0	85.6	158.4	231.4	304.3	377.2	410.9	405.5	400.1	394.7	389.4
110°	153.1	175.3	239.7	304.1	368.3	432.7	462.6	457.9	453.3	448.6	443.8



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	361.1	442.2	458.2	474.1	489.9	505.9	511.7	507.6	503.4	499.4	495.2
115°	515.1	618.2	612.7	607.1	601.5	596.0	591.3	587.5	583.7	579.9	576.2
117.5°	659.8	684.8	680.9	677.1	673.3	669.4	665.4	661.2	657.0	652.7	648.5
120°	737.1	734.4	730.5	726.4	722.5	718.4	714.7	711.4	708.0	704.7	701.3
122.5°	783.3	781.7	777.4	773.0	768.6	764.3	760.3	756.9	753.3	749.8	746.3
125°	848.2	846.7	842.4	838.2	834.0	829.7	826.1	823.3	820.4	817.5	814.6
127.5°	907.5	905.2	902.0	898.8	895.7	892.5	889.4	886.2	883.0	879.8	876.6
130°	945.3	942.8	940.4	937.9	935.5	933.0	930.0	926.5	922.9	919.4	915.8
132.5°	982.6	980.5	978.1	975.6	973.2	970.7	968.0	965.0	962.0	958.9	955.8
135°	1035.3	1033.0	1031.0	1029.0	1027.0	1025.0	1022.2	1018.7	1015.1	1011.5	1008.0
137.5°	1084.3	1082.1	1079.9	1077.6	1075.3	1073.0	1070.6	1068.2	1065.6	1063.2	1060.6
140°	1116.2	1114.2	1111.7	1109.3	1106.8	1104.4	1102.3	1100.5	1098.7	1096.9	1095.1
142.5°	1145.7	1143.9	1141.0	1138.2	1135.4	1132.7	1130.4	1128.8	1127.2	1125.6	1124.0
145°	1186.8	1185.3	1181.6	1177.7	1173.9	1170.2	1168.4	1168.7	1168.8	1169.0	1169.3
147.5°	1222.9	1221.8	1218.0	1214.3	1210.6	1206.8	1205.4	1206.3	1207.1	1208.0	1208.8
150°	1244.8	1243.4	1239.9	1236.3	1232.8	1229.2	1228.2	1229.7	1231.3	1232.8	1234.4
152.5°	1264.8	1263.5	1260.1	1256.7	1253.3	1249.9	1249.2	1250.8	1252.5	1254.3	1256.0
155°	1291.8	1290.5	1287.9	1285.2	1282.5	1279.9	1279.5	1281.5	1283.6	1285.5	1287.5
157.5°	1314.5	1313.0	1311.1	1309.2	1307.4	1305.5	1305.4	1307.1	1308.8	1310.5	1312.2
160°	1327.9	1326.6	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6
162.5°	1340.1	1338.6	1337.5	1336.3	1335.1	1334.0	1334.1	1335.4	1336.7	1338.1	1339.4
165°	1355.2	1353.7	1353.0	1352.4	1351.6	1350.9	1351.3	1352.6	1354.0	1355.3	1356.7
167.5°	1367.8	1366.3	1365.6	1365.0	1364.4	1363.8	1364.1	1365.5	1366.8	1368.2	1369.5
170°	1374.2	1372.7	1372.2	1371.8	1371.4	1370.9	1371.4	1372.7	1374.0	1375.4	1376.7
172.5°	1379.0	1377.5	1377.1	1376.6	1376.2	1375.7	1376.2	1377.5	1378.8	1380.2	1381.5
175°	1384.3	1382.7	1382.2	1381.9	1381.4	1380.9	1381.5	1383.1	1384.6	1386.2	1387.7
177.5°	1385.2	1383.9	1383.7	1383.6	1383.4	1383.2	1383.7	1385.0	1386.2	1387.5	1388.7
