

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: P332081-830

Luminaire Tested: **S123DIP-S1165D1195U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332081-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S1165D1195U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9113.6 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

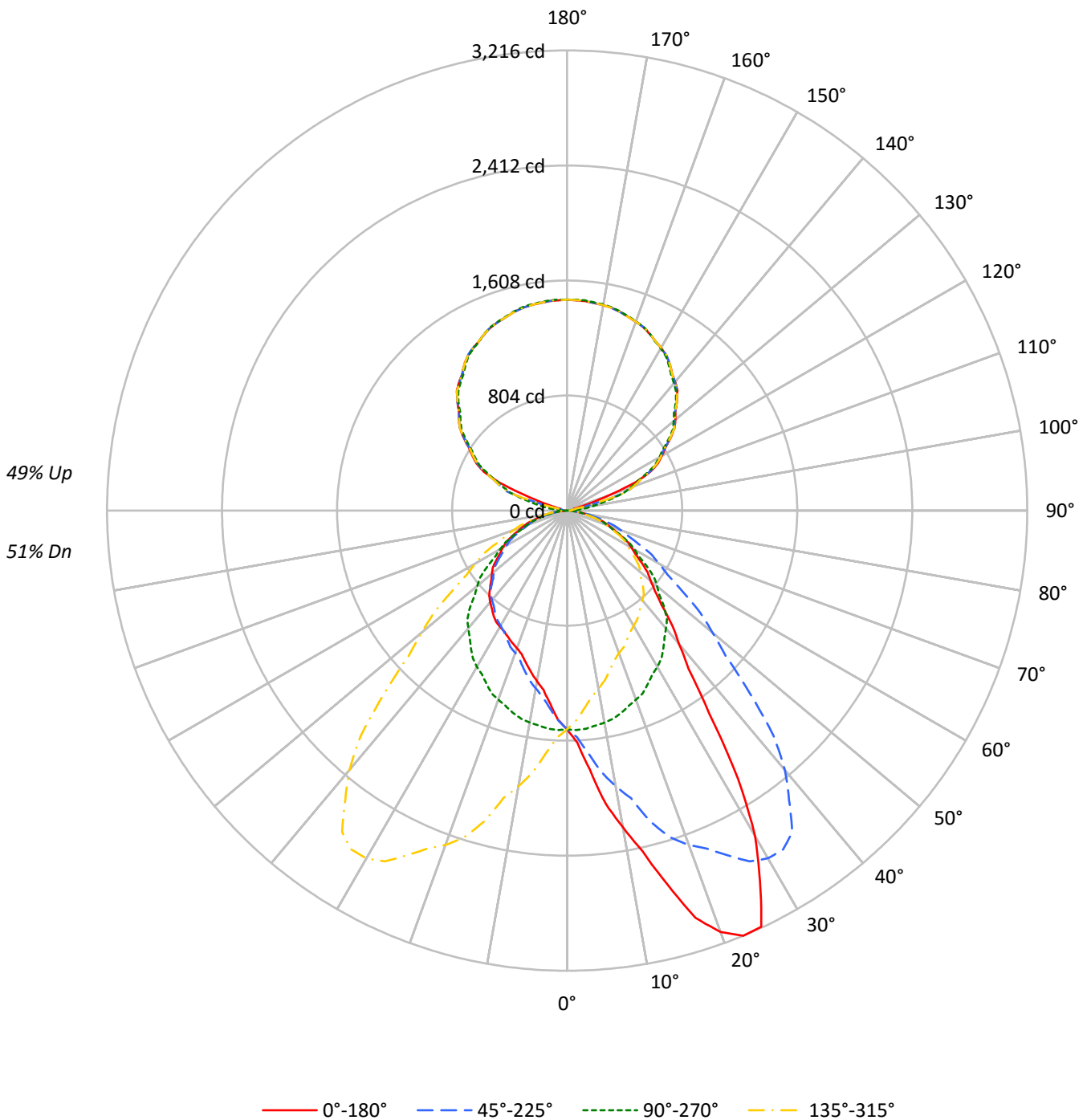
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51	51	51	51	51	51	51	51	51	51	51																		
1	98	94	90	87	91	87	84	81	74	71	69	62	60	59	51	49	48	43	43	43	43	43	43	43	43	43	43	43																		
2	90	82	76	71	83	76	71	67	65	61	58	55	52	49	45	43	41	37	37	37	37	37	37	37	37	37	37	37																		
3	82	73	65	60	75	67	61	56	58	53	49	48	45	42	40	37	35	31	31	31	31	31	31	31	31	31	31	31																		
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	27	27	27	27	27	27	27	27	27	27	27																		
5	69	57	49	44	63	53	46	41	46	40	36	39	35	31	32	29	27	24	24	24	24	24	24	24	24	24	24	24																		
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	29	26	24	21	21	21	21	21	21	21	21	21	21	21																		
7	59	47	39	33	54	43	36	31	38	32	28	32	28	24	27	24	21	18	18	18	18	18	18	18	18	18	18	18																		
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19	17	17	17	17	17	17	17	17	17	17	17																		
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15	15	15	15	15	15	15	15	15	15	15																		
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	14	14	14	14	14	14	14	14	14	14	14																		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16457	16457	16457	16457
5°	19626	16528	14647	16528
10°	24565	16444	13230	16444
15°	30130	16312	12316	16312
20°	35892	16105	11726	16105
25°	38112	15853	11595	15853
30°	32666	15669	11656	15669
35°	22718	15408	11779	15408
40°	17113	15104	11741	15104
45°	14209	14647	11592	14647
50°	12728	13720	11488	13720
55°	11898	12720	11344	12720
60°	11162	11672	11227	11672
65°	10491	10641	10868	10641
70°	9838	9467	10351	9467
75°	8813	8289	9491	8289
80°	7711	6794	8176	6794
85°	6039	4940	5496	4940



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.6	1.7
10°-20°	482.9	5.3
20°-30°	810.5	8.9
30°-40°	917.8	10.1
40°-50°	823.0	9.0
50°-60°	664.2	7.3
60°-70°	462.8	5.1
70°-80°	243.3	2.7
80°-90°	63.6	0.7
90°-100°	53.6	0.6
100°-110°	255.4	2.8
110°-120°	613.5	6.7
120°-130°	781.2	8.6
130°-140°	834.7	9.2
140°-150°	780.5	8.6
150°-160°	629.6	6.9
160°-170°	406.3	4.5
170°-180°	140.0	1.5
0°-30°	1444.1	15.8
0°-40°	2361.9	25.9
0°-60°	3849.1	42.2
0°-90°	4618.8	50.7
90°-120°	922.4	10.1
90°-150°	3318.8	36.4
90°-180°	4495.0	49.3
0°-180°	9113.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1529	1529	1529	1529	1529	
5°	1816	1530	1356	1530	1816	188
15°	2704	1464	1105	1464	2704	781
25°	3209	1335	976	1335	3209	1407
35°	1729	1173	896	1173	1729	1123
45°	933	962	762	962	933	739
55°	634	678	604	678	634	569
65°	412	418	427	418	412	410
75°	212	199	228	199	212	227
85°	49	40	44	40	49	59
90°	33	1	33	1	33	17
95°	42	67	42	67	42	35
105°	48	326	48	326	48	110
115°	644	612	644	612	644	595
125°	880	863	880	863	880	786
135°	1085	1074	1085	1074	1085	837
145°	1252	1240	1252	1240	1252	781
155°	1363	1366	1363	1366	1363	629
165°	1437	1440	1437	1440	1437	406
175°	1468	1474	1468	1474	1468	140
180°	1474	1474	1474	1474	1474	



