

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: P332661-830

Luminaire Tested: **SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332661-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

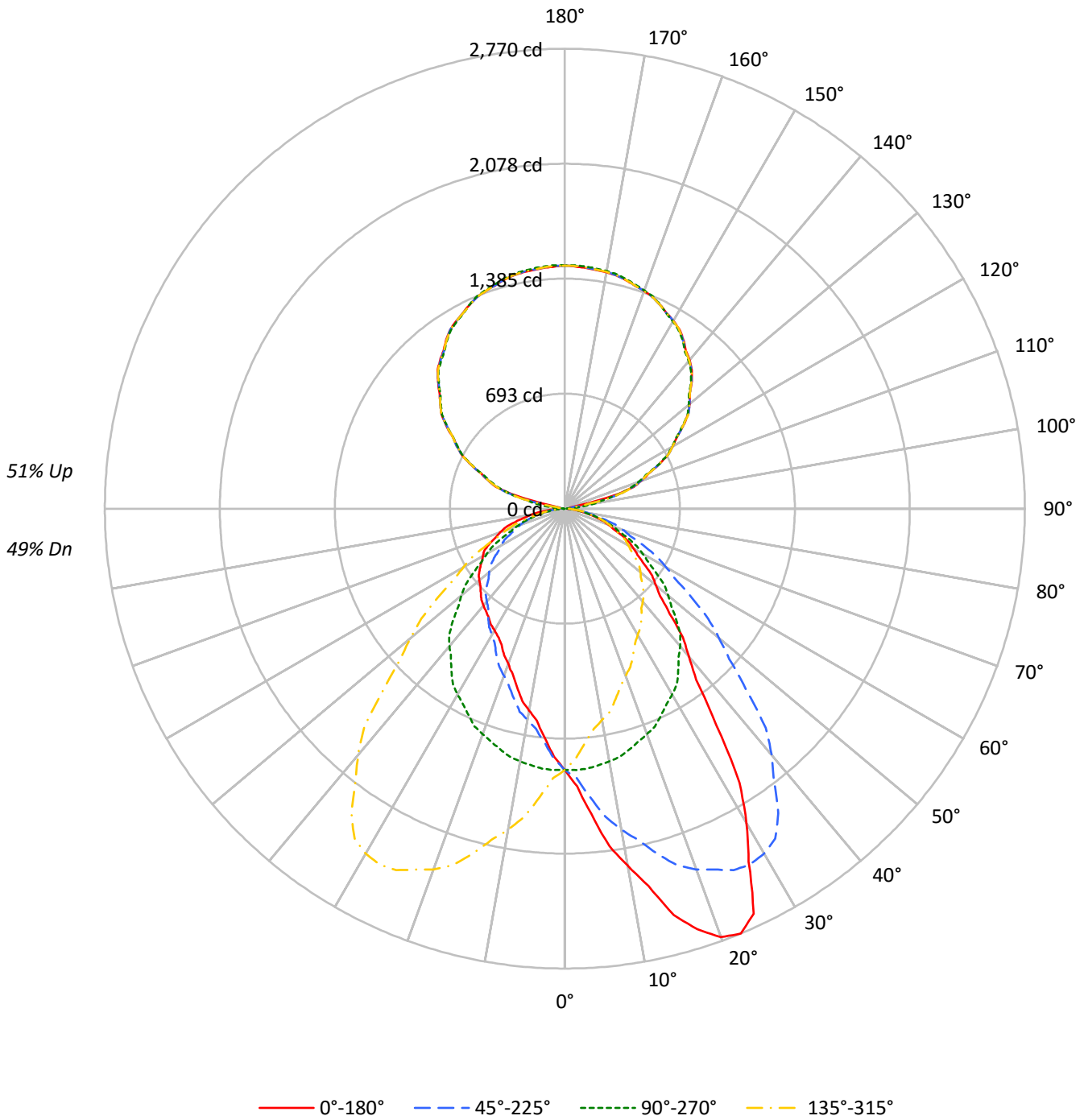
Lumens per Lamp: N/A
Luminaire Lumens: 8873.4 lumens
Efficiency: N/A
Efficacy: 135.7 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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: P332661-830
CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40	35
3	81	72	65	59	75	67	61	55	57	52	48	47	44	41	39	36	34	30
4	75	64	56	50	69	59	53	47	51	45	41	42	38	35	35	32	30	26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26	23
6	63	51	43	38	58	48	41	35	41	35	31	34	30	27	29	25	23	20
7	58	46	38	33	54	43	36	31	37	32	28	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	28	34	28	24	29	25	21	24	21	18	16
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17	14
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12698	12698	12698	12698
5°	14954	12730	11237	12730
10°	17905	12675	10117	12675
15°	21184	12547	9290	12547
20°	23589	12416	8553	12416
25°	23971	12223	8044	12223
30°	20396	12039	7883	12039
35°	15682	11739	7885	11739
40°	12223	11385	8033	11385
45°	10192	10853	8169	10853
50°	8970	10206	8445	10206
55°	8217	9429	8785	9429
60°	7700	8732	9195	8732
65°	7169	7952	9534	7952
70°	6552	7183	9751	7183
75°	5855	6319	9635	6319
80°	4909	5179	9331	5179
85°	3622	3742	8929	3742



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.2	1.7
10°-20°	472.3	5.3
20°-30°	749.0	8.4
30°-40°	833.5	9.4
40°-50°	758.7	8.6
50°-60°	620.0	7.0
60°-70°	442.6	5.0
70°-80°	243.7	2.7
80°-90°	70.8	0.8
90°-100°	50.1	0.6
100°-110°	319.3	3.6
110°-120°	610.8	6.9
120°-130°	775.4	8.7
130°-140°	829.7	9.3
140°-150°	775.8	8.7
150°-160°	625.7	7.1
160°-170°	403.5	4.5
170°-180°	139.1	1.6
0°-30°	1374.6	15.5
0°-40°	2208.1	24.9
0°-60°	3586.8	40.4
0°-90°	4344.0	49.0
90°-120°	980.2	11.0
90°-150°	3361.2	37.9
90°-180°	4529.0	51.0
0°-180°	8873.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1573	1573	1573	1573	1573	
5°	1845	1571	1387	1571	1845	188
15°	2535	1501	1112	1501	2535	716
25°	2691	1372	903	1372	2691	1186
35°	1591	1191	800	1191	1591	1010
45°	893	951	716	951	893	703
55°	584	670	624	670	584	527
65°	375	416	499	416	375	372
75°	188	203	309	203	188	200
85°	39	40	96	40	39	48
90°	33	3	33	3	33	16
95°	32	60	32	60	32	25
105°	312	330	312	330	312	272
115°	620	616	620	616	620	614
125°	872	865	872	865	872	776
135°	1081	1073	1081	1073	1081	832
145°	1244	1238	1244	1238	1244	777
155°	1356	1357	1356	1357	1356	625
165°	1425	1431	1425	1431	1425	402
175°	1456	1464	1456	1464	1456	139
180°	1464	1464	1464	1464	1464	



