

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: P332662-840

Luminaire Tested: **SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332662-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

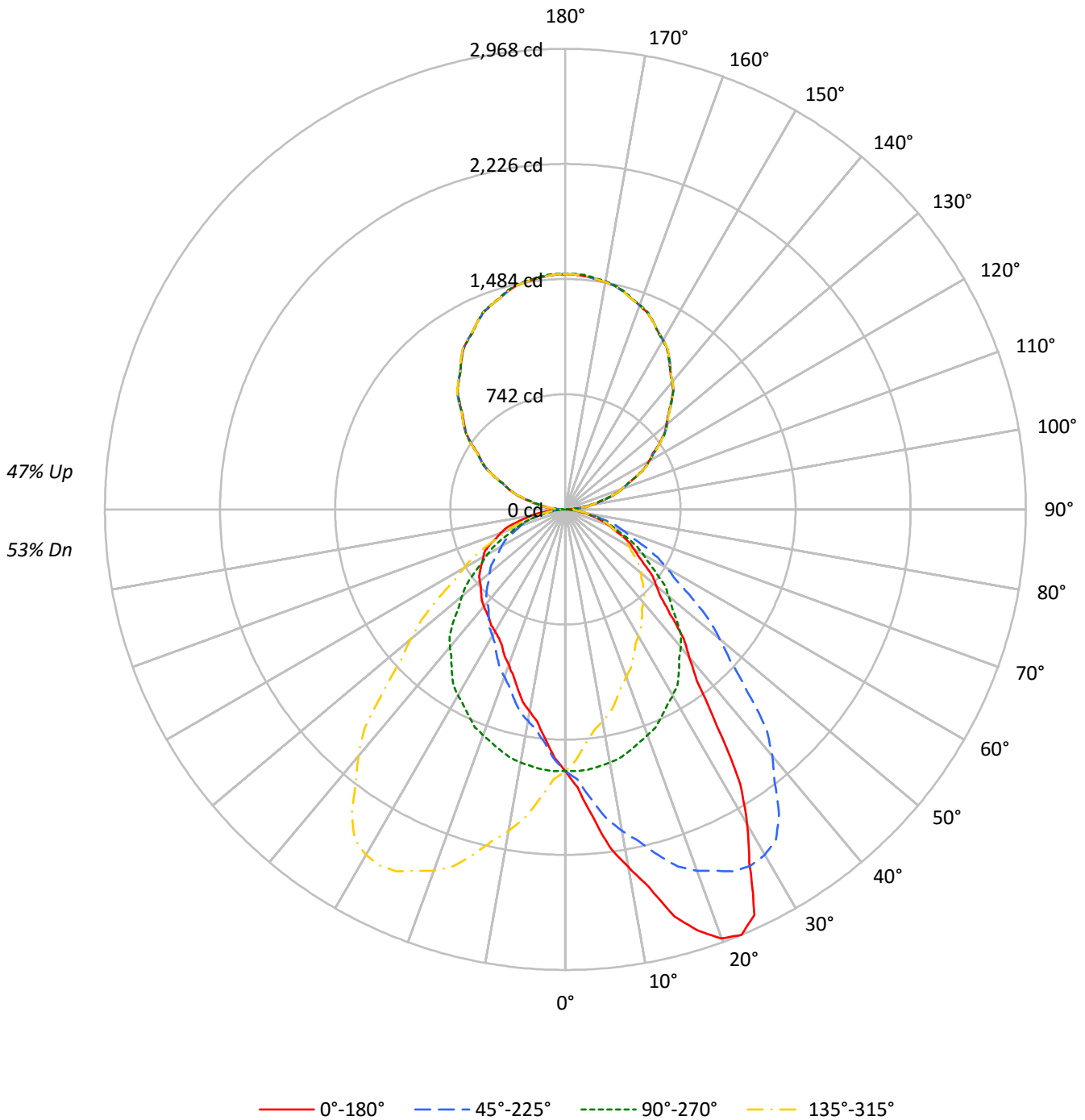
Lumens per Lamp: N/A
Luminaire Lumens: 8863.2 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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: P332662-840
CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	53
1	99	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50	45
2	90	83	77	71	83	77	71	67	66	62	58	55	53	50	46	44	42	38
3	82	73	66	60	76	68	61	56	58	53	49	49	46	43	41	38	36	32
4	75	65	57	51	69	60	53	48	52	46	42	44	40	37	37	34	31	28
5	69	58	50	44	64	54	47	41	46	41	37	40	35	32	33	30	28	24
6	64	52	44	38	59	48	41	36	42	36	32	36	32	28	30	27	24	22
7	59	47	39	33	55	44	37	32	38	32	28	33	28	25	28	24	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	25	22	19	17
9	51	39	31	26	47	37	30	25	32	26	23	28	23	20	23	20	18	16
10	48	36	29	24	44	34	27	23	29	24	20	26	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13605	13605	13605	13605
5°	16022	13639	12039	13639
10°	19184	13581	10839	13581
15°	22697	13443	9954	13443
20°	25274	13302	9164	13302
25°	25683	13097	8620	13097
30°	21853	12899	8447	12899
35°	16802	12577	8449	12577
40°	13095	12198	8608	12198
45°	10919	11628	8752	11628
50°	9610	10934	9048	10934
55°	8804	10101	9413	10101
60°	8251	9357	9852	9357
65°	7681	8521	10214	8521
70°	7020	7695	10447	7695
75°	6273	6772	10321	6772
80°	5258	5551	9995	5551
85°	3881	4011	9568	4011



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	1.9
10°-20°	506.1	5.7
20°-30°	802.5	9.1
30°-40°	893.1	10.1
40°-50°	812.9	9.2
50°-60°	664.3	7.5
60°-70°	474.2	5.4
70°-80°	261.1	2.9
80°-90°	75.8	0.9
90°-100°	100.1	1.1
100°-110°	296.4	3.3
110°-120°	503.1	5.7
120°-130°	663.4	7.5
130°-140°	745.0	8.4
140°-150°	732.1	8.3
150°-160°	615.7	6.9
160°-170°	409.7	4.6
170°-180°	143.5	1.6
0°-30°	1472.7	16.6
0°-40°	2365.8	26.7
0°-60°	3843.0	43.4
0°-90°	4654.3	52.5
90°-120°	899.6	10.1
90°-150°	3040.1	34.3
90°-180°	4209.0	47.5
0°-180°	8863.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1685	1685	1685	1685	1685	
5°	1977	1683	1486	1683	1977	201
15°	2716	1608	1191	1608	2716	767
25°	2883	1470	968	1470	2883	1271
35°	1705	1276	857	1276	1705	1082
45°	956	1018	767	1018	956	753
55°	626	718	669	718	626	565
65°	402	446	535	446	402	398
75°	201	217	331	217	201	214
85°	42	43	103	43	42	52
90°	35	4	35	4	35	19
95°	93	70	93	70	93	97
105°	286	273	286	273	286	302
115°	507	512	507	512	507	501
125°	739	745	739	745	739	659
135°	962	961	962	961	962	743
145°	1169	1167	1169	1167	1169	731
155°	1336	1338	1336	1338	1336	615
165°	1452	1456	1452	1456	1452	409
175°	1508	1515	1508	1515	1508	143
180°	1517	1517	1517	1517	1517	



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1793.6	1793.1	1787.5	1786.4	1782.4	1777.5	1776.4	1767.4	1749.5	1741.1	1738.9
5°	1977.1	1991.0	1972.9	1969.4	1967.3	1944.3	1932.4	1918.4	1886.3	1867.4	1852.8
7.5°	2196.1	2197.7	2189.8	2183.3	2165.6	2145.5	2115.4	2083.3	2045.0	2005.2	1975.1
10°	2340.2	2345.7	2336.6	2335.2	2299.7	2277.2	2232.6	2194.9	2151.6	2103.4	2059.5
12.5°	2492.0	2484.2	2479.6	2449.7	2443.2	2402.4	2350.5	2311.7	2244.9	2189.5	2130.9
15°	2715.7	2700.4	2690.6	2649.4	2629.2	2572.6	2517.4	2474.9	2387.6	2304.5	2241.7
17.5°	2846.9	2862.4	2839.7	2822.8	2770.5	2730.8	2674.4	2585.1	2516.8	2413.6	2334.3
20°	2941.9	2943.3	2930.7	2913.3	2872.1	2821.9	2760.4	2662.6	2581.0	2478.3	2369.4
22.5°	2967.6	2967.9	2962.5	2946.2	2915.1	2874.3	2812.4	2730.8	2631.8	2520.2	2411.4
25°	2883.3	2880.4	2886.8	2904.9	2893.1	2880.4	2844.9	2784.1	2692.0	2573.9	2456.7
27.5°	2569.9	2589.2	2624.6	2669.4	2712.4	2745.2	2754.4	2742.0	2684.8	2587.8	2465.0
30°	2344.3	2368.0	2394.6	2439.2	2525.8	2575.4	2629.9	2671.0	2648.0	2570.5	2456.0
32.5°	2096.4	2102.2	2141.6	2192.4	2271.7	2367.0	2453.4	2537.0	2564.8	2524.2	2428.6
35°	1704.9	1714.5	1757.2	1807.5	1904.5	2021.0	2150.9	2266.8	2362.5	2400.9	2352.0
37.5°	1391.2	1419.3	1449.4	1503.4	1588.8	1693.7	1828.7	1978.6	2121.2	2216.7	2232.9
40°	1242.6	1260.1	1281.7	1322.9	1395.5	1498.8	1614.8	1786.6	1938.0	2074.9	2119.5
42.5°	1125.4	1135.6	1148.8	1186.1	1241.4	1344.1	1450.0	1601.0	1753.1	1916.7	1991.7
45°	956.4	966.9	989.3	1010.9	1052.8	1124.0	1222.4	1346.7	1499.5	1657.4	1795.5
47.5°	834.4	841.1	854.3	877.6	913.1	960.1	1040.2	1144.0	1285.7	1438.9	1586.1
50°	765.2	770.7	781.2	802.1	829.4	871.2	936.9	1033.9	1144.9	1299.2	1443.7
52.5°	710.4	712.7	720.3	734.6	756.2	791.4	845.3	925.5	1028.7	1166.3	1310.2
55°	625.5	628.3	635.3	645.8	664.6	686.9	728.1	788.2	878.3	997.6	1122.6
57.5°	555.7	557.6	563.5	567.5	583.1	601.3	632.9	675.8	744.1	845.3	956.8
60°	511.0	509.7	516.6	520.1	530.6	545.9	570.4	611.6	670.9	752.6	855.2
62.5°	467.5	465.5	471.4	475.9	482.0	495.1	515.0	547.3	595.5	669.3	758.0
65°	402.1	399.3	402.8	408.4	413.9	421.0	435.7	464.2	502.6	555.7	623.4
67.5°	336.5	339.4	340.0	342.7	346.0	355.5	365.6	385.8	412.8	455.3	512.7
