

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: P332653-840

Luminaire Tested: **SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332653-840
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-C1020D1035U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8269.6 lumens
Efficiency: N/A
Efficacy: 136.7 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

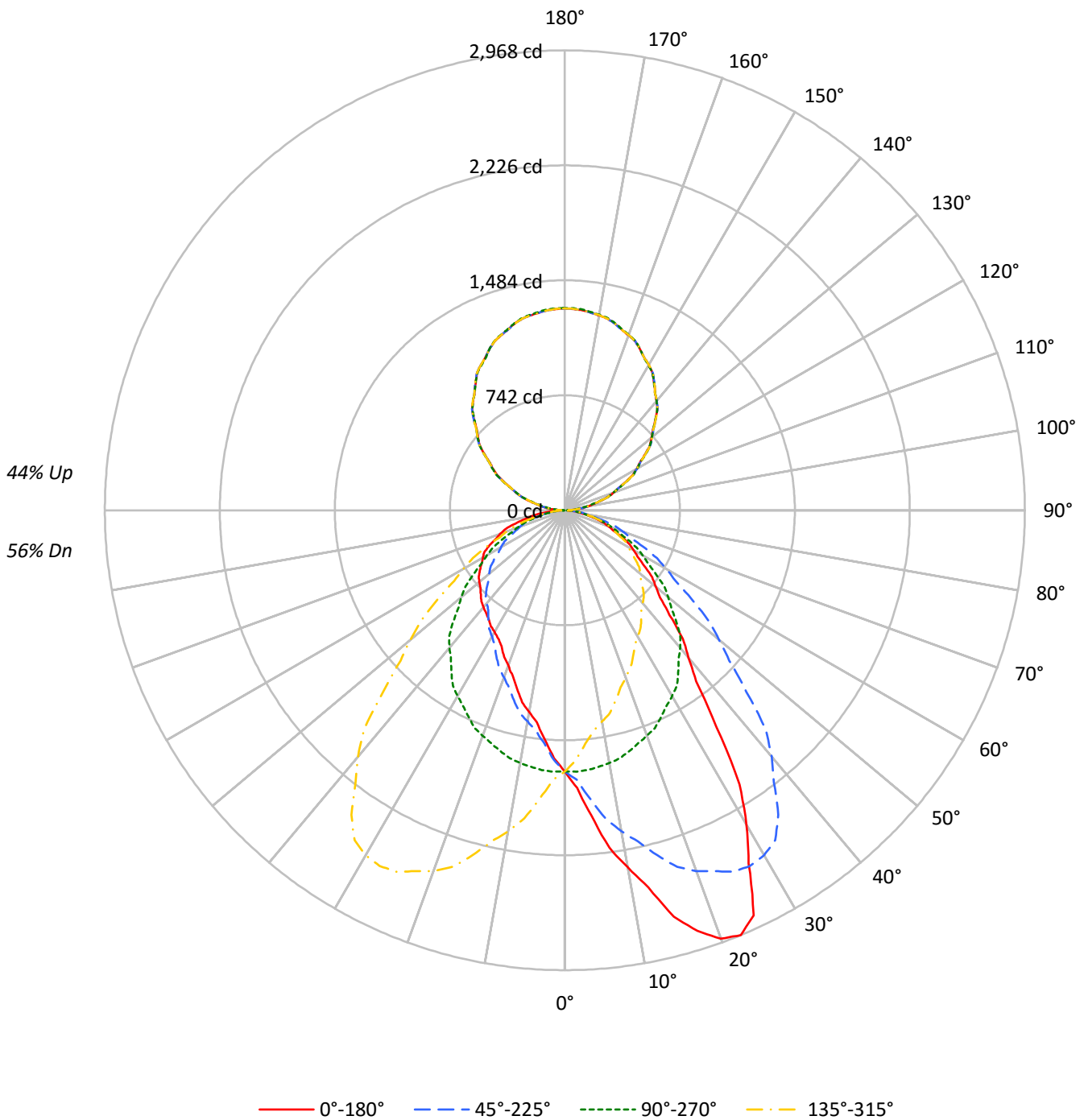
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	99	95	91	88	92	89	85	82	77	74	72	65	64	62	55	54	53	48
2	91	83	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	44	43	41	38	35
4	76	65	57	51	70	61	54	49	53	48	43	46	42	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	39	34	55	45	37	32	39	33	29	34	29	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

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: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	2.0
10°-20°	506.1	6.1
20°-30°	802.5	9.7
30°-40°	893.1	10.8
40°-50°	812.9	9.8
50°-60°	664.3	8.0
60°-70°	474.2	5.7
70°-80°	261.1	3.2
80°-90°	75.2	0.9
90°-100°	86.0	1.0
100°-110°	254.7	3.1
110°-120°	432.2	5.2
120°-130°	569.9	6.9
130°-140°	640.1	7.7
140°-150°	629.0	7.6
150°-160°	529.0	6.4
160°-170°	352.0	4.3
170°-180°	123.2	1.5
0°-30°	1472.7	17.8
0°-40°	2365.8	28.6
0°-60°	3843.0	46.5
0°-90°	4653.6	56.3
90°-120°	772.9	9.3
90°-150°	2611.8	31.6
90°-180°	3616.0	43.7
0°-180°	8269.6	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°	30	3	30	3	30	17
95°	80	60	80	60	80	83
105°	246	235	246	235	246	259
115°	436	440	436	440	436	430
125°	635	640	635	640	635	566
135°	827	826	827	826	827	638
145°	1004	1003	1004	1003	1004	628
155°	1148	1149	1148	1149	1148	528
165°	1248	1251	1248	1251	1248	351
175°	1295	1301	1295	1301	1295	123
180°	1303	1303	1303	1303	1303	



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	18.4	19.9	19.8	20.3	21.3	21.7	22.0	21.2	23.1	23.4	25.3
90°	30.2	29.8	29.4	28.9	28.5	27.6	26.3	24.8	23.5	22.2	20.4
92.5°	44.7	44.5	44.2	43.9	43.7	43.1	42.3	41.5	40.7	39.9	38.7
95°	79.7	79.7	79.7	79.7	79.7	79.3	78.7	78.0	77.3	76.6	75.0
97.5°	124.8	124.8	124.8	124.8	124.8	124.4	123.6	122.8	122.0	121.2	119.4
100°	156.2	156.2	156.2	156.2	156.2	156.0	155.5	155.1	154.7	154.2	152.2
102.5°	191.7	191.6	191.4	191.2	191.0	190.6	190.0	189.3	188.7	188.1	186.2
105°	245.9	245.3	244.6	243.9	243.3	242.6	242.0	241.3	240.5	239.9	239.0
107.5°	298.7	298.8	298.8	298.9	298.9	298.6	298.0	297.4	296.8	296.2	296.0
110°	336.7	336.0	335.3	334.7	334.0	333.9	334.3	334.8	335.2	335.7	335.9



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	375.4	375.3	375.1	375.0	374.9	374.9	374.9	375.0	375.1	375.2	375.6
115°	435.5	435.7	435.9	436.2	436.4	436.6	436.8	437.0	437.3	437.5	437.9
