

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: P331760-830

Luminaire Tested: **SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331760-830
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: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

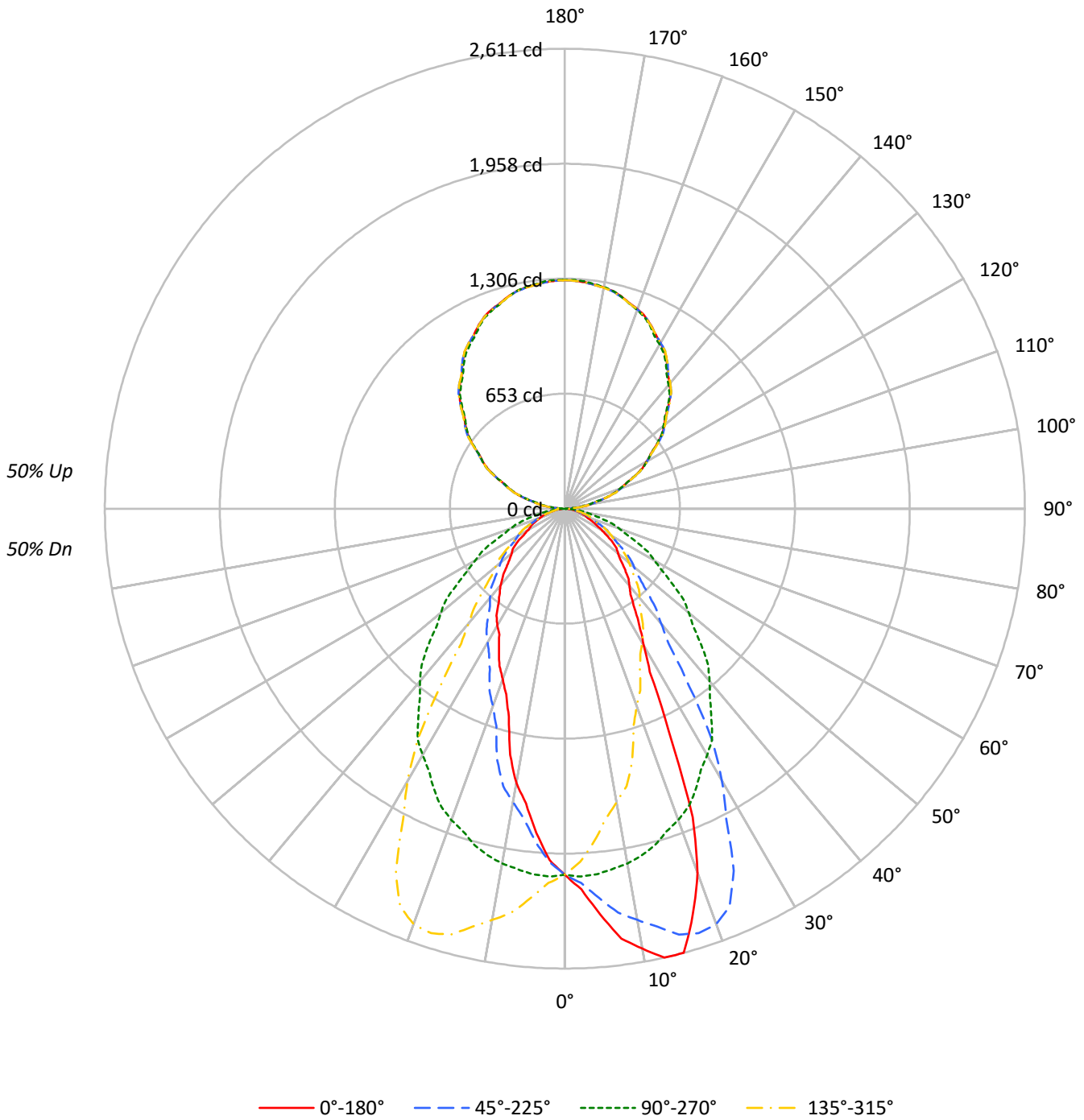
Lumens per Lamp: N/A
Luminaire Lumens: 7225.4 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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



TEST NUMBER: P331760-830
CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

Luminous Intensity Polar Plot





TEST NUMBER: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	94	91	88	91	87	84	81	74	72	70	62	60	59	51	50	49	43				
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	46	44	42	38				
3	83	74	67	62	76	69	63	58	59	54	51	50	46	44	41	39	37	33				
4	76	66	59	53	70	62	55	50	53	48	44	45	41	38	37	35	33	29				
5	70	59	52	46	65	55	49	44	48	43	39	41	37	34	34	31	29	26				
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23				
7	61	49	41	36	56	46	39	34	40	34	31	34	30	27	29	26	24	21				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	27	24	21	19				
9	53	41	34	29	49	38	32	28	34	29	25	29	25	22	25	22	20	18				
10	49	38	31	26	46	36	29	25	31	26	23	27	23	20	23	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	33562	33562	33562	33562
5°	37483	33773	29945	33773
10°	41589	33536	25956	33536
15°	43632	33045	20451	33045
20°	37826	32316	17698	32316
25°	24807	31319	15800	31319
30°	16697	30109	14300	30109
35°	13525	28586	12899	28586
40°	12026	26930	11936	26930
45°	10885	24987	10654	24987
50°	9907	23059	9869	23059
55°	9312	20921	9191	20921
60°	7789	18962	7698	18962
65°	6567	17219	7450	17219
70°	6071	15375	7024	15375
75°	5677	13381	6488	13381
80°	5244	11018	5774	11018
85°	4817	8688	5076	8688



TEST NUMBER: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.1	2.7
10°-20°	549.1	7.6
20°-30°	707.5	9.8
30°-40°	672.4	9.3
40°-50°	576.0	8.0
50°-60°	438.6	6.1
60°-70°	277.3	3.8
70°-80°	138.5	1.9
80°-90°	41.2	0.6
90°-100°	82.2	1.1
100°-110°	255.3	3.5
110°-120°	436.4	6.0
120°-130°	573.9	7.9
130°-140°	644.2	8.9
140°-150°	631.6	8.7
150°-160°	529.8	7.3
160°-170°	351.4	4.9
170°-180°	122.8	1.7
0°-30°	1453.7	20.1
0°-40°	2126.0	29.4
0°-60°	3140.7	43.5
0°-90°	3597.7	49.8
90°-120°	774.0	10.7
90°-150°	2623.7	36.3
90°-180°	3628.0	50.2
0°-180°	7225.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2079	2079	2079	2079	2079	
5°	2313	2084	1848	2084	2313	228
15°	2610	1977	1224	1977	2610	704
25°	1392	1758	887	1758	1392	661
35°	686	1450	654	1450	686	439
45°	477	1094	467	1094	477	369
55°	331	743	326	743	331	290
65°	172	451	195	451	172	175