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1810.3	1811.8	1821.8	1826.4	1835.4	1838.9	1842.9	1841.9	1841.9	1843.9	1857.9
5°	1814.2	1826.7	1845.5	1863.7	1881.1	1896.2	1906.2	1916.2	1920.0	1938.1	1954.4
7.5°	1807.7	1830.8	1861.8	1889.4	1922.6	1948.4	1970.0	1989.3	2002.6	2029.0	2056.1
10°	1799.2	1831.7	1866.8	1902.4	1948.0	1982.4	2017.5	2044.4	2053.1	2092.5	2115.1
12.5°	1782.3	1825.7	1870.3	1916.5	1961.1	2008.5	2047.0	2073.9	2104.7	2140.0	2181.6
15°	1756.7	1806.8	1864.9	1924.3	1988.1	2045.6	2086.9	2133.8	2167.6	2206.4	2242.6
17.5°	1720.0	1784.5	1858.4	1927.2	2001.0	2062.8	2119.6	2164.5	2188.3	2210.5	2215.8
20°	1691.0	1760.5	1847.4	1928.7	2002.5	2073.8	2130.1	2167.6	2173.9	2174.4	2141.4
22.5°	1659.5	1738.0	1828.9	1912.1	2000.5	2079.8	2123.5	2139.6	2114.8	2072.4	2008.3
25°	1601.6	1692.3	1798.0	1893.0	1989.3	2064.4	2079.4	2051.3	1964.4	1873.0	1757.4
27.5°	1538.8	1640.8	1754.1	1859.7	1962.4	2008.8	1976.5	1875.0	1718.4	1582.3	1417.4
30°	1492.8	1607.2	1718.5	1836.7	1931.8	1951.8	1877.5	1728.0	1545.3	1340.2	1175.7
32.5°	1440.3	1560.2	1682.5	1804.8	1884.3	1864.7	1741.8	1557.8	1343.7	1142.1	986.7
35°	1365.2	1489.0	1621.0	1743.6	1794.2	1709.8	1526.0	1286.4	1067.5	879.3	772.3
37.5°	1278.6	1413.3	1550.6	1663.1	1659.5	1518.8	1268.4	1021.2	837.2	725.9	649.7
40°	1217.0	1353.3	1501.6	1596.6	1555.9	1372.7	1101.3	868.0	733.6	644.8	589.1
42.5°	1158.0	1294.8	1442.0	1517.6	1446.9	1221.6	951.2	768.5	657.5	588.2	543.1
45°	1057.5	1202.0	1338.3	1380.3	1253.9	1005.6	769.2	636.7	562.9	511.5	480.3
47.5°	959.3	1101.5	1225.9	1226.6	1055.7	815.5	648.9	551.0	488.0	448.3	425.6
50°	899.3	1034.3	1138.8	1122.6	928.7	725.5	580.3	496.0	443.4	412.7	389.0
52.5°	831.8	962.8	1053.3	1007.0	821.1	638.4	518.8	447.9	404.4	377.8	356.5
55°	733.6	849.9	913.7	843.7	669.8	530.9	438.4	382.8	350.2	327.7	309.5
57.5°	637.2	733.1	773.3	691.6	551.7	440.3	370.9	329.0	296.8	280.7	271.3
60°	576.6	658.6	686.6	596.6	479.7	385.2	328.3	289.5	265.8	255.1	245.8
62.5°	517.1	584.0	595.6	513.0	418.1	337.2	288.3	255.5	239.8	229.6	220.7
65°	429.0	477.2	471.6	405.3	330.8	267.7	232.1	212.0	200.1	185.8	170.1
67.5°	353.2	382.6	364.9	315.2	252.5	208.0	184.7	169.6	154.9	141.2	137.6
70°	305.2	322.1	303.3	257.7	207.0	174.5	155.7	137.6	128.8	125.7	120.1
72.5°	259.2	265.0	244.8	205.7	168.4	144.5	126.2	116.0	111.3	108.7	105.1