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1674.0	1673.6	1668.3	1667.3	1663.6	1659.0	1657.9	1649.5	1632.9	1625.0	1623.0
5°	1845.3	1858.3	1841.4	1838.1	1836.2	1814.7	1803.6	1790.5	1760.6	1742.9	1729.3
7.5°	2049.7	2051.2	2043.8	2037.8	2021.2	2002.4	1974.3	1944.4	1908.6	1871.5	1843.4
10°	2184.2	2189.3	2180.9	2179.5	2146.4	2125.4	2083.8	2048.6	2008.2	1963.2	1922.2
12.5°	2325.9	2318.6	2314.3	2286.4	2280.3	2242.2	2193.8	2157.6	2095.3	2043.5	1988.9
15°	2534.7	2520.4	2511.2	2472.8	2453.9	2401.1	2349.6	2309.9	2228.5	2150.9	2092.3
17.5°	2657.1	2671.5	2650.4	2634.6	2585.8	2548.7	2496.1	2412.7	2349.0	2252.7	2178.7
20°	2745.8	2747.0	2735.4	2719.0	2680.6	2633.7	2576.3	2485.1	2409.0	2313.1	2211.5
22.5°	2769.8	2770.0	2765.0	2749.8	2720.7	2682.7	2624.9	2548.7	2456.4	2352.2	2250.6
25°	2691.1	2688.4	2694.4	2711.2	2700.2	2688.4	2655.2	2598.5	2512.5	2402.4	2292.9
27.5°	2398.6	2416.6	2449.7	2491.4	2531.6	2562.2	2570.8	2559.2	2505.8	2415.3	2300.7
30°	2188.0	2210.2	2235.0	2276.6	2357.4	2403.7	2454.6	2492.9	2471.4	2399.1	2292.3
32.5°	1956.6	1962.1	1998.8	2046.3	2120.2	2209.2	2289.8	2367.9	2393.8	2355.9	2266.7
35°	1591.2	1600.2	1640.0	1687.0	1777.5	1886.3	2007.5	2115.7	2205.0	2240.8	2195.2
37.5°	1298.4	1324.6	1352.7	1403.2	1482.9	1580.8	1706.8	1846.7	1979.8	2068.9	2084.1
40°	1159.8	1176.1	1196.3	1234.7	1302.5	1398.9	1507.1	1667.5	1808.8	1936.5	1978.2
42.5°	1050.4	1059.9	1072.2	1107.0	1158.7	1254.5	1353.3	1494.3	1636.3	1788.9	1858.9
45°	892.7	902.5	923.3	943.5	982.6	1049.0	1140.9	1256.9	1399.6	1546.9	1675.8
47.5°	778.7	785.0	797.4	819.1	852.2	896.1	970.8	1067.7	1200.0	1342.9	1480.4
50°	714.2	719.3	729.2	748.7	774.1	813.1	874.4	965.0	1068.6	1212.6	1347.5
52.5°	663.1	665.2	672.3	685.6	705.8	738.7	788.9	863.8	960.2	1088.5	1222.9
55°	583.8	586.4	593.0	602.8	620.3	641.1	679.6	735.7	819.7	931.1	1047.7
57.5°	518.7	520.5	525.9	529.7	544.2	561.2	590.7	630.7	694.5	788.9	893.1
60°	476.9	475.7	482.2	485.4	495.2	509.5	532.3	570.8	626.1	702.4	798.1
62.5°	436.3	434.5	440.0	444.2	449.9	462.1	480.7	510.9	555.8	624.7	707.5
65°	375.3	372.7	376.0	381.2	386.3	392.9	406.6	433.3	469.1	518.7	581.8
67.5°	314.1	316.8	317.4	319.9	322.9	331.8	341.2	360.1	385.3	425.0	478.5
70°	277.6	278.2	280.9	280.9	282.8	290.6	298.4	309.5	334.2	370.8	414.4
72.5°	241.1	243.8	242.8	244.9	246.3	251.5	257.2	267.8	288.9	316.0	352.9
75°	187.7	189.6	189.6	190.3	192.2	194.2	198.7	206.5	221.5	241.8	267.1
77.5°	136.9	137.1	138.0	140.3	140.3	143.5	146.8	153.2	160.5	174.4	189.8
80°	105.6	106.9	106.2	107.5	107.5	110.1	111.4	119.2	122.5	131.6	144.0
82.5°	77.4	78.7	78.6	80.4	81.4	82.0	83.8	86.9	90.2	98.2	103.3
85°	39.1	40.4	39.1	40.4	42.3	43.0	45.0	45.6	48.3	50.1	54.8
87.5°	18.0	19.5	19.4	19.8	20.7	21.1	21.3	20.5	22.3	22.5	24.2
90°	32.9	32.3	31.9	31.4	30.9	30.0	28.5	27.1	25.5	24.1	22.1
92.5°	30.3	30.2	30.1	30.0	29.9	29.0	27.6	26.1	24.7	23.2	21.3
95°	31.8	31.5	31.3	31.0	30.8	30.0	28.5	27.1	25.5	24.1	23.8
97.5°	30.6	30.4	30.2	30.0	29.7	29.5	29.3	29.2	29.0	28.9	56.1
100°	30.6	30.4	30.2	30.0	29.7	31.7	35.8	39.9	44.0	48.2	81.8
102.5°	31.6	31.5	31.5	31.4	31.4	53.6	98.3	142.9	187.6	232.1	236.6
105°	312.2	320.9	329.6	338.4	347.1	350.4	348.3	346.1	343.9	341.7	340.4
107.5°	435.0	434.0	433.2	432.3	431.3	430.3	429.2	428.2	427.1	426.0	424.3
110°	488.4	487.8	487.0	486.3	485.5	484.9	484.5	484.0	483.4	483.0	481.5