117.5°	492.7	493.1	493.6	494.0	494.5	495.1	495.8	496.7	497.4	498.2	498.5
120°	536.2	535.8	535.3	534.9	534.4	534.8	535.9	537.0	538.2	539.3	540.0
122.5°	572.5	573.3	574.1	574.9	575.7	576.5	577.3	578.0	578.9	579.6	579.9
125°	635.0	635.5	635.9	636.4	636.8	637.2	637.7	638.1	638.6	639.0	639.2
127.5°	692.9	693.3	693.6	694.0	694.3	694.7	695.2	695.6	696.1	696.5	696.9
130°	730.7	731.6	732.6	733.5	734.4	735.1	735.5	736.0	736.4	736.8	736.8
132.5°	771.1	771.4	771.8	772.1	772.5	773.0	773.4	773.9	774.3	774.8	774.9
135°	826.6	827.2	827.9	828.6	829.2	829.8	830.2	830.7	831.1	831.6	831.6
137.5°	884.8	884.6	884.5	884.4	884.2	884.5	885.0	885.7	886.3	886.9	886.5
140°	920.3	920.5	920.7	921.0	921.2	921.4	921.6	921.9	922.1	922.3	922.3
142.5°	955.7	955.8	955.8	955.9	955.9	956.0	956.0	956.0	956.1	956.1	956.3
145°	1003.9	1004.6	1005.3	1005.9	1006.6	1007.0	1007.3	1007.5	1007.7	1007.9	1007.7
147.5°	1052.8	1053.0	1053.2	1053.4	1053.6	1053.8	1054.0	1054.2	1054.4	1054.6	1054.7
150°	1082.6	1082.8	1083.0	1083.3	1083.5	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6
152.5°	1109.9	1110.5	1111.2	1111.8	1112.4	1112.4	1111.8	1111.3	1110.8	1110.1	1110.0
155°	1148.1	1149.0	1149.9	1150.7	1151.7	1151.7	1150.7	1149.9	1149.0	1148.1	1148.3
157.5°	1182.1	1183.0	1183.7	1184.5	1185.2	1185.3	1184.6	1183.9	1183.3	1182.6	1182.7
160°	1201.5	1202.6	1203.8	1204.9	1206.0	1206.2	1205.6	1204.9	1204.2	1203.6	1203.8
162.5°	1221.6	1222.8	1224.0	1225.1	1226.2	1226.1	1224.9	1223.7	1222.4	1221.2	1221.5
165°	1247.9	1248.8	1249.7	1250.6	1251.4	1251.2	1249.9	1248.6	1247.2	1245.9	1246.3
167.5°	1266.7	1268.0	1269.4	1270.8	1272.2	1272.2	1270.9	1269.5	1268.2	1266.9	1266.8
170°	1277.1	1278.7	1280.2	1281.8	1283.3	1283.5	1282.1	1280.8	1279.5	1278.1	1277.9
172.5°	1286.0	1287.6	1289.1	1290.7	1292.2	1292.3	1290.7	1289.2	1287.7	1286.2	1286.2
175°	1295.3	1296.9	1298.4	1300.0	1301.5	1301.5	1300.0	1298.4	1296.9	1295.3	1295.5
177.5°	1300.1	1301.5	1302.9	1304.4	1305.9	1306.0	1304.6	1303.4	1302.1	1300.9	1300.9
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	24.9	25.1	24.2	21.6	19.4	17.3	16.2	15.1	16.2	17.3	18.3
90°	18.6	16.8	15.0	12.9	10.4	8.0	5.5	3.0	5.5	8.0	10.4
92.5°	37.4	36.2	34.9	32.8	30.0	27.2	24.4	21.6	24.4	27.2	30.0
95°	73.5	71.9	70.3	68.6	66.6	64.5	62.5	60.5	62.5	64.5	66.6
97.5°	117.4	115.6	113.8	112.1	110.5	108.9	107.2	105.6	107.2	108.9	110.5
100°	150.2	148.1	146.1	144.7	143.8	142.9	142.0	141.1	142.0	142.9	143.8
102.5°	184.4	182.6	180.8	179.7	179.3	178.9	178.5	178.2	178.5	178.9	179.3
105°	238.1	237.2	236.3	235.8	235.5	235.3	235.1	234.9	235.1	235.3	235.5
107.5°	295.9	295.8	295.6	295.4	295.2	294.9	294.6	294.4	294.6	294.9	295.2