70°	297.4	298.1	300.9	300.9	303.0	311.3	319.7	331.6	358.1	397.3	444.0
72.5°	258.3	261.3	260.1	262.4	263.9	269.4	275.6	286.9	309.5	338.6	378.1
75°	201.1	203.2	203.2	203.9	205.9	208.0	212.9	221.3	237.3	259.0	286.2
77.5°	146.6	146.9	147.8	150.4	150.4	153.7	157.3	164.1	172.0	186.8	203.4
80°	113.1	114.5	113.8	115.2	115.2	118.0	119.4	127.7	131.3	141.0	154.3
82.5°	82.9	84.3	84.2	86.1	87.3	87.9	89.8	93.1	96.6	105.2	110.7
85°	41.9	43.3	41.9	43.3	45.3	46.0	48.2	48.9	51.7	53.7	58.7
87.5°	19.3	20.9	20.8	21.2	22.2	22.6	22.8	22.0	23.9	24.1	26.0
90°	35.2	34.6	34.1	33.6	33.1	32.1	30.5	29.0	27.4	25.9	23.7
92.5°	52.1	51.8	51.5	51.2	50.8	50.2	49.3	48.4	47.4	46.5	45.0
95°	92.7	92.7	92.7	92.7	92.7	92.3	91.5	90.7	90.0	89.2	87.4
97.5°	145.2	145.2	145.2	145.2	145.2	144.8	143.8	142.9	142.0	141.0	138.9
100°	181.9	181.9	181.9	181.9	181.9	181.6	181.1	180.6	180.1	179.6	177.1
102.5°	223.2	223.0	222.8	222.6	222.3	221.9	221.2	220.4	219.6	218.9	216.8
105°	286.3	285.5	284.7	284.0	283.2	282.4	281.6	280.8	280.0	279.2	278.2
107.5°	347.8	347.8	347.9	347.9	348.0	347.6	346.9	346.2	345.5	344.7	344.6
110°	391.8	391.1	390.3	389.5	388.7	388.6	389.1	389.6	390.2	390.7	390.9



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	437.0	436.8	436.6	436.5	436.3	436.3	436.4	436.5	436.6	436.7	437.2
115°	506.9	507.2	507.4	507.7	507.9	508.2	508.4	508.7	509.0	509.2	509.7
117.5°	573.5	574.0	574.5	575.0	575.6	576.2	577.1	578.0	579.0	579.9	580.2
120°	624.2	623.7	623.1	622.6	622.1	622.5	623.8	625.1	626.4	627.7	628.4
122.5°	666.4	667.3	668.3	669.2	670.1	671.1	672.0	672.9	673.8	674.6	675.0
125°	739.1	739.6	740.2	740.7	741.2	741.7	742.3	742.8	743.4	743.9	744.1
127.5°	806.5	806.9	807.3	807.8	808.2	808.6	809.2	809.7	810.2	810.7	811.1
130°	850.6	851.6	852.7	853.7	854.7	855.6	856.1	856.6	857.2	857.7	857.7
132.5°	897.6	898.0	898.4	898.8	899.2	899.7	900.2	900.7	901.2	901.8	902.0
135°	962.1	962.8	963.6	964.4	965.2	965.8	966.3	966.9	967.5	968.0	968.0
137.5°	1029.9	1029.8	1029.6	1029.5	1029.3	1029.6	1030.2	1030.9	1031.6	1032.2	1031.8
140°	1071.2	1071.5	1071.7	1072.0	1072.3	1072.5	1072.8	1073.0	1073.3	1073.5	1073.5
142.5°	1112.5	1112.6	1112.6	1112.7	1112.7	1112.8	1112.8	1112.9	1112.9	1113.0	1113.2
145°	1168.6	1169.3	1170.1	1170.9	1171.6	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0
147.5°	1225.4	1225.6	1225.9	1226.2	1226.4	1226.6	1226.9	1227.1	1227.3	1227.5	1227.7
150°	1260.1	1260.3	1260.6	1260.8	1261.1	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2
152.5°	1292.0	1292.6	1293.3	1294.0	1294.7	1294.7	1294.1	1293.4	1292.8	1292.2	1292.0
155°	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5	1339.5	1338.5	1337.4	1336.4	1336.6
157.5°	1376.0	1376.8	1377.8	1378.7	1379.6	1379.6	1378.8	1378.1	1377.3	1376.4	1376.5
160°	1398.6	1399.9	1401.1	1402.4	1403.7	1404.0	1403.2	1402.4	1401.7	1400.9	1401.1
162.5°	1422.0	1423.3	1424.6	1425.9	1427.2	1427.1	1425.7	1424.3	1422.9	1421.5	1421.8
165°	1452.5	1453.5	1454.6	1455.6	1456.6	1456.4	1454.8	1453.3	1451.7	1450.2	1450.7
167.5°	1474.3	1475.9	1477.5	1479.1	1480.8	1480.8	1479.3	1477.6	1476.1	1474.5	1474.5
170°	1486.5	1488.3	1490.2	1492.0	1493.8	1494.0	1492.4	1490.9	1489.2	1487.7	1487.4
172.5°	1496.8	1498.6	1500.5	1502.3	1504.2	1504.2	1502.4	1500.7	1498.8	1497.1	1497.0
175°	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9	1513.1	1511.3	1509.4	1507.6	1507.9
177.5°	1513.3	1514.9	1516.6	1518.2	1519.9	1520.0	1518.6	1517.1	1515.7	1514.2	1514.2
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1739.5	1731.6	1726.1	1721.6	1709.3	1702.0	1696.5	1688.6	1679.7	1670.2	1658.5
5°	1838.2	1814.4	1797.0	1770.5	1745.3	1724.3	1702.7	1683.1	1659.4	1633.7	1614.8
7.5°	1941.9	1906.6	1861.4	1822.1	1778.0	1739.6	1705.3	1670.0	1633.5	1598.0	1565.5
10°	2007.8	1962.5	1912.2	1852.8	1797.0	1747.4	1701.3	1656.7	1613.4	1570.0	1533.1
12.5°	2078.7	2022.2	1947.9	1878.6	1815.9	1749.7	1694.0	1639.3	1587.1	1541.6	1498.4
15°	2173.9	2092.2	2006.4	1913.6	1831.2	1753.7	1677.6	1608.5	1549.8	1489.8	1447.9
17.5°	2232.5	2131.4	2033.3	1936.2	1836.4	1738.8	1656.7	1576.9	1503.5	1443.9	1391.1
20°	2271.0	2170.5	2048.3	1951.3	1832.6	1732.0	1637.1	1548.4	1471.7	1408.2	1353.6
22.5°	2304.5	2188.4	2066.2	1938.4	1820.3	1713.6	1609.7	1520.6	1442.1	1375.1	1322.9
25°	2322.7	2189.3	2056.7	1929.7	1795.5	1669.2	1575.0	1470.3	1386.4	1316.0	1260.1
27.5°	2324.6	2182.0	2031.9	1890.8	1752.4	1634.8	1515.8	1422.2	1335.2	1260.7	1207.1
30°	2318.4	2169.8	2008.5	1855.6	1716.7	1588.9	1485.6	1383.7	1295.1	1221.0	1165.2
32.5°	2299.0	2144.0	1978.3	1816.5	1672.5	1547.6	1441.0	1344.0	1257.6	1184.7	1126.1
35°	2242.4	2089.5	1912.9	1744.6	1597.3	1471.0	1374.6	1276.2	1189.6	1120.4	1064.0
37.5°	2154.0	2015.8	1836.2	1662.1	1517.4	1390.5	1295.1	1206.1	1128.0	1057.8	999.9
40°	2076.9	1955.4	1775.3	1605.7	1449.4	1328.6	1239.2	1157.5	1080.1	1013.7	958.6
42.5°	1988.1	1882.3	1716.2	1536.4	1385.6	1264.4	1177.2	1103.9	1030.9	969.6	914.4
45°	1829.8	1760.0	1603.6	1437.4	1280.4	1165.9	1082.8	1018.5	957.2	897.1	851.0
47.5°	1647.7	1613.1	1481.5	1323.6	1174.6	1061.7	989.7	930.3	876.5	825.6	785.0