75°	194.5	190.1	172.6	141.9	117.0	100.7	95.1	91.3	88.2	85.7	83.8
77.5°	136.6	130.2	114.6	94.5	81.4	73.7	70.3	68.3	66.8	65.5	63.6
80°	102.5	98.2	82.6	67.6	61.9	58.2	56.3	53.8	53.8	52.5	50.6
82.5°	75.0	70.1	56.6	49.5	46.4	44.1	42.8	41.3	40.8	41.0	39.7
85°	39.4	31.9	28.2	26.9	25.0	23.8	24.4	23.1	23.1	23.1	22.5
87.5°	12.7	10.7	10.7	10.7	11.6	12.0	11.8	12.2	13.0	12.7	13.5
90°	3.5	5.9	8.4	10.8	12.9	14.7	16.5	18.3	20.1	21.1	22.2
92.5°	20.0	19.8	19.6	19.3	19.7	20.5	21.5	22.3	23.3	23.8	24.4
95°	57.8	50.4	43.1	35.7	32.8	34.4	36.0	37.5	39.1	40.2	41.3
97.5°	108.6	87.8	67.1	46.5	37.9	41.5	45.1	48.7	52.3	53.2	54.1
100°	146.8	116.3	85.9	55.3	41.9	45.7	49.6	53.3	57.1	58.9	60.7
102.5°	223.8	217.4	210.8	204.4	185.4	153.7	122.1	90.4	58.7	61.1	63.3
105°	311.3	317.9	324.6	331.3	304.3	243.5	182.7	121.9	61.1	63.5	66.0
107.5°	394.7	400.1	405.5	410.9	377.2	304.3	231.4	158.4	85.6	83.0	80.6
110°	448.6	453.3	457.9	462.6	432.7	368.3	304.1	239.7	175.3	153.1	130.8



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	499.4	503.4	507.6	511.7	505.9	489.9	474.1	458.2	442.2	361.1	279.8
115°	579.9	583.7	587.5	591.3	596.0	601.5	607.1	612.7	618.2	515.1	412.0
117.5°	652.7	657.0	661.2	665.4	669.4	673.3	677.1	680.9	684.8	659.8	634.9
120°	704.7	708.0	711.4	714.7	718.4	722.5	726.4	730.5	734.4	737.1	739.8
122.5°	749.8	753.3	756.9	760.3	764.3	768.6	773.0	777.4	781.7	783.3	784.9
125°	817.5	820.4	823.3	826.1	829.7	834.0	838.2	842.4	846.7	848.2	849.8
127.5°	879.8	883.0	886.2	889.4	892.5	895.7	898.8	902.0	905.2	907.5	909.7
130°	919.4	922.9	926.5	930.0	933.0	935.5	937.9	940.4	942.8	945.3	947.7
132.5°	958.9	962.0	965.0	968.0	970.7	973.2	975.6	978.1	980.5	982.6	984.7
135°	1011.5	1015.1	1018.7	1022.2	1025.0	1027.0	1029.0	1031.0	1033.0	1035.3	1037.5
137.5°	1063.2	1065.6	1068.2	1070.6	1073.0	1075.3	1077.6	1079.9	1082.1	1084.3	1086.5
140°	1096.9	1098.7	1100.5	1102.3	1104.4	1106.8	1109.3	1111.7	1114.2	1116.2	1118.2
142.5°	1125.6	1127.2	1128.8	1130.4	1132.7	1135.4	1138.2	1141.0	1143.9	1145.7	1147.5
145°	1169.0	1168.8	1168.7	1168.4	1170.2	1173.9	1177.7	1181.6	1185.3	1186.8	1188.5
147.5°	1208.0	1207.1	1206.3	1205.4	1206.8	1210.6	1214.3	1218.0	1221.8	1222.9	1224.1
150°	1232.8	1231.3	1229.7	1228.2	1229.2	1232.8	1236.3	1239.9	1243.4	1244.8	1246.1
152.5°	1254.3	1252.5	1250.8	1249.2	1249.9	1253.3	1256.7	1260.1	1263.5	1264.8	1266.1