110°	336.1	336.3	336.6	336.5	336.0	335.6	335.1	334.7	335.1	335.6	336.0



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	376.0	376.4	376.8	377.0	376.9	376.8	376.7	376.6	376.7	376.8	376.9
115°	438.4	438.8	439.3	439.5	439.5	439.5	439.5	439.5	439.5	439.5	439.5
117.5°	498.8	499.1	499.4	499.5	499.3	499.1	499.0	498.8	499.0	499.1	499.3
120°	540.6	541.3	542.0	541.9	541.0	540.1	539.2	538.3	539.2	540.1	541.0
122.5°	580.2	580.6	580.9	580.8	580.5	580.1	579.8	579.4	579.8	580.1	580.5
125°	639.5	639.7	640.0	640.1	640.1	640.1	640.1	640.1	640.1	640.1	640.1
127.5°	697.2	697.6	697.9	697.8	697.1	696.4	695.8	695.1	695.8	696.4	697.1
130°	736.8	736.8	736.8	736.5	735.8	735.2	734.5	733.8	734.5	735.2	735.8
132.5°	775.1	775.3	775.5	775.3	774.8	774.3	773.9	773.4	773.9	774.3	774.8
135°	831.6	831.6	831.6	830.9	829.6	828.2	826.9	825.6	826.9	828.2	829.6
137.5°	886.2	885.8	885.3	884.9	884.2	883.6	883.0	882.4	883.0	883.6	884.2
140°	922.3	922.3	922.3	922.1	921.6	921.2	920.7	920.3	920.7	921.2	921.6
142.5°	956.5	956.7	956.8	956.7	956.3	955.8	955.4	954.9	955.4	955.8	956.3
145°	1007.5	1007.3	1007.0	1006.5	1005.6	1004.7	1003.8	1002.9	1003.8	1004.7	1005.6
147.5°	1054.9	1055.1	1055.3	1054.8	1053.8	1052.7	1051.6	1050.6	1051.6	1052.7	1053.8
150°	1083.6	1083.6	1083.6	1083.2	1082.3	1081.4	1080.5	1079.5	1080.5	1081.4	1082.3
152.5°	1109.8	1109.6	1109.4	1109.1	1108.6	1108.0	1107.5	1107.0	1107.5	1108.0	1108.6
155°	1148.5	1148.7	1149.0	1149.1	1149.1	1149.1	1149.1	1149.1	1149.1	1149.1	1149.1
157.5°	1182.7	1182.7	1182.8	1183.0	1183.4	1183.8	1184.2	1184.6	1184.2	1183.8	1183.4
160°	1204.0	1204.2	1204.5	1204.7	1204.9	1205.1	1205.3	1205.6	1205.3	1205.1	1204.9
162.5°	1221.7	1221.9	1222.1	1222.5	1223.1	1223.8	1224.4	1224.9	1224.4	1223.8	1223.1
165°	1246.8	1247.2	1247.7	1248.2	1248.9	1249.6	1250.2	1250.9	1250.2	1249.6	1248.9
167.5°	1266.8	1266.7	1266.7	1267.1	1268.1	1269.0	1269.9	1270.9	1269.9	1269.0	1268.1
170°	1277.7	1277.5	1277.2	1277.7	1278.8	1279.9	1281.0	1282.1	1281.0	1279.9	1278.8
172.5°	1286.1	1286.1	1286.0	1286.5	1287.4	1288.4	1289.3	1290.2	1289.3	1288.4	1287.4
175°	1295.7	1296.0	1296.2	1296.9	1298.0	1299.1	1300.2	1301.3	1300.2	1299.1	1298.0
177.5°	1300.9	1300.9	1300.9	1301.3	1302.2	1303.1	1304.0	1304.9	1304.0	1303.1	1302.2
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	20.4	20.9	23.4	24.9	27.0	30.1	31.5	38.0	40.4	43.5	48.7
90°	12.9	15.0	16.8	18.6	20.4	22.2	23.5	24.8	26.3	27.6	28.5
92.5°	32.8	34.9	36.2	37.4	38.7	39.9	40.7	41.5	42.3	43.1	43.7
95°	68.6	70.3	71.9	73.5	75.0	76.6	77.3	78.0	78.7	79.3	79.7
97.5°	112.1	113.8	115.6	117.4	119.4	121.2	122.0	122.8	123.6	124.4	124.8
100°	144.7	146.1	148.1	150.2	152.2	154.2	154.7	155.1	155.5	156.0	156.2
