

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: P331457-830

Luminaire Tested: **SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331457-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

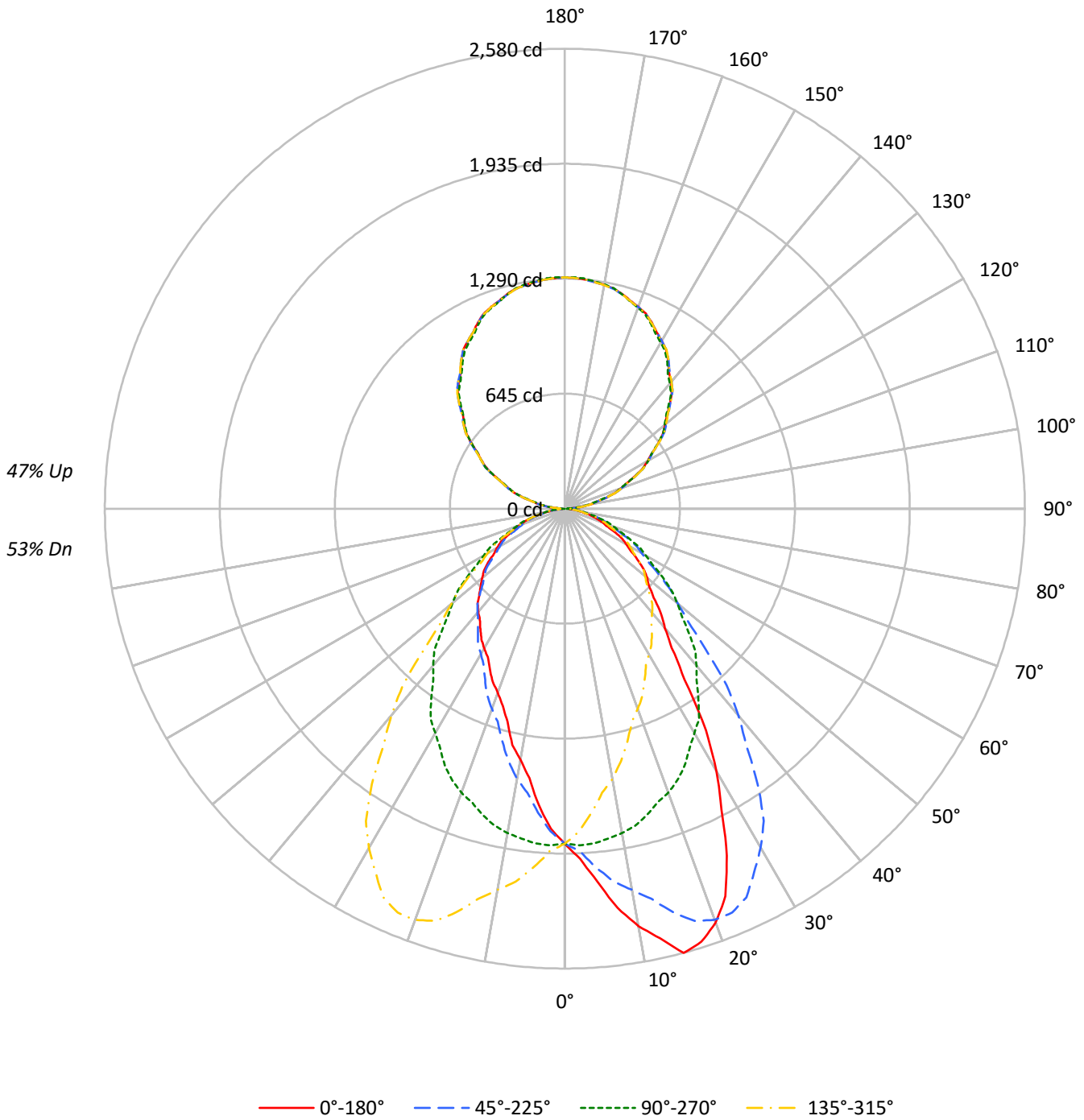
Lumens per Lamp: N/A
Luminaire Lumens: 7779.4 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	95	91	88	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	91	83	78	73	84	78	72	68	67	63	60	57	54	51	47	45	44	39
3	83	74	67	61	77	69	63	58	59	55	51	51	47	44	42	40	38	34
4	76	66	58	52	70	61	55	49	53	48	44	45	41	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	39	60	50	43	37	43	38	34	37	33	30	32	28	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	26	29	26	23	21
8	56	44	36	31	52	41	34	29	36	31	27	31	27	24	27	23	21	19
9	52	40	33	28	48	38	31	26	33	28	24	29	25	22	25	22	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	30344	30344	30344	30344
5°	34020	30543	27067	30543
10°	38984	30293	23423	30293
15°	43127	29737	20694	29737
20°	42471	29141	18866	29141
25°	38297	28349	17706	28349
30°	31646	27082	16861	27082
35°	23065	25754	16259	25754
40°	18421	24190	15924	24190
45°	16098	22379	15470	22379
50°	15131	20627	15169	20627
55°	13948	18849	14762	18849
60°	12784	16956	14134	16956
65°	11645	15259	13521	15259
70°	10570	13605	12619	13605
75°	9370	11759	11179	11759
80°	8061	9735	9000	9735
85°	7225	7225	5354	7225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.0	2.3
10°-20°	520.4	6.7
20°-30°	755.2	9.7
30°-40°	796.9	10.2
40°-50°	705.6	9.1
50°-60°	563.1	7.2
60°-70°	382.7	4.9
70°-80°	196.2	2.5
80°-90°	52.5	0.7
90°-100°	82.2	1.1
100°-110°	255.3	3.3
110°-120°	436.4	5.6
120°-130°	573.9	7.4
130°-140°	644.2	8.3
140°-150°	631.6	8.1
150°-160°	529.8	6.8
160°-170°	351.4	4.5
170°-180°	122.8	1.6
0°-30°	1454.6	18.7
0°-40°	2251.5	28.9
0°-60°	3520.2	45.3
0°-90°	4151.7	53.4
90°-120°	774.0	9.9
90°-150°	2623.7	33.7
90°-180°	3628.0	46.6
0°-180°	7779.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1879	1879	1879	1879	1879	
5°	2099	1884	1670	1884	2099	210
15°	2580	1779	1238	1779	2580	712
25°	2150	1591	994	1591	2150	972
35°	1170	1307	825	1307	1170	761
45°	705	980	678	980	705	554
55°	496	670	524	670	496	444
65°	305	399	354	399	305	303
75°	150	188	179	188	150	161
85°	39	39	29	39	39	44
90°	37	1	37	1	37	18
95°	68	57	68	57	68	76
105°	243	235	243	235	243	256
115°	438	438	438	438	438	432
125°	639	637	639	637	639	570
135°	834	824	834	824	834	642
145°	1012	1001	1012	1001	1012	632
155°	1153	1144	1153	1144	1153	531
165°	1246	1245	1246	1245	1246	351
175°	1291	1295	1291	1295	1291	123
180°	1297	1297	1297	1297	1297	



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1966.1	1966.7	1967.8	1958.6	1957.5	1957.5	1949.4	1942.5	1934.4	1923.4	1924.6
5°	2099.0	2107.0	2109.9	2101.2	2088.2	2086.8	2074.5	2054.3	2035.5	2020.3	2009.5
7.5°	2257.7	2260.9	2253.8	2242.4	2232.7	2215.4	2192.5	2170.1	2138.8	2110.1	2088.7
10°	2377.8	2382.2	2369.9	2353.3	2339.6	2319.4	2286.1	2252.2	2211.0	2171.3	2139.5
12.5°	2469.2	2479.8	2464.1	2461.9	2438.5	2410.6	2371.1	2353.9	2295.9	2240.6	2206.6
15°	2580.1	2579.4	2580.9	2567.1	2549.8	2545.4	2503.6	2458.1	2376.4	2343.9	2287.6
17.5°	2548.1	2559.0	2564.1	2563.9	2563.5	2560.8	2547.3	2518.6	2477.7	2425.0	2359.9
20°	2471.8	2486.2	2488.4	2505.0	2514.4	2526.7	2531.8	2523.8	2498.5	2454.5	2398.1
22.5°	2353.9	2358.0	2364.7	2390.6	2410.9	2441.8	2457.8	2484.4	2474.8	2453.2	2406.2
25°	2149.7	2142.4	2167.7	2180.7	2227.6	2276.7	2312.2	2351.2	2385.9	2406.8	2393.0
27.5°	1904.3	1893.5	1931.4	1965.9	2004.0	2057.2	2112.3	2177.5	2231.7	2299.4	2322.7
30°	1697.4	1703.9	1740.0	1776.9	1834.7	1909.8	1971.9	2043.4	2120.7	2196.6	2249.3
32.5°	1474.4	1499.4	1522.2	1578.7	1629.6	1713.4	1804.3	1893.8	1990.2	2076.4	2158.0
35°	1170.2	1199.0	1230.9	1272.0	1343.5	1426.5	1515.4	1636.1	1767.6	1885.3	1982.1
37.5°	985.0	980.3	998.5	1028.3	1086.2	1153.3	1255.6	1374.7	1529.5	1667.8	1804.3
40°	874.0	871.1	884.1	911.5	955.6	1004.8	1094.3	1199.0	1342.7	1511.8	1674.3
42.5°	797.8	799.5	806.7	826.0	856.2	896.6	963.7	1052.8	1184.5	1343.7	1518.3
45°	705.0	710.0	718.0	727.4	744.7	778.0	815.5	879.1	983.1	1116.0	1287.9
47.5°	638.2	638.4	646.5	654.7	665.0	683.7	714.4	754.2	827.6	935.9	1083.6
50°	602.4	597.4	603.1	609.6	620.5	633.5	653.7	691.3	740.4	827.7	951.3
52.5°	558.5	558.6	563.8	566.3	576.0	589.0	607.5	633.5	678.0	746.3	847.8
55°	495.5	499.1	502.0	506.3	515.0	524.4	538.9	556.2	590.9	642.2	717.3
57.5°	436.3	437.4	440.4	448.6	454.0	462.7	476.5	492.2	514.7	552.7	609.2
60°	395.9	395.9	401.6	405.2	412.5	421.1	432.0	447.1	467.3	498.4	543.9
62.5°	358.8	358.3	360.6	366.5	372.0	380.1	390.9	403.8	422.8	450.4	487.9
65°	304.8	303.4	307.7	309.2	314.9	322.9	331.6	345.3	360.4	380.7	413.9
67.5°	252.8	254.6	256.8	259.6	262.8	271.2	276.9	286.6	299.4	316.2	338.7
70°	223.9	223.9	223.9	226.1	230.5	234.8	240.5	248.5	260.8	275.2	295.4
72.5°	191.5	193.9	196.1	194.9	200.4	202.9	209.9	214.4	226.1	235.4	253.3