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	541.9	541.0	540.1	539.1	538.2	537.8	537.9	538.0	538.1	538.2	537.5
115°	619.9	619.9	619.9	619.9	619.9	619.6	619.2	618.7	618.2	617.6	617.9
117.5°	699.2	699.3	699.4	699.5	699.6	699.6	699.7	699.8	699.9	700.0	699.6
120°	749.1	749.6	750.1	750.5	751.0	751.0	750.5	750.1	749.6	749.1	749.3
122.5°	798.1	798.6	799.2	799.7	800.1	800.2	799.9	799.7	799.4	799.1	798.7
125°	871.8	871.6	871.3	871.0	870.8	870.3	869.6	868.8	868.1	867.4	867.9
127.5°	936.4	936.6	936.8	937.0	937.2	937.4	937.5	937.6	937.7	937.9	936.8
130°	980.1	980.1	980.1	980.1	980.1	980.1	979.9	979.6	979.3	979.1	978.4
132.5°	1020.5	1020.7	1020.9	1021.1	1021.2	1021.2	1021.1	1020.8	1020.5	1020.3	1019.4
135°	1080.9	1080.4	1080.0	1079.5	1079.0	1078.6	1078.0	1077.5	1077.0	1076.6	1075.6
137.5°	1132.7	1132.7	1132.9	1133.1	1133.2	1133.0	1132.5	1132.0	1131.4	1130.9	1129.8
140°	1168.6	1168.3	1168.1	1167.8	1167.6	1167.2	1166.4	1165.6	1164.9	1164.2	1163.7
142.5°	1198.3	1198.3	1198.3	1198.3	1198.2	1197.9	1197.3	1196.8	1196.3	1195.7	1195.4
145°	1244.2	1243.7	1243.1	1242.6	1242.2	1241.8	1241.6	1241.3	1241.1	1240.9	1240.9
147.5°	1282.0	1281.8	1281.6	1281.3	1281.0	1280.8	1280.6	1280.4	1280.3	1280.1	1280.3
150°	1306.6	1306.4	1306.1	1305.8	1305.6	1305.4	1305.4	1305.4	1305.4	1305.4	1305.7
152.5°	1327.6	1327.8	1327.9	1328.0	1328.1	1328.0	1327.7	1327.3	1326.9	1326.5	1326.9
155°	1355.8	1356.6	1357.3	1358.0	1358.8	1358.7	1357.6	1356.7	1355.8	1354.7	1355.5
157.5°	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6	1383.3	1382.1	1380.7	1379.5	1380.4
160°	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1	1399.7	1398.2	1396.8	1395.2	1395.5
162.5°	1407.5	1409.2	1410.9	1412.5	1414.2	1414.3	1412.8	1411.4	1409.9	1408.4	1408.6
165°	1424.8	1427.0	1429.2	1431.4	1433.6	1433.7	1431.8	1429.8	1427.9	1426.0	1426.0
167.5°	1437.8	1440.2	1442.7	1445.1	1447.5	1447.7	1445.5	1443.4	1441.2	1439.1	1439.3
170°	1445.7	1448.1	1450.5	1452.9	1455.4	1455.7	1453.7	1451.7	1449.8	1447.8	1447.6
172.5°	1450.0	1452.6	1455.3	1457.9	1460.6	1460.8	1459.0	1457.0	1455.0	1453.1	1452.8
175°	1455.5	1458.4	1461.3	1464.2	1467.2	1467.5	1465.4	1463.2	1460.9	1458.8	1458.6
177.5°	1459.1	1461.3	1463.7	1466.0	1468.4	1468.8	1467.2	1465.7	1464.1	1462.5	1462.2
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1623.5	1616.2	1611.0	1606.8	1595.3	1588.6	1583.4	1576.0	1567.7	1558.9	1547.9
5°	1715.6	1693.5	1677.2	1652.5	1629.0	1609.4	1589.2	1570.9	1548.8	1524.8	1507.1
7.5°	1812.4	1779.5	1737.3	1700.6	1659.4	1623.6	1591.6	1558.7	1524.6	1491.5	1461.1
10°	1874.0	1831.6	1784.7	1729.3	1677.2	1630.9	1587.9	1546.2	1505.8	1465.4	1430.9
12.5°	1940.1	1887.3	1818.1	1753.3	1694.9	1633.0	1581.1	1530.0	1481.3	1438.8	1398.5
15°	2029.0	1952.8	1872.6	1786.0	1709.1	1636.8	1565.8	1501.3	1446.5	1390.4	1351.4
17.5°	2083.7	1989.3	1897.7	1807.1	1714.0	1622.9	1546.2	1471.8	1403.3	1347.6	1298.4
20°	2119.6	2025.8	1911.8	1821.2	1710.4	1616.6	1528.0	1445.2	1373.6	1314.3	1263.4
22.5°	2150.9	2042.5	1928.4	1809.2	1698.9	1599.4	1502.4	1419.2	1346.0	1283.5	1234.7
25°	2167.8	2043.3	1919.6	1801.0	1675.8	1557.9	1470.0	1372.2	1294.0	1228.2	1176.1
27.5°	2169.6	2036.6	1896.5	1764.7	1635.6	1525.8	1414.8	1327.4	1246.2	1176.7	1126.6
30°	2163.9	2025.1	1874.6	1731.9	1602.2	1483.0	1386.6	1291.5	1208.7	1139.6	1087.5
32.5°	2145.7	2001.1	1846.4	1695.4	1561.0	1444.4	1344.9	1254.4	1173.7	1105.7	1051.0
35°	2092.9	1950.2	1785.4	1628.3	1490.8	1372.9	1283.0	1191.1	1110.3	1045.8	993.1
37.5°	2010.4	1881.4	1713.8	1551.3	1416.3	1297.8	1208.7	1125.7	1052.8	987.3	933.2
40°	1938.4	1825.0	1657.0	1498.6	1352.7	1240.0	1156.6	1080.3	1008.0	946.1	894.7
42.5°	1855.6	1756.8	1601.8	1434.0	1293.3	1180.1	1098.7	1030.3	962.1	904.9	853.5
45°	1707.8	1642.7	1496.7	1341.6	1195.0	1088.2	1010.6	950.6	893.3	837.3	794.3
47.5°	1537.9	1505.5	1382.7	1235.4	1096.3	990.9	923.7	868.3	818.0	770.5	732.6
50°	1423.7	1408.1	1301.8	1159.8	1026.9	927.8	860.1	812.6	769.5	727.8	692.0
52.5°	1311.1	1310.6	1214.8	1084.8	961.8	866.4	799.1	754.7	717.4	683.5	651.3
55°	1139.0	1157.3	1082.3	966.3	856.2	770.2	709.5	669.9	643.8	615.8	591.6
57.5°	980.9	1011.2	949.3	847.2	755.4	676.1	623.3	593.4	565.7	548.7	531.2
60°	877.7	906.3	858.2	772.1	685.5	617.7	567.5	540.8	516.7	505.0	492.6
62.5°	786.0	811.5	775.8	696.1	620.9	555.6	513.3	487.7	471.4	458.5	450.3
65°	654.9	676.4	645.7	587.8	523.2	471.1	436.6	416.3	400.8	395.5	386.3
67.5°	529.3	548.9	532.3	483.1	431.3	391.9	364.9	345.4	336.2	331.7	325.2
70°	454.8	474.4	456.8	413.8	374.0	340.8	315.4	304.3	294.5	292.6	283.4
72.5°	391.7	405.0	387.5	353.8	319.8	291.8	272.1	260.5	255.4	251.9	246.9
75°	293.9	305.6	293.9	267.8	243.6	224.1	207.2	202.6	196.8	194.8	191.5
77.5°	208.0	218.1	209.2	192.8	174.8	159.8	150.6	144.8	143.5	140.1	141.7
80°	159.0	165.5	157.0	146.0	131.6	121.2	114.7	111.4	107.5	106.2	108.8
82.5°	114.1	117.1	112.7	105.3	94.6	87.8	83.4	79.6	78.8	79.1	79.1
85°	59.3	58.6	58.0	51.5	48.3	43.6	41.1	40.4	39.8	41.1	42.3
87.5°	23.8	23.9	23.1	20.5	18.4	16.3	15.3	14.2	15.3	16.3	17.3
90°	20.2	18.3	16.3	13.9	11.3	8.7	5.9	3.3	5.9	8.7	11.3
92.5°	19.3	17.3	15.5	14.4	14.2	14.1	13.9	13.8	13.9	14.1	14.2
95°	23.6	23.4	23.1	27.1	35.4	43.6	51.9	60.2	51.9	43.6	35.4
97.5°	83.2	110.4	137.5	148.5	143.4	138.3	133.1	127.9	133.1	138.3	143.4
100°	115.4	148.9	182.6	197.2	192.7	188.4	184.0	179.6	184.0	188.4	192.7
102.5°	240.9	245.3	249.7	250.2	247.0	243.8	240.6	237.4	240.6	243.8	247.0
105°	339.2	338.1	336.9	335.5	334.0	332.5	331.1	329.6	331.1	332.5	334.0
107.5°	422.7	421.0	419.4	418.2	417.5	416.8	416.0	415.3	416.0	416.8	417.5
110°	480.0	478.6	477.1	476.1	475.3	474.6	473.8	473.2	473.8	474.6	475.3