102.5°	179.7	180.8	182.6	184.4	186.2	188.1	188.7	189.3	190.0	190.6	191.0
105°	235.8	236.3	237.2	238.1	239.0	239.9	240.5	241.3	242.0	242.6	243.3
107.5°	295.4	295.6	295.8	295.9	296.0	296.2	296.8	297.4	298.0	298.6	298.9
110°	336.5	336.6	336.3	336.1	335.9	335.7	335.2	334.8	334.3	333.9	334.0



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	377.0	376.8	376.4	376.0	375.6	375.2	375.1	375.0	374.9	374.9	374.9
115°	439.5	439.3	438.8	438.4	437.9	437.5	437.3	437.0	436.8	436.6	436.4
117.5°	499.5	499.4	499.1	498.8	498.5	498.2	497.4	496.7	495.8	495.1	494.5
120°	541.9	542.0	541.3	540.6	540.0	539.3	538.2	537.0	535.9	534.8	534.4
122.5°	580.8	580.9	580.6	580.2	579.9	579.6	578.9	578.0	577.3	576.5	575.7
125°	640.1	640.0	639.7	639.5	639.2	639.0	638.6	638.1	637.7	637.2	636.8
127.5°	697.8	697.9	697.6	697.2	696.9	696.5	696.1	695.6	695.2	694.7	694.3
130°	736.5	736.8	736.8	736.8	736.8	736.8	736.4	736.0	735.5	735.1	734.4
132.5°	775.3	775.5	775.3	775.1	774.9	774.8	774.3	773.9	773.4	773.0	772.5
135°	830.9	831.6	831.6	831.6	831.6	831.6	831.1	830.7	830.2	829.8	829.2
137.5°	884.9	885.3	885.8	886.2	886.5	886.9	886.3	885.7	885.0	884.5	884.2
140°	922.1	922.3	922.3	922.3	922.3	922.3	922.1	921.9	921.6	921.4	921.2
142.5°	956.7	956.8	956.7	956.5	956.3	956.1	956.1	956.0	956.0	956.0	955.9
145°	1006.5	1007.0	1007.3	1007.5	1007.7	1007.9	1007.7	1007.5	1007.3	1007.0	1006.6
147.5°	1054.8	1055.3	1055.1	1054.9	1054.7	1054.6	1054.4	1054.2	1054.0	1053.8	1053.6
150°	1083.2	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.5
152.5°	1109.1	1109.4	1109.6	1109.8	1110.0	1110.1	1110.8	1111.3	1111.8	1112.4	1112.4
155°	1149.1	1149.0	1148.7	1148.5	1148.3	1148.1	1149.0	1149.9	1150.7	1151.7	1151.7
157.5°	1183.0	1182.8	1182.7	1182.7	1182.7	1182.6	1183.3	1183.9	1184.6	1185.3	1185.2
160°	1204.7	1204.5	1204.2	1204.0	1203.8	1203.6	1204.2	1204.9	1205.6	1206.2	1206.0
162.5°	1222.5	1222.1	1221.9	1221.7	1221.5	1221.2	1222.4	1223.7	1224.9	1226.1	1226.2
165°	1248.2	1247.7	1247.2	1246.8	1246.3	1245.9	1247.2	1248.6	1249.9	1251.2	1251.4
167.5°	1267.1	1266.7	1266.7	1266.8	1266.8	1266.9	1268.2	1269.5	1270.9	1272.2	1272.2
170°	1277.7	1277.2	1277.5	1277.7	1277.9	1278.1	1279.5	1280.8	1282.1	1283.5	1283.3
172.5°	1286.5	1286.0	1286.1	1286.1	1286.2	1286.2	1287.7	1289.2	1290.7	1292.3	1292.2
175°	1296.9	1296.2	1296.0	1295.7	1295.5	1295.3	1296.9	1298.4	1300.0	1301.5	1301.5
177.5°	1301.3	1300.9	1300.9	1300.9	1300.9	1300.9	1302.1	1303.4	1304.6	1306.0	1305.9
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	50.5	51.1	52.9	54.1	52.9	51.1	50.5	48.7	43.5	40.4	38.0
90°	28.9	29.4	29.8	30.2	29.8	29.4	28.9	28.5	27.6	26.3	24.8
92.5°	43.9	44.2	44.5	44.7	44.5	44.2	43.9	43.7	43.1	42.3	41.5