50°	1525.4	1508.6	1394.8	1242.6	1100.2	994.1	921.5	870.6	824.5	779.8	741.4
52.5°	1404.7	1404.2	1301.6	1162.3	1030.5	928.3	856.2	808.6	768.6	732.4	697.8
55°	1220.3	1239.9	1159.6	1035.3	917.4	825.2	760.2	717.7	689.7	659.7	633.9
57.5°	1051.0	1083.4	1017.1	907.7	809.3	724.4	667.8	635.8	606.1	587.9	569.2
60°	940.4	971.1	919.5	827.3	734.5	661.9	608.0	579.5	553.6	541.1	527.8
62.5°	842.1	869.5	831.2	745.8	665.2	595.3	550.0	522.5	505.0	491.3	482.5
65°	701.7	724.7	691.9	629.8	560.6	504.7	467.8	446.1	429.4	423.7	413.9
67.5°	567.1	588.1	570.4	517.6	462.1	419.9	390.9	370.1	360.2	355.4	348.4
70°	487.3	508.3	489.4	443.3	400.7	365.2	337.9	326.0	315.6	313.5	303.7
72.5°	419.7	433.9	415.2	379.1	342.6	312.7	291.5	279.1	273.7	269.9	264.6
75°	314.9	327.4	314.9	286.9	261.1	240.1	222.0	217.1	210.9	208.7	205.2
77.5°	222.9	233.7	224.1	206.6	187.3	171.2	161.4	155.1	153.7	150.1	151.8
80°	170.4	177.3	168.2	156.4	141.0	129.9	122.9	119.4	115.2	113.8	116.5
82.5°	122.3	125.4	120.8	112.8	101.4	94.1	89.4	85.3	84.4	84.7	84.7
85°	63.5	62.8	62.1	55.1	51.7	46.8	44.0	43.3	42.6	44.0	45.3
87.5°	25.5	25.7	24.7	22.0	19.7	17.5	16.4	15.2	16.4	17.5	18.6
90°	21.6	19.6	17.5	14.9	12.1	9.3	6.4	3.5	6.4	9.3	12.1
92.5°	43.5	42.1	40.6	38.3	34.9	31.7	28.4	25.1	28.4	31.7	34.9
95°	85.5	83.7	81.9	79.8	77.5	75.1	72.7	70.4	72.7	75.1	77.5
97.5°	136.7	134.6	132.5	130.5	128.6	126.7	124.8	123.0	124.8	126.7	128.6
100°	174.8	172.5	170.2	168.4	167.3	166.3	165.3	164.3	165.3	166.3	167.3
102.5°	214.7	212.5	210.4	209.1	208.6	208.2	207.8	207.4	207.8	208.2	208.6
105°	277.1	276.1	275.1	274.4	274.2	273.9	273.7	273.4	273.7	273.9	274.2
107.5°	344.4	344.3	344.1	343.9	343.6	343.3	343.0	342.5	343.0	343.3	343.6
110°	391.2	391.5	391.7	391.6	391.1	390.5	390.0	389.5	390.0	390.5	391.1



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	437.7	438.1	438.6	438.8	438.7	438.6	438.5	438.3	438.5	438.6	438.7
115°	510.3	510.8	511.3	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5
117.5°	580.6	580.9	581.3	581.4	581.2	581.0	580.8	580.6	580.8	581.0	581.2
120°	629.2	630.1	630.9	630.7	629.7	628.6	627.5	626.5	627.5	628.6	629.7
122.5°	675.4	675.7	676.1	676.1	675.6	675.2	674.8	674.4	674.8	675.2	675.6
125°	744.4	744.7	744.9	745.0	745.0	745.0	745.0	745.0	745.0	745.0	745.0
127.5°	811.5	811.9	812.4	812.2	811.4	810.6	809.9	809.1	809.9	810.6	811.4
130°	857.7	857.7	857.7	857.3	856.5	855.7	855.0	854.1	855.0	855.7	856.5
132.5°	902.2	902.4	902.6	902.4	901.8	901.3	900.7	900.1	900.7	901.3	901.8
135°	968.0	968.0	968.0	967.1	965.6	964.0	962.5	960.9	962.5	964.0	965.6
137.5°	1031.4	1031.0	1030.6	1030.0	1029.3	1028.5	1027.8	1027.0	1027.8	1028.5	1029.3
140°	1073.5	1073.5	1073.5	1073.3	1072.8	1072.3	1071.7	1071.2	1071.7	1072.3	1072.8
142.5°	1113.4	1113.6	1113.8	1113.7	1113.1	1112.6	1112.1	1111.6	1112.1	1112.6	1113.1
145°	1172.8	1172.5	1172.3	1171.5	1170.5	1169.5	1168.4	1167.4	1168.4	1169.5	1170.5
147.5°	1227.9	1228.1	1228.3	1227.8	1226.5	1225.3	1224.1	1222.7	1224.1	1225.3	1226.5
150°	1261.2	1261.2	1261.2	1260.7	1259.7	1258.7	1257.6	1256.6	1257.6	1258.7	1259.7
152.5°	1291.8	1291.6	1291.4	1291.0	1290.3	1289.7	1289.1	1288.5	1289.1	1289.7	1290.3
155°	1336.9	1337.2	1337.4	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5
157.5°	1376.5	1376.6	1376.6	1377.0	1377.5	1377.9	1378.4	1378.8	1378.4	1377.9	1377.5
160°	1401.4	1401.7	1401.9	1402.2	1402.4	1402.7	1403.0	1403.2	1403.0	1402.7	1402.4
162.5°	1422.1	1422.3	1422.6	1423.0	1423.7	1424.4	1425.0	1425.7	1425.0	1424.4	1423.7
165°	1451.2	1451.7	1452.2	1452.9	1453.7	1454.4	1455.2	1456.0	1455.2	1454.4	1453.7
167.5°	1474.4	1474.4	1474.3	1474.9	1475.9	1477.0	1478.1	1479.3	1478.1	1477.0	1475.9
170°	1487.1	1486.9	1486.6	1487.1	1488.4	1489.8	1491.1	1492.4	1491.1	1489.8	1488.4
172.5°	1497.0	1496.9	1496.8	1497.4	1498.4	1499.5	1500.7	1501.8	1500.7	1499.5	1498.4
175°	1508.1	1508.4	1508.6	1509.4	1510.8	1512.1	1513.4	1514.7	1513.4	1512.1	1510.8
177.5°	1514.2	1514.2	1514.2	1514.7	1515.8	1516.8	1517.8	1518.9	1517.8	1516.8	1515.8
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1652.8	1647.9	1640.6	1630.5	1622.1	1613.3	1611.0	1607.6	1614.4	1608.7	1607.1
5°	1598.7	1584.1	1565.2	1543.6	1531.0	1512.9	1509.3	1502.4	1495.4	1494.7	1487.7
7.5°	1541.4	1519.8	1495.1	1473.1	1452.7	1432.8	1419.9	1417.0	1406.7	1400.7	1393.7
10°	1504.5	1477.9	1449.4	1428.4	1404.6	1383.7	1369.1	1360.7	1353.6	1345.9	1339.0
12.5°	1460.9	1432.7	1409.1	1386.4	1358.3	1342.3	1318.2	1303.6	1302.3	1302.4	1284.2
15°	1410.2	1382.3	1345.9	1313.8	1298.5	1267.8	1254.6	1237.8	1227.3	1216.8	1208.5
17.5°	1352.3	1317.5	1289.2	1252.3	1222.9	1198.5	1181.1	1171.0	1155.3	1140.4	1129.7
20°	1316.0	1279.0	1248.9	1209.8	1177.7	1147.7	1133.1	1119.1	1107.2	1094.7	1082.8
22.5°	1279.1	1240.4	1203.7	1165.7	1135.9	1104.2	1090.0	1071.1	1059.8	1052.8	1040.9
25°	1221.0	1179.1	1137.2	1101.0	1070.3	1042.3	1023.5	1008.8	996.2	990.7	983.0
27.5°	1157.9	1116.3	1075.8	1034.6	999.8	979.5	964.4	953.3	946.1	938.7	935.2
30°	1117.7	1074.4	1031.2	992.7	960.6	940.4	926.5	918.8	913.1	909.7	906.2