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1622.6	1621.4	1618.4	1620.8	1616.1	1609.5	1608.9	1603.0	1585.8	1584.6	1579.9
5°	1816.4	1810.4	1809.7	1808.9	1798.6	1784.5	1757.8	1755.6	1720.0	1702.2	1680.8
7.5°	2067.3	2070.4	2059.6	2050.1	2018.5	1997.5	1969.0	1932.4	1888.7	1844.4	1814.9
10°	2247.5	2271.9	2241.6	2220.8	2201.6	2165.2	2123.1	2070.4	2017.8	1956.3	1909.7
12.5°	2440.7	2452.7	2446.6	2427.0	2397.1	2341.8	2267.0	2209.1	2160.7	2058.3	2016.9
15°	2703.8	2749.0	2720.1	2653.4	2654.9	2602.3	2504.5	2397.1	2340.1	2250.4	2128.3
17.5°	2984.1	2989.7	2977.4	2921.9	2884.8	2812.5	2722.3	2619.3	2503.8	2395.4	2265.7
20°	3133.4	3129.0	3103.0	3074.2	3010.5	2954.2	2855.6	2740.8	2592.7	2486.1	2344.5
22.5°	3216.4	3209.0	3196.7	3172.5	3119.5	3059.0	2970.6	2845.2	2704.1	2557.1	2393.7
25°	3209.0	3218.6	3220.1	3213.4	3194.9	3158.6	3089.0	2989.0	2848.3	2659.4	2489.0
27.5°	2918.6	2932.2	2971.8	3006.9	3046.2	3086.2	3080.8	3031.2	2927.1	2763.9	2555.6
30°	2628.2	2598.6	2671.9	2764.6	2827.5	2938.6	3000.9	3004.5	2946.0	2806.0	2603.0
32.5°	2225.2	2257.9	2290.3	2404.2	2541.8	2666.6	2790.5	2890.2	2901.6	2808.4	2630.9
35°	1728.9	1769.7	1828.9	1888.2	2036.4	2163.8	2381.5	2571.2	2722.3	2742.3	2633.4
37.5°	1393.3	1413.3	1450.9	1510.2	1607.1	1758.3	1926.7	2166.4	2385.4	2548.3	2555.3
40°	1217.9	1223.7	1265.9	1311.2	1389.7	1514.1	1665.9	1877.8	2140.0	2367.5	2462.3
42.5°	1086.3	1099.3	1117.2	1160.6	1223.1	1316.8	1458.0	1633.0	1873.4	2135.1	2320.6
45°	933.4	948.2	959.3	988.2	1032.6	1095.6	1194.1	1354.2	1537.1	1807.4	2057.1
47.5°	832.4	833.5	841.8	863.6	893.8	941.0	1010.7	1113.5	1281.5	1500.8	1757.1
50°	760.1	771.8	774.9	791.8	815.6	850.4	908.1	995.6	1133.4	1326.0	1561.5
52.5°	709.1	712.7	721.0	733.2	753.9	781.1	831.1	899.6	1007.8	1171.9	1388.5
55°	634.0	634.0	642.2	651.9	663.7	688.2	721.5	771.8	854.1	981.5	1160.7
57.5°	564.8	568.4	574.2	577.2	587.3	603.4	631.3	669.5	730.8	828.9	971.5
60°	518.5	525.2	524.4	530.4	539.3	551.9	575.6	606.7	661.5	740.0	860.1
62.5°	478.2	477.8	477.7	484.7	493.6	505.7	521.0	548.0	594.6	664.2	766.4
65°	411.9	410.4	415.6	420.0	423.0	431.9	443.7	467.4	498.5	550.4	629.6
67.5°	352.9	348.6	351.4	352.9	358.0	364.9	376.0	390.7	415.4	457.0	516.8
70°	312.6	308.9	308.1	309.6	314.1	319.2	327.4	341.5	364.5	397.8	441.5
72.5°	271.1	268.6	268.4	271.7	273.8	277.2	283.0	295.9	314.1	339.1	379.8
75°	211.9	211.9	211.9	212.6	214.8	217.8	222.3	228.8	243.0	260.7	288.1
77.5°	158.8	158.6	157.8	157.6	160.9	162.2	163.2	169.5	177.3	189.4	209.3
80°	124.4	120.7	122.2	124.4	125.9	126.7	128.9	130.4	137.0	143.7	157.8
82.5°	92.5	89.4	89.6	93.0	93.3	94.1	96.3	98.4	100.9	107.0	114.5
85°	48.9	48.9	49.7	49.7	50.3	49.7	51.8	52.6	52.6	56.3	60.7
87.5°	24.3	23.1	23.6	24.0	23.4	23.8	24.2	24.6	25.0	25.4	25.4
90°	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2	27.2	26.3	23.1
92.5°	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1	29.6	28.0	25.6
95°	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3	35.6	33.9	31.3
97.5°	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1	37.2	35.3	32.8
100°	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1	38.1	36.1	34.1
102.5°	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9	66.0	72.0	113.5
105°	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6	196.7	239.8	261.7
107.5°	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4	407.9	439.6	436.1