155°	1285.5	1283.6	1281.5	1279.5	1279.9	1282.5	1285.2	1287.9	1290.5	1291.8	1293.2
157.5°	1310.5	1308.8	1307.1	1305.4	1305.5	1307.4	1309.2	1311.1	1313.0	1314.5	1316.0
160°	1325.3	1323.9	1322.6	1321.3	1321.3	1322.6	1323.9	1325.3	1326.6	1327.9	1329.3
162.5°	1338.1	1336.7	1335.4	1334.1	1334.0	1335.1	1336.3	1337.5	1338.6	1340.1	1341.6
165°	1355.3	1354.0	1352.6	1351.3	1350.9	1351.6	1352.4	1353.0	1353.7	1355.2	1356.8
167.5°	1368.2	1366.8	1365.5	1364.1	1363.8	1364.4	1365.0	1365.6	1366.3	1367.8	1369.4
170°	1375.4	1374.0	1372.7	1371.4	1370.9	1371.4	1371.8	1372.2	1372.7	1374.2	1375.8
172.5°	1380.2	1378.8	1377.5	1376.2	1375.7	1376.2	1376.6	1377.1	1377.5	1379.0	1380.6
175°	1386.2	1384.6	1383.1	1381.5	1380.9	1381.4	1381.9	1382.2	1382.7	1384.3	1385.8
177.5°	1387.5	1386.2	1385.0	1383.7	1383.2	1383.4	1383.6	1383.7	1383.9	1385.2	1386.4
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7



TEST NUMBER: P331729-830
 CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9	1799.9
2.5°	1862.9	1869.4	1872.4	1872.4	1875.9	1874.4	1872.9
5°	1970.0	1981.9	1984.3	1995.6	2003.8	2001.2	2002.5
7.5°	2076.4	2095.6	2114.4	2123.1	2124.4	2129.4	2131.3
10°	2141.9	2157.6	2187.0	2182.6	2204.5	2217.0	2196.3
12.5°	2205.0	2226.1	2246.6	2252.1	2264.6	2268.5	2260.4
15°	2262.0	2273.3	2274.5	2271.4	2275.1	2272.0	2260.1
17.5°	2208.8	2190.5	2153.4	2135.9	2122.0	2101.6	2093.3
20°	2120.7	2066.9	2004.3	1979.3	1949.9	1892.4	1906.2
22.5°	1930.6	1869.3	1806.8	1733.7	1698.8	1644.3	1641.0
25°	1634.7	1529.1	1412.8	1331.4	1283.9	1229.5	1205.7
27.5°	1271.0	1137.9	1042.6	994.4	950.5	907.3	905.6
30°	1031.9	931.8	858.0	816.7	789.9	771.8	775.5
32.5°	869.8	801.3	751.5	717.2	697.3	683.6	683.4
35°	711.1	664.1	632.3	617.8	603.5	593.5	594.1
37.5°	608.5	580.3	562.6	546.7	537.7	532.8	530.1
40°	556.0	532.8	519.1	509.7	502.2	495.3	494.1
42.5°	514.4	495.3	481.5	474.2	467.1	462.3	461.0
45°	456.6	440.9	428.4	420.3	417.2	412.7	412.7
47.5°	406.1	390.8	381.0	375.9	370.5	367.6	367.5
50°	372.1	360.2	351.5	348.4	343.9	342.0	341.5
52.5°	341.6	332.7	326.5	324.3	322.4	320.1	320.5
55°	300.2	295.2	292.7	290.8	287.7	283.9	286.4
57.5°	265.3	261.0	254.3	248.4	245.5	242.9	243.9
60°	240.8	232.1	223.3	216.4	214.5	208.9	208.9
62.5°	209.7	197.5	186.7	182.9	181.0	178.3	177.9
65°	161.4	156.4	153.8	151.4	150.1	150.1	148.8
67.5°	133.7	131.7	128.9	128.4	127.1	126.7	126.3