75°	150.2	150.2	150.2	153.8	156.0	158.2	162.5	166.8	172.7	184.2	193.6
77.5°	112.1	111.8	112.5	113.4	115.7	118.3	119.6	123.5	128.8	134.2	142.1
80°	86.7	88.1	88.9	90.3	90.3	91.7	92.5	97.6	101.1	104.7	109.8
82.5°	67.0	67.3	67.5	67.8	68.3	69.2	71.1	72.7	74.0	77.0	80.9
85°	39.0	38.3	38.3	39.7	39.0	39.0	40.4	41.8	41.8	42.6	44.8
87.5°	22.4	22.4	22.9	22.3	22.2	22.9	23.0	22.5	23.2	23.8	23.4
90°	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3	37.8	38.4	33.0
92.5°	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0	34.9	34.8	33.6
95°	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0	70.0	70.0	69.6
97.5°	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8	117.8	117.8	116.9
100°	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1	151.1	151.1	150.3
102.5°	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4	187.2	187.0	186.1
105°	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9	241.4	240.8	240.3
107.5°	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6	300.4	300.2	300.2
110°	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5	340.5	340.5	340.5



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5	381.1	381.6	381.8
115°	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9	442.1	442.3	442.8
117.5°	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1	501.7	502.3	503.7
120°	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8	540.8	540.8	542.8
122.5°	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7	582.3	582.9	584.3
125°	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3	643.0	643.8	644.5
127.5°	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2	702.0	702.9	703.8
130°	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3	741.8	742.3	742.8
132.5°	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4	781.6	782.6	782.5
135°	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2	838.4	838.7	838.2
137.5°	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4	893.6	893.8	893.2
140°	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6	930.6	930.6	929.4
142.5°	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3	964.1	963.9	963.1
145°	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4	1015.1	1014.9	1013.4
147.5°	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3	1059.7	1059.1	1058.2
150°	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2	1086.2
152.5°	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2	1114.1
155°	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1	1151.9	1150.7	1150.0
157.5°	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4	1184.8	1183.1	1182.6
160°	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2	1204.7	1203.2	1203.0
162.5°	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1	1222.4	1220.8	1220.5
165°	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2	1245.5	1243.8	1243.8
167.5°	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2	1264.5	1262.8	1262.8
170°	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7	1275.0	1273.3	1273.6
172.5°	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6	1282.9	1281.2	1281.4
175°	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2	1291.5	1289.7	1290.2
177.5°	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8	1295.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1928.6	1924.0	1921.1	1910.7	1901.4	1892.2	1889.3	1890.5	1877.7	1865.6	1860.4
5°	2003.8	1989.2	1975.6	1956.1	1933.0	1907.6	1894.6	1884.5	1859.3	1831.8	1815.9
7.5°	2071.0	2050.4	2023.9	1987.3	1953.6	1913.8	1888.6	1866.1	1829.2	1790.5	1766.8
10°	2112.0	2083.9	2049.9	2005.2	1964.0	1915.6	1881.6	1847.7	1804.3	1758.1	1729.2
12.5°	2147.3	2109.3	2075.9	2018.5	1969.7	1909.2	1869.0	1821.1	1775.5	1720.5	1692.2
15°	2231.3	2161.2	2097.6	2032.6	1972.6	1888.1	1843.3	1779.0	1719.1	1651.2	1618.7
17.5°	2296.1	2217.3	2117.2	2034.7	1964.7	1871.1	1805.3	1728.3	1657.5	1579.9	1535.7
20°	2333.1	2242.8	2135.1	2036.9	1953.1	1846.3	1774.7	1696.0	1613.0	1525.5	1477.9
22.5°	2355.0	2260.1	2153.7	2028.3	1930.0	1826.0	1736.0	1649.7	1565.6	1471.2	1421.3
25°	2362.0	2275.3	2162.7	2021.1	1901.1	1783.4	1675.1	1591.3	1489.4	1401.3	1328.3
27.5°	2327.6	2265.5	2157.1	2007.4	1867.7	1730.1	1609.3	1514.4	1406.9	1311.3	1237.9
30°	2285.4	2249.3	2143.8	1993.6	1841.2	1693.1	1560.2	1452.6	1345.7	1248.9	1173.7
32.5°	2220.2	2212.3	2119.6	1974.0	1812.9	1646.3	1508.8	1400.0	1281.6	1186.5	1114.8
35°	2091.9	2126.5	2068.0	1930.0	1759.5	1579.7	1430.9	1306.6	1183.9	1092.9	1025.7
37.5°	1920.0	2006.0	1990.7	1865.8	1687.6	1507.2	1342.9	1213.1	1096.1	1004.2	938.3
40°	1801.5	1911.3	1927.1	1816.7	1636.8	1451.1	1277.1	1147.7	1033.6	949.9	883.4
42.5°	1674.3	1802.6	1846.3	1757.7	1581.3	1392.2	1218.1	1084.2	971.2	889.8	830.9
45°	1461.2	1631.0	1709.8	1659.2	1488.7	1295.1	1116.0	980.1	877.6	801.1	755.5
47.5°	1262.1	1447.6	1553.4	1535.5	1385.7	1194.0	1016.9	886.6	786.7	725.7	684.9
50°	1121.1	1311.7	1439.5	1445.4	1311.7	1121.7	944.1	821.2	729.5	672.5	639.2