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	536.8	536.1	535.5	534.4	533.1	531.8	530.6	529.2	530.6	531.8	533.1
115°	618.2	618.4	618.7	618.4	617.6	617.0	616.2	615.5	616.2	617.0	617.6
117.5°	699.0	698.4	697.9	697.1	696.2	695.2	694.2	693.2	694.2	695.2	696.2
120°	749.6	749.9	750.1	749.7	748.8	747.8	746.8	745.8	746.8	747.8	748.8
122.5°	798.3	798.1	797.7	797.2	796.6	796.1	795.5	794.8	795.5	796.1	796.6
125°	868.4	868.8	869.3	869.1	868.1	867.1	866.2	865.2	866.2	867.1	868.1
127.5°	935.7	934.5	933.4	932.7	932.6	932.3	932.0	931.8	932.0	932.3	932.6
130°	977.6	976.9	976.2	975.7	975.4	975.2	975.0	974.7	975.0	975.2	975.4
132.5°	1018.4	1017.5	1016.6	1015.9	1015.5	1015.0	1014.6	1014.2	1014.6	1015.0	1015.5
135°	1074.6	1073.7	1072.7	1072.3	1072.5	1072.8	1073.1	1073.3	1073.1	1072.8	1072.5
137.5°	1128.8	1127.7	1126.6	1126.1	1126.0	1125.9	1125.8	1125.7	1125.8	1125.9	1126.0
140°	1163.2	1162.7	1162.2	1161.8	1161.3	1160.7	1160.3	1159.8	1160.3	1160.7	1161.3
142.5°	1195.1	1194.9	1194.6	1194.0	1193.1	1192.2	1191.4	1190.4	1191.4	1192.2	1193.1
145°	1240.9	1240.9	1240.9	1240.5	1239.7	1239.1	1238.3	1237.6	1238.3	1239.1	1239.7
147.5°	1280.5	1280.8	1281.0	1280.4	1279.1	1277.7	1276.4	1275.0	1276.4	1277.7	1279.1
150°	1306.0	1306.2	1306.5	1306.1	1305.1	1304.1	1303.2	1302.2	1303.2	1304.1	1305.1
152.5°	1327.4	1327.9	1328.2	1328.0	1327.3	1326.5	1325.8	1324.9	1325.8	1326.5	1327.3
155°	1356.2	1357.0	1357.6	1357.9	1357.6	1357.4	1357.2	1357.0	1357.2	1357.4	1357.6
157.5°	1381.2	1382.0	1382.8	1383.3	1383.5	1383.6	1383.7	1383.8	1383.7	1383.6	1383.5
160°	1395.7	1396.0	1396.3	1396.8	1397.5	1398.2	1398.9	1399.7	1398.9	1398.2	1397.5
162.5°	1408.9	1409.1	1409.4	1409.9	1410.9	1411.8	1412.8	1413.6	1412.8	1411.8	1410.9
165°	1426.0	1426.0	1426.0	1426.5	1427.8	1429.0	1430.2	1431.4	1430.2	1429.0	1427.8
167.5°	1439.4	1439.5	1439.6	1440.4	1441.6	1442.9	1444.2	1445.4	1444.2	1442.9	1441.6
170°	1447.4	1447.1	1446.9	1447.5	1449.0	1450.4	1451.9	1453.3	1451.9	1450.4	1449.0
172.5°	1452.6	1452.4	1452.1	1452.7	1454.2	1455.7	1457.1	1458.6	1457.1	1455.7	1454.2
175°	1458.3	1458.0	1457.8	1458.4	1459.9	1461.3	1462.8	1464.2	1462.8	1461.3	1459.9
177.5°	1461.7	1461.3	1460.9	1461.4	1462.8	1464.1	1465.6	1466.9	1465.6	1464.1	1462.8
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1542.7	1538.0	1531.3	1521.8	1514.0	1505.7	1503.6	1500.4	1506.7	1501.5	1500.0
5°	1492.1	1478.5	1460.8	1440.7	1428.9	1412.0	1408.7	1402.2	1395.7	1395.1	1388.6
7.5°	1438.6	1418.5	1395.4	1374.9	1355.8	1337.3	1325.2	1322.6	1313.0	1307.3	1300.8
10°	1404.2	1379.4	1352.7	1333.1	1311.0	1291.5	1277.8	1270.0	1263.4	1256.2	1249.7
12.5°	1363.5	1337.2	1315.1	1294.0	1267.7	1252.8	1230.3	1216.7	1215.5	1215.6	1198.6
15°	1316.2	1290.2	1256.2	1226.2	1211.9	1183.3	1170.9	1155.3	1145.5	1135.7	1127.9
17.5°	1262.2	1229.6	1203.2	1168.8	1141.4	1118.6	1102.4	1093.0	1078.3	1064.4	1054.4
20°	1228.2	1193.7	1165.6	1129.2	1099.2	1071.2	1057.5	1044.5	1033.4	1021.7	1010.6
22.5°	1193.8	1157.7	1123.4	1088.0	1060.2	1030.6	1017.4	999.7	989.1	982.6	971.5
25°	1139.6	1100.5	1061.4	1027.6	998.9	972.8	955.3	941.5	929.8	924.6	917.5
27.5°	1080.7	1041.9	1004.1	965.6	933.1	914.2	900.1	889.8	883.1	876.1	872.9
30°	1043.2	1002.8	962.4	926.5	896.5	877.7	864.7	857.5	852.2	849.0	845.7
32.5°	1005.1	965.3	922.7	890.0	863.2	846.4	836.5	829.3	826.7	825.6	824.3
35°	944.1	903.7	864.7	835.4	809.9	803.4	794.9	791.0	789.8	794.3	796.3
37.5°	885.1	847.6	811.6	783.2	766.6	757.1	754.1	754.3	758.9	763.0	767.7
40°	847.1	810.6	776.7	752.0	736.3	730.5	729.2	732.4	737.6	742.2	747.3
42.5°	810.0	774.1	743.3	720.1	709.2	703.8	704.6	707.8	715.2	720.8	728.6
45°	752.6	722.6	692.7	673.7	664.6	665.9	665.9	671.8	678.9	687.4	695.9
47.5°	698.5	668.3	643.7	627.7	623.0	621.9	625.6	633.2	643.5	653.9	665.8
50°	662.0	633.3	611.8	597.5	592.3	594.3	599.5	606.6	619.0	632.1	644.4
52.5°	625.0	598.9	579.0	565.7	562.0	565.6	570.8	582.1	593.0	607.0	622.0
55°	567.5	545.4	529.7	520.0	518.7	520.7	526.5	538.9	554.5	572.1	586.4
57.5°	510.3	491.8	477.5	470.7	471.4	473.2	482.9	497.6	514.3	533.0	551.5
60°	471.7	454.8	443.1	437.9	438.5	442.4	454.1	467.9	488.7	506.9	526.5
62.5°	435.3	420.4	409.2	404.5	403.6	412.2	423.4	437.6	458.5	478.8	499.9
65°	376.6	364.9	355.8	353.2	355.2	361.7	376.0	394.8	412.5	433.9	456.1
67.5°	319.2	309.6	303.4	304.5	306.9	316.5	328.6	344.8	364.8	387.0	409.0
70°	282.8	273.6	268.4	269.1	273.1	284.7	295.2	311.4	333.0	355.8	374.0
72.5°	245.2	239.2	234.6	237.3	241.2	249.3	262.3	278.6	297.6	318.8	338.0
75°	188.3	188.3	185.7	187.7	193.5	201.3	211.1	228.1	246.9	263.9	279.6
77.5°	139.7	138.3	140.0	142.3	145.7	155.0	166.2	178.2	192.5	209.4	222.3
80°	106.9	107.5	110.7	114.7	116.0	123.2	134.9	146.0	157.0	171.4	183.7
82.5°	80.3	81.0	82.7	87.6	88.9	96.6	104.2	115.2	125.3	134.9	145.2
85°	43.6	43.6	46.9	48.8	52.1	57.3	61.9	68.4	77.6	84.1	93.8
87.5°	19.5	20.0	22.4	23.8	25.8	28.8	30.2	36.2	38.5	41.5	46.3
90°	13.9	16.3	18.3	20.2	22.1	24.1	25.5	27.1	28.5	30.0	30.9
92.5°	14.4	15.5	17.3	19.3	21.3	23.2	24.7	26.1	27.6	29.0	29.9
95°	27.1	23.1	23.4	23.6	23.8	24.1	25.5	27.1	28.5	30.0	30.8
97.5°	148.5	137.5	110.4	83.2	56.1	28.9	29.0	29.2	29.3	29.5	29.7
100°	197.2	182.6	148.9	115.4	81.8	48.2	44.0	39.9	35.8	31.7	29.7
102.5°	250.2	249.7	245.3	240.9	236.6	232.1	187.6	142.9	98.3	53.6	31.4
105°	335.5	336.9	338.1	339.2	340.4	341.7	343.9	346.1	348.3	350.4	347.1
107.5°	418.2	419.4	421.0	422.7	424.3	426.0	427.1	428.2	429.2	430.3	431.3
110°	476.1	477.1	478.6	480.0	481.5	483.0	483.4	484.0	484.5	484.9	485.5