95°	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.3	78.7	78.0
97.5°	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.4	123.6	122.8
100°	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.0	155.5	155.1
102.5°	191.2	191.4	191.6	191.7	191.6	191.4	191.2	191.0	190.6	190.0	189.3
105°	243.9	244.6	245.3	245.9	245.3	244.6	243.9	243.3	242.6	242.0	241.3
107.5°	298.9	298.8	298.8	298.7	298.8	298.8	298.9	298.9	298.6	298.0	297.4
110°	334.7	335.3	336.0	336.7	336.0	335.3	334.7	334.0	333.9	334.3	334.8



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	375.0	375.1	375.3	375.4	375.3	375.1	375.0	374.9	374.9	374.9	375.0
115°	436.2	435.9	435.7	435.5	435.7	435.9	436.2	436.4	436.6	436.8	437.0
117.5°	494.0	493.6	493.1	492.7	493.1	493.6	494.0	494.5	495.1	495.8	496.7
120°	534.9	535.3	535.8	536.2	535.8	535.3	534.9	534.4	534.8	535.9	537.0
122.5°	574.9	574.1	573.3	572.5	573.3	574.1	574.9	575.7	576.5	577.3	578.0
125°	636.4	635.9	635.5	635.0	635.5	635.9	636.4	636.8	637.2	637.7	638.1
127.5°	694.0	693.6	693.3	692.9	693.3	693.6	694.0	694.3	694.7	695.2	695.6
130°	733.5	732.6	731.6	730.7	731.6	732.6	733.5	734.4	735.1	735.5	736.0
132.5°	772.1	771.8	771.4	771.1	771.4	771.8	772.1	772.5	773.0	773.4	773.9
135°	828.6	827.9	827.2	826.6	827.2	827.9	828.6	829.2	829.8	830.2	830.7
137.5°	884.4	884.5	884.6	884.8	884.6	884.5	884.4	884.2	884.5	885.0	885.7
140°	921.0	920.7	920.5	920.3	920.5	920.7	921.0	921.2	921.4	921.6	921.9
142.5°	955.9	955.8	955.8	955.7	955.8	955.8	955.9	955.9	956.0	956.0	956.0
145°	1005.9	1005.3	1004.6	1003.9	1004.6	1005.3	1005.9	1006.6	1007.0	1007.3	1007.5
147.5°	1053.4	1053.2	1053.0	1052.8	1053.0	1053.2	1053.4	1053.6	1053.8	1054.0	1054.2
150°	1083.3	1083.0	1082.8	1082.6	1082.8	1083.0	1083.3	1083.5	1083.6	1083.6	1083.6
152.5°	1111.8	1111.2	1110.5	1109.9	1110.5	1111.2	1111.8	1112.4	1112.4	1111.8	1111.3
155°	1150.7	1149.9	1149.0	1148.1	1149.0	1149.9	1150.7	1151.7	1151.7	1150.7	1149.9
157.5°	1184.5	1183.7	1183.0	1182.1	1183.0	1183.7	1184.5	1185.2	1185.3	1184.6	1183.9
160°	1204.9	1203.8	1202.6	1201.5	1202.6	1203.8	1204.9	1206.0	1206.2	1205.6	1204.9
162.5°	1225.1	1224.0	1222.8	1221.6	1222.8	1224.0	1225.1	1226.2	1226.1	1224.9	1223.7
165°	1250.6	1249.7	1248.8	1247.9	1248.8	1249.7	1250.6	1251.4	1251.2	1249.9	1248.6
167.5°	1270.8	1269.4	1268.0	1266.7	1268.0	1269.4	1270.8	1272.2	1272.2	1270.9	1269.5
170°	1281.8	1280.2	1278.7	1277.1	1278.7	1280.2	1281.8	1283.3	1283.5	1282.1	1280.8
172.5°	1290.7	1289.1	1287.6	1286.0	1287.6	1289.1	1290.7	1292.2	1292.3	1290.7	1289.2
175°	1300.0	1298.4	1296.9	1295.3	1296.9	1298.4	1300.0	1301.5	1301.5	1300.0	1298.4
177.5°	1304.4	1302.9	1301.5	1300.1	1301.5	1302.9	1304.4	1305.9	1306.0	1304.6	1303.4