52.5°	998.5	1180.5	1319.9	1350.6	1229.1	1046.6	878.7	756.6	675.8	623.4	593.6
55°	838.6	992.5	1147.1	1203.3	1105.9	932.6	777.2	669.6	593.7	557.6	531.6
57.5°	697.2	825.5	968.2	1030.5	970.3	822.0	676.4	582.9	521.4	489.7	469.8
60°	622.6	723.8	850.9	925.3	873.3	741.1	614.0	525.1	474.6	446.4	427.6
62.5°	553.3	642.9	750.4	818.4	790.0	665.4	551.6	473.2	429.5	403.0	389.5
65°	456.5	527.3	610.4	673.2	654.4	559.8	466.7	399.4	364.8	343.8	333.0
67.5°	375.9	427.1	484.7	539.7	524.5	457.5	382.7	330.4	304.5	286.4	279.9
70°	325.1	364.0	415.4	459.4	447.1	392.2	333.0	288.2	265.8	250.6	244.1
72.5°	276.5	308.6	347.7	383.7	375.4	329.8	280.4	246.6	229.4	215.4	210.1
75°	208.8	233.3	257.1	281.0	278.8	243.5	214.5	188.5	174.8	164.0	161.8
77.5°	154.1	167.9	184.1	198.2	194.3	174.1	151.4	136.5	126.4	119.1	118.0
80°	117.7	125.6	137.2	147.3	142.3	133.7	115.6	104.7	97.6	90.3	87.4
82.5°	85.4	93.3	100.3	105.8	101.9	93.8	82.7	75.3	71.0	66.0	64.8
85°	44.8	49.1	52.0	53.4	52.0	46.9	41.8	39.0	35.4	33.3	32.5
87.5°	22.9	21.8	20.7	21.0	18.8	18.2	15.3	12.9	12.9	12.9	12.3
90°	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1	4.1	7.0	9.9
92.5°	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5	21.6	23.8	25.9
95°	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9	59.4	61.8	64.2
97.5°	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1	106.1	108.3	110.5
100°	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0	141.0	143.0	144.9
102.5°	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9	177.4	179.0	180.5
105°	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4	236.1	236.9	237.6
107.5°	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4	296.4	297.6	298.6
110°	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9	335.4	336.9	338.3



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0	377.4	378.9	380.3
115°	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9	439.4	440.8	442.3
117.5°	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6	501.6	503.6	505.5
120°	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	542.8	544.8	546.7
122.5°	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5	580.9	583.2	585.5
125°	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2	639.4	641.6	643.8
127.5°	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4	697.1	699.9	702.7
130°	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3	733.4	736.6	739.7
132.5°	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5	773.2	775.7	778.3
135°	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4	827.1	829.8	832.5
137.5°	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1	883.4	885.5	887.7
140°	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3	917.5	919.6	921.9
142.5°	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4	952.5	954.7	956.9
145°	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7	1002.4	1004.1	1005.8
147.5°	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6	1047.6	1049.6	1051.7
150°	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2	1077.7	1079.1	1080.6
152.5°	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3	1104.8	1106.3	1107.8
155°	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2	1144.8	1145.6	1146.3
157.5°	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9	1179.4	1179.9	1180.3
160°	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0	1200.4	1200.9	1201.4
162.5°	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2	1219.3	1219.4	1219.5
165°	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8	1244.6	1244.3	1244.1
167.5°	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3	1265.6	1264.8	1264.1
170°	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7	1277.0	1276.2	1275.4
172.5°	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5	1284.9	1284.1	1283.4
175°	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2	1294.5	1293.7	1293.0
177.5°	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1	1298.5	1298.0	1297.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1854.6	1851.2	1839.0	1832.7	1822.3	1812.4	1806.1	1809.0	1811.3	1810.2	1808.4
5°	1801.5	1787.7	1766.8	1748.7	1735.7	1711.9	1701.8	1696.8	1692.4	1687.3	1682.2
7.5°	1738.1	1716.6	1686.5	1660.8	1636.4	1606.8	1590.0	1579.9	1569.4	1558.0	1547.9
10°	1693.1	1662.7	1631.0	1594.9	1566.0	1539.3	1515.4	1499.5	1485.1	1471.4	1461.2
12.5°	1645.8	1610.8	1571.5	1522.1	1490.3	1452.0	1448.4	1420.4	1397.8	1389.3	1377.4
15°	1570.3	1521.2	1471.4	1412.9	1387.6	1352.9	1331.2	1309.6	1290.1	1276.3	1272.7
17.5°	1484.7	1421.1	1371.5	1329.5	1288.1	1252.5	1232.6	1215.2	1199.2	1180.8	1178.4
20°	1419.4	1364.4	1310.3	1273.5	1230.9	1194.7	1170.2	1152.8	1139.1	1128.2	1118.9
22.5°	1357.5	1297.4	1247.8	1207.6	1165.5	1136.3	1117.0	1100.2	1088.8	1076.9	1068.0
25°	1258.3	1211.4	1157.2	1111.6	1076.9	1058.2	1042.3	1027.8	1020.7	1012.7	1002.6
27.5°	1171.5	1119.3	1068.6	1033.3	1002.9	986.3	975.0	965.2	958.4	953.8	948.0