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	534.4	535.5	536.1	536.8	537.5	538.2	538.1	538.0	537.9	537.8	538.2
115°	618.4	618.7	618.4	618.2	617.9	617.6	618.2	618.7	619.2	619.6	619.9
117.5°	697.1	697.9	698.4	699.0	699.6	700.0	699.9	699.8	699.7	699.6	699.6
120°	749.7	750.1	749.9	749.6	749.3	749.1	749.6	750.1	750.5	751.0	751.0
122.5°	797.2	797.7	798.1	798.3	798.7	799.1	799.4	799.7	799.9	800.2	800.1
125°	869.1	869.3	868.8	868.4	867.9	867.4	868.1	868.8	869.6	870.3	870.8
127.5°	932.7	933.4	934.5	935.7	936.8	937.9	937.7	937.6	937.5	937.4	937.2
130°	975.7	976.2	976.9	977.6	978.4	979.1	979.3	979.6	979.9	980.1	980.1
132.5°	1015.9	1016.6	1017.5	1018.4	1019.4	1020.3	1020.5	1020.8	1021.1	1021.2	1021.2
135°	1072.3	1072.7	1073.7	1074.6	1075.6	1076.6	1077.0	1077.5	1078.0	1078.6	1079.0
137.5°	1126.1	1126.6	1127.7	1128.8	1129.8	1130.9	1131.4	1132.0	1132.5	1133.0	1133.2
140°	1161.8	1162.2	1162.7	1163.2	1163.7	1164.2	1164.9	1165.6	1166.4	1167.2	1167.6
142.5°	1194.0	1194.6	1194.9	1195.1	1195.4	1195.7	1196.3	1196.8	1197.3	1197.9	1198.2
145°	1240.5	1240.9	1240.9	1240.9	1240.9	1240.9	1241.1	1241.3	1241.6	1241.8	1242.2
147.5°	1280.4	1281.0	1280.8	1280.5	1280.3	1280.1	1280.3	1280.4	1280.6	1280.8	1281.0
150°	1306.1	1306.5	1306.2	1306.0	1305.7	1305.4	1305.4	1305.4	1305.4	1305.4	1305.6
152.5°	1328.0	1328.2	1327.9	1327.4	1326.9	1326.5	1326.9	1327.3	1327.7	1328.0	1328.1
155°	1357.9	1357.6	1357.0	1356.2	1355.5	1354.7	1355.8	1356.7	1357.6	1358.7	1358.8
157.5°	1383.3	1382.8	1382.0	1381.2	1380.4	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6
160°	1396.8	1396.3	1396.0	1395.7	1395.5	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1
162.5°	1409.9	1409.4	1409.1	1408.9	1408.6	1408.4	1409.9	1411.4	1412.8	1414.3	1414.2
165°	1426.5	1426.0	1426.0	1426.0	1426.0	1426.0	1427.9	1429.8	1431.8	1433.7	1433.6
167.5°	1440.4	1439.6	1439.5	1439.4	1439.3	1439.1	1441.2	1443.4	1445.5	1447.7	1447.5
170°	1447.5	1446.9	1447.1	1447.4	1447.6	1447.8	1449.8	1451.7	1453.7	1455.7	1455.4
172.5°	1452.7	1452.1	1452.4	1452.6	1452.8	1453.1	1455.0	1457.0	1459.0	1460.8	1460.6
175°	1458.4	1457.8	1458.0	1458.3	1458.6	1458.8	1460.9	1463.2	1465.4	1467.5	1467.2
177.5°	1461.4	1460.9	1461.3	1461.7	1462.2	1462.5	1464.1	1465.7	1467.2	1468.8	1468.4
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1498.9	1497.9	1494.2	1493.7	1494.2	1497.9	1498.9	1500.0	1501.5	1506.7	1500.4
5°	1384.6	1381.4	1379.4	1386.6	1379.4	1381.4	1384.6	1388.6	1395.1	1395.7	1402.2
7.5°	1298.4	1295.9	1290.2	1288.4	1290.2	1295.9	1298.4	1300.8	1307.3	1313.0	1322.6
10°	1243.2	1240.6	1235.4	1234.1	1235.4	1240.6	1243.2	1249.7	1256.2	1263.4	1270.0
12.5°	1190.1	1184.9	1183.8	1185.1	1183.8	1184.9	1190.1	1198.6	1215.6	1215.5	1216.7
15°	1119.5	1116.8	1109.7	1111.6	1109.7	1116.8	1119.5	1127.9	1135.7	1145.5	1155.3
17.5°	1049.8	1046.7	1038.0	1045.7	1038.0	1046.7	1049.8	1054.4	1064.4	1078.3	1093.0
20°	1006.1	1000.8	996.3	995.6	996.3	1000.8	1006.1	1010.6	1021.7	1033.4	1044.5
22.5°	964.3	959.7	959.2	955.0	959.2	959.7	964.3	971.5	982.6	989.1	999.7
25°	912.2	907.7	906.3	903.1	906.3	907.7	912.2	917.5	924.6	929.8	941.5
27.5°	872.2	870.0	867.6	868.6	867.6	870.0	872.2	872.9	876.1	883.1	889.8
30°	847.7	847.1	845.7	845.7	845.7	847.1	847.7	845.7	849.0	852.2	857.5
32.5°	827.4	827.3	828.0	828.0	828.0	827.3	827.4	824.3	825.6	826.7	829.3
35°	798.8	800.8	802.1	800.1	802.1	800.8	798.8	796.3	794.3	789.8	791.0
37.5°	773.1	775.0	776.8	779.0	776.8	775.0	773.1	767.7	763.0	758.9	754.3
40°	753.2	757.8	759.1	762.3	759.1	757.8	753.2	747.3	742.2	737.6	732.4
42.5°	734.4	739.5	742.9	743.6	742.9	739.5	734.4	728.6	720.8	715.2	707.8
45°	705.7	710.9	715.5	715.5	715.5	710.9	705.7	695.9	687.4	678.9	671.8
47.5°	675.8	683.3	688.0	689.1	688.0	683.3	675.8	665.8	653.9	643.5	633.2
50°	655.5	664.6	669.2	672.4	669.2	664.6	655.5	644.4	632.1	619.0	606.6
52.5°	635.7	644.8	650.9	652.6	650.9	644.8	635.7	622.0	607.0	593.0	582.1
55°	601.4	614.4	621.6	624.2	621.6	614.4	601.4	586.4	572.1	554.5	538.9
57.5°	569.1	581.1	589.5	591.4	589.5	581.1	569.1	551.5	533.0	514.3	497.6
60°	544.0	557.1	567.5	569.5	567.5	557.1	544.0	526.5	506.9	488.7	467.9
62.5°	518.5	532.1	541.5	546.6	541.5	532.1	518.5	499.9	478.8	458.5	437.6
65°	474.4	488.0	497.2	499.1	497.2	488.0	474.4	456.1	433.9	412.5	394.8
67.5°	426.1	439.8	445.8	449.6	445.8	439.8	426.1	409.0	387.0	364.8	344.8
70°	392.3	403.3	409.8	413.1	409.8	403.3	392.3	374.0	355.8	333.0	311.4
72.5°	353.6	365.2	372.9	373.5	372.9	365.2	353.6	338.0	318.8	297.6	278.6
75°	294.5	304.9	308.9	308.9	308.9	304.9	294.5	279.6	263.9	246.9	228.1
77.5°	233.1	238.5	243.5	244.5	243.5	238.5	233.1	222.3	209.4	192.5	178.2
80°	193.5	196.8	200.7	200.7	200.7	196.8	193.5	183.7	171.4	157.0	146.0
82.5°	152.9	155.6	159.5	159.0	159.5	155.6	152.9	145.2	134.9	125.3	115.2
85°	92.6	98.4	97.7	96.4	97.7	98.4	92.6	93.8	84.1	77.6	68.4
87.5°	48.0	48.6	50.2	51.4	50.2	48.6	48.0	46.3	41.5	38.5	36.2
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.0	28.5	27.1
92.5°	30.0	30.1	30.2	30.3	30.2	30.1	30.0	29.9	29.0	27.6	26.1
95°	31.0	31.3	31.5	31.8	31.5	31.3	31.0	30.8	30.0	28.5	27.1
97.5°	30.0	30.2	30.4	30.6	30.4	30.2	30.0	29.7	29.5	29.3	29.2
100°	30.0	30.2	30.4	30.6	30.4	30.2	30.0	29.7	31.7	35.8	39.9
102.5°	31.4	31.5	31.5	31.6	31.5	31.5	31.4	31.4	53.6	98.3	142.9
105°	338.4	329.6	320.9	312.2	320.9	329.6	338.4	347.1	350.4	348.3	346.1
107.5°	432.3	433.2	434.0	435.0	434.0	433.2	432.3	431.3	430.3	429.2	428.2
110°	486.3	487.0	487.8	488.4	487.8	487.0	486.3	485.5	484.9	484.5	484.0