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	31.5	30.1	27.0	24.9	23.4	20.9	20.4	18.3	17.3	16.2	15.1
90°	23.5	22.2	20.4	18.6	16.8	15.0	12.9	10.4	8.0	5.5	3.0
92.5°	40.7	39.9	38.7	37.4	36.2	34.9	32.8	30.0	27.2	24.4	21.6
95°	77.3	76.6	75.0	73.5	71.9	70.3	68.6	66.6	64.5	62.5	60.5
97.5°	122.0	121.2	119.4	117.4	115.6	113.8	112.1	110.5	108.9	107.2	105.6
100°	154.7	154.2	152.2	150.2	148.1	146.1	144.7	143.8	142.9	142.0	141.1
102.5°	188.7	188.1	186.2	184.4	182.6	180.8	179.7	179.3	178.9	178.5	178.2
105°	240.5	239.9	239.0	238.1	237.2	236.3	235.8	235.5	235.3	235.1	234.9
107.5°	296.8	296.2	296.0	295.9	295.8	295.6	295.4	295.2	294.9	294.6	294.4
110°	335.2	335.7	335.9	336.1	336.3	336.6	336.5	336.0	335.6	335.1	334.7



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	375.1	375.2	375.6	376.0	376.4	376.8	377.0	376.9	376.8	376.7	376.6
115°	437.3	437.5	437.9	438.4	438.8	439.3	439.5	439.5	439.5	439.5	439.5
117.5°	497.4	498.2	498.5	498.8	499.1	499.4	499.5	499.3	499.1	499.0	498.8
120°	538.2	539.3	540.0	540.6	541.3	542.0	541.9	541.0	540.1	539.2	538.3
122.5°	578.9	579.6	579.9	580.2	580.6	580.9	580.8	580.5	580.1	579.8	579.4
125°	638.6	639.0	639.2	639.5	639.7	640.0	640.1	640.1	640.1	640.1	640.1
127.5°	696.1	696.5	696.9	697.2	697.6	697.9	697.8	697.1	696.4	695.8	695.1
130°	736.4	736.8	736.8	736.8	736.8	736.8	736.5	735.8	735.2	734.5	733.8
132.5°	774.3	774.8	774.9	775.1	775.3	775.5	775.3	774.8	774.3	773.9	773.4
135°	831.1	831.6	831.6	831.6	831.6	831.6	830.9	829.6	828.2	826.9	825.6
137.5°	886.3	886.9	886.5	886.2	885.8	885.3	884.9	884.2	883.6	883.0	882.4
140°	922.1	922.3	922.3	922.3	922.3	922.3	922.1	921.6	921.2	920.7	920.3
142.5°	956.1	956.1	956.3	956.5	956.7	956.8	956.7	956.3	955.8	955.4	954.9
145°	1007.7	1007.9	1007.7	1007.5	1007.3	1007.0	1006.5	1005.6	1004.7	1003.8	1002.9
147.5°	1054.4	1054.6	1054.7	1054.9	1055.1	1055.3	1054.8	1053.8	1052.7	1051.6	1050.6
150°	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.2	1082.3	1081.4	1080.5	1079.5
152.5°	1110.8	1110.1	1110.0	1109.8	1109.6	1109.4	1109.1	1108.6	1108.0	1107.5	1107.0
155°	1149.0	1148.1	1148.3	1148.5	1148.7	1149.0	1149.1	1149.1	1149.1	1149.1	1149.1
157.5°	1183.3	1182.6	1182.7	1182.7	1182.7	1182.8	1183.0	1183.4	1183.8	1184.2	1184.6
160°	1204.2	1203.6	1203.8	1204.0	1204.2	1204.5	1204.7	1204.9	1205.1	1205.3	1205.6
162.5°	1222.4	1221.2	1221.5	1221.7	1221.9	1222.1	1222.5	1223.1	1223.8	1224.4	1224.9
165°	1247.2	1245.9	1246.3	1246.8	1247.2	1247.7	1248.2	1248.9	1249.6	1250.2	1250.9
167.5°	1268.2	1266.9	1266.8	1266.8	1266.7	1266.7	1267.1	1268.1	1269.0	1269.9	1270.9
170°	1279.5	1278.1	1277.9	1277.7	1277.5	1277.2	1277.7	1278.8	1279.9	1281.0	1282.1