30°	1110.2	1057.4	1017.8	983.1	957.8	941.2	934.0	928.2	920.2	917.4	914.5
32.5°	1051.2	1003.7	969.8	939.7	915.6	904.7	898.1	893.0	886.7	883.8	878.1
35°	967.9	928.2	894.9	878.4	858.8	849.4	844.4	837.2	831.4	828.5	827.7
37.5°	889.5	855.0	833.1	811.7	803.5	797.8	790.8	785.9	784.2	783.7	783.0
40°	838.6	810.4	791.0	773.6	770.0	761.3	755.5	751.2	751.2	752.0	751.2
42.5°	792.4	767.1	749.9	734.9	730.7	725.5	719.7	719.4	720.6	723.0	720.6
45°	722.4	704.3	692.0	684.8	676.8	671.8	671.0	673.2	673.9	674.7	676.8
47.5°	657.9	645.9	634.8	626.8	623.4	622.5	621.6	625.4	628.9	630.2	633.5
50°	619.7	606.1	596.6	591.5	588.7	587.2	588.7	593.0	595.9	599.6	601.7
52.5°	577.0	567.3	560.8	556.9	555.7	556.7	556.9	561.8	566.5	567.8	568.7
55°	517.9	510.7	509.3	502.8	505.6	504.9	508.5	511.4	515.8	520.1	520.8
57.5°	458.9	453.2	449.3	449.9	450.7	453.9	456.9	462.0	466.7	471.3	471.6
60°	419.7	416.8	414.6	414.6	416.0	420.4	424.0	429.0	432.0	434.8	437.0
62.5°	383.8	381.0	378.8	379.9	383.7	386.3	390.5	393.2	396.2	399.0	400.0
65°	327.3	325.7	327.9	329.4	330.1	333.8	338.7	340.9	343.8	345.3	350.3
67.5°	275.0	275.3	275.0	277.1	281.3	282.1	286.9	292.0	292.6	295.3	298.6
70°	239.8	241.3	242.7	244.1	247.8	249.2	252.8	255.0	257.9	260.0	262.2
72.5°	207.5	207.7	209.2	208.9	211.9	215.1	218.1	220.3	223.2	225.9	228.1
75°	159.7	159.7	161.1	161.8	165.4	169.0	168.3	169.8	172.7	175.5	177.0
77.5°	116.6	115.0	116.6	117.3	118.5	121.5	122.1	124.1	127.4	126.4	128.0
80°	88.9	86.7	88.9	89.5	89.5	93.2	93.2	94.6	96.8	94.6	96.8
82.5°	63.4	62.4	64.0	64.2	65.3	65.4	66.6	66.9	69.1	68.1	69.1
85°	31.8	31.1	31.8	31.1	31.8	32.5	32.5	31.8	31.8	33.3	31.1
87.5°	12.3	12.6	13.1	14.2	14.7	15.2	14.5	14.4	14.3	13.0	13.0
90°	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3	36.9	36.4	36.3
92.5°	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0	35.1	35.3	35.3
95°	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0	70.0	70.0	69.8
97.5°	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8	117.8	117.8	117.8
100°	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1	151.1	151.1	151.0
102.5°	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4	187.6	187.8	187.8
105°	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9	242.3	242.8	243.1
107.5°	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6	300.8	301.0	300.5
110°	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.5	340.2



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5	379.9	379.4	378.8
115°	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9	441.6	441.3	440.8
117.5°	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1	500.6	500.0	499.4
120°	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8	540.8	540.8	540.5
122.5°	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7	581.2	580.5	580.0
125°	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3	641.6	640.8	640.4
127.5°	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2	700.2	699.4	698.5
130°	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3	740.8	740.4	739.6
132.5°	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4	779.4	778.4	777.4
135°	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2	837.9	837.6	837.2
137.5°	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4	893.2	893.1	892.5
140°	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6	930.6	930.6	930.1
142.5°	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3	964.5	964.7	964.3
145°	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4	1015.7	1015.9	1015.5
147.5°	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3	1060.7	1061.3	1061.1
150°	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1
152.5°	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9
155°	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1	1154.3	1155.6	1155.7
157.5°	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4	1188.1	1189.7	1190.0
160°	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2	1207.6	1209.1	1209.3
162.5°	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1	1225.7	1227.4	1227.6
165°	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2	1248.9	1250.6	1250.8
167.5°	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2	1267.9	1269.6	1269.8
170°	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7	1278.4	1280.1	1280.3
172.5°	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6	1286.3	1288.0	1288.1
175°	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2	1294.9	1296.6	1296.7
177.5°	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1802.6	1801.5	1801.5	1796.3	1801.5	1801.5	1802.6	1808.4	1810.2	1811.3	1809.0
5°	1672.2	1670.0	1666.4	1670.0	1666.4	1670.0	1672.2	1682.2	1687.3	1692.4	1696.8
7.5°	1543.1	1534.5	1533.2	1524.7	1533.2	1534.5	1543.1	1547.9	1558.0	1569.4	1579.9
10°	1449.0	1443.2	1442.5	1428.7	1442.5	1443.2	1449.0	1461.2	1471.4	1485.1	1499.5
12.5°	1377.3	1363.5	1366.2	1358.2	1366.2	1363.5	1377.3	1377.4	1389.3	1397.8	1420.4