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	539.1	540.1	541.0	541.9	541.0	540.1	539.1	538.2	537.8	537.9	538.0
115°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.6	619.2	618.7
117.5°	699.5	699.4	699.3	699.2	699.3	699.4	699.5	699.6	699.6	699.7	699.8
120°	750.5	750.1	749.6	749.1	749.6	750.1	750.5	751.0	751.0	750.5	750.1
122.5°	799.7	799.2	798.6	798.1	798.6	799.2	799.7	800.1	800.2	799.9	799.7
125°	871.0	871.3	871.6	871.8	871.6	871.3	871.0	870.8	870.3	869.6	868.8
127.5°	937.0	936.8	936.6	936.4	936.6	936.8	937.0	937.2	937.4	937.5	937.6
130°	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	980.1	979.9	979.6
132.5°	1021.1	1020.9	1020.7	1020.5	1020.7	1020.9	1021.1	1021.2	1021.2	1021.1	1020.8
135°	1079.5	1080.0	1080.4	1080.9	1080.4	1080.0	1079.5	1079.0	1078.6	1078.0	1077.5
137.5°	1133.1	1132.9	1132.7	1132.7	1132.7	1132.9	1133.1	1133.2	1133.0	1132.5	1132.0
140°	1167.8	1168.1	1168.3	1168.6	1168.3	1168.1	1167.8	1167.6	1167.2	1166.4	1165.6
142.5°	1198.3	1198.3	1198.3	1198.3	1198.3	1198.3	1198.3	1198.2	1197.9	1197.3	1196.8
145°	1242.6	1243.1	1243.7	1244.2	1243.7	1243.1	1242.6	1242.2	1241.8	1241.6	1241.3
147.5°	1281.3	1281.6	1281.8	1282.0	1281.8	1281.6	1281.3	1281.0	1280.8	1280.6	1280.4
150°	1305.8	1306.1	1306.4	1306.6	1306.4	1306.1	1305.8	1305.6	1305.4	1305.4	1305.4
152.5°	1328.0	1327.9	1327.8	1327.6	1327.8	1327.9	1328.0	1328.1	1328.0	1327.7	1327.3
155°	1358.0	1357.3	1356.6	1355.8	1356.6	1357.3	1358.0	1358.8	1358.7	1357.6	1356.7
157.5°	1383.3	1382.1	1380.7	1379.5	1380.7	1382.1	1383.3	1384.6	1384.6	1383.3	1382.1
160°	1399.7	1398.2	1396.8	1395.2	1396.8	1398.2	1399.7	1401.1	1401.1	1399.7	1398.2
162.5°	1412.5	1410.9	1409.2	1407.5	1409.2	1410.9	1412.5	1414.2	1414.3	1412.8	1411.4
165°	1431.4	1429.2	1427.0	1424.8	1427.0	1429.2	1431.4	1433.6	1433.7	1431.8	1429.8
167.5°	1445.1	1442.7	1440.2	1437.8	1440.2	1442.7	1445.1	1447.5	1447.7	1445.5	1443.4
170°	1452.9	1450.5	1448.1	1445.7	1448.1	1450.5	1452.9	1455.4	1455.7	1453.7	1451.7
172.5°	1457.9	1455.3	1452.6	1450.0	1452.6	1455.3	1457.9	1460.6	1460.8	1459.0	1457.0
175°	1464.2	1461.3	1458.4	1455.5	1458.4	1461.3	1464.2	1467.2	1467.5	1465.4	1463.2
177.5°	1466.0	1463.7	1461.3	1459.1	1461.3	1463.7	1466.0	1468.4	1468.8	1467.2	1465.7
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1503.6	1505.7	1514.0	1521.8	1531.3	1538.0	1542.7	1547.9	1558.9	1567.7	1576.0
5°	1408.7	1412.0	1428.9	1440.7	1460.8	1478.5	1492.1	1507.1	1524.8	1548.8	1570.9
7.5°	1325.2	1337.3	1355.8	1374.9	1395.4	1418.5	1438.6	1461.1	1491.5	1524.6	1558.7
10°	1277.8	1291.5	1311.0	1333.1	1352.7	1379.4	1404.2	1430.9	1465.4	1505.8	1546.2
12.5°	1230.3	1252.8	1267.7	1294.0	1315.1	1337.2	1363.5	1398.5	1438.8	1481.3	1530.0
15°	1170.9	1183.3	1211.9	1226.2	1256.2	1290.2	1316.2	1351.4	1390.4	1446.5	1501.3
17.5°	1102.4	1118.6	1141.4	1168.8	1203.2	1229.6	1262.2	1298.4	1347.6	1403.3	1471.8
20°	1057.5	1071.2	1099.2	1129.2	1165.6	1193.7	1228.2	1263.4	1314.3	1373.6	1445.2
22.5°	1017.4	1030.6	1060.2	1088.0	1123.4	1157.7	1193.8	1234.7	1283.5	1346.0	1419.2
25°	955.3	972.8	998.9	1027.6	1061.4	1100.5	1139.6	1176.1	1228.2	1294.0	1372.2
27.5°	900.1	914.2	933.1	965.6	1004.1	1041.9	1080.7	1126.6	1176.7	1246.2	1327.4
30°	864.7	877.7	896.5	926.5	962.4	1002.8	1043.2	1087.5	1139.6	1208.7	1291.5
32.5°	836.5	846.4	863.2	890.0	922.7	965.3	1005.1	1051.0	1105.7	1173.7	1254.4
35°	794.9	803.4	809.9	835.4	864.7	903.7	944.1	993.1	1045.8	1110.3	1191.1
37.5°	754.1	757.1	766.6	783.2	811.6	847.6	885.1	933.2	987.3	1052.8	1125.7
40°	729.2	730.5	736.3	752.0	776.7	810.6	847.1	894.7	946.1	1008.0	1080.3
42.5°	704.6	703.8	709.2	720.1	743.3	774.1	810.0	853.5	904.9	962.1	1030.3
45°	665.9	665.9	664.6	673.7	692.7	722.6	752.6	794.3	837.3	893.3	950.6
47.5°	625.6	621.9	623.0	627.7	643.7	668.3	698.5	732.6	770.5	818.0	868.3
50°	599.5	594.3	592.3	597.5	611.8	633.3	662.0	692.0	727.8	769.5	812.6
52.5°	570.8	565.6	562.0	565.7	579.0	598.9	625.0	651.3	683.5	717.4	754.7
55°	526.5	520.7	518.7	520.0	529.7	545.4	567.5	591.6	615.8	643.8	669.9
57.5°	482.9	473.2	471.4	470.7	477.5	491.8	510.3	531.2	548.7	565.7	593.4
60°	454.1	442.4	438.5	437.9	443.1	454.8	471.7	492.6	505.0	516.7	540.8
62.5°	423.4	412.2	403.6	404.5	409.2	420.4	435.3	450.3	458.5	471.4	487.7
65°	376.0	361.7	355.2	353.2	355.8	364.9	376.6	386.3	395.5	400.8	416.3
67.5°	328.6	316.5	306.9	304.5	303.4	309.6	319.2	325.2	331.7	336.2	345.4
70°	295.2	284.7	273.1	269.1	268.4	273.6	282.8	283.4	292.6	294.5	304.3
72.5°	262.3	249.3	241.2	237.3	234.6	239.2	245.2	246.9	251.9	255.4	260.5
75°	211.1	201.3	193.5	187.7	185.7	188.3	188.3	191.5	194.8	196.8	202.6
77.5°	166.2	155.0	145.7	142.3	140.0	138.3	139.7	141.7	140.1	143.5	144.8
80°	134.9	123.2	116.0	114.7	110.7	107.5	106.9	108.8	106.2	107.5	111.4
82.5°	104.2	96.6	88.9	87.6	82.7	81.0	80.3	79.1	79.1	78.8	79.6
85°	61.9	57.3	52.1	48.8	46.9	43.6	43.6	42.3	41.1	39.8	40.4
87.5°	30.2	28.8	25.8	23.8	22.4	20.0	19.5	17.3	16.3	15.3	14.2
90°	25.5	24.1	22.1	20.2	18.3	16.3	13.9	11.3	8.7	5.9	3.3
92.5°	24.7	23.2	21.3	19.3	17.3	15.5	14.4	14.2	14.1	13.9	13.8
95°	25.5	24.1	23.8	23.6	23.4	23.1	27.1	35.4	43.6	51.9	60.2
97.5°	29.0	28.9	56.1	83.2	110.4	137.5	148.5	143.4	138.3	133.1	127.9
100°	44.0	48.2	81.8	115.4	148.9	182.6	197.2	192.7	188.4	184.0	179.6
102.5°	187.6	232.1	236.6	240.9	245.3	249.7	250.2	247.0	243.8	240.6	237.4
105°	343.9	341.7	340.4	339.2	338.1	336.9	335.5	334.0	332.5	331.1	329.6
107.5°	427.1	426.0	424.3	422.7	421.0	419.4	418.2	417.5	416.8	416.0	415.3
110°	483.4	483.0	481.5	480.0	478.6	477.1	476.1	475.3	474.6	473.8	473.2