32.5°	1076.9	1034.2	988.7	953.6	924.8	906.9	896.3	888.6	885.8	884.5	883.2
35°	1011.6	968.3	926.5	895.0	867.8	860.8	851.7	847.5	846.2	851.0	853.1
37.5°	948.4	908.2	869.6	839.1	821.3	811.1	808.0	808.2	813.1	817.5	822.5
40°	907.6	868.5	832.1	805.7	788.9	782.6	781.2	784.7	790.3	795.2	800.7
42.5°	867.9	829.4	796.4	771.5	759.8	754.1	755.0	758.4	766.3	772.2	780.6
45°	806.4	774.3	742.1	721.9	712.1	713.5	713.5	719.7	727.4	736.5	745.6
47.5°	748.4	716.0	689.6	672.6	667.5	666.3	670.2	678.4	689.4	700.6	713.4
50°	709.3	678.5	655.5	640.2	634.6	636.7	642.3	649.9	663.2	677.2	690.4
52.5°	669.6	641.7	620.4	606.1	602.2	606.0	611.6	623.7	635.3	650.4	666.4
55°	608.0	584.3	567.5	557.1	555.7	557.8	564.1	577.3	594.1	613.0	628.3
57.5°	546.7	526.9	511.6	504.3	505.0	507.0	517.4	533.1	551.0	571.1	590.9
60°	505.4	487.3	474.7	469.2	469.8	474.0	486.6	501.3	523.6	543.1	564.1
62.5°	466.4	450.4	438.4	433.4	432.4	441.6	453.6	468.9	491.2	513.0	535.6
65°	403.5	390.9	381.2	378.4	380.5	387.5	402.8	423.0	441.9	464.9	488.7
67.5°	342.0	331.7	325.1	326.3	328.8	339.1	352.0	369.4	390.8	414.7	438.2
70°	303.0	293.2	287.6	288.3	292.6	305.1	316.3	333.7	356.8	381.2	400.7
72.5°	262.8	256.3	251.4	254.3	258.4	267.1	281.0	298.5	318.8	341.5	362.1
75°	201.8	201.8	198.9	201.1	207.3	215.7	226.2	244.4	264.6	282.8	299.5
77.5°	149.7	148.1	150.0	152.5	156.1	166.0	178.0	191.0	206.2	224.4	238.2
80°	114.5	115.2	118.7	122.9	124.3	132.0	144.5	156.4	168.2	183.6	196.8
82.5°	86.0	86.7	88.6	93.8	95.2	103.5	111.6	123.4	134.2	144.5	155.5
85°	46.8	46.8	50.3	52.3	55.8	61.4	66.3	73.3	83.1	90.1	100.5
87.5°	20.9	21.4	24.0	25.5	27.7	30.9	32.3	38.8	41.3	44.4	49.6
90°	14.9	17.5	19.6	21.6	23.7	25.9	27.4	29.0	30.5	32.1	33.1
92.5°	38.3	40.6	42.1	43.5	45.0	46.5	47.4	48.4	49.3	50.2	50.8
95°	79.8	81.9	83.7	85.5	87.4	89.2	90.0	90.7	91.5	92.3	92.7
97.5°	130.5	132.5	134.6	136.7	138.9	141.0	142.0	142.9	143.8	144.8	145.2
100°	168.4	170.2	172.5	174.8	177.1	179.6	180.1	180.6	181.1	181.6	181.9
102.5°	209.1	210.4	212.5	214.7	216.8	218.9	219.6	220.4	221.2	221.9	222.3
105°	274.4	275.1	276.1	277.1	278.2	279.2	280.0	280.8	281.6	282.4	283.2
107.5°	343.9	344.1	344.3	344.4	344.6	344.7	345.5	346.2	346.9	347.6	348.0
110°	391.6	391.7	391.5	391.2	390.9	390.7	390.2	389.6	389.1	388.6	388.7



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	438.8	438.6	438.1	437.7	437.2	436.7	436.6	436.5	436.4	436.3	436.3
115°	511.5	511.3	510.8	510.3	509.7	509.2	509.0	508.7	508.4	508.2	507.9
117.5°	581.4	581.3	580.9	580.6	580.2	579.9	579.0	578.0	577.1	576.2	575.6
120°	630.7	630.9	630.1	629.2	628.4	627.7	626.4	625.1	623.8	622.5	622.1
122.5°	676.1	676.1	675.7	675.4	675.0	674.6	673.8	672.9	672.0	671.1	670.1
125°	745.0	744.9	744.7	744.4	744.1	743.9	743.4	742.8	742.3	741.7	741.2
127.5°	812.2	812.4	811.9	811.5	811.1	810.7	810.2	809.7	809.2	808.6	808.2
130°	857.3	857.7	857.7	857.7	857.7	857.7	857.2	856.6	856.1	855.6	854.7
132.5°	902.4	902.6	902.4	902.2	902.0	901.8	901.2	900.7	900.2	899.7	899.2
135°	967.1	968.0	968.0	968.0	968.0	968.0	967.5	966.9	966.3	965.8	965.2
137.5°	1030.0	1030.6	1031.0	1031.4	1031.8	1032.2	1031.6	1030.9	1030.2	1029.6	1029.3
140°	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1073.0	1072.8	1072.5	1072.3
142.5°	1113.7	1113.8	1113.6	1113.4	1113.2	1113.0	1112.9	1112.9	1112.8	1112.8	1112.7
145°	1171.5	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0	1172.8	1172.5	1172.3	1171.6
147.5°	1227.8	1228.3	1228.1	1227.9	1227.7	1227.5	1227.3	1227.1	1226.9	1226.6	1226.4
150°	1260.7	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.1
152.5°	1291.0	1291.4	1291.6	1291.8	1292.0	1292.2	1292.8	1293.4	1294.1	1294.7	1294.7
155°	1337.5	1337.4	1337.2	1336.9	1336.6	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5
157.5°	1377.0	1376.6	1376.6	1376.5	1376.5	1376.4	1377.3	1378.1	1378.8	1379.6	1379.6
160°	1402.2	1401.9	1401.7	1401.4	1401.1	1400.9	1401.7	1402.4	1403.2	1404.0	1403.7
162.5°	1423.0	1422.6	1422.3	1422.1	1421.8	1421.5	1422.9	1424.3	1425.7	1427.1	1427.2
165°	1452.9	1452.2	1451.7	1451.2	1450.7	1450.2	1451.7	1453.3	1454.8	1456.4	1456.6
167.5°	1474.9	1474.3	1474.4	1474.4	1474.5	1474.5	1476.1	1477.6	1479.3	1480.8	1480.8
170°	1487.1	1486.6	1486.9	1487.1	1487.4	1487.7	1489.2	1490.9	1492.4	1494.0	1493.8
172.5°	1497.4	1496.8	1496.9	1497.0	1497.0	1497.1	1498.8	1500.7	1502.4	1504.2	1504.2
175°	1509.4	1508.6	1508.4	1508.1	1507.9	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9
177.5°	1514.7	1514.2	1514.2	1514.2	1514.2	1514.2	1515.7	1517.1	1518.6	1520.0	1519.9
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1606.0	1604.9	1600.9	1600.4	1600.9	1604.9	1606.0	1607.1	1608.7	1614.4	1607.6
5°	1483.5	1480.1	1477.9	1485.6	1477.9	1480.1	1483.5	1487.7	1494.7	1495.4	1502.4
7.5°	1391.2	1388.5	1382.3	1380.4	1382.3	1388.5	1391.2	1393.7	1400.7	1406.7	1417.0
10°	1332.0	1329.2	1323.6	1322.2	1323.6	1329.2	1332.0	1339.0	1345.9	1353.6	1360.7
12.5°	1275.1	1269.5	1268.4	1269.7	1268.4	1269.5	1275.1	1284.2	1302.4	1302.3	1303.6