75°	91	214	104	214	91	97
85°	26	47	27	47	26	29
90°	37	1	37	1	37	17
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2163.0	2164.8	2166.5	2162.5	2162.5	2159.0	2151.5	2145.7	2129.6	2127.2	2127.2
5°	2312.7	2311.3	2314.1	2304.8	2291.8	2288.9	2275.2	2257.1	2238.4	2217.4	2213.1
7.5°	2461.5	2459.4	2453.5	2452.0	2442.0	2420.2	2398.1	2374.5	2343.3	2312.9	2297.5
10°	2536.7	2560.5	2546.0	2520.7	2525.8	2491.9	2473.8	2442.8	2416.8	2371.2	2361.2
12.5°	2610.6	2620.0	2615.4	2601.0	2594.5	2571.0	2546.6	2519.6	2471.6	2430.7	2395.2
15°	2610.3	2624.0	2627.6	2623.3	2627.0	2625.5	2612.4	2590.1	2548.2	2503.4	2464.4
17.5°	2417.6	2427.1	2450.8	2466.8	2487.1	2529.9	2550.9	2559.2	2553.0	2527.4	2499.9
20°	2201.5	2185.6	2252.0	2286.0	2314.9	2387.1	2449.2	2473.0	2511.3	2510.7	2503.4
22.5°	1895.3	1899.0	1962.0	2002.3	2086.7	2158.9	2229.7	2319.4	2393.5	2442.4	2471.1
25°	1392.5	1420.0	1482.8	1537.8	1631.6	1765.9	1888.0	2029.6	2163.2	2268.7	2369.1
27.5°	1045.8	1047.9	1097.7	1148.4	1204.2	1314.3	1467.9	1637.0	1827.5	1984.7	2165.5
30°	895.6	891.3	912.2	943.3	991.0	1076.2	1191.8	1357.9	1547.8	1784.7	1995.6
32.5°	789.3	789.6	805.3	828.3	867.9	925.4	1004.6	1139.4	1319.0	1551.9	1799.2
35°	686.2	685.4	697.0	713.6	730.2	767.0	821.2	892.0	1015.5	1232.9	1485.7
37.5°	612.2	615.4	621.0	631.4	649.8	670.2	702.8	750.3	838.3	966.9	1179.3
40°	570.6	572.0	579.9	588.6	599.5	615.4	642.1	680.4	744.7	847.3	1002.5
42.5°	532.4	534.0	539.5	547.6	556.2	572.0	594.2	627.3	679.4	759.4	887.5
45°	476.7	476.7	481.7	485.4	494.7	509.2	527.3	554.7	590.8	650.1	735.3
47.5°	424.4	424.5	427.9	434.1	440.0	451.3	469.0	491.4	517.7	563.5	636.3
50°	394.4	395.1	397.3	402.3	406.0	416.0	429.8	449.2	476.7	512.1	572.8
52.5°	370.1	369.7	372.4	374.6	377.0	384.3	394.5	411.7	436.2	467.0	517.3
55°	330.8	327.9	332.2	335.8	338.0	340.9	346.7	357.5	378.4	404.4	442.1
57.5°	281.7	280.5	283.6	286.9	293.7	301.5	306.4	313.3	324.1	342.8	380.0
60°	241.2	241.2	247.7	249.9	257.9	268.0	278.1	283.9	294.7	307.0	334.4
62.5°	205.4	206.0	209.1	211.2	215.7	228.1	242.2	255.0	265.2	276.9	295.1
65°	171.9	173.3	173.3	174.7	177.7	180.6	186.3	196.4	214.5	231.1	244.9
67.5°	145.9	146.4	146.8	148.2	148.9	152.1	154.4	158.9	163.1	178.8	195.9
70°	128.6	130.7	130.0	131.5	132.1	133.7	136.5	138.6	145.2	148.8	158.9
72.5°	112.4	114.0	113.9	114.7	116.6	116.9	119.1	121.3	125.5	128.6	134.0
75°	91.0	90.3	91.0	92.5	93.2	93.9	93.9	96.8	99.0	101.8	105.5
77.5°	70.2	71.0	70.8	71.0	71.1	72.4	72.2	73.5	75.7	77.1	78.9
80°	56.4	57.0	56.4	57.0	57.8	58.5	57.8	58.5	60.7	62.1	62.1
82.5°	43.6	43.7	44.2	44.4	44.5	44.7	45.6	45.8	47.4	47.1	47.7
85°	26.0	25.3	25.3	25.3	26.0	26.8	26.0	26.0	26.8	26.8	26.8