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	538.1	538.2	537.5	536.8	536.1	535.5	534.4	533.1	531.8	530.6	529.2
115°	618.2	617.6	617.9	618.2	618.4	618.7	618.4	617.6	617.0	616.2	615.5
117.5°	699.9	700.0	699.6	699.0	698.4	697.9	697.1	696.2	695.2	694.2	693.2
120°	749.6	749.1	749.3	749.6	749.9	750.1	749.7	748.8	747.8	746.8	745.8
122.5°	799.4	799.1	798.7	798.3	798.1	797.7	797.2	796.6	796.1	795.5	794.8
125°	868.1	867.4	867.9	868.4	868.8	869.3	869.1	868.1	867.1	866.2	865.2
127.5°	937.7	937.9	936.8	935.7	934.5	933.4	932.7	932.6	932.3	932.0	931.8
130°	979.3	979.1	978.4	977.6	976.9	976.2	975.7	975.4	975.2	975.0	974.7
132.5°	1020.5	1020.3	1019.4	1018.4	1017.5	1016.6	1015.9	1015.5	1015.0	1014.6	1014.2
135°	1077.0	1076.6	1075.6	1074.6	1073.7	1072.7	1072.3	1072.5	1072.8	1073.1	1073.3
137.5°	1131.4	1130.9	1129.8	1128.8	1127.7	1126.6	1126.1	1126.0	1125.9	1125.8	1125.7
140°	1164.9	1164.2	1163.7	1163.2	1162.7	1162.2	1161.8	1161.3	1160.7	1160.3	1159.8
142.5°	1196.3	1195.7	1195.4	1195.1	1194.9	1194.6	1194.0	1193.1	1192.2	1191.4	1190.4
145°	1241.1	1240.9	1240.9	1240.9	1240.9	1240.9	1240.5	1239.7	1239.1	1238.3	1237.6
147.5°	1280.3	1280.1	1280.3	1280.5	1280.8	1281.0	1280.4	1279.1	1277.7	1276.4	1275.0
150°	1305.4	1305.4	1305.7	1306.0	1306.2	1306.5	1306.1	1305.1	1304.1	1303.2	1302.2
152.5°	1326.9	1326.5	1326.9	1327.4	1327.9	1328.2	1328.0	1327.3	1326.5	1325.8	1324.9
155°	1355.8	1354.7	1355.5	1356.2	1357.0	1357.6	1357.9	1357.6	1357.4	1357.2	1357.0
157.5°	1380.7	1379.5	1380.4	1381.2	1382.0	1382.8	1383.3	1383.5	1383.6	1383.7	1383.8
160°	1396.8	1395.2	1395.5	1395.7	1396.0	1396.3	1396.8	1397.5	1398.2	1398.9	1399.7
162.5°	1409.9	1408.4	1408.6	1408.9	1409.1	1409.4	1409.9	1410.9	1411.8	1412.8	1413.6
165°	1427.9	1426.0	1426.0	1426.0	1426.0	1426.0	1426.5	1427.8	1429.0	1430.2	1431.4
167.5°	1441.2	1439.1	1439.3	1439.4	1439.5	1439.6	1440.4	1441.6	1442.9	1444.2	1445.4
170°	1449.8	1447.8	1447.6	1447.4	1447.1	1446.9	1447.5	1449.0	1450.4	1451.9	1453.3
172.5°	1455.0	1453.1	1452.8	1452.6	1452.4	1452.1	1452.7	1454.2	1455.7	1457.1	1458.6
175°	1460.9	1458.8	1458.6	1458.3	1458.0	1457.8	1458.4	1459.9	1461.3	1462.8	1464.2
177.5°	1464.1	1462.5	1462.2	1461.7	1461.3	1460.9	1461.4	1462.8	1464.1	1465.6	1466.9
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830
 CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1583.4	1588.6	1595.3	1606.8	1611.0	1616.2	1623.5	1623.0	1625.0	1632.9	1649.5
5°	1589.2	1609.4	1629.0	1652.5	1677.2	1693.5	1715.6	1729.3	1742.9	1760.6	1790.5
7.5°	1591.6	1623.6	1659.4	1700.6	1737.3	1779.5	1812.4	1843.4	1871.5	1908.6	1944.4
10°	1587.9	1630.9	1677.2	1729.3	1784.7	1831.6	1874.0	1922.2	1963.2	2008.2	2048.6
12.5°	1581.1	1633.0	1694.9	1753.3	1818.1	1887.3	1940.1	1988.9	2043.5	2095.3	2157.6
15°	1565.8	1636.8	1709.1	1786.0	1872.6	1952.8	2029.0	2092.3	2150.9	2228.5	2309.9
17.5°	1546.2	1622.9	1714.0	1807.1	1897.7	1989.3	2083.7	2178.7	2252.7	2349.0	2412.7
20°	1528.0	1616.6	1710.4	1821.2	1911.8	2025.8	2119.6	2211.5	2313.1	2409.0	2485.1
22.5°	1502.4	1599.4	1698.9	1809.2	1928.4	2042.5	2150.9	2250.6	2352.2	2456.4	2548.7
25°	1470.0	1557.9	1675.8	1801.0	1919.6	2043.3	2167.8	2292.9	2402.4	2512.5	2598.5
27.5°	1414.8	1525.8	1635.6	1764.7	1896.5	2036.6	2169.6	2300.7	2415.3	2505.8	2559.2
30°	1386.6	1483.0	1602.2	1731.9	1874.6	2025.1	2163.9	2292.3	2399.1	2471.4	2492.9
32.5°	1344.9	1444.4	1561.0	1695.4	1846.4	2001.1	2145.7	2266.7	2355.9	2393.8	2367.9
35°	1283.0	1372.9	1490.8	1628.3	1785.4	1950.2	2092.9	2195.2	2240.8	2205.0	2115.7
37.5°	1208.7	1297.8	1416.3	1551.3	1713.8	1881.4	2010.4	2084.1	2068.9	1979.8	1846.7
40°	1156.6	1240.0	1352.7	1498.6	1657.0	1825.0	1938.4	1978.2	1936.5	1808.8	1667.5
42.5°	1098.7	1180.1	1293.3	1434.0	1601.8	1756.8	1855.6	1858.9	1788.9	1636.3	1494.3
45°	1010.6	1088.2	1195.0	1341.6	1496.7	1642.7	1707.8	1675.8	1546.9	1399.6	1256.9
47.5°	923.7	990.9	1096.3	1235.4	1382.7	1505.5	1537.9	1480.4	1342.9	1200.0	1067.7
50°	860.1	927.8	1026.9	1159.8	1301.8	1408.1	1423.7	1347.5	1212.6	1068.6	965.0
52.5°	799.1	866.4	961.8	1084.8	1214.8	1310.6	1311.1	1222.9	1088.5	960.2	863.8
55°	709.5	770.2	856.2	966.3	1082.3	1157.3	1139.0	1047.7	931.1	819.7	735.7
57.5°	623.3	676.1	755.4	847.2	949.3	1011.2	980.9	893.1	788.9	694.5	630.7
60°	567.5	617.7	685.5	772.1	858.2	906.3	877.7	798.1	702.4	626.1	570.8
62.5°	513.3	555.6	620.9	696.1	775.8	811.5	786.0	707.5	624.7	555.8	510.9
65°	436.6	471.1	523.2	587.8	645.7	676.4	654.9	581.8	518.7	469.1	433.3
67.5°	364.9	391.9	431.3	483.1	532.3	548.9	529.3	478.5	425.0	385.3	360.1
70°	315.4	340.8	374.0	413.8	456.8	474.4	454.8	414.4	370.8	334.2	309.5
72.5°	272.1	291.8	319.8	353.8	387.5	405.0	391.7	352.9	316.0	288.9	267.8
75°	207.2	224.1	243.6	267.8	293.9	305.6	293.9	267.1	241.8	221.5	206.5
77.5°	150.6	159.8	174.8	192.8	209.2	218.1	208.0	189.8	174.4	160.5	153.2
80°	114.7	121.2	131.6	146.0	157.0	165.5	159.0	144.0	131.6	122.5	119.2
82.5°	83.4	87.8	94.6	105.3	112.7	117.1	114.1	103.3	98.2	90.2	86.9
85°	41.1	43.6	48.3	51.5	58.0	58.6	59.3	54.8	50.1	48.3	45.6
87.5°	15.3	16.3	18.4	20.5	23.1	23.9	23.8	24.2	22.5	22.3	20.5
90°	5.9	8.7	11.3	13.9	16.3	18.3	20.2	22.1	24.1	25.5	27.1
92.5°	13.9	14.1	14.2	14.4	15.5	17.3	19.3	21.3	23.2	24.7	26.1
95°	51.9	43.6	35.4	27.1	23.1	23.4	23.6	23.8	24.1	25.5	27.1
97.5°	133.1	138.3	143.4	148.5	137.5	110.4	83.2	56.1	28.9	29.0	29.2
100°	184.0	188.4	192.7	197.2	182.6	148.9	115.4	81.8	48.2	44.0	39.9
102.5°	240.6	243.8	247.0	250.2	249.7	245.3	240.9	236.6	232.1	187.6	142.9
105°	331.1	332.5	334.0	335.5	336.9	338.1	339.2	340.4	341.7	343.9	346.1
107.5°	416.0	416.8	417.5	418.2	419.4	421.0	422.7	424.3	426.0	427.1	428.2
110°	473.8	474.6	475.3	476.1	477.1	478.6	480.0	481.5	483.0	483.4	484.0