15°	1199.4	1196.6	1188.9	1191.0	1188.9	1196.6	1199.4	1208.5	1216.8	1227.3	1237.8
17.5°	1124.8	1121.5	1112.2	1120.3	1112.2	1121.5	1124.8	1129.7	1140.4	1155.3	1171.0
20°	1077.9	1072.3	1067.4	1066.7	1067.4	1072.3	1077.9	1082.8	1094.7	1107.2	1119.1
22.5°	1033.2	1028.2	1027.7	1023.2	1027.7	1028.2	1033.2	1040.9	1052.8	1059.8	1071.1
25°	977.3	972.5	971.1	967.7	971.1	972.5	977.3	983.0	990.7	996.2	1008.8
27.5°	934.5	932.1	929.6	930.7	929.6	932.1	934.5	935.2	938.7	946.1	953.3
30°	908.3	907.6	906.2	906.2	906.2	907.6	908.3	906.2	909.7	913.1	918.8
32.5°	886.5	886.4	887.2	887.2	887.2	886.4	886.5	883.2	884.5	885.8	888.6
35°	855.9	858.0	859.4	857.3	859.4	858.0	855.9	853.1	851.0	846.2	847.5
37.5°	828.3	830.3	832.3	834.7	832.3	830.3	828.3	822.5	817.5	813.1	808.2
40°	807.0	811.9	813.3	816.8	813.3	811.9	807.0	800.7	795.2	790.3	784.7
42.5°	786.9	792.3	796.0	796.7	796.0	792.3	786.9	780.6	772.2	766.3	758.4
45°	756.1	761.6	766.6	766.6	766.6	761.6	756.1	745.6	736.5	727.4	719.7
47.5°	724.1	732.2	737.1	738.3	737.1	732.2	724.1	713.4	700.6	689.4	678.4
50°	702.4	712.1	717.0	720.4	717.0	712.1	702.4	690.4	677.2	663.2	649.9
52.5°	681.1	690.8	697.4	699.2	697.4	690.8	681.1	666.4	650.4	635.3	623.7
55°	644.4	658.3	666.0	668.8	666.0	658.3	644.4	628.3	613.0	594.1	577.3
57.5°	609.8	622.6	631.6	633.6	631.6	622.6	609.8	590.9	571.1	551.0	533.1
60°	582.9	596.9	608.0	610.2	608.0	596.9	582.9	564.1	543.1	523.6	501.3
62.5°	555.5	570.1	580.2	585.6	580.2	570.1	555.5	535.6	513.0	491.2	468.9
65°	508.3	522.9	532.7	534.7	532.7	522.9	508.3	488.7	464.9	441.9	423.0
67.5°	456.6	471.2	477.7	481.7	477.7	471.2	456.6	438.2	414.7	390.8	369.4
70°	420.3	432.1	439.1	442.6	439.1	432.1	420.3	400.7	381.2	356.8	333.7
72.5°	378.9	391.3	399.5	400.2	399.5	391.3	378.9	362.1	341.5	318.8	298.5
75°	315.6	326.7	330.9	330.9	330.9	326.7	315.6	299.5	282.8	264.6	244.4
77.5°	249.7	255.5	260.8	262.0	260.8	255.5	249.7	238.2	224.4	206.2	191.0
80°	207.3	210.9	215.0	215.0	215.0	210.9	207.3	196.8	183.6	168.2	156.4
82.5°	163.8	166.7	170.9	170.4	170.9	166.7	163.8	155.5	144.5	134.2	123.4
85°	99.2	105.4	104.7	103.3	104.7	105.4	99.2	100.5	90.1	83.1	73.3
87.5°	51.4	52.1	53.8	55.0	53.8	52.1	51.4	49.6	44.4	41.3	38.8
90°	33.6	34.1	34.6	35.2	34.6	34.1	33.6	33.1	32.1	30.5	29.0
92.5°	51.2	51.5	51.8	52.1	51.8	51.5	51.2	50.8	50.2	49.3	48.4
95°	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.3	91.5	90.7
97.5°	145.2	145.2	145.2	145.2	145.2	145.2	145.2	145.2	144.8	143.8	142.9
100°	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.6	181.1	180.6
102.5°	222.6	222.8	223.0	223.2	223.0	222.8	222.6	222.3	221.9	221.2	220.4
105°	284.0	284.7	285.5	286.3	285.5	284.7	284.0	283.2	282.4	281.6	280.8
107.5°	347.9	347.9	347.8	347.8	347.8	347.9	347.9	348.0	347.6	346.9	346.2
110°	389.5	390.3	391.1	391.8	391.1	390.3	389.5	388.7	388.6	389.1	389.6



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	436.5	436.6	436.8	437.0	436.8	436.6	436.5	436.3	436.3	436.4	436.5
115°	507.7	507.4	507.2	506.9	507.2	507.4	507.7	507.9	508.2	508.4	508.7
117.5°	575.0	574.5	574.0	573.5	574.0	574.5	575.0	575.6	576.2	577.1	578.0
120°	622.6	623.1	623.7	624.2	623.7	623.1	622.6	622.1	622.5	623.8	625.1
122.5°	669.2	668.3	667.3	666.4	667.3	668.3	669.2	670.1	671.1	672.0	672.9
125°	740.7	740.2	739.6	739.1	739.6	740.2	740.7	741.2	741.7	742.3	742.8
127.5°	807.8	807.3	806.9	806.5	806.9	807.3	807.8	808.2	808.6	809.2	809.7
130°	853.7	852.7	851.6	850.6	851.6	852.7	853.7	854.7	855.6	856.1	856.6
132.5°	898.8	898.4	898.0	897.6	898.0	898.4	898.8	899.2	899.7	900.2	900.7
135°	964.4	963.6	962.8	962.1	962.8	963.6	964.4	965.2	965.8	966.3	966.9
137.5°	1029.5	1029.6	1029.8	1029.9	1029.8	1029.6	1029.5	1029.3	1029.6	1030.2	1030.9
140°	1072.0	1071.7	1071.5	1071.2	1071.5	1071.7	1072.0	1072.3	1072.5	1072.8	1073.0
142.5°	1112.7	1112.6	1112.6	1112.5	1112.6	1112.6	1112.7	1112.7	1112.8	1112.8	1112.9
145°	1170.9	1170.1	1169.3	1168.6	1169.3	1170.1	1170.9	1171.6	1172.3	1172.5	1172.8
147.5°	1226.2	1225.9	1225.6	1225.4	1225.6	1225.9	1226.2	1226.4	1226.6	1226.9	1227.1
150°	1260.8	1260.6	1260.3	1260.1	1260.3	1260.6	1260.8	1261.1	1261.2	1261.2	1261.2
152.5°	1294.0	1293.3	1292.6	1292.0	1292.6	1293.3	1294.0	1294.7	1294.7	1294.1	1293.4
155°	1339.5	1338.5	1337.4	1336.4	1337.4	1338.5	1339.5	1340.5	1340.5	1339.5	1338.5
157.5°	1378.7	1377.8	1376.8	1376.0	1376.8	1377.8	1378.7	1379.6	1379.6	1378.8	1378.1
160°	1402.4	1401.1	1399.9	1398.6	1399.9	1401.1	1402.4	1403.7	1404.0	1403.2	1402.4
162.5°	1425.9	1424.6	1423.3	1422.0	1423.3	1424.6	1425.9	1427.2	1427.1	1425.7	1424.3
165°	1455.6	1454.6	1453.5	1452.5	1453.5	1454.6	1455.6	1456.6	1456.4	1454.8	1453.3
167.5°	1479.1	1477.5	1475.9	1474.3	1475.9	1477.5	1479.1	1480.8	1480.8	1479.3	1477.6
170°	1492.0	1490.2	1488.3	1486.5	1488.3	1490.2	1492.0	1493.8	1494.0	1492.4	1490.9
172.5°	1502.3	1500.5	1498.6	1496.8	1498.6	1500.5	1502.3	1504.2	1504.2	1502.4	1500.7
175°	1513.1	1511.3	1509.4	1507.6	1509.4	1511.3	1513.1	1514.9	1514.9	1513.1	1511.3
177.5°	1518.2	1516.6	1514.9	1513.3	1514.9	1516.6	1518.2	1519.9	1520.0	1518.6	1517.1