110°	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8	485.9	493.9	491.2



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3	549.2	549.0	546.4
115°	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4	631.0	628.6	626.4
117.5°	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5	707.6	705.7	704.6
120°	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5	757.5	755.5	754.9
122.5°	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2	806.9	805.5	804.6
125°	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0	876.6	876.0	875.1
127.5°	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9	945.2	944.3	943.2
130°	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5	986.6	985.5	984.6
132.5°	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9	1026.0	1025.0	1024.2
135°	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2	1084.2
137.5°	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9	1138.7	1137.6	1137.0
140°	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7	1172.7	1171.7	1171.0
142.5°	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7	1204.9	1204.1	1203.4
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5	1249.9	1249.4	1249.0
147.5°	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5	1290.1	1289.5	1289.0
150°	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0	1314.6	1314.1	1313.6
152.5°	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8	1336.0	1335.1	1334.8
155°	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9	1365.6	1364.4	1364.2
157.5°	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0	1391.6	1390.1	1390.3
160°	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9	1406.5	1405.0	1405.2
162.5°	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4	1419.8	1418.1	1418.3
165°	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5	1437.6	1435.6	1435.9
167.5°	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6	1449.6
170°	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5	1457.5
172.5°	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7	1464.7	1462.7	1462.5
175°	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0	1471.3	1469.5	1469.3
177.5°	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3	1473.8	1472.2	1472.0
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1576.3	1571.6	1566.9	1558.6	1551.4	1541.3	1538.4	1534.8	1524.2	1514.8	1507.6
5°	1672.6	1654.8	1628.9	1605.2	1586.0	1560.1	1545.2	1529.7	1507.4	1487.4	1471.1
7.5°	1773.4	1738.4	1698.1	1654.5	1614.0	1574.9	1543.3	1515.1	1484.0	1454.5	1431.6
10°	1853.4	1803.0	1746.7	1686.0	1634.1	1583.8	1541.5	1504.5	1464.5	1429.6	1400.8
12.5°	1944.7	1870.0	1792.3	1718.5	1657.3	1587.3	1536.2	1489.1	1443.8	1401.8	1369.4
15°	2052.7	1957.8	1866.0	1764.5	1671.1	1583.8	1523.1	1463.8	1411.2	1368.2	1326.7
17.5°	2151.1	2043.6	1922.6	1799.1	1686.6	1582.9	1497.8	1430.9	1365.1	1312.5	1271.1
20°	2206.8	2084.5	1947.5	1819.3	1694.9	1579.3	1486.0	1406.0	1334.8	1279.3	1232.7
22.5°	2254.8	2111.8	1970.0	1833.0	1694.3	1569.8	1464.1	1381.7	1304.7	1250.3	1200.6
25°	2304.5	2133.4	1991.2	1830.4	1675.7	1546.7	1428.2	1334.8	1257.8	1194.1	1143.0
27.5°	2347.2	2131.9	1963.1	1790.3	1646.2	1517.1	1390.5	1290.4	1208.6	1139.4	1087.6
30°	2375.6	2134.9	1934.1	1763.0	1617.9	1484.5	1361.5	1260.7	1174.9	1104.5	1055.6
32.5°	2393.4	2133.1	1907.4	1725.1	1572.8	1454.8	1330.1	1225.8	1137.6	1068.4	1021.2