87.5°	16.7	17.2	17.2	17.2	17.1	17.1	17.2	17.9	17.3	18.1	16.4
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2128.4	2123.7	2119.8	2109.3	2104.1	2092.5	2090.8	2090.3	2075.3	2060.8	2056.7
5°	2201.5	2189.9	2172.7	2152.4	2131.5	2109.8	2095.4	2083.8	2054.8	2027.4	2011.6
7.5°	2275.2	2250.3	2220.4	2182.2	2150.2	2114.4	2087.8	2064.0	2023.0	1983.7	1957.2
10°	2330.1	2289.6	2249.8	2197.2	2156.0	2115.5	2078.0	2045.5	1999.2	1947.3	1910.4
12.5°	2364.2	2319.7	2264.9	2213.4	2160.0	2108.7	2058.3	2016.6	1962.3	1908.6	1864.8
15°	2410.3	2362.6	2296.1	2222.4	2153.8	2086.7	2028.9	1976.9	1906.1	1841.8	1788.4
17.5°	2448.0	2382.4	2311.0	2225.8	2146.4	2061.0	1986.6	1920.1	1841.4	1763.8	1700.8
20°	2460.0	2395.1	2312.7	2227.5	2133.6	2033.3	1953.0	1880.8	1796.3	1711.8	1639.6
22.5°	2452.6	2402.0	2310.5	2208.5	2112.2	2007.2	1916.7	1832.9	1739.1	1652.8	1569.1
25°	2401.6	2384.3	2297.5	2186.3	2076.5	1954.5	1849.7	1758.0	1651.1	1558.7	1467.6
27.5°	2282.6	2320.1	2266.3	2147.9	2025.8	1895.0	1777.3	1672.8	1561.9	1457.8	1367.2
30°	2168.3	2254.2	2231.1	2121.3	1984.8	1856.2	1724.1	1615.0	1496.6	1389.7	1300.1
32.5°	2011.7	2153.7	2176.2	2084.3	1943.2	1802.0	1663.4	1554.9	1431.3	1318.6	1231.3
35°	1762.4	1974.7	2072.2	2013.7	1872.2	1719.8	1576.7	1450.3	1326.1	1214.8	1128.2
37.5°	1464.9	1754.2	1916.7	1920.8	1790.8	1632.4	1476.6	1351.1	1224.0	1114.7	1021.1
40°	1272.0	1585.4	1797.1	1844.0	1734.2	1563.0	1405.5	1277.7	1153.5	1046.6	939.0
42.5°	1098.6	1410.9	1671.0	1752.7	1665.5	1495.4	1337.4	1203.7	1083.0	981.8	871.9
45°	888.4	1161.4	1448.1	1594.0	1545.7	1388.2	1221.3	1094.3	980.8	893.4	788.0
47.5°	749.4	941.9	1219.4	1416.6	1415.8	1272.1	1108.0	986.2	881.0	799.1	713.8
50°	670.2	837.8	1072.6	1296.5	1315.2	1194.7	1038.6	918.0	819.8	733.9	665.2
52.5°	599.2	737.3	948.4	1163.0	1216.4	1112.0	960.6	849.2	753.9	674.9	616.1
55°	506.3	613.2	773.5	974.3	1055.3	981.6	847.3	743.2	665.9	599.5	548.9
57.5°	428.3	508.5	637.2	798.8	893.1	846.7	735.8	651.4	585.2	525.1	485.2
60°	379.2	444.9	554.0	689.1	793.1	760.5	665.9	587.2	530.8	478.9	441.3
62.5°	333.0	389.5	483.0	592.6	687.9	674.5	597.2	531.1	481.7	434.4	402.6
65°	268.0	309.2	382.1	468.1	544.6	551.1	495.5	450.7	406.6	369.1	340.9
67.5°	213.4	240.3	291.6	364.0	421.4	441.9	407.9	373.7	338.7	309.7	285.3
70°	179.8	201.5	239.0	297.6	350.3	371.9	352.5	325.7	295.4	271.5	250.6
72.5°	145.7	166.8	194.5	237.5	282.7	306.1	299.4	280.1	255.5	235.7	215.9
75°	109.8	116.3	135.1	164.0	199.3	219.6	224.6	214.5	195.0	179.8	168.2
77.5°	81.2	85.1	94.1	109.2	132.3	150.3	157.8	156.6	143.2	134.3	123.5
80°	65.0	67.2	71.5	78.0	95.4	113.4	118.5	118.5	109.1	105.5	94.6
82.5°	49.4	51.0	53.6	57.2	65.3	81.1	86.7	87.8	81.9	77.1	68.6