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.6	531.8	533.1	534.4	535.5	536.1	536.8	537.5	538.2	538.1	538.0
115°	616.2	617.0	617.6	618.4	618.7	618.4	618.2	617.9	617.6	618.2	618.7
117.5°	694.2	695.2	696.2	697.1	697.9	698.4	699.0	699.6	700.0	699.9	699.8
120°	746.8	747.8	748.8	749.7	750.1	749.9	749.6	749.3	749.1	749.6	750.1
122.5°	795.5	796.1	796.6	797.2	797.7	798.1	798.3	798.7	799.1	799.4	799.7
125°	866.2	867.1	868.1	869.1	869.3	868.8	868.4	867.9	867.4	868.1	868.8
127.5°	932.0	932.3	932.6	932.7	933.4	934.5	935.7	936.8	937.9	937.7	937.6
130°	975.0	975.2	975.4	975.7	976.2	976.9	977.6	978.4	979.1	979.3	979.6
132.5°	1014.6	1015.0	1015.5	1015.9	1016.6	1017.5	1018.4	1019.4	1020.3	1020.5	1020.8
135°	1073.1	1072.8	1072.5	1072.3	1072.7	1073.7	1074.6	1075.6	1076.6	1077.0	1077.5
137.5°	1125.8	1125.9	1126.0	1126.1	1126.6	1127.7	1128.8	1129.8	1130.9	1131.4	1132.0
140°	1160.3	1160.7	1161.3	1161.8	1162.2	1162.7	1163.2	1163.7	1164.2	1164.9	1165.6
142.5°	1191.4	1192.2	1193.1	1194.0	1194.6	1194.9	1195.1	1195.4	1195.7	1196.3	1196.8
145°	1238.3	1239.1	1239.7	1240.5	1240.9	1240.9	1240.9	1240.9	1240.9	1241.1	1241.3
147.5°	1276.4	1277.7	1279.1	1280.4	1281.0	1280.8	1280.5	1280.3	1280.1	1280.3	1280.4
150°	1303.2	1304.1	1305.1	1306.1	1306.5	1306.2	1306.0	1305.7	1305.4	1305.4	1305.4
152.5°	1325.8	1326.5	1327.3	1328.0	1328.2	1327.9	1327.4	1326.9	1326.5	1326.9	1327.3
155°	1357.2	1357.4	1357.6	1357.9	1357.6	1357.0	1356.2	1355.5	1354.7	1355.8	1356.7
157.5°	1383.7	1383.6	1383.5	1383.3	1382.8	1382.0	1381.2	1380.4	1379.5	1380.7	1382.1
160°	1398.9	1398.2	1397.5	1396.8	1396.3	1396.0	1395.7	1395.5	1395.2	1396.8	1398.2
162.5°	1412.8	1411.8	1410.9	1409.9	1409.4	1409.1	1408.9	1408.6	1408.4	1409.9	1411.4
165°	1430.2	1429.0	1427.8	1426.5	1426.0	1426.0	1426.0	1426.0	1426.0	1427.9	1429.8
167.5°	1444.2	1442.9	1441.6	1440.4	1439.6	1439.5	1439.4	1439.3	1439.1	1441.2	1443.4
170°	1451.9	1450.4	1449.0	1447.5	1446.9	1447.1	1447.4	1447.6	1447.8	1449.8	1451.7
172.5°	1457.1	1455.7	1454.2	1452.7	1452.1	1452.4	1452.6	1452.8	1453.1	1455.0	1457.0
175°	1462.8	1461.3	1459.9	1458.4	1457.8	1458.0	1458.3	1458.6	1458.8	1460.9	1463.2
177.5°	1465.6	1464.1	1462.8	1461.4	1460.9	1461.3	1461.7	1462.2	1462.5	1464.1	1465.7
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2



TEST NUMBER: P332661-830
 CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9	1572.9
2.5°	1657.9	1659.0	1663.6	1667.3	1668.3	1673.6	1674.0
5°	1803.6	1814.7	1836.2	1838.1	1841.4	1858.3	1845.3
7.5°	1974.3	2002.4	2021.2	2037.8	2043.8	2051.2	2049.7
10°	2083.8	2125.4	2146.4	2179.5	2180.9	2189.3	2184.2
12.5°	2193.8	2242.2	2280.3	2286.4	2314.3	2318.6	2325.9
15°	2349.6	2401.1	2453.9	2472.8	2511.2	2520.4	2534.7
17.5°	2496.1	2548.7	2585.8	2634.6	2650.4	2671.5	2657.1
20°	2576.3	2633.7	2680.6	2719.0	2735.4	2747.0	2745.8
22.5°	2624.9	2682.7	2720.7	2749.8	2765.0	2770.0	2769.8
25°	2655.2	2688.4	2700.2	2711.2	2694.4	2688.4	2691.1
27.5°	2570.8	2562.2	2531.6	2491.4	2449.7	2416.6	2398.6
30°	2454.6	2403.7	2357.4	2276.6	2235.0	2210.2	2188.0
32.5°	2289.8	2209.2	2120.2	2046.3	1998.8	1962.1	1956.6
35°	2007.5	1886.3	1777.5	1687.0	1640.0	1600.2	1591.2
37.5°	1706.8	1580.8	1482.9	1403.2	1352.7	1324.6	1298.4
40°	1507.1	1398.9	1302.5	1234.7	1196.3	1176.1	1159.8
42.5°	1353.3	1254.5	1158.7	1107.0	1072.2	1059.9	1050.4
45°	1140.9	1049.0	982.6	943.5	923.3	902.5	892.7
47.5°	970.8	896.1	852.2	819.1	797.4	785.0	778.7
50°	874.4	813.1	774.1	748.7	729.2	719.3	714.2
52.5°	788.9	738.7	705.8	685.6	672.3	665.2	663.1
55°	679.6	641.1	620.3	602.8	593.0	586.4	583.8
57.5°	590.7	561.2	544.2	529.7	525.9	520.5	518.7
60°	532.3	509.5	495.2	485.4	482.2	475.7	476.9
62.5°	480.7	462.1	449.9	444.2	440.0	434.5	436.3
65°	406.6	392.9	386.3	381.2	376.0	372.7	375.3
67.5°	341.2	331.8	322.9	319.9	317.4	316.8	314.1
70°	298.4	290.6	282.8	280.9	280.9	278.2	277.6
72.5°	257.2	251.5	246.3	244.9	242.8	243.8	241.1
75°	198.7	194.2	192.2	190.3	189.6	189.6	187.7
77.5°	146.8	143.5	140.3	140.3	138.0	137.1	136.9
80°	111.4	110.1	107.5	107.5	106.2	106.9	105.6
82.5°	83.8	82.0	81.4	80.4	78.6	78.7	77.4
85°	45.0	43.0	42.3	40.4	39.1	40.4	39.1
87.5°	21.3	21.1	20.7	19.8	19.4	19.5	18.0
90°	28.5	30.0	30.9	31.4	31.9	32.3	32.9
92.5°	27.6	29.0	29.9	30.0	30.1	30.2	30.3
95°	28.5	30.0	30.8	31.0	31.3	31.5	31.8
97.5°	29.3	29.5	29.7	30.0	30.2	30.4	30.6
100°	35.8	31.7	29.7	30.0	30.2	30.4	30.6
102.5°	98.3	53.6	31.4	31.4	31.5	31.5	31.6
105°	348.3	350.4	347.1	338.4	329.6	320.9	312.2
107.5°	429.2	430.3	431.3	432.3	433.2	434.0	435.0
110°	484.5	484.9	485.5	486.3	487.0	487.8	488.4



TEST NUMBER: P332661-830

CATALOG NUMBER: SA4XXDIP-C1020D1205U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	537.9	537.8	538.2	539.1	540.1	541.0	541.9
115°	619.2	619.6	619.9	619.9	619.9	619.9	619.9
117.5°	699.7	699.6	699.6	699.5	699.4	699.3	699.2
120°	750.5	751.0	751.0	750.5	750.1	749.6	749.1
122.5°	799.9	800.2	800.1	799.7	799.2	798.6	798.1
125°	869.6	870.3	870.8	871.0	871.3	871.6	871.8
127.5°	937.5	937.4	937.2	937.0	936.8	936.6	936.4
130°	979.9	980.1	980.1	980.1	980.1	980.1	980.1
132.5°	1021.1	1021.2	1021.2	1021.1	1020.9	1020.7	1020.5
135°	1078.0	1078.6	1079.0	1079.5	1080.0	1080.4	1080.9
137.5°	1132.5	1133.0	1133.2	1133.1	1132.9	1132.7	1132.7
140°	1166.4	1167.2	1167.6	1167.8	1168.1	1168.3	1168.6
142.5°	1197.3	1197.9	1198.2	1198.3	1198.3	1198.3	1198.3
145°	1241.6	1241.8	1242.2	1242.6	1243.1	1243.7	1244.2
147.5°	1280.6	1280.8	1281.0	1281.3	1281.6	1281.8	1282.0
150°	1305.4	1305.4	1305.6	1305.8	1306.1	1306.4	1306.6
152.5°	1327.7	1328.0	1328.1	1328.0	1327.9	1327.8	1327.6
155°	1357.6	1358.7	1358.8	1358.0	1357.3	1356.6	1355.8
157.5°	1383.3	1384.6	1384.6	1383.3	1382.1	1380.7	1379.5
160°	1399.7	1401.1	1401.1	1399.7	1398.2	1396.8	1395.2
162.5°	1412.8	1414.3	1414.2	1412.5	1410.9	1409.2	1407.5
165°	1431.8	1433.7	1433.6	1431.4	1429.2	1427.0	1424.8
167.5°	1445.5	1447.7	1447.5	1445.1	1442.7	1440.2	1437.8
170°	1453.7	1455.7	1455.4	1452.9	1450.5	1448.1	1445.7
172.5°	1459.0	1460.8	1460.6	1457.9	1455.3	1452.6	1450.0
175°	1465.4	1467.5	1467.2	1464.2	1461.3	1458.4	1455.5
177.5°	1467.2	1468.8	1468.4	1466.0	1463.7	1461.3	1459.1
180°	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2	1464.2

(END OF REPORT)