35°	2403.8	2120.1	1861.5	1646.7	1500.1	1385.3	1280.8	1172.6	1080.1	1015.6	962.2
37.5°	2383.0	2092.6	1808.2	1571.1	1410.6	1297.5	1209.7	1117.5	1028.9	958.0	912.0
40°	2350.4	2074.9	1766.7	1517.9	1349.0	1240.0	1165.3	1074.9	987.4	920.0	877.0
42.5°	2288.2	2038.7	1721.1	1458.6	1285.0	1176.0	1107.1	1031.6	949.0	885.6	842.7
45°	2136.4	1960.0	1652.7	1369.7	1190.4	1077.8	1017.1	962.2	887.4	826.0	788.9
47.5°	1925.7	1841.7	1553.7	1275.9	1091.7	983.4	920.3	876.2	821.5	771.8	736.3
50°	1779.3	1744.5	1486.7	1211.9	1026.0	920.0	859.3	819.3	780.0	730.4	697.8
52.5°	1610.4	1631.9	1408.5	1145.5	959.0	854.9	797.7	765.9	730.3	689.5	661.1
55°	1372.6	1450.4	1273.4	1034.1	859.3	760.1	706.0	677.8	657.0	626.7	602.3
57.5°	1150.0	1249.0	1127.3	919.3	761.4	675.7	623.9	593.2	579.9	564.0	544.8
60°	1017.9	1115.6	1023.0	842.3	695.6	614.1	568.2	542.2	528.9	517.8	501.5
62.5°	899.8	998.8	921.1	764.0	630.9	555.4	515.4	490.1	479.8	473.9	460.1
65°	737.8	823.0	771.1	642.2	538.6	471.8	435.5	417.8	408.1	406.0	397.1
67.5°	600.5	665.3	627.5	532.7	451.1	393.5	362.7	347.6	340.2	339.4	332.7
70°	510.4	571.1	542.2	456.3	386.0	340.7	314.1	300.8	296.3	295.6	291.9
72.5°	440.5	482.9	459.9	388.1	333.8	292.8	273.1	259.3	254.2	255.2	252.8
75°	325.9	357.8	344.5	294.8	251.1	224.4	208.1	199.3	194.8	197.1	194.1
77.5°	234.5	254.7	242.7	208.3	181.3	162.1	150.1	144.6	140.6	140.4	139.1
80°	177.0	188.9	182.2	161.5	139.3	123.0	113.3	109.6	107.4	106.7	105.9
82.5°	126.1	136.2	128.3	114.0	99.0	89.2	83.7	78.8	77.2	77.7	76.9
85°	63.7	67.4	64.5	55.5	49.7	45.1	42.2	40.0	38.5	39.3	37.8
87.5°	25.9	25.9	23.5	20.5	18.9	16.6	16.1	14.4	13.8	14.2	14.1
90°	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1	3.5	5.9	8.4
92.5°	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4	19.7	19.0	18.3
95°	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8	56.8	46.8	36.9
97.5°	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2	129.8	125.3	120.8
100°	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0	189.9	194.8	199.6
102.5°	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9	246.4	249.9	253.4
105°	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3	329.0	331.7	334.3
107.5°	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3	416.5	418.7	420.8
110°	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1	475.0	476.9	478.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1	530.8	532.6	534.4
115°	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2	613.6	615.0	616.5
117.5°	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5	694.3	696.1	698.0
120°	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4	744.6	746.9	749.0
122.5°	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2	795.0	796.8	798.6
125°	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9	864.9	866.8	868.7
127.5°	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4	932.3	934.2	936.2
130°	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4	974.4	976.3	978.3
132.5°	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7	1014.6	1016.6	1018.5
135°	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2	1075.7	1077.1	1078.6
137.5°	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8	1128.7	1130.5	1132.4
140°	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9	1163.3	1164.8	1166.2
142.5°	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3	1195.7	1197.2	1198.6