85°	28.2	27.4	28.9	31.1	32.5	36.9	45.5	46.9	45.5	39.7	37.5
87.5°	15.4	14.9	13.8	12.3	12.3	12.3	14.7	17.0	15.3	14.1	13.6
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2049.3	2045.2	2037.7	2026.1	2019.2	2007.1	1998.9	2003.6	2004.8	2003.6	2002.4
5°	1994.2	1979.1	1958.1	1937.9	1919.1	1898.8	1887.3	1882.3	1872.2	1866.3	1863.5
7.5°	1927.6	1901.5	1871.9	1836.6	1806.7	1775.4	1759.3	1751.3	1730.7	1719.5	1709.6
10°	1877.9	1836.7	1807.1	1761.0	1732.8	1691.6	1663.4	1664.2	1636.0	1620.0	1608.5
12.5°	1823.1	1777.8	1728.5	1687.0	1647.8	1614.8	1580.7	1567.1	1537.2	1521.8	1490.6
15°	1732.0	1679.3	1627.3	1570.9	1531.3	1480.0	1430.9	1370.9	1322.5	1280.6	1269.0
17.5°	1632.7	1567.4	1515.2	1449.1	1381.0	1294.8	1237.8	1203.1	1173.8	1151.8	1135.3
20°	1564.4	1498.0	1442.4	1342.7	1250.9	1192.5	1150.6	1123.9	1093.5	1069.7	1056.7
22.5°	1492.8	1423.4	1347.6	1236.4	1164.9	1117.9	1080.6	1049.9	1029.4	1010.8	998.9
25°	1391.1	1315.2	1190.3	1113.7	1055.9	1006.8	980.8	962.1	940.4	915.1	903.6
27.5°	1283.6	1163.0	1073.3	1016.3	961.2	929.3	905.9	877.9	858.5	847.1	835.1
30°	1203.3	1082.7	1012.7	950.6	911.5	876.1	848.7	832.8	814.0	794.5	786.6
32.5°	1113.7	1017.4	950.3	898.5	858.9	828.8	807.1	781.4	767.8	755.8	739.1
35°	1002.5	929.5	868.2	826.3	788.7	764.2	738.9	723.7	699.2	689.1	682.6
37.5°	908.3	845.1	799.3	755.1	725.3	698.1	682.7	658.6	647.9	633.9	620.2
40°	855.2	793.1	749.0	712.8	679.7	659.4	639.9	620.5	604.5	598.0	581.5
42.5°	800.9	750.3	706.2	666.7	644.4	623.0	598.3	584.0	567.6	557.0	546.8
45°	725.9	681.1	643.6	611.1	586.4	564.1	548.2	524.3	515.0	494.1	485.4
47.5°	660.1	618.4	582.6	551.7	527.7	513.1	489.8	471.2	456.2	443.4	432.3
50°	613.2	578.5	543.8	516.4	494.7	473.8	450.0	440.5	417.5	410.9	404.4
52.5°	570.4	537.5	505.8	478.9	457.2	436.9	415.8	403.6	388.0	381.5	376.7
55°	510.7	478.9	448.6	424.7	403.0	382.1	369.1	353.9	346.7	341.7	335.8
57.5°	450.5	422.0	398.7	374.6	352.8	336.1	321.1	312.0	304.5	297.8	291.0
60°	412.5	384.9	364.0	341.7	319.2	305.5	294.0	283.1	274.5	264.4	261.5
62.5°	371.9	348.0	328.8	307.0	287.5	274.9	263.9	253.6	243.3	228.6	224.5
65°	316.3	297.6	277.4	259.3	242.0	229.7	213.8	202.3	197.9	196.4	195.8
67.5°	266.1	248.4	231.0	212.4	196.7	185.3	177.3	175.5	172.5	171.6	169.6
70°	232.6	215.9	198.6	181.3	166.2	164.0	161.1	158.2	154.6	153.2	151.7
72.5°	202.6	185.3	168.0	154.1	147.6	144.9	142.0	139.1	136.7	135.3	134.3
75°	155.3	139.4	127.8	122.8	119.1	117.0	112.6	110.5	109.1	106.9	106.1
77.5°	111.8	102.8	97.6	94.3	90.6	88.2	85.8	83.6	82.1	81.6	80.5
80°	85.2	80.9	77.3	73.0	71.5	68.6	67.9	65.7	66.4	64.3	64.3
82.5°	66.2	60.7	57.7	55.6	54.2	51.8	51.2	50.1	50.2	48.6	48.6