70°	118.2	115.6	114.4	113.9	112.5	113.2	111.3
72.5°	103.2	101.2	100.9	99.3	98.6	98.7	97.3
75°	81.3	81.3	80.7	80.0	78.8	78.1	78.8
77.5°	62.6	62.7	61.5	61.5	61.3	61.5	60.8
80°	50.0	50.6	50.0	49.4	48.8	49.4	48.8
82.5°	39.5	38.6	38.5	38.4	38.3	37.9	37.8
85°	22.5	23.1	22.5	21.9	21.9	21.9	22.5
87.5°	13.2	13.4	13.6	13.7	13.8	13.9	13.4
90°	23.4	24.5	25.3	25.7	26.2	26.6	27.1
92.5°	25.0	25.5	26.0	26.3	26.5	26.8	27.1
95°	42.4	43.5	44.0	43.7	43.5	43.3	43.1
97.5°	55.0	55.9	56.5	56.7	57.0	57.2	57.5
100°	62.5	64.3	65.3	65.8	66.3	66.7	67.1
102.5°	65.7	68.0	69.5	70.0	70.7	71.4	71.9
105°	68.4	70.9	72.6	73.5	74.4	75.2	76.2
107.5°	78.0	75.6	74.8	75.7	76.5	77.5	78.3
110°	108.6	86.2	75.6	76.4	77.4	78.2	79.2



TEST NUMBER: P331729-830

CATALOG NUMBER: SA2XXRDIP-C865D1080U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	198.6	117.3	77.1	77.9	78.5	79.3	79.9
115°	309.0	205.9	146.3	130.3	114.2	98.2	82.2
117.5°	609.9	585.0	546.2	493.5	440.8	388.1	335.5
120°	742.4	745.2	731.4	701.3	671.3	641.2	611.2
122.5°	786.6	788.2	786.0	780.2	774.4	768.5	762.7
125°	851.3	852.9	854.0	854.7	855.4	856.0	856.7
127.5°	912.0	914.3	915.5	915.6	915.8	915.9	916.0
130°	950.2	952.6	953.8	953.6	953.3	953.1	952.9
132.5°	986.8	988.9	989.9	989.6	989.4	989.2	988.9
135°	1039.7	1041.9	1042.8	1042.4	1041.9	1041.5	1041.0
137.5°	1088.6	1090.8	1091.6	1090.8	1090.1	1089.3	1088.5
140°	1120.2	1122.2	1122.7	1121.5	1120.4	1119.3	1118.2
142.5°	1149.3	1151.1	1151.5	1150.4	1149.2	1148.2	1147.1
145°	1190.0	1191.6	1191.8	1190.7	1189.6	1188.5	1187.3
147.5°	1225.3	1226.4	1226.5	1225.6	1224.6	1223.7	1222.8
150°	1247.5	1248.8	1248.9	1247.7	1246.7	1245.6	1244.4
152.5°	1267.5	1268.9	1268.8	1267.2	1265.8	1264.3	1262.9
155°	1294.6	1295.9	1295.6	1293.8	1292.1	1290.3	1288.5
157.5°	1317.5	1319.0	1318.9	1317.2	1315.4	1313.7	1311.9
160°	1330.6	1331.9	1331.8	1330.3	1328.7	1327.2	1325.6
162.5°	1343.1	1344.7	1344.4	1342.6	1340.7	1338.7	1336.8
165°	1358.3	1359.9	1359.9	1358.3	1356.8	1355.2	1353.7
167.5°	1370.9	1372.5	1372.2	1370.3	1368.3	1366.3	1364.2
170°	1377.3	1378.9	1378.7	1376.7	1374.7	1372.7	1370.6
172.5°	1382.1	1383.7	1383.6	1381.5	1379.5	1377.5	1375.5
175°	1387.4	1388.9	1388.6	1386.4	1384.1	1382.0	1379.7
177.5°	1387.6	1388.9	1388.7	1387.1	1385.5	1383.9	1382.3
180°	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7	1384.7

(END OF REPORT)