145°	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6	1241.3	1243.0	1244.7
147.5°	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3	1283.5	1284.6	1285.6
150°	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6	1309.3	1310.0	1310.8
152.5°	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3	1332.6	1332.9	1333.2
155°	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6	1365.1	1364.5	1364.0
157.5°	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4	1391.3	1391.3	1391.2
160°	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1	1406.9	1406.7	1406.5
162.5°	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0	1421.4	1420.8	1420.1
165°	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0	1439.3	1438.5	1437.8
167.5°	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1	1453.0	1452.1	1451.1
170°	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9	1460.9	1460.0	1459.0
172.5°	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2	1466.0	1464.8	1463.7
175°	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9	1472.7	1471.5	1470.3
177.5°	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7	1474.7	1473.8	1472.8
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1503.4	1499.3	1493.4	1484.5	1477.3	1466.1	1466.1	1467.9	1467.9	1467.4	1466.1
5°	1457.8	1446.7	1433.4	1417.9	1401.6	1385.3	1382.2	1376.3	1371.9	1368.9	1365.3
7.5°	1409.7	1390.0	1370.6	1348.8	1328.9	1312.5	1301.1	1291.6	1285.5	1279.0	1274.2
10°	1377.1	1352.6	1329.6	1306.7	1281.5	1261.5	1249.0	1240.0	1233.4	1227.5	1224.5
12.5°	1338.6	1310.6	1285.3	1263.5	1235.9	1215.3	1203.3	1199.1	1191.3	1178.8	1172.3
15°	1282.2	1256.3	1226.0	1192.6	1179.3	1154.1	1140.0	1133.4	1128.9	1119.3	1116.3
17.5°	1234.1	1200.1	1166.1	1141.2	1116.4	1096.0	1088.2	1079.9	1073.9	1066.1	1063.8
20°	1195.6	1165.3	1134.1	1107.5	1081.5	1059.3	1052.6	1046.7	1040.8	1037.1	1034.1
22.5°	1156.5	1126.1	1100.3	1075.4	1047.7	1033.2	1026.0	1019.5	1015.3	1012.8	1009.8
25°	1101.5	1074.9	1045.9	1023.7	1001.5	991.8	987.4	983.7	980.8	977.0	976.3
27.5°	1052.3	1023.3	999.8	979.1	963.2	955.2	950.8	949.0	949.7	951.0	951.9
30°	1015.6	988.9	969.7	951.9	937.1	929.6	928.9	928.9	931.9	932.6	934.1
32.5°	981.8	959.9	940.7	923.4	912.2	907.1	909.9	909.9	912.3	914.3	916.9
35°	932.6	913.3	898.5	883.7	874.1	876.3	877.8	879.3	883.0	887.4	890.4
37.5°	885.6	868.9	853.5	842.0	837.5	841.5	845.1	848.2	852.4	855.9	858.8
40°	851.9	839.2	824.4	814.1	815.6	817.8	820.8	824.4	828.2	830.4	833.4
42.5°	820.5	807.3	796.1	787.4	789.5	792.3	794.1	796.1	800.3	804.4	806.1
45°	772.6	762.2	751.9	746.7	748.2	749.7	751.1	753.4	757.1	760.1	760.7
47.5°	718.9	711.6	704.6	699.6	701.9	701.3	703.3	708.0	709.2	711.0	715.1
50°	684.5	677.8	669.7	668.2	668.2	668.2	668.9	674.9	674.9	677.8	680.8
52.5°	646.6	642.2	637.1	634.4	633.2	633.2	636.3	639.3	640.5	644.6	647.6
55°	590.4	586.0	581.5	579.3	577.8	579.3	585.2	586.6	590.4	592.6	594.8
57.5°	531.9	528.5	524.9	523.7	523.4	525.4	528.6	533.0	534.0	540.7	544.1
60°	493.3	488.1	485.2	485.2	483.7	490.4	488.9	496.3	497.8	502.3	507.5
62.5°	453.6	446.7	445.5	445.5	447.6	449.5	451.6	454.9	458.6	464.3	468.3
65°	389.6	386.0	391.2	390.4	388.9	393.3	393.3	397.1	401.5	406.7	414.8
67.5°	329.0	327.2	327.5	327.5	329.8	332.3	334.4	337.6	343.0	348.5	353.8
70°	288.1	290.4	286.7	289.6	291.9	292.6	294.1	298.5	304.4	308.1	314.1