85°	33.9	32.5	31.1	29.6	29.6	27.4	28.2	27.4	27.4	26.0	25.3
87.5°	13.6	13.8	13.7	14.8	15.8	16.3	16.2	15.6	15.5	15.4	14.8
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: P331760-830
 CATALOG NUMBER: SA2XXRDIP-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: P331760-830
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1996.1	1997.2	1995.6	1996.7	1995.6	1997.2	1996.1	2002.4	2003.6	2004.8	2003.6
5°	1859.8	1851.2	1849.7	1847.6	1849.7	1851.2	1859.8	1863.5	1866.3	1872.2	1882.3
7.5°	1697.2	1695.9	1692.3	1687.2	1692.3	1695.9	1697.2	1709.6	1719.5	1730.7	1751.3
10°	1592.6	1589.0	1588.3	1583.2	1588.3	1589.0	1592.6	1608.5	1620.0	1636.0	1664.2
12.5°	1470.1	1446.9	1444.4	1431.8	1444.4	1446.9	1470.1	1490.6	1521.8	1537.2	1567.1
15°	1251.7	1247.4	1232.9	1223.5	1232.9	1247.4	1251.7	1269.0	1280.6	1322.5	1370.9
17.5°	1126.9	1112.8	1108.2	1106.3	1108.2	1112.8	1126.9	1135.3	1151.8	1173.8	1203.1
20°	1046.6	1033.6	1031.4	1030.0	1031.4	1033.6	1046.6	1056.7	1069.7	1093.5	1123.9
22.5°	991.1	977.5	971.9	967.5	971.9	977.5	991.1	998.9	1010.8	1029.4	1049.9
25°	896.4	891.3	888.4	886.9	888.4	891.3	896.4	903.6	915.1	940.4	962.1
27.5°	822.3	811.2	809.0	805.2	809.0	811.2	822.3	835.1	847.1	858.5	877.9
30°	780.0	776.5	771.4	767.0	771.4	776.5	780.0	786.6	794.5	814.0	832.8
32.5°	730.4	727.4	722.8	720.9	722.8	727.4	730.4	739.1	755.8	767.8	781.4
35°	675.3	665.2	660.9	654.4	660.9	665.2	675.3	682.6	689.1	699.2	723.7
37.5°	617.1	611.8	605.7	607.8	605.7	611.8	617.1	620.2	633.9	647.9	658.6
40°	572.0	568.4	567.0	566.3	567.0	568.4	572.0	581.5	598.0	604.5	620.5
42.5°	536.2	526.2	522.5	522.4	522.5	526.2	536.2	546.8	557.0	567.6	584.0
45°	481.7	472.4	465.9	466.6	465.9	472.4	481.7	485.4	494.1	515.0	524.3
47.5°	426.0	425.7	421.7	422.9	421.7	425.7	426.0	432.3	443.4	456.2	471.2
50°	399.4	395.1	392.2	392.9	392.2	395.1	399.4	404.4	410.9	417.5	440.5
52.5°	374.0	370.2	368.0	371.0	368.0	370.2	374.0	376.7	381.5	388.0	403.6
55°	332.2	327.9	327.2	326.5	327.2	327.9	332.2	335.8	341.7	346.7	353.9
57.5°	285.6	282.7	278.3	276.4	278.3	282.7	285.6	291.0	297.8	304.5	312.0
60°	252.0	246.3	239.0	238.4	239.0	246.3	252.0	261.5	264.4	274.5	283.1
62.5°	221.4	220.3	218.9	218.7	218.9	220.3	221.4	224.5	228.6	243.3	253.6
65°	194.3	193.6	194.3	195.0	194.3	193.6	194.3	195.8	196.4	197.9	202.3
67.5°	169.3	168.0	166.7	167.3	166.7	168.0	169.3	169.6	171.6	172.5	175.5
70°	150.2	149.5	148.8	148.8	148.8	149.5	150.2	151.7	153.2	154.6	158.2
72.5°	131.8	131.6	130.9	130.3	130.9	131.6	131.8	134.3	135.3	136.7	139.1
75°	105.5	104.0	104.0	104.0	104.0	104.0	105.5	106.1	106.9	109.1	110.5
77.5°	80.3	79.6	78.9	78.3	78.9	79.6	80.3	80.5	81.6	82.1	83.6