15°	1253.2	1253.2	1250.4	1238.0	1250.4	1253.2	1253.2	1272.7	1276.3	1290.1	1309.6
17.5°	1164.1	1162.6	1155.7	1159.1	1155.7	1162.6	1164.1	1178.4	1180.8	1199.2	1215.2
20°	1110.9	1106.6	1098.0	1098.0	1098.0	1106.6	1110.9	1118.9	1128.2	1139.1	1152.8
22.5°	1060.6	1060.4	1051.1	1054.0	1051.1	1060.4	1060.6	1068.0	1076.9	1088.8	1100.2
25°	1001.8	996.1	991.7	993.9	991.7	996.1	1001.8	1002.6	1012.7	1020.7	1027.8
27.5°	946.1	942.9	942.6	936.7	942.6	942.9	946.1	948.0	953.8	958.4	965.2
30°	913.7	906.5	908.0	904.4	908.0	906.5	913.7	914.5	917.4	920.2	928.2
32.5°	876.8	874.1	872.7	869.7	872.7	874.1	876.8	878.1	883.8	886.7	893.0
35°	826.3	827.1	823.4	824.9	823.4	827.1	826.3	827.7	828.5	831.4	837.2
37.5°	782.3	784.6	782.9	783.3	782.9	784.6	782.3	783.0	783.7	784.2	785.9
40°	753.4	753.4	753.4	755.5	753.4	753.4	753.4	751.2	752.0	751.2	751.2
42.5°	725.7	724.5	723.3	723.2	723.3	724.5	725.7	720.6	723.0	720.6	719.4
45°	678.3	680.4	681.2	677.5	681.2	680.4	678.3	676.8	674.7	673.9	673.2
47.5°	635.4	635.7	635.4	638.6	635.4	635.7	635.4	633.5	630.2	628.9	625.4
50°	605.3	603.9	605.3	603.9	605.3	603.9	605.3	601.7	599.6	595.9	593.0
52.5°	573.5	573.8	573.0	572.7	573.0	573.8	573.5	568.7	567.8	566.5	561.8
55°	523.7	525.1	524.4	524.4	524.4	525.1	523.7	520.8	520.1	515.8	511.4
57.5°	472.1	473.4	474.4	471.3	474.4	473.4	472.1	471.6	471.3	466.7	462.0
60°	436.3	439.9	439.1	437.7	439.1	439.9	436.3	437.0	434.8	432.0	429.0
62.5°	403.3	404.6	404.5	404.3	404.5	404.6	403.3	400.0	399.0	396.2	393.2
65°	352.5	353.9	351.8	353.9	351.8	353.9	352.5	350.3	345.3	343.8	340.9
67.5°	297.7	298.2	299.7	300.8	299.7	298.2	297.7	298.6	295.3	292.6	292.0
70°	263.6	263.0	265.1	267.3	265.1	263.0	263.6	262.2	260.0	257.9	255.0
72.5°	227.8	229.4	228.7	230.3	228.7	229.4	227.8	228.1	225.9	223.2	220.3
75°	175.5	177.7	177.0	179.2	177.0	177.7	175.5	177.0	175.5	172.7	169.8
77.5°	126.9	127.1	126.9	128.0	126.9	127.1	126.9	128.0	126.4	127.4	124.1
80°	96.8	95.4	93.9	96.8	93.9	95.4	96.8	96.8	94.6	96.8	94.6
82.5°	67.3	68.1	66.7	66.7	66.7	68.1	67.3	69.1	68.1	69.1	66.9
85°	31.1	30.3	28.9	28.9	28.9	30.3	31.1	31.1	33.3	31.8	31.8
87.5°	13.1	12.5	12.6	12.1	12.6	12.5	13.1	13.0	13.0	14.3	14.4
90°	36.5	36.8	36.9	37.2	36.9	36.8	36.5	36.3	36.4	36.9	37.3
92.5°	35.3	35.3	35.4	35.4	35.4	35.3	35.3	35.3	35.3	35.1	35.0
95°	69.4	68.9	68.3	67.9	68.3	68.9	69.4	69.8	70.0	70.0	70.0
97.5°	117.7	117.7	117.6	117.6	117.6	117.7	117.7	117.8	117.8	117.8	117.8
100°	150.7	150.5	150.2	150.0	150.2	150.5	150.7	151.0	151.1	151.1	151.1
102.5°	187.5	187.3	187.0	186.8	187.0	187.3	187.5	187.8	187.8	187.6	187.4
105°	243.1	243.1	243.1	243.1	243.1	243.1	243.1	243.1	242.8	242.3	241.9
107.5°	299.4	298.3	297.2	296.1	297.2	298.3	299.4	300.5	301.0	300.8	300.6
110°	339.4	338.7	337.9	337.2	337.9	338.7	339.4	340.2	340.5	340.5	340.5



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	378.2	377.7	377.2	376.6	377.2	377.7	378.2	378.8	379.4	379.9	380.5
115°	440.2	439.4	438.7	437.9	438.7	439.4	440.2	440.8	441.3	441.6	441.9
117.5°	498.6	497.9	497.1	496.4	497.1	497.9	498.6	499.4	500.0	500.6	501.1
120°	539.8	539.0	538.3	537.5	538.3	539.0	539.8	540.5	540.8	540.8	540.8
122.5°	579.5	578.9	578.4	577.9	578.4	578.9	579.5	580.0	580.5	581.2	581.7
125°	640.1	639.9	639.6	639.4	639.6	639.9	640.1	640.4	640.8	641.6	642.3
127.5°	697.8	697.0	696.3	695.4	696.3	697.0	697.8	698.5	699.4	700.2	701.2
130°	738.7	737.6	736.7	735.7	736.7	737.6	738.7	739.6	740.4	740.8	741.3
132.5°	776.7	775.8	775.1	774.3	775.1	775.8	776.7	777.4	778.4	779.4	780.4
135°	836.4	835.8	835.0	834.2	835.0	835.8	836.4	837.2	837.6	837.9	838.2
137.5°	891.5	890.5	889.6	888.5	889.6	890.5	891.5	892.5	893.1	893.2	893.4
140°	929.2	928.2	927.2	926.2	927.2	928.2	929.2	930.1	930.6	930.6	930.6
142.5°	963.3	962.3	961.4	960.4	961.4	962.3	963.3	964.3	964.7	964.5	964.3
145°	1014.6	1013.6	1012.6	1011.6	1012.6	1013.6	1014.6	1015.5	1015.9	1015.7	1015.4
147.5°	1060.2	1059.2	1058.3	1057.4	1058.3	1059.2	1060.2	1061.1	1061.3	1060.7	1060.3
150°	1089.4	1088.6	1087.9	1087.2	1087.9	1088.6	1089.4	1090.1	1090.1	1089.4	1088.6
152.5°	1117.9	1117.1	1116.2	1115.2	1116.2	1117.1	1117.9	1118.9	1118.9	1117.9	1117.1
155°	1155.1	1154.3	1153.6	1152.8	1153.6	1154.3	1155.1	1155.7	1155.6	1154.3	1153.1
157.5°	1188.7	1187.6	1186.5	1185.2	1186.5	1187.6	1188.7	1190.0	1189.7	1188.1	1186.4
160°	1208.3	1207.4	1206.4	1205.4	1206.4	1207.4	1208.3	1209.3	1209.1	1207.6	1206.2
162.5°	1226.4	1225.3	1224.1	1222.9	1224.1	1225.3	1226.4	1227.6	1227.4	1225.7	1224.1
165°	1249.6	1248.4	1247.2	1245.9	1247.2	1248.4	1249.6	1250.8	1250.6	1248.9	1247.2
167.5°	1268.6	1267.2	1266.0	1264.8	1266.0	1267.2	1268.6	1269.8	1269.6	1267.9	1266.2
170°	1278.7	1277.3	1275.8	1274.4	1275.8	1277.3	1278.7	1280.3	1280.1	1278.4	1276.7
172.5°	1286.7	1285.2	1283.7	1282.2	1283.7	1285.2	1286.7	1288.1	1288.0	1286.3	1284.6
175°	1295.2	1293.7	1292.3	1290.8	1292.3	1293.7	1295.2	1296.7	1296.6	1294.9	1293.2