72.5°	248.5	248.3	248.7	250.0	252.1	253.4	255.0	260.0	266.6	269.7	274.4
75°	191.1	190.4	192.6	192.6	196.3	197.7	199.3	201.5	207.5	211.9	215.6
77.5°	139.6	140.4	140.0	142.5	141.5	141.8	146.4	148.6	149.2	158.0	159.9
80°	105.2	106.7	107.4	108.1	108.9	107.4	112.6	114.8	114.8	120.0	123.7
82.5°	75.6	76.4	78.4	79.1	79.3	80.8	81.2	82.8	84.6	86.8	91.7
85°	37.8	40.0	40.7	40.0	40.7	39.3	41.5	42.2	43.0	43.0	43.0
87.5°	14.0	15.2	15.2	16.4	16.5	17.7	17.9	16.9	17.1	19.0	16.9
90°	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2	29.2	30.2	30.9
92.5°	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1	32.7	34.3	35.2
95°	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3	39.0	40.7	41.6
97.5°	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1	41.1	43.1	44.1
100°	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1	41.9	43.9	45.1
102.5°	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9	53.9	47.9	45.1
105°	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6	110.6	67.5	46.3
107.5°	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4	344.8	313.2	281.2
110°	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8	469.8	461.8	440.4



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3	549.5	549.7	546.0
115°	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4	635.8	638.3	640.0
117.5°	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5	711.5	713.4	714.5
120°	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5	761.4	763.4	764.3
122.5°	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2	809.6	811.0	811.7
125°	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0	877.5	878.0	878.4
127.5°	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9	946.7	947.4	947.6
130°	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5	988.4	989.5	989.7
132.5°	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9	1027.9	1028.9	1029.0
135°	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2
137.5°	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9	1141.0	1142.2	1142.6
140°	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7	1174.6	1175.6	1175.8
142.5°	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7	1206.5	1207.2	1207.3
145°	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5	1250.9	1251.4	1251.6
147.5°	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5	1291.0	1291.5	1291.2
150°	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0	1315.5	1316.0	1315.9
152.5°	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8	1337.8	1338.6	1338.5
155°	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9	1368.1	1369.3	1369.1
157.5°	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0	1394.4	1395.9	1395.7
160°	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9	1409.3	1410.8	1410.7
162.5°	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4	1423.1	1424.7	1424.7
165°	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5	1441.4	1443.4	1443.5
167.5°	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5
170°	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3
172.5°	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7	1468.6	1470.6	1470.5
175°	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0	1474.7	1476.4	1476.2
177.5°	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3	1476.9	1478.4	1478.2