80°	63.5	62.9	62.1	62.1	62.1	62.9	63.5	64.3	64.3	66.4	65.7
82.5°	48.5	47.8	47.7	47.1	47.7	47.8	48.5	48.6	48.6	50.2	50.1
85°	26.0	26.8	26.0	27.4	26.0	26.8	26.0	25.3	26.0	27.4	27.4
87.5°	14.8	14.3	14.9	14.4	14.9	14.3	14.8	14.8	15.4	15.5	15.6
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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: P331760-830

CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	1998.9	2007.1	2019.2	2026.1	2037.7	2045.2	2049.3	2056.7	2060.8	2075.3	2090.3
5°	1887.3	1898.8	1919.1	1937.9	1958.1	1979.1	1994.2	2011.6	2027.4	2054.8	2083.8
7.5°	1759.3	1775.4	1806.7	1836.6	1871.9	1901.5	1927.6	1957.2	1983.7	2023.0	2064.0
10°	1663.4	1691.6	1732.8	1761.0	1807.1	1836.7	1877.9	1910.4	1947.3	1999.2	2045.5
12.5°	1580.7	1614.8	1647.8	1687.0	1728.5	1777.8	1823.1	1864.8	1908.6	1962.3	2016.6
15°	1430.9	1480.0	1531.3	1570.9	1627.3	1679.3	1732.0	1788.4	1841.8	1906.1	1976.9
17.5°	1237.8	1294.8	1381.0	1449.1	1515.2	1567.4	1632.7	1700.8	1763.8	1841.4	1920.1
20°	1150.6	1192.5	1250.9	1342.7	1442.4	1498.0	1564.4	1639.6	1711.8	1796.3	1880.8
22.5°	1080.6	1117.9	1164.9	1236.4	1347.6	1423.4	1492.8	1569.1	1652.8	1739.1	1832.9
25°	980.8	1006.8	1055.9	1113.7	1190.3	1315.2	1391.1	1467.6	1558.7	1651.1	1758.0
27.5°	905.9	929.3	961.2	1016.3	1073.3	1163.0	1283.6	1367.2	1457.8	1561.9	1672.8
30°	848.7	876.1	911.5	950.6	1012.7	1082.7	1203.3	1300.1	1389.7	1496.6	1615.0
32.5°	807.1	828.8	858.9	898.5	950.3	1017.4	1113.7	1231.3	1318.6	1431.3	1554.9
35°	738.9	764.2	788.7	826.3	868.2	929.5	1002.5	1128.2	1214.8	1326.1	1450.3
37.5°	682.7	698.1	725.3	755.1	799.3	845.1	908.3	1021.1	1114.7	1224.0	1351.1
40°	639.9	659.4	679.7	712.8	749.0	793.1	855.2	939.0	1046.6	1153.5	1277.7
42.5°	598.3	623.0	644.4	666.7	706.2	750.3	800.9	871.9	981.8	1083.0	1203.7
45°	548.2	564.1	586.4	611.1	643.6	681.1	725.9	788.0	893.4	980.8	1094.3
47.5°	489.8	513.1	527.7	551.7	582.6	618.4	660.1	713.8	799.1	881.0	986.2
50°	450.0	473.8	494.7	516.4	543.8	578.5	613.2	665.2	733.9	819.8	918.0
52.5°	415.8	436.9	457.2	478.9	505.8	537.5	570.4	616.1	674.9	753.9	849.2
55°	369.1	382.1	403.0	424.7	448.6	478.9	510.7	548.9	599.5	665.9	743.2
57.5°	321.1	336.1	352.8	374.6	398.7	422.0	450.5	485.2	525.1	585.2	651.4
60°	294.0	305.5	319.2	341.7	364.0	384.9	412.5	441.3	478.9	530.8	587.2
62.5°	263.9	274.9	287.5	307.0	328.8	348.0	371.9	402.6	434.4	481.7	531.1
65°	213.8	229.7	242.0	259.3	277.4	297.6	316.3	340.9	369.1	406.6	450.7
67.5°	177.3	185.3	196.7	212.4	231.0	248.4	266.1	285.3	309.7	338.7	373.7
70°	161.1	164.0	166.2	181.3	198.6	215.9	232.6	250.6	271.5	295.4	325.7
72.5°	142.0	144.9	147.6	154.1	168.0	185.3	202.6	215.9	235.7	255.5	280.1