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1611.0	1613.3	1622.1	1630.5	1640.6	1647.9	1652.8	1658.5	1670.2	1679.7	1688.6
5°	1509.3	1512.9	1531.0	1543.6	1565.2	1584.1	1598.7	1614.8	1633.7	1659.4	1683.1
7.5°	1419.9	1432.8	1452.7	1473.1	1495.1	1519.8	1541.4	1565.5	1598.0	1633.5	1670.0
10°	1369.1	1383.7	1404.6	1428.4	1449.4	1477.9	1504.5	1533.1	1570.0	1613.4	1656.7
12.5°	1318.2	1342.3	1358.3	1386.4	1409.1	1432.7	1460.9	1498.4	1541.6	1587.1	1639.3
15°	1254.6	1267.8	1298.5	1313.8	1345.9	1382.3	1410.2	1447.9	1489.8	1549.8	1608.5
17.5°	1181.1	1198.5	1222.9	1252.3	1289.2	1317.5	1352.3	1391.1	1443.9	1503.5	1576.9
20°	1133.1	1147.7	1177.7	1209.8	1248.9	1279.0	1316.0	1353.6	1408.2	1471.7	1548.4
22.5°	1090.0	1104.2	1135.9	1165.7	1203.7	1240.4	1279.1	1322.9	1375.1	1442.1	1520.6
25°	1023.5	1042.3	1070.3	1101.0	1137.2	1179.1	1221.0	1260.1	1316.0	1386.4	1470.3
27.5°	964.4	979.5	999.8	1034.6	1075.8	1116.3	1157.9	1207.1	1260.7	1335.2	1422.2
30°	926.5	940.4	960.6	992.7	1031.2	1074.4	1117.7	1165.2	1221.0	1295.1	1383.7
32.5°	896.3	906.9	924.8	953.6	988.7	1034.2	1076.9	1126.1	1184.7	1257.6	1344.0
35°	851.7	860.8	867.8	895.0	926.5	968.3	1011.6	1064.0	1120.4	1189.6	1276.2
37.5°	808.0	811.1	821.3	839.1	869.6	908.2	948.4	999.9	1057.8	1128.0	1206.1
40°	781.2	782.6	788.9	805.7	832.1	868.5	907.6	958.6	1013.7	1080.1	1157.5
42.5°	755.0	754.1	759.8	771.5	796.4	829.4	867.9	914.4	969.6	1030.9	1103.9
45°	713.5	713.5	712.1	721.9	742.1	774.3	806.4	851.0	897.1	957.2	1018.5
47.5°	670.2	666.3	667.5	672.6	689.6	716.0	748.4	785.0	825.6	876.5	930.3
50°	642.3	636.7	634.6	640.2	655.5	678.5	709.3	741.4	779.8	824.5	870.6
52.5°	611.6	606.0	602.2	606.1	620.4	641.7	669.6	697.8	732.4	768.6	808.6
55°	564.1	557.8	555.7	557.1	567.5	584.3	608.0	633.9	659.7	689.7	717.7
57.5°	517.4	507.0	505.0	504.3	511.6	526.9	546.7	569.2	587.9	606.1	635.8
60°	486.6	474.0	469.8	469.2	474.7	487.3	505.4	527.8	541.1	553.6	579.5
62.5°	453.6	441.6	432.4	433.4	438.4	450.4	466.4	482.5	491.3	505.0	522.5
65°	402.8	387.5	380.5	378.4	381.2	390.9	403.5	413.9	423.7	429.4	446.1
67.5°	352.0	339.1	328.8	326.3	325.1	331.7	342.0	348.4	355.4	360.2	370.1
70°	316.3	305.1	292.6	288.3	287.6	293.2	303.0	303.7	313.5	315.6	326.0
72.5°	281.0	267.1	258.4	254.3	251.4	256.3	262.8	264.6	269.9	273.7	279.1
75°	226.2	215.7	207.3	201.1	198.9	201.8	201.8	205.2	208.7	210.9	217.1
77.5°	178.0	166.0	156.1	152.5	150.0	148.1	149.7	151.8	150.1	153.7	155.1
80°	144.5	132.0	124.3	122.9	118.7	115.2	114.5	116.5	113.8	115.2	119.4
82.5°	111.6	103.5	95.2	93.8	88.6	86.7	86.0	84.7	84.7	84.4	85.3
85°	66.3	61.4	55.8	52.3	50.3	46.8	46.8	45.3	44.0	42.6	43.3
87.5°	32.3	30.9	27.7	25.5	24.0	21.4	20.9	18.6	17.5	16.4	15.2
90°	27.4	25.9	23.7	21.6	19.6	17.5	14.9	12.1	9.3	6.4	3.5
92.5°	47.4	46.5	45.0	43.5	42.1	40.6	38.3	34.9	31.7	28.4	25.1
95°	90.0	89.2	87.4	85.5	83.7	81.9	79.8	77.5	75.1	72.7	70.4
97.5°	142.0	141.0	138.9	136.7	134.6	132.5	130.5	128.6	126.7	124.8	123.0
100°	180.1	179.6	177.1	174.8	172.5	170.2	168.4	167.3	166.3	165.3	164.3
102.5°	219.6	218.9	216.8	214.7	212.5	210.4	209.1	208.6	208.2	207.8	207.4
105°	280.0	279.2	278.2	277.1	276.1	275.1	274.4	274.2	273.9	273.7	273.4
107.5°	345.5	344.7	344.6	344.4	344.3	344.1	343.9	343.6	343.3	343.0	342.5
110°	390.2	390.7	390.9	391.2	391.5	391.7	391.6	391.1	390.5	390.0	389.5



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	436.6	436.7	437.2	437.7	438.1	438.6	438.8	438.7	438.6	438.5	438.3
115°	509.0	509.2	509.7	510.3	510.8	511.3	511.5	511.5	511.5	511.5	511.5
117.5°	579.0	579.9	580.2	580.6	580.9	581.3	581.4	581.2	581.0	580.8	580.6
120°	626.4	627.7	628.4	629.2	630.1	630.9	630.7	629.7	628.6	627.5	626.5
122.5°	673.8	674.6	675.0	675.4	675.7	676.1	676.1	675.6	675.2	674.8	674.4
125°	743.4	743.9	744.1	744.4	744.7	744.9	745.0	745.0	745.0	745.0	745.0
127.5°	810.2	810.7	811.1	811.5	811.9	812.4	812.2	811.4	810.6	809.9	809.1
130°	857.2	857.7	857.7	857.7	857.7	857.7	857.3	856.5	855.7	855.0	854.1
132.5°	901.2	901.8	902.0	902.2	902.4	902.6	902.4	901.8	901.3	900.7	900.1
135°	967.5	968.0	968.0	968.0	968.0	968.0	967.1	965.6	964.0	962.5	960.9
137.5°	1031.6	1032.2	1031.8	1031.4	1031.0	1030.6	1030.0	1029.3	1028.5	1027.8	1027.0
140°	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1072.8	1072.3	1071.7	1071.2
142.5°	1112.9	1113.0	1113.2	1113.4	1113.6	1113.8	1113.7	1113.1	1112.6	1112.1	1111.6
145°	1173.0	1173.3	1173.0	1172.8	1172.5	1172.3	1171.5	1170.5	1169.5	1168.4	1167.4
147.5°	1227.3	1227.5	1227.7	1227.9	1228.1	1228.3	1227.8	1226.5	1225.3	1224.1	1222.7
150°	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1260.7	1259.7	1258.7	1257.6	1256.6
152.5°	1292.8	1292.2	1292.0	1291.8	1291.6	1291.4	1291.0	1290.3	1289.7	1289.1	1288.5
155°	1337.4	1336.4	1336.6	1336.9	1337.2	1337.4	1337.5	1337.5	1337.5	1337.5	1337.5
157.5°	1377.3	1376.4	1376.5	1376.5	1376.6	1376.6	1377.0	1377.5	1377.9	1378.4	1378.8
160°	1401.7	1400.9	1401.1	1401.4	1401.7	1401.9	1402.2	1402.4	1402.7	1403.0	1403.2
162.5°	1422.9	1421.5	1421.8	1422.1	1422.3	1422.6	1423.0	1423.7	1424.4	1425.0	1425.7