177.5°	1298.3	1297.1	1295.9	1294.8	1295.9	1297.1	1298.3	1299.4	1299.4	1298.3	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1806.1	1812.4	1822.3	1832.7	1839.0	1851.2	1854.6	1860.4	1865.6	1877.7	1890.5
5°	1701.8	1711.9	1735.7	1748.7	1766.8	1787.7	1801.5	1815.9	1831.8	1859.3	1884.5
7.5°	1590.0	1606.8	1636.4	1660.8	1686.5	1716.6	1738.1	1766.8	1790.5	1829.2	1866.1
10°	1515.4	1539.3	1566.0	1594.9	1631.0	1662.7	1693.1	1729.2	1758.1	1804.3	1847.7
12.5°	1448.4	1452.0	1490.3	1522.1	1571.5	1610.8	1645.8	1692.2	1720.5	1775.5	1821.1
15°	1331.2	1352.9	1387.6	1412.9	1471.4	1521.2	1570.3	1618.7	1651.2	1719.1	1779.0
17.5°	1232.6	1252.5	1288.1	1329.5	1371.5	1421.1	1484.7	1535.7	1579.9	1657.5	1728.3
20°	1170.2	1194.7	1230.9	1273.5	1310.3	1364.4	1419.4	1477.9	1525.5	1613.0	1696.0
22.5°	1117.0	1136.3	1165.5	1207.6	1247.8	1297.4	1357.5	1421.3	1471.2	1565.6	1649.7
25°	1042.3	1058.2	1076.9	1111.6	1157.2	1211.4	1258.3	1328.3	1401.3	1489.4	1591.3
27.5°	975.0	986.3	1002.9	1033.3	1068.6	1119.3	1171.5	1237.9	1311.3	1406.9	1514.4
30°	934.0	941.2	957.8	983.1	1017.8	1057.4	1110.2	1173.7	1248.9	1345.7	1452.6
32.5°	898.1	904.7	915.6	939.7	969.8	1003.7	1051.2	1114.8	1186.5	1281.6	1400.0
35°	844.4	849.4	858.8	878.4	894.9	928.2	967.9	1025.7	1092.9	1183.9	1306.6
37.5°	790.8	797.8	803.5	811.7	833.1	855.0	889.5	938.3	1004.2	1096.1	1213.1
40°	755.5	761.3	770.0	773.6	791.0	810.4	838.6	883.4	949.9	1033.6	1147.7
42.5°	719.7	725.5	730.7	734.9	749.9	767.1	792.4	830.9	889.8	971.2	1084.2
45°	671.0	671.8	676.8	684.8	692.0	704.3	722.4	755.5	801.1	877.6	980.1
47.5°	621.6	622.5	623.4	626.8	634.8	645.9	657.9	684.9	725.7	786.7	886.6
50°	588.7	587.2	588.7	591.5	596.6	606.1	619.7	639.2	672.5	729.5	821.2
52.5°	556.9	556.7	555.7	556.9	560.8	567.3	577.0	593.6	623.4	675.8	756.6
55°	508.5	504.9	505.6	502.8	509.3	510.7	517.9	531.6	557.6	593.7	669.6
57.5°	456.9	453.9	450.7	449.9	449.3	453.2	458.9	469.8	489.7	521.4	582.9
60°	424.0	420.4	416.0	414.6	414.6	416.8	419.7	427.6	446.4	474.6	525.1
62.5°	390.5	386.3	383.7	379.9	378.8	381.0	383.8	389.5	403.0	429.5	473.2
65°	338.7	333.8	330.1	329.4	327.9	325.7	327.3	333.0	343.8	364.8	399.4
67.5°	286.9	282.1	281.3	277.1	275.0	275.3	275.0	279.9	286.4	304.5	330.4
70°	252.8	249.2	247.8	244.1	242.7	241.3	239.8	244.1	250.6	265.8	288.2
72.5°	218.1	215.1	211.9	208.9	209.2	207.7	207.5	210.1	215.4	229.4	246.6
75°	168.3	169.0	165.4	161.8	161.1	159.7	159.7	161.8	164.0	174.8	188.5
77.5°	122.1	121.5	118.5	117.3	116.6	115.0	116.6	118.0	119.1	126.4	136.5
80°	93.2	93.2	89.5	89.5	88.9	86.7	88.9	87.4	90.3	97.6	104.7
82.5°	66.6	65.4	65.3	64.2	64.0	62.4	63.4	64.8	66.0	71.0	75.3
85°	32.5	32.5	31.8	31.1	31.8	31.1	31.8	32.5	33.3	35.4	39.0
87.5°	14.5	15.2	14.7	14.2	13.1	12.6	12.3	12.3	12.9	12.9	12.9
90°	37.8	38.4	33.0	27.6	22.2	16.9	12.8	9.9	7.0	4.1	1.1
92.5°	34.9	34.8	33.6	32.3	31.0	29.8	28.1	25.9	23.8	21.6	19.5
95°	70.0	70.0	69.6	69.1	68.6	68.1	66.6	64.2	61.8	59.4	56.9
97.5°	117.8	117.8	116.9	115.9	115.0	114.1	112.5	110.5	108.3	106.1	104.1
100°	151.1	151.1	150.3	149.6	148.9	148.2	146.8	144.9	143.0	141.0	139.0
102.5°	187.2	187.0	186.1	185.1	184.3	183.3	182.1	180.5	179.0	177.4	175.9
105°	241.4	240.8	240.3	239.9	239.4	238.9	238.3	237.6	236.9	236.1	235.4
107.5°	300.4	300.2	300.2	300.2	300.2	300.2	299.6	298.6	297.6	296.4	295.4
110°	340.5	340.5	340.5	340.5	340.5	340.5	339.8	338.3	336.9	335.4	333.9



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	381.1	381.6	381.8	382.0	382.2	382.5	381.8	380.3	378.9	377.4	376.0
115°	442.1	442.3	442.8	443.3	443.7	444.2	443.7	442.3	440.8	439.4	437.9
117.5°	501.7	502.3	503.7	505.0	506.4	507.7	507.5	505.5	503.6	501.6	499.6
120°	540.8	540.8	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8
122.5°	582.3	582.9	584.3	585.6	587.0	588.3	587.9	585.5	583.2	580.9	578.5
125°	643.0	643.8	644.5	645.3	645.9	646.7	645.9	643.8	641.6	639.4	637.2
127.5°	702.0	702.9	703.8	704.6	705.5	706.4	705.4	702.7	699.9	697.1	694.4
130°	741.8	742.3	742.8	743.3	743.8	744.2	742.9	739.7	736.6	733.4	730.3
132.5°	781.6	782.6	782.5	782.4	782.3	782.2	780.9	778.3	775.7	773.2	770.5
135°	838.4	838.7	838.2	837.6	837.2	836.7	835.1	832.5	829.8	827.1	824.4
137.5°	893.6	893.8	893.2	892.6	891.9	891.3	889.9	887.7	885.5	883.4	881.1
140°	930.6	930.6	929.4	928.2	927.0	925.8	924.1	921.9	919.6	917.5	915.3
142.5°	964.1	963.9	963.1	962.2	961.4	960.5	959.0	956.9	954.7	952.5	950.4
145°	1015.1	1014.9	1013.4	1012.0	1010.5	1009.1	1007.5	1005.8	1004.1	1002.4	1000.7
147.5°	1059.7	1059.1	1058.2	1057.2	1056.2	1055.3	1053.8	1051.7	1049.6	1047.6	1045.6
150°	1087.9	1087.2	1086.2	1085.2	1084.3	1083.3	1082.0	1080.6	1079.1	1077.7	1076.2
152.5°	1116.2	1115.2	1114.1	1112.9	1111.7	1110.5	1109.2	1107.8	1106.3	1104.8	1103.3
155°	1151.9	1150.7	1150.0	1149.2	1148.5	1147.7	1147.1	1146.3	1145.6	1144.8	1144.2
157.5°	1184.8	1183.1	1182.6	1182.2	1181.8	1181.3	1180.9	1180.3	1179.9	1179.4	1178.9
160°	1204.7	1203.2	1203.0	1202.8	1202.5	1202.2	1201.9	1201.4	1200.9	1200.4	1200.0
162.5°	1222.4	1220.8	1220.5	1220.2	1220.0	1219.7	1219.7	1219.5	1219.4	1219.3	1219.2