75°	112.6	117.0	119.1	122.8	127.8	139.4	155.3	168.2	179.8	195.0	214.5
77.5°	85.8	88.2	90.6	94.3	97.6	102.8	111.8	123.5	134.3	143.2	156.6
80°	67.9	68.6	71.5	73.0	77.3	80.9	85.2	94.6	105.5	109.1	118.5
82.5°	51.2	51.8	54.2	55.6	57.7	60.7	66.2	68.6	77.1	81.9	87.8
85°	28.2	27.4	29.6	29.6	31.1	32.5	33.9	37.5	39.7	45.5	46.9
87.5°	16.2	16.3	15.8	14.8	13.7	13.8	13.6	13.6	14.1	15.3	17.0
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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: P331760-830
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2090.8	2092.5	2104.1	2109.3	2119.8	2123.7	2128.4	2127.2	2127.2	2129.6	2145.7
5°	2095.4	2109.8	2131.5	2152.4	2172.7	2189.9	2201.5	2213.1	2217.4	2238.4	2257.1
7.5°	2087.8	2114.4	2150.2	2182.2	2220.4	2250.3	2275.2	2297.5	2312.9	2343.3	2374.5
10°	2078.0	2115.5	2156.0	2197.2	2249.8	2289.6	2330.1	2361.2	2371.2	2416.8	2442.8
12.5°	2058.3	2108.7	2160.0	2213.4	2264.9	2319.7	2364.2	2395.2	2430.7	2471.6	2519.6
15°	2028.9	2086.7	2153.8	2222.4	2296.1	2362.6	2410.3	2464.4	2503.4	2548.2	2590.1
17.5°	1986.6	2061.0	2146.4	2225.8	2311.0	2382.4	2448.0	2499.9	2527.4	2553.0	2559.2
20°	1953.0	2033.3	2133.6	2227.5	2312.7	2395.1	2460.0	2503.4	2510.7	2511.3	2473.0
22.5°	1916.7	2007.2	2112.2	2208.5	2310.5	2402.0	2452.6	2471.1	2442.4	2393.5	2319.4
25°	1849.7	1954.5	2076.5	2186.3	2297.5	2384.3	2401.6	2369.1	2268.7	2163.2	2029.6
27.5°	1777.3	1895.0	2025.8	2147.9	2266.3	2320.1	2282.6	2165.5	1984.7	1827.5	1637.0
30°	1724.1	1856.2	1984.8	2121.3	2231.1	2254.2	2168.3	1995.6	1784.7	1547.8	1357.9
32.5°	1663.4	1802.0	1943.2	2084.3	2176.2	2153.7	2011.7	1799.2	1551.9	1319.0	1139.4
35°	1576.7	1719.8	1872.2	2013.7	2072.2	1974.7	1762.4	1485.7	1232.9	1015.5	892.0
37.5°	1476.6	1632.4	1790.8	1920.8	1916.7	1754.2	1464.9	1179.3	966.9	838.3	750.3
40°	1405.5	1563.0	1734.2	1844.0	1797.1	1585.4	1272.0	1002.5	847.3	744.7	680.4
42.5°	1337.4	1495.4	1665.5	1752.7	1671.0	1410.9	1098.6	887.5	759.4	679.4	627.3
45°	1221.3	1388.2	1545.7	1594.0	1448.1	1161.4	888.4	735.3	650.1	590.8	554.7
47.5°	1108.0	1272.1	1415.8	1416.6	1219.4	941.9	749.4	636.3	563.5	517.7	491.4
50°	1038.6	1194.7	1315.2	1296.5	1072.6	837.8	670.2	572.8	512.1	476.7	449.2
52.5°	960.6	1112.0	1216.4	1163.0	948.4	737.3	599.2	517.3	467.0	436.2	411.7
55°	847.3	981.6	1055.3	974.3	773.5	613.2	506.3	442.1	404.4	378.4	357.5
57.5°	735.8	846.7	893.1	798.8	637.2	508.5	428.3	380.0	342.8	324.1	313.3
60°	665.9	760.5	793.1	689.1	554.0	444.9	379.2	334.4	307.0	294.7	283.9
62.5°	597.2	674.5	687.9	592.6	483.0	389.5	333.0	295.1	276.9	265.2	255.0
65°	495.5	551.1	544.6	468.1	382.1	309.2	268.0	244.9	231.1	214.5	196.4