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1462.0	1461.4	1465.6	1462.5	1465.6	1461.4	1462.0	1466.1	1467.4	1467.9	1467.9
5°	1360.7	1363.0	1355.6	1355.6	1355.6	1363.0	1360.7	1365.3	1368.9	1371.9	1376.3
7.5°	1270.7	1267.4	1267.7	1263.8	1267.7	1267.4	1270.7	1274.2	1279.0	1285.5	1291.6
10°	1215.6	1211.2	1209.7	1210.4	1209.7	1211.2	1215.6	1224.5	1227.5	1233.4	1240.0
12.5°	1170.0	1169.0	1159.3	1159.4	1159.3	1169.0	1170.0	1172.3	1178.8	1191.3	1199.1
15°	1116.3	1102.3	1100.8	1105.2	1100.8	1102.3	1116.3	1116.3	1119.3	1128.9	1133.4
17.5°	1062.5	1055.2	1055.6	1053.4	1055.6	1055.2	1062.5	1063.8	1066.1	1073.9	1079.9
20°	1034.1	1029.6	1028.9	1023.7	1028.9	1029.6	1034.1	1034.1	1037.1	1040.8	1046.7
22.5°	1008.0	1006.5	1007.0	1001.3	1007.0	1006.5	1008.0	1009.8	1012.8	1015.3	1019.5
25°	975.6	979.3	976.3	976.3	976.3	979.3	975.6	976.3	977.0	980.8	983.7
27.5°	953.7	953.5	952.1	952.1	952.1	953.5	953.7	951.9	951.0	949.7	949.0
30°	937.1	936.3	937.8	937.8	937.8	936.3	937.1	934.1	932.6	931.9	928.9
32.5°	920.5	921.5	921.8	922.4	921.8	921.5	920.5	916.9	914.3	912.3	909.9
35°	894.8	895.6	897.8	896.4	897.8	895.6	894.8	890.4	887.4	883.0	879.3
37.5°	860.2	863.6	862.8	864.0	862.8	863.6	860.2	858.8	855.9	852.4	848.2
40°	834.1	836.3	835.6	835.6	835.6	836.3	834.1	833.4	830.4	828.2	824.4
42.5°	807.5	809.1	807.1	806.0	807.1	809.1	807.5	806.1	804.4	800.3	796.1
45°	763.7	762.2	764.5	761.5	764.5	762.2	763.7	760.7	760.1	757.1	753.4
47.5°	714.8	716.3	716.9	719.2	716.9	716.3	714.8	715.1	711.0	709.2	708.0
50°	682.2	686.6	686.6	686.0	686.6	686.6	682.2	680.8	677.8	674.9	674.9
52.5°	650.3	652.3	655.3	655.2	655.3	652.3	650.3	647.6	644.6	640.5	639.3
55°	600.8	602.3	603.7	604.5	603.7	602.3	600.8	594.8	592.6	590.4	586.6
57.5°	549.5	548.9	552.4	553.5	552.4	548.9	549.5	544.1	540.7	534.0	533.0
60°	513.3	513.3	519.2	521.5	519.2	513.3	513.3	507.5	502.3	497.8	496.3
62.5°	474.9	477.2	483.1	480.0	483.1	477.2	474.9	468.3	464.3	458.6	454.9
65°	418.5	424.4	423.7	426.7	423.7	424.4	418.5	414.8	406.7	401.5	397.1
67.5°	359.7	363.4	368.7	369.2	368.7	363.4	359.7	353.8	348.5	343.0	337.6
70°	320.0	323.7	326.7	328.9	326.7	323.7	320.0	314.1	308.1	304.4	298.5
72.5°	281.5	283.4	290.5	287.4	290.5	283.4	281.5	274.4	269.7	266.6	260.0
75°	220.7	225.9	230.4	228.2	230.4	225.9	220.7	215.6	211.9	207.5	201.5
77.5°	163.2	168.4	170.5	168.6	170.5	168.4	163.2	159.9	158.0	149.2	148.6
80°	128.9	128.2	132.6	131.9	132.6	128.2	128.9	123.7	120.0	114.8	114.8
82.5°	94.5	93.8	95.9	96.3	95.9	93.8	94.5	91.7	86.8	84.6	82.8
85°	45.9	48.2	45.1	44.5	45.1	48.2	45.9	43.0	43.0	43.0	42.2
87.5°	17.0	17.1	16.6	16.0	16.6	17.1	17.0	16.9	19.0	17.1	16.9
90°	31.4	31.9	32.3	32.9	32.3	31.9	31.4	30.9	30.2	29.2	28.2
92.5°	35.4	35.8	36.1	36.4	36.1	35.8	35.4	35.2	34.3	32.7	31.1
95°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	40.7	39.0	37.3
97.5°	44.4	44.7	44.9	45.1	44.9	44.7	44.4	44.1	43.1	41.1	39.1
100°	45.2	45.5	45.7	46.0	45.7	45.5	45.2	45.1	43.9	41.9	40.1
102.5°	45.5	46.0	46.5	46.8	46.5	46.0	45.5	45.1	47.9	53.9	59.9
105°	46.8	47.2	47.7	48.2	47.7	47.2	46.8	46.3	67.5	110.6	153.6
107.5°	248.7	216.2	183.8	151.4	183.8	216.2	248.7	281.2	313.2	344.8	376.4
110°	405.6	370.7	335.9	301.1	335.9	370.7	405.6	440.4	461.8	469.8	477.8



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	538.7	531.3	524.0	516.6	524.0	531.3	538.7	546.0	549.7	549.5	549.3