165°	1451.7	1450.2	1450.7	1451.2	1451.7	1452.2	1452.9	1453.7	1454.4	1455.2	1456.0
167.5°	1476.1	1474.5	1474.5	1474.4	1474.4	1474.3	1474.9	1475.9	1477.0	1478.1	1479.3
170°	1489.2	1487.7	1487.4	1487.1	1486.9	1486.6	1487.1	1488.4	1489.8	1491.1	1492.4
172.5°	1498.8	1497.1	1497.0	1497.0	1496.9	1496.8	1497.4	1498.4	1499.5	1500.7	1501.8
175°	1509.4	1507.6	1507.9	1508.1	1508.4	1508.6	1509.4	1510.8	1512.1	1513.4	1514.7
177.5°	1515.7	1514.2	1514.2	1514.2	1514.2	1514.2	1514.7	1515.8	1516.8	1517.8	1518.9
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1696.5	1702.0	1709.3	1721.6	1726.1	1731.6	1739.5	1738.9	1741.1	1749.5	1767.4
5°	1702.7	1724.3	1745.3	1770.5	1797.0	1814.4	1838.2	1852.8	1867.4	1886.3	1918.4
7.5°	1705.3	1739.6	1778.0	1822.1	1861.4	1906.6	1941.9	1975.1	2005.2	2045.0	2083.3
10°	1701.3	1747.4	1797.0	1852.8	1912.2	1962.5	2007.8	2059.5	2103.4	2151.6	2194.9
12.5°	1694.0	1749.7	1815.9	1878.6	1947.9	2022.2	2078.7	2130.9	2189.5	2244.9	2311.7
15°	1677.6	1753.7	1831.2	1913.6	2006.4	2092.2	2173.9	2241.7	2304.5	2387.6	2474.9
17.5°	1656.7	1738.8	1836.4	1936.2	2033.3	2131.4	2232.5	2334.3	2413.6	2516.8	2585.1
20°	1637.1	1732.0	1832.6	1951.3	2048.3	2170.5	2271.0	2369.4	2478.3	2581.0	2662.6
22.5°	1609.7	1713.6	1820.3	1938.4	2066.2	2188.4	2304.5	2411.4	2520.2	2631.8	2730.8
25°	1575.0	1669.2	1795.5	1929.7	2056.7	2189.3	2322.7	2456.7	2573.9	2692.0	2784.1
27.5°	1515.8	1634.8	1752.4	1890.8	2031.9	2182.0	2324.6	2465.0	2587.8	2684.8	2742.0
30°	1485.6	1588.9	1716.7	1855.6	2008.5	2169.8	2318.4	2456.0	2570.5	2648.0	2671.0
32.5°	1441.0	1547.6	1672.5	1816.5	1978.3	2144.0	2299.0	2428.6	2524.2	2564.8	2537.0
35°	1374.6	1471.0	1597.3	1744.6	1912.9	2089.5	2242.4	2352.0	2400.9	2362.5	2266.8
37.5°	1295.1	1390.5	1517.4	1662.1	1836.2	2015.8	2154.0	2232.9	2216.7	2121.2	1978.6
40°	1239.2	1328.6	1449.4	1605.7	1775.3	1955.4	2076.9	2119.5	2074.9	1938.0	1786.6
42.5°	1177.2	1264.4	1385.6	1536.4	1716.2	1882.3	1988.1	1991.7	1916.7	1753.1	1601.0
45°	1082.8	1165.9	1280.4	1437.4	1603.6	1760.0	1829.8	1795.5	1657.4	1499.5	1346.7
47.5°	989.7	1061.7	1174.6	1323.6	1481.5	1613.1	1647.7	1586.1	1438.9	1285.7	1144.0
50°	921.5	994.1	1100.2	1242.6	1394.8	1508.6	1525.4	1443.7	1299.2	1144.9	1033.9
52.5°	856.2	928.3	1030.5	1162.3	1301.6	1404.2	1404.7	1310.2	1166.3	1028.7	925.5
55°	760.2	825.2	917.4	1035.3	1159.6	1239.9	1220.3	1122.6	997.6	878.3	788.2
57.5°	667.8	724.4	809.3	907.7	1017.1	1083.4	1051.0	956.8	845.3	744.1	675.8
60°	608.0	661.9	734.5	827.3	919.5	971.1	940.4	855.2	752.6	670.9	611.6
62.5°	550.0	595.3	665.2	745.8	831.2	869.5	842.1	758.0	669.3	595.5	547.3
65°	467.8	504.7	560.6	629.8	691.9	724.7	701.7	623.4	555.7	502.6	464.2
67.5°	390.9	419.9	462.1	517.6	570.4	588.1	567.1	512.7	455.3	412.8	385.8
70°	337.9	365.2	400.7	443.3	489.4	508.3	487.3	444.0	397.3	358.1	331.6
72.5°	291.5	312.7	342.6	379.1	415.2	433.9	419.7	378.1	338.6	309.5	286.9
75°	222.0	240.1	261.1	286.9	314.9	327.4	314.9	286.2	259.0	237.3	221.3
77.5°	161.4	171.2	187.3	206.6	224.1	233.7	222.9	203.4	186.8	172.0	164.1
80°	122.9	129.9	141.0	156.4	168.2	177.3	170.4	154.3	141.0	131.3	127.7
82.5°	89.4	94.1	101.4	112.8	120.8	125.4	122.3	110.7	105.2	96.6	93.1
85°	44.0	46.8	51.7	55.1	62.1	62.8	63.5	58.7	53.7	51.7	48.9
87.5°	16.4	17.5	19.7	22.0	24.7	25.7	25.5	26.0	24.1	23.9	22.0
90°	6.4	9.3	12.1	14.9	17.5	19.6	21.6	23.7	25.9	27.4	29.0
92.5°	28.4	31.7	34.9	38.3	40.6	42.1	43.5	45.0	46.5	47.4	48.4
95°	72.7	75.1	77.5	79.8	81.9	83.7	85.5	87.4	89.2	90.0	90.7
97.5°	124.8	126.7	128.6	130.5	132.5	134.6	136.7	138.9	141.0	142.0	142.9
100°	165.3	166.3	167.3	168.4	170.2	172.5	174.8	177.1	179.6	180.1	180.6
102.5°	207.8	208.2	208.6	209.1	210.4	212.5	214.7	216.8	218.9	219.6	220.4
105°	273.7	273.9	274.2	274.4	275.1	276.1	277.1	278.2	279.2	280.0	280.8
107.5°	343.0	343.3	343.6	343.9	344.1	344.3	344.4	344.6	344.7	345.5	346.2
110°	390.0	390.5	391.1	391.6	391.7	391.5	391.2	390.9	390.7	390.2	389.6



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	438.5	438.6	438.7	438.8	438.6	438.1	437.7	437.2	436.7	436.6	436.5
115°	511.5	511.5	511.5	511.5	511.3	510.8	510.3	509.7	509.2	509.0	508.7
117.5°	580.8	581.0	581.2	581.4	581.3	580.9	580.6	580.2	579.9	579.0	578.0
120°	627.5	628.6	629.7	630.7	630.9	630.1	629.2	628.4	627.7	626.4	625.1
122.5°	674.8	675.2	675.6	676.1	676.1	675.7	675.4	675.0	674.6	673.8	672.9
125°	745.0	745.0	745.0	745.0	744.9	744.7	744.4	744.1	743.9	743.4	742.8
127.5°	809.9	810.6	811.4	812.2	812.4	811.9	811.5	811.1	810.7	810.2	809.7
130°	855.0	855.7	856.5	857.3	857.7	857.7	857.7	857.7	857.7	857.2	856.6
132.5°	900.7	901.3	901.8	902.4	902.6	902.4	902.2	902.0	901.8	901.2	900.7
135°	962.5	964.0	965.6	967.1	968.0	968.0	968.0	968.0	968.0	967.5	966.9
137.5°	1027.8	1028.5	1029.3	1030.0	1030.6	1031.0	1031.4	1031.8	1032.2	1031.6	1030.9
140°	1071.7	1072.3	1072.8	1073.3	1073.5	1073.5	1073.5	1073.5	1073.5	1073.3	1073.0
142.5°	1112.1	1112.6	1113.1	1113.7	1113.8	1113.6	1113.4	1113.2	1113.0	1112.9	1112.9
145°	1168.4	1169.5	1170.5	1171.5	1172.3	1172.5	1172.8	1173.0	1173.3	1173.0	1172.8