67.5°	407.9	441.9	421.4	364.0	291.6	240.3	213.4	195.9	178.8	163.1	158.9
70°	352.5	371.9	350.3	297.6	239.0	201.5	179.8	158.9	148.8	145.2	138.6
72.5°	299.4	306.1	282.7	237.5	194.5	166.8	145.7	134.0	128.6	125.5	121.3
75°	224.6	219.6	199.3	164.0	135.1	116.3	109.8	105.5	101.8	99.0	96.8
77.5°	157.8	150.3	132.3	109.2	94.1	85.1	81.2	78.9	77.1	75.7	73.5
80°	118.5	113.4	95.4	78.0	71.5	67.2	65.0	62.1	62.1	60.7	58.5
82.5°	86.7	81.1	65.3	57.2	53.6	51.0	49.4	47.7	47.1	47.4	45.8
85°	45.5	36.9	32.5	31.1	28.9	27.4	28.2	26.8	26.8	26.8	26.0
87.5°	14.7	12.3	12.3	12.3	13.8	14.9	15.4	16.4	18.1	17.3	17.9
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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: P331760-830
 CATALOG NUMBER: SA2XXRDIP-C1005D1080U830-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2151.5	2159.0	2162.5	2162.5	2166.5	2164.8	2163.0
5°	2275.2	2288.9	2291.8	2304.8	2314.1	2311.3	2312.7
7.5°	2398.1	2420.2	2442.0	2452.0	2453.5	2459.4	2461.5
10°	2473.8	2491.9	2525.8	2520.7	2546.0	2560.5	2536.7
12.5°	2546.6	2571.0	2594.5	2601.0	2615.4	2620.0	2610.6
15°	2612.4	2625.5	2627.0	2623.3	2627.6	2624.0	2610.3
17.5°	2550.9	2529.9	2487.1	2466.8	2450.8	2427.1	2417.6
20°	2449.2	2387.1	2314.9	2286.0	2252.0	2185.6	2201.5
22.5°	2229.7	2158.9	2086.7	2002.3	1962.0	1899.0	1895.3
25°	1888.0	1765.9	1631.6	1537.8	1482.8	1420.0	1392.5
27.5°	1467.9	1314.3	1204.2	1148.4	1097.7	1047.9	1045.8
30°	1191.8	1076.2	991.0	943.3	912.2	891.3	895.6
32.5°	1004.6	925.4	867.9	828.3	805.3	789.6	789.3
35°	821.2	767.0	730.2	713.6	697.0	685.4	686.2
37.5°	702.8	670.2	649.8	631.4	621.0	615.4	612.2
40°	642.1	615.4	599.5	588.6	579.9	572.0	570.6
42.5°	594.2	572.0	556.2	547.6	539.5	534.0	532.4
45°	527.3	509.2	494.7	485.4	481.7	476.7	476.7
47.5°	469.0	451.3	440.0	434.1	427.9	424.5	424.4
50°	429.8	416.0	406.0	402.3	397.3	395.1	394.4
52.5°	394.5	384.3	377.0	374.6	372.4	369.7	370.1
55°	346.7	340.9	338.0	335.8	332.2	327.9	330.8
57.5°	306.4	301.5	293.7	286.9	283.6	280.5	281.7
60°	278.1	268.0	257.9	249.9	247.7	241.2	241.2
62.5°	242.2	228.1	215.7	211.2	209.1	206.0	205.4
65°	186.3	180.6	177.7	174.7	173.3	173.3	171.9
67.5°	154.4	152.1	148.9	148.2	146.8	146.4	145.9
70°	136.5	133.7	132.1	131.5	130.0	130.7	128.6
72.5°	119.1	116.9	116.6	114.7	113.9	114.0	112.4
75°	93.9	93.9	93.2	92.5	91.0	90.3	91.0
77.5°	72.2	72.4	71.1	71.0	70.8	71.0	70.2
80°	57.8	58.5	57.8	57.0	56.4	57.0	56.4
82.5°	45.6	44.7	44.5	44.4	44.2	43.7	43.6
85°	26.0	26.8	26.0	25.3	25.3	25.3	26.0
87.5°	17.2	17.1	17.1	17.2	17.2	17.2	16.7
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: P331760-830

CATALOG NUMBER: SA2XXRDIP-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)