165°	1245.5	1243.8	1243.8	1243.8	1243.8	1243.8	1243.9	1244.1	1244.3	1244.6	1244.8
167.5°	1264.5	1262.8	1262.8	1262.9	1262.9	1263.0	1263.4	1264.1	1264.8	1265.6	1266.3
170°	1275.0	1273.3	1273.6	1273.8	1274.0	1274.3	1274.8	1275.4	1276.2	1277.0	1277.7
172.5°	1282.9	1281.2	1281.4	1281.7	1282.0	1282.1	1282.6	1283.4	1284.1	1284.9	1285.5
175°	1291.5	1289.7	1290.2	1290.7	1291.2	1291.7	1292.3	1293.0	1293.7	1294.5	1295.2
177.5°	1295.9	1294.8	1295.1	1295.5	1295.9	1296.3	1296.8	1297.4	1298.0	1298.5	1299.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1889.3	1892.2	1901.4	1910.7	1921.1	1924.0	1928.6	1924.6	1923.4	1934.4	1942.5
5°	1894.6	1907.6	1933.0	1956.1	1975.6	1989.2	2003.8	2009.5	2020.3	2035.5	2054.3
7.5°	1888.6	1913.8	1953.6	1987.3	2023.9	2050.4	2071.0	2088.7	2110.1	2138.8	2170.1
10°	1881.6	1915.6	1964.0	2005.2	2049.9	2083.9	2112.0	2139.5	2171.3	2211.0	2252.2
12.5°	1869.0	1909.2	1969.7	2018.5	2075.9	2109.3	2147.3	2206.6	2240.6	2295.9	2353.9
15°	1843.3	1888.1	1972.6	2032.6	2097.6	2161.2	2231.3	2287.6	2343.9	2376.4	2458.1
17.5°	1805.3	1871.1	1964.7	2034.7	2117.2	2217.3	2296.1	2359.9	2425.0	2477.7	2518.6
20°	1774.7	1846.3	1953.1	2036.9	2135.1	2242.8	2333.1	2398.1	2454.5	2498.5	2523.8
22.5°	1736.0	1826.0	1930.0	2028.3	2153.7	2260.1	2355.0	2406.2	2453.2	2474.8	2484.4
25°	1675.1	1783.4	1901.1	2021.1	2162.7	2275.3	2362.0	2393.0	2406.8	2385.9	2351.2
27.5°	1609.3	1730.1	1867.7	2007.4	2157.1	2265.5	2327.6	2322.7	2299.4	2231.7	2177.5
30°	1560.2	1693.1	1841.2	1993.6	2143.8	2249.3	2285.4	2249.3	2196.6	2120.7	2043.4
32.5°	1508.8	1646.3	1812.9	1974.0	2119.6	2212.3	2220.2	2158.0	2076.4	1990.2	1893.8
35°	1430.9	1579.7	1759.5	1930.0	2068.0	2126.5	2091.9	1982.1	1885.3	1767.6	1636.1
37.5°	1342.9	1507.2	1687.6	1865.8	1990.7	2006.0	1920.0	1804.3	1667.8	1529.5	1374.7
40°	1277.1	1451.1	1636.8	1816.7	1927.1	1911.3	1801.5	1674.3	1511.8	1342.7	1199.0
42.5°	1218.1	1392.2	1581.3	1757.7	1846.3	1802.6	1674.3	1518.3	1343.7	1184.5	1052.8
45°	1116.0	1295.1	1488.7	1659.2	1709.8	1631.0	1461.2	1287.9	1116.0	983.1	879.1
47.5°	1016.9	1194.0	1385.7	1535.5	1553.4	1447.6	1262.1	1083.6	935.9	827.6	754.2
50°	944.1	1121.7	1311.7	1445.4	1439.5	1311.7	1121.1	951.3	827.7	740.4	691.3
52.5°	878.7	1046.6	1229.1	1350.6	1319.9	1180.5	998.5	847.8	746.3	678.0	633.5
55°	777.2	932.6	1105.9	1203.3	1147.1	992.5	838.6	717.3	642.2	590.9	556.2
57.5°	676.4	822.0	970.3	1030.5	968.2	825.5	697.2	609.2	552.7	514.7	492.2
60°	614.0	741.1	873.3	925.3	850.9	723.8	622.6	543.9	498.4	467.3	447.1
62.5°	551.6	665.4	790.0	818.4	750.4	642.9	553.3	487.9	450.4	422.8	403.8
65°	466.7	559.8	654.4	673.2	610.4	527.3	456.5	413.9	380.7	360.4	345.3
67.5°	382.7	457.5	524.5	539.7	484.7	427.1	375.9	338.7	316.2	299.4	286.6
70°	333.0	392.2	447.1	459.4	415.4	364.0	325.1	295.4	275.2	260.8	248.5
72.5°	280.4	329.8	375.4	383.7	347.7	308.6	276.5	253.3	235.4	226.1	214.4
75°	214.5	243.5	278.8	281.0	257.1	233.3	208.8	193.6	184.2	172.7	166.8
77.5°	151.4	174.1	194.3	198.2	184.1	167.9	154.1	142.1	134.2	128.8	123.5
80°	115.6	133.7	142.3	147.3	137.2	125.6	117.7	109.8	104.7	101.1	97.6
82.5°	82.7	93.8	101.9	105.8	100.3	93.3	85.4	80.9	77.0	74.0	72.7
85°	41.8	46.9	52.0	53.4	52.0	49.1	44.8	44.8	42.6	41.8	41.8
87.5°	15.3	18.2	18.8	21.0	20.7	21.8	22.9	23.4	23.8	23.2	22.5
90°	4.1	7.0	9.9	12.8	16.9	22.2	27.6	33.0	38.4	37.8	37.3
92.5°	21.6	23.8	25.9	28.1	29.8	31.0	32.3	33.6	34.8	34.9	35.0
95°	59.4	61.8	64.2	66.6	68.1	68.6	69.1	69.6	70.0	70.0	70.0
97.5°	106.1	108.3	110.5	112.5	114.1	115.0	115.9	116.9	117.8	117.8	117.8
100°	141.0	143.0	144.9	146.8	148.2	148.9	149.6	150.3	151.1	151.1	151.1
102.5°	177.4	179.0	180.5	182.1	183.3	184.3	185.1	186.1	187.0	187.2	187.4
105°	236.1	236.9	237.6	238.3	238.9	239.4	239.9	240.3	240.8	241.4	241.9
107.5°	296.4	297.6	298.6	299.6	300.2	300.2	300.2	300.2	300.2	300.4	300.6
110°	335.4	336.9	338.3	339.8	340.5	340.5	340.5	340.5	340.5	340.5	340.5



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	377.4	378.9	380.3	381.8	382.5	382.2	382.0	381.8	381.6	381.1	380.5
115°	439.4	440.8	442.3	443.7	444.2	443.7	443.3	442.8	442.3	442.1	441.9
117.5°	501.6	503.6	505.5	507.5	507.7	506.4	505.0	503.7	502.3	501.7	501.1
120°	542.8	544.8	546.7	548.7	548.7	546.7	544.8	542.8	540.8	540.8	540.8
122.5°	580.9	583.2	585.5	587.9	588.3	587.0	585.6	584.3	582.9	582.3	581.7
125°	639.4	641.6	643.8	645.9	646.7	645.9	645.3	644.5	643.8	643.0	642.3
127.5°	697.1	699.9	702.7	705.4	706.4	705.5	704.6	703.8	702.9	702.0	701.2
130°	733.4	736.6	739.7	742.9	744.2	743.8	743.3	742.8	742.3	741.8	741.3
132.5°	773.2	775.7	778.3	780.9	782.2	782.3	782.4	782.5	782.6	781.6	780.4
135°	827.1	829.8	832.5	835.1	836.7	837.2	837.6	838.2	838.7	838.4	838.2
137.5°	883.4	885.5	887.7	889.9	891.3	891.9	892.6	893.2	893.8	893.6	893.4
140°	917.5	919.6	921.9	924.1	925.8	927.0	928.2	929.4	930.6	930.6	930.6
142.5°	952.5	954.7	956.9	959.0	960.5	961.4	962.2	963.1	963.9	964.1	964.3
145°	1002.4	1004.1	1005.8	1007.5	1009.1	1010.5	1012.0	1013.4	1014.9	1015.1	1015.4