172.5°	1287.7	1286.2	1286.2	1286.1	1286.1	1286.0	1286.5	1287.4	1288.4	1289.3	1290.2
175°	1296.9	1295.3	1295.5	1295.7	1296.0	1296.2	1296.9	1298.0	1299.1	1300.2	1301.3
177.5°	1302.1	1300.9	1300.9	1300.9	1300.9	1300.9	1301.3	1302.2	1303.1	1304.0	1304.9
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	16.2	17.3	19.4	21.6	24.2	25.1	24.9	25.3	23.4	23.1	21.2
90°	5.5	8.0	10.4	12.9	15.0	16.8	18.6	20.4	22.2	23.5	24.8
92.5°	24.4	27.2	30.0	32.8	34.9	36.2	37.4	38.7	39.9	40.7	41.5
95°	62.5	64.5	66.6	68.6	70.3	71.9	73.5	75.0	76.6	77.3	78.0
97.5°	107.2	108.9	110.5	112.1	113.8	115.6	117.4	119.4	121.2	122.0	122.8
100°	142.0	142.9	143.8	144.7	146.1	148.1	150.2	152.2	154.2	154.7	155.1
102.5°	178.5	178.9	179.3	179.7	180.8	182.6	184.4	186.2	188.1	188.7	189.3
105°	235.1	235.3	235.5	235.8	236.3	237.2	238.1	239.0	239.9	240.5	241.3
107.5°	294.6	294.9	295.2	295.4	295.6	295.8	295.9	296.0	296.2	296.8	297.4
110°	335.1	335.6	336.0	336.5	336.6	336.3	336.1	335.9	335.7	335.2	334.8



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	376.7	376.8	376.9	377.0	376.8	376.4	376.0	375.6	375.2	375.1	375.0
115°	439.5	439.5	439.5	439.5	439.3	438.8	438.4	437.9	437.5	437.3	437.0
117.5°	499.0	499.1	499.3	499.5	499.4	499.1	498.8	498.5	498.2	497.4	496.7
120°	539.2	540.1	541.0	541.9	542.0	541.3	540.6	540.0	539.3	538.2	537.0
122.5°	579.8	580.1	580.5	580.8	580.9	580.6	580.2	579.9	579.6	578.9	578.0
125°	640.1	640.1	640.1	640.1	640.0	639.7	639.5	639.2	639.0	638.6	638.1
127.5°	695.8	696.4	697.1	697.8	697.9	697.6	697.2	696.9	696.5	696.1	695.6
130°	734.5	735.2	735.8	736.5	736.8	736.8	736.8	736.8	736.8	736.4	736.0
132.5°	773.9	774.3	774.8	775.3	775.5	775.3	775.1	774.9	774.8	774.3	773.9
135°	826.9	828.2	829.6	830.9	831.6	831.6	831.6	831.6	831.6	831.1	830.7
137.5°	883.0	883.6	884.2	884.9	885.3	885.8	886.2	886.5	886.9	886.3	885.7
140°	920.7	921.2	921.6	922.1	922.3	922.3	922.3	922.3	922.3	922.1	921.9
142.5°	955.4	955.8	956.3	956.7	956.8	956.7	956.5	956.3	956.1	956.1	956.0
145°	1003.8	1004.7	1005.6	1006.5	1007.0	1007.3	1007.5	1007.7	1007.9	1007.7	1007.5
147.5°	1051.6	1052.7	1053.8	1054.8	1055.3	1055.1	1054.9	1054.7	1054.6	1054.4	1054.2
150°	1080.5	1081.4	1082.3	1083.2	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6	1083.6
152.5°	1107.5	1108.0	1108.6	1109.1	1109.4	1109.6	1109.8	1110.0	1110.1	1110.8	1111.3
155°	1149.1	1149.1	1149.1	1149.1	1149.0	1148.7	1148.5	1148.3	1148.1	1149.0	1149.9
157.5°	1184.2	1183.8	1183.4	1183.0	1182.8	1182.7	1182.7	1182.7	1182.6	1183.3	1183.9
160°	1205.3	1205.1	1204.9	1204.7	1204.5	1204.2	1204.0	1203.8	1203.6	1204.2	1204.9
162.5°	1224.4	1223.8	1223.1	1222.5	1222.1	1221.9	1221.7	1221.5	1221.2	1222.4	1223.7