147.5°	1224.1	1225.3	1226.5	1227.8	1228.3	1228.1	1227.9	1227.7	1227.5	1227.3	1227.1
150°	1257.6	1258.7	1259.7	1260.7	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2	1261.2
152.5°	1289.1	1289.7	1290.3	1291.0	1291.4	1291.6	1291.8	1292.0	1292.2	1292.8	1293.4
155°	1337.5	1337.5	1337.5	1337.5	1337.4	1337.2	1336.9	1336.6	1336.4	1337.4	1338.5
157.5°	1378.4	1377.9	1377.5	1377.0	1376.6	1376.6	1376.5	1376.5	1376.4	1377.3	1378.1
160°	1403.0	1402.7	1402.4	1402.2	1401.9	1401.7	1401.4	1401.1	1400.9	1401.7	1402.4
162.5°	1425.0	1424.4	1423.7	1423.0	1422.6	1422.3	1422.1	1421.8	1421.5	1422.9	1424.3
165°	1455.2	1454.4	1453.7	1452.9	1452.2	1451.7	1451.2	1450.7	1450.2	1451.7	1453.3
167.5°	1478.1	1477.0	1475.9	1474.9	1474.3	1474.4	1474.4	1474.5	1474.5	1476.1	1477.6
170°	1491.1	1489.8	1488.4	1487.1	1486.6	1486.9	1487.1	1487.4	1487.7	1489.2	1490.9
172.5°	1500.7	1499.5	1498.4	1497.4	1496.8	1496.9	1497.0	1497.0	1497.1	1498.8	1500.7
175°	1513.4	1512.1	1510.8	1509.4	1508.6	1508.4	1508.1	1507.9	1507.6	1509.4	1511.3
177.5°	1517.8	1516.8	1515.8	1514.7	1514.2	1514.2	1514.2	1514.2	1514.2	1515.7	1517.1
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1776.4	1777.5	1782.4	1786.4	1787.5	1793.1	1793.6
5°	1932.4	1944.3	1967.3	1969.4	1972.9	1991.0	1977.1
7.5°	2115.4	2145.5	2165.6	2183.3	2189.8	2197.7	2196.1
10°	2232.6	2277.2	2299.7	2335.2	2336.6	2345.7	2340.2
12.5°	2350.5	2402.4	2443.2	2449.7	2479.6	2484.2	2492.0
15°	2517.4	2572.6	2629.2	2649.4	2690.6	2700.4	2715.7
17.5°	2674.4	2730.8	2770.5	2822.8	2839.7	2862.4	2846.9
20°	2760.4	2821.9	2872.1	2913.3	2930.7	2943.3	2941.9
22.5°	2812.4	2874.3	2915.1	2946.2	2962.5	2967.9	2967.6
25°	2844.9	2880.4	2893.1	2904.9	2886.8	2880.4	2883.3
27.5°	2754.4	2745.2	2712.4	2669.4	2624.6	2589.2	2569.9
30°	2629.9	2575.4	2525.8	2439.2	2394.6	2368.0	2344.3
32.5°	2453.4	2367.0	2271.7	2192.4	2141.6	2102.2	2096.4
35°	2150.9	2021.0	1904.5	1807.5	1757.2	1714.5	1704.9
37.5°	1828.7	1693.7	1588.8	1503.4	1449.4	1419.3	1391.2
40°	1614.8	1498.8	1395.5	1322.9	1281.7	1260.1	1242.6
42.5°	1450.0	1344.1	1241.4	1186.1	1148.8	1135.6	1125.4
45°	1222.4	1124.0	1052.8	1010.9	989.3	966.9	956.4
47.5°	1040.2	960.1	913.1	877.6	854.3	841.1	834.4
50°	936.9	871.2	829.4	802.1	781.2	770.7	765.2
52.5°	845.3	791.4	756.2	734.6	720.3	712.7	710.4
55°	728.1	686.9	664.6	645.8	635.3	628.3	625.5
57.5°	632.9	601.3	583.1	567.5	563.5	557.6	555.7
60°	570.4	545.9	530.6	520.1	516.6	509.7	511.0
62.5°	515.0	495.1	482.0	475.9	471.4	465.5	467.5
65°	435.7	421.0	413.9	408.4	402.8	399.3	402.1
67.5°	365.6	355.5	346.0	342.7	340.0	339.4	336.5
70°	319.7	311.3	303.0	300.9	300.9	298.1	297.4
72.5°	275.6	269.4	263.9	262.4	260.1	261.3	258.3
75°	212.9	208.0	205.9	203.9	203.2	203.2	201.1
77.5°	157.3	153.7	150.4	150.4	147.8	146.9	146.6
80°	119.4	118.0	115.2	115.2	113.8	114.5	113.1
82.5°	89.8	87.9	87.3	86.1	84.2	84.3	82.9
85°	48.2	46.0	45.3	43.3	41.9	43.3	41.9
87.5°	22.8	22.6	22.2	21.2	20.8	20.9	19.3
90°	30.5	32.1	33.1	33.6	34.1	34.6	35.2
92.5°	49.3	50.2	50.8	51.2	51.5	51.8	52.1
95°	91.5	92.3	92.7	92.7	92.7	92.7	92.7
97.5°	143.8	144.8	145.2	145.2	145.2	145.2	145.2
100°	181.1	181.6	181.9	181.9	181.9	181.9	181.9
102.5°	221.2	221.9	222.3	222.6	222.8	223.0	223.2
105°	281.6	282.4	283.2	284.0	284.7	285.5	286.3
107.5°	346.9	347.6	348.0	347.9	347.9	347.8	347.8
110°	389.1	388.6	388.7	389.5	390.3	391.1	391.8



TEST NUMBER: P332662-840

CATALOG NUMBER: SA4XXDIP-C1020D1205U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	436.4	436.3	436.3	436.5	436.6	436.8	437.0
115°	508.4	508.2	507.9	507.7	507.4	507.2	506.9
117.5°	577.1	576.2	575.6	575.0	574.5	574.0	573.5
120°	623.8	622.5	622.1	622.6	623.1	623.7	624.2
122.5°	672.0	671.1	670.1	669.2	668.3	667.3	666.4
125°	742.3	741.7	741.2	740.7	740.2	739.6	739.1
127.5°	809.2	808.6	808.2	807.8	807.3	806.9	806.5
130°	856.1	855.6	854.7	853.7	852.7	851.6	850.6
132.5°	900.2	899.7	899.2	898.8	898.4	898.0	897.6
135°	966.3	965.8	965.2	964.4	963.6	962.8	962.1
137.5°	1030.2	1029.6	1029.3	1029.5	1029.6	1029.8	1029.9
140°	1072.8	1072.5	1072.3	1072.0	1071.7	1071.5	1071.2
142.5°	1112.8	1112.8	1112.7	1112.7	1112.6	1112.6	1112.5
145°	1172.5	1172.3	1171.6	1170.9	1170.1	1169.3	1168.6
147.5°	1226.9	1226.6	1226.4	1226.2	1225.9	1225.6	1225.4
150°	1261.2	1261.2	1261.1	1260.8	1260.6	1260.3	1260.1
152.5°	1294.1	1294.7	1294.7	1294.0	1293.3	1292.6	1292.0
155°	1339.5	1340.5	1340.5	1339.5	1338.5	1337.4	1336.4
157.5°	1378.8	1379.6	1379.6	1378.7	1377.8	1376.8	1376.0
160°	1403.2	1404.0	1403.7	1402.4	1401.1	1399.9	1398.6
162.5°	1425.7	1427.1	1427.2	1425.9	1424.6	1423.3	1422.0
165°	1454.8	1456.4	1456.6	1455.6	1454.6	1453.5	1452.5
167.5°	1479.3	1480.8	1480.8	1479.1	1477.5	1475.9	1474.3
170°	1492.4	1494.0	1493.8	1492.0	1490.2	1488.3	1486.5
172.5°	1502.4	1504.2	1504.2	1502.3	1500.5	1498.6	1496.8
175°	1513.1	1514.9	1514.9	1513.1	1511.3	1509.4	1507.6
177.5°	1518.6	1520.0	1519.9	1518.2	1516.6	1514.9	1513.3
180°	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0	1517.0

(END OF REPORT)