147.5°	1047.6	1049.6	1051.7	1053.8	1055.3	1056.2	1057.2	1058.2	1059.1	1059.7	1060.3
150°	1077.7	1079.1	1080.6	1082.0	1083.3	1084.3	1085.2	1086.2	1087.2	1087.9	1088.6
152.5°	1104.8	1106.3	1107.8	1109.2	1110.5	1111.7	1112.9	1114.1	1115.2	1116.2	1117.1
155°	1144.8	1145.6	1146.3	1147.1	1147.7	1148.5	1149.2	1150.0	1150.7	1151.9	1153.1
157.5°	1179.4	1179.9	1180.3	1180.9	1181.3	1181.8	1182.2	1182.6	1183.1	1184.8	1186.4
160°	1200.4	1200.9	1201.4	1201.9	1202.2	1202.5	1202.8	1203.0	1203.2	1204.7	1206.2
162.5°	1219.3	1219.4	1219.5	1219.7	1219.7	1220.0	1220.2	1220.5	1220.8	1222.4	1224.1
165°	1244.6	1244.3	1244.1	1243.9	1243.8	1243.8	1243.8	1243.8	1243.8	1245.5	1247.2
167.5°	1265.6	1264.8	1264.1	1263.4	1263.0	1262.9	1262.9	1262.8	1262.8	1264.5	1266.2
170°	1277.0	1276.2	1275.4	1274.8	1274.3	1274.0	1273.8	1273.6	1273.3	1275.0	1276.7
172.5°	1284.9	1284.1	1283.4	1282.6	1282.1	1282.0	1281.7	1281.4	1281.2	1282.9	1284.6
175°	1294.5	1293.7	1293.0	1292.3	1291.7	1291.2	1290.7	1290.2	1289.7	1291.5	1293.2
177.5°	1298.5	1298.0	1297.4	1296.8	1296.3	1295.9	1295.5	1295.1	1294.8	1295.9	1297.1
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4	1879.4
2.5°	1949.4	1957.5	1957.5	1958.6	1967.8	1966.7	1966.1
5°	2074.5	2086.8	2088.2	2101.2	2109.9	2107.0	2099.0
7.5°	2192.5	2215.4	2232.7	2242.4	2253.8	2260.9	2257.7
10°	2286.1	2319.4	2339.6	2353.3	2369.9	2382.2	2377.8
12.5°	2371.1	2410.6	2438.5	2461.9	2464.1	2479.8	2469.2
15°	2503.6	2545.4	2549.8	2567.1	2580.9	2579.4	2580.1
17.5°	2547.3	2560.8	2563.5	2563.9	2564.1	2559.0	2548.1
20°	2531.8	2526.7	2514.4	2505.0	2488.4	2486.2	2471.8
22.5°	2457.8	2441.8	2410.9	2390.6	2364.7	2358.0	2353.9
25°	2312.2	2276.7	2227.6	2180.7	2167.7	2142.4	2149.7
27.5°	2112.3	2057.2	2004.0	1965.9	1931.4	1893.5	1904.3
30°	1971.9	1909.8	1834.7	1776.9	1740.0	1703.9	1697.4
32.5°	1804.3	1713.4	1629.6	1578.7	1522.2	1499.4	1474.4
35°	1515.4	1426.5	1343.5	1272.0	1230.9	1199.0	1170.2
37.5°	1255.6	1153.3	1086.2	1028.3	998.5	980.3	985.0
40°	1094.3	1004.8	955.6	911.5	884.1	871.1	874.0
42.5°	963.7	896.6	856.2	826.0	806.7	799.5	797.8
45°	815.5	778.0	744.7	727.4	718.0	710.0	705.0
47.5°	714.4	683.7	665.0	654.7	646.5	638.4	638.2
50°	653.7	633.5	620.5	609.6	603.1	597.4	602.4
52.5°	607.5	589.0	576.0	566.3	563.8	558.6	558.5
55°	538.9	524.4	515.0	506.3	502.0	499.1	495.5
57.5°	476.5	462.7	454.0	448.6	440.4	437.4	436.3
60°	432.0	421.1	412.5	405.2	401.6	395.9	395.9
62.5°	390.9	380.1	372.0	366.5	360.6	358.3	358.8
65°	331.6	322.9	314.9	309.2	307.7	303.4	304.8
67.5°	276.9	271.2	262.8	259.6	256.8	254.6	252.8
70°	240.5	234.8	230.5	226.1	223.9	223.9	223.9
72.5°	209.9	202.9	200.4	194.9	196.1	193.9	191.5
75°	162.5	158.2	156.0	153.8	150.2	150.2	150.2
77.5°	119.6	118.3	115.7	113.4	112.5	111.8	112.1
80°	92.5	91.7	90.3	90.3	88.9	88.1	86.7
82.5°	71.1	69.2	68.3	67.8	67.5	67.3	67.0
85°	40.4	39.0	39.0	39.7	38.3	38.3	39.0
87.5°	23.0	22.9	22.2	22.3	22.9	22.4	22.4
90°	36.9	36.4	36.3	36.5	36.8	36.9	37.2
92.5°	35.1	35.3	35.3	35.3	35.3	35.4	35.4
95°	70.0	70.0	69.8	69.4	68.9	68.3	67.9
97.5°	117.8	117.8	117.8	117.7	117.7	117.6	117.6
100°	151.1	151.1	151.0	150.7	150.5	150.2	150.0
102.5°	187.6	187.8	187.8	187.5	187.3	187.0	186.8
105°	242.3	242.8	243.1	243.1	243.1	243.1	243.1
107.5°	300.8	301.0	300.5	299.4	298.3	297.2	296.1
110°	340.5	340.5	340.2	339.4	338.7	337.9	337.2



TEST NUMBER: P331457-830

CATALOG NUMBER: SA2XXDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	379.9	379.4	378.8	378.2	377.7	377.2	376.6
115°	441.6	441.3	440.8	440.2	439.4	438.7	437.9
117.5°	500.6	500.0	499.4	498.6	497.9	497.1	496.4
120°	540.8	540.8	540.5	539.8	539.0	538.3	537.5
122.5°	581.2	580.5	580.0	579.5	578.9	578.4	577.9
125°	641.6	640.8	640.4	640.1	639.9	639.6	639.4
127.5°	700.2	699.4	698.5	697.8	697.0	696.3	695.4
130°	740.8	740.4	739.6	738.7	737.6	736.7	735.7
132.5°	779.4	778.4	777.4	776.7	775.8	775.1	774.3
135°	837.9	837.6	837.2	836.4	835.8	835.0	834.2
137.5°	893.2	893.1	892.5	891.5	890.5	889.6	888.5
140°	930.6	930.6	930.1	929.2	928.2	927.2	926.2
142.5°	964.5	964.7	964.3	963.3	962.3	961.4	960.4
145°	1015.7	1015.9	1015.5	1014.6	1013.6	1012.6	1011.6
147.5°	1060.7	1061.3	1061.1	1060.2	1059.2	1058.3	1057.4
150°	1089.4	1090.1	1090.1	1089.4	1088.6	1087.9	1087.2
152.5°	1117.9	1118.9	1118.9	1117.9	1117.1	1116.2	1115.2
155°	1154.3	1155.6	1155.7	1155.1	1154.3	1153.6	1152.8
157.5°	1188.1	1189.7	1190.0	1188.7	1187.6	1186.5	1185.2
160°	1207.6	1209.1	1209.3	1208.3	1207.4	1206.4	1205.4
162.5°	1225.7	1227.4	1227.6	1226.4	1225.3	1224.1	1222.9
165°	1248.9	1250.6	1250.8	1249.6	1248.4	1247.2	1245.9
167.5°	1267.9	1269.6	1269.8	1268.6	1267.2	1266.0	1264.8
170°	1278.4	1280.1	1280.3	1278.7	1277.3	1275.8	1274.4
172.5°	1286.3	1288.0	1288.1	1286.7	1285.2	1283.7	1282.2
175°	1294.9	1296.6	1296.7	1295.2	1293.7	1292.3	1290.8
177.5°	1298.3	1299.4	1299.4	1298.3	1297.1	1295.9	1294.8
180°	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4	1297.4

(END OF REPORT)