165°	1250.2	1249.6	1248.9	1248.2	1247.7	1247.2	1246.8	1246.3	1245.9	1247.2	1248.6
167.5°	1269.9	1269.0	1268.1	1267.1	1266.7	1266.7	1266.8	1266.8	1266.9	1268.2	1269.5
170°	1281.0	1279.9	1278.8	1277.7	1277.2	1277.5	1277.7	1277.9	1278.1	1279.5	1280.8
172.5°	1289.3	1288.4	1287.4	1286.5	1286.0	1286.1	1286.1	1286.2	1286.2	1287.7	1289.2
175°	1300.2	1299.1	1298.0	1296.9	1296.2	1296.0	1295.7	1295.5	1295.3	1296.9	1298.4
177.5°	1304.0	1303.1	1302.2	1301.3	1300.9	1300.9	1300.9	1300.9	1300.9	1302.1	1303.4
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-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°	22.0	21.7	21.3	20.3	19.8	19.9	18.4
90°	26.3	27.6	28.5	28.9	29.4	29.8	30.2
92.5°	42.3	43.1	43.7	43.9	44.2	44.5	44.7
95°	78.7	79.3	79.7	79.7	79.7	79.7	79.7
97.5°	123.6	124.4	124.8	124.8	124.8	124.8	124.8
100°	155.5	156.0	156.2	156.2	156.2	156.2	156.2
102.5°	190.0	190.6	191.0	191.2	191.4	191.6	191.7
105°	242.0	242.6	243.3	243.9	244.6	245.3	245.9
107.5°	298.0	298.6	298.9	298.9	298.8	298.8	298.7
110°	334.3	333.9	334.0	334.7	335.3	336.0	336.7



TEST NUMBER: P332653-840

CATALOG NUMBER: SA4XXDIP-C1020D1035U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	374.9	374.9	374.9	375.0	375.1	375.3	375.4
115°	436.8	436.6	436.4	436.2	435.9	435.7	435.5
117.5°	495.8	495.1	494.5	494.0	493.6	493.1	492.7
120°	535.9	534.8	534.4	534.9	535.3	535.8	536.2
122.5°	577.3	576.5	575.7	574.9	574.1	573.3	572.5
125°	637.7	637.2	636.8	636.4	635.9	635.5	635.0
127.5°	695.2	694.7	694.3	694.0	693.6	693.3	692.9
130°	735.5	735.1	734.4	733.5	732.6	731.6	730.7
132.5°	773.4	773.0	772.5	772.1	771.8	771.4	771.1
135°	830.2	829.8	829.2	828.6	827.9	827.2	826.6
137.5°	885.0	884.5	884.2	884.4	884.5	884.6	884.8
140°	921.6	921.4	921.2	921.0	920.7	920.5	920.3
142.5°	956.0	956.0	955.9	955.9	955.8	955.8	955.7
145°	1007.3	1007.0	1006.6	1005.9	1005.3	1004.6	1003.9
147.5°	1054.0	1053.8	1053.6	1053.4	1053.2	1053.0	1052.8
150°	1083.6	1083.6	1083.5	1083.3	1083.0	1082.8	1082.6
152.5°	1111.8	1112.4	1112.4	1111.8	1111.2	1110.5	1109.9
155°	1150.7	1151.7	1151.7	1150.7	1149.9	1149.0	1148.1
157.5°	1184.6	1185.3	1185.2	1184.5	1183.7	1183.0	1182.1
160°	1205.6	1206.2	1206.0	1204.9	1203.8	1202.6	1201.5
162.5°	1224.9	1226.1	1226.2	1225.1	1224.0	1222.8	1221.6
165°	1249.9	1251.2	1251.4	1250.6	1249.7	1248.8	1247.9
167.5°	1270.9	1272.2	1272.2	1270.8	1269.4	1268.0	1266.7
170°	1282.1	1283.5	1283.3	1281.8	1280.2	1278.7	1277.1
172.5°	1290.7	1292.3	1292.2	1290.7	1289.1	1287.6	1286.0
175°	1300.0	1301.5	1301.5	1300.0	1298.4	1296.9	1295.3
177.5°	1304.6	1306.0	1305.9	1304.4	1302.9	1301.5	1300.1
180°	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3	1303.3

(END OF REPORT)