115°	640.9	642.0	642.9	643.9	642.9	642.0	640.9	640.0	638.3	635.8	633.4
117.5°	714.7	714.9	715.1	715.3	715.1	714.9	714.7	714.5	713.4	711.5	709.5
120°	764.3	764.3	764.3	764.3	764.3	764.3	764.3	764.3	763.4	761.4	759.5
122.5°	811.9	812.1	812.4	812.6	812.4	812.1	811.9	811.7	811.0	809.6	808.2
125°	878.9	879.5	880.0	880.4	880.0	879.5	878.9	878.4	878.0	877.5	877.0
127.5°	947.2	946.7	946.2	945.7	946.2	946.7	947.2	947.6	947.4	946.7	945.9
130°	989.2	988.7	988.3	987.8	988.3	988.7	989.2	989.7	989.5	988.4	987.5
132.5°	1028.3	1027.7	1027.0	1026.2	1027.0	1027.7	1028.3	1029.0	1028.9	1027.9	1026.9
135°	1087.4	1086.7	1085.9	1085.2	1085.9	1086.7	1087.4	1088.2	1088.2	1087.4	1086.7
137.5°	1142.1	1141.6	1141.1	1140.6	1141.1	1141.6	1142.1	1142.6	1142.2	1141.0	1139.9
140°	1175.4	1174.9	1174.4	1173.9	1174.4	1174.9	1175.4	1175.8	1175.6	1174.6	1173.7
142.5°	1206.6	1205.9	1205.2	1204.6	1205.2	1205.9	1206.6	1207.3	1207.2	1206.5	1205.7
145°	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.6	1251.4	1250.9	1250.5
147.5°	1290.1	1288.9	1287.8	1286.7	1287.8	1288.9	1290.1	1291.2	1291.5	1291.0	1290.5
150°	1315.1	1314.5	1313.7	1313.0	1313.7	1314.5	1315.1	1315.9	1316.0	1315.5	1315.0
152.5°	1337.4	1336.2	1335.1	1334.0	1335.1	1336.2	1337.4	1338.5	1338.6	1337.8	1336.8
155°	1367.7	1366.3	1364.8	1363.4	1364.8	1366.3	1367.7	1369.1	1369.3	1368.1	1366.9
157.5°	1393.8	1391.9	1390.0	1388.1	1390.0	1391.9	1393.8	1395.7	1395.9	1394.4	1393.0
160°	1409.0	1407.3	1405.5	1403.8	1405.5	1407.3	1409.0	1410.7	1410.8	1409.3	1407.9
162.5°	1423.2	1421.7	1420.2	1418.7	1420.2	1421.7	1423.2	1424.7	1424.7	1423.1	1421.4
165°	1441.8	1440.1	1438.4	1436.7	1438.4	1440.1	1441.8	1443.5	1443.4	1441.4	1439.5
167.5°	1455.5	1453.5	1451.6	1449.6	1451.6	1453.5	1455.5	1457.5	1457.5	1455.5	1453.5
170°	1463.4	1461.4	1459.4	1457.5	1459.4	1461.4	1463.4	1465.3	1465.3	1463.4	1461.4
172.5°	1468.3	1466.2	1464.1	1461.9	1464.1	1466.2	1468.3	1470.5	1470.6	1468.6	1466.7
175°	1474.3	1472.3	1470.5	1468.5	1470.5	1472.3	1474.3	1476.2	1476.4	1474.7	1473.0
177.5°	1476.3	1474.3	1472.3	1470.5	1472.3	1474.3	1476.3	1478.2	1478.4	1476.9	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1466.1	1466.1	1477.3	1484.5	1493.4	1499.3	1503.4	1507.6	1514.8	1524.2	1534.8
5°	1382.2	1385.3	1401.6	1417.9	1433.4	1446.7	1457.8	1471.1	1487.4	1507.4	1529.7
7.5°	1301.1	1312.5	1328.9	1348.8	1370.6	1390.0	1409.7	1431.6	1454.5	1484.0	1515.1
10°	1249.0	1261.5	1281.5	1306.7	1329.6	1352.6	1377.1	1400.8	1429.6	1464.5	1504.5
12.5°	1203.3	1215.3	1235.9	1263.5	1285.3	1310.6	1338.6	1369.4	1401.8	1443.8	1489.1
15°	1140.0	1154.1	1179.3	1192.6	1226.0	1256.3	1282.2	1326.7	1368.2	1411.2	1463.8
17.5°	1088.2	1096.0	1116.4	1141.2	1166.1	1200.1	1234.1	1271.1	1312.5	1365.1	1430.9
20°	1052.6	1059.3	1081.5	1107.5	1134.1	1165.3	1195.6	1232.7	1279.3	1334.8	1406.0
22.5°	1026.0	1033.2	1047.7	1075.4	1100.3	1126.1	1156.5	1200.6	1250.3	1304.7	1381.7
25°	987.4	991.8	1001.5	1023.7	1045.9	1074.9	1101.5	1143.0	1194.1	1257.8	1334.8
27.5°	950.8	955.2	963.2	979.1	999.8	1023.3	1052.3	1087.6	1139.4	1208.6	1290.4
30°	928.9	929.6	937.1	951.9	969.7	988.9	1015.6	1055.6	1104.5	1174.9	1260.7
32.5°	909.9	907.1	912.2	923.4	940.7	959.9	981.8	1021.2	1068.4	1137.6	1225.8
35°	877.8	876.3	874.1	883.7	898.5	913.3	932.6	962.2	1015.6	1080.1	1172.6
37.5°	845.1	841.5	837.5	842.0	853.5	868.9	885.6	912.0	958.0	1028.9	1117.5
40°	820.8	817.8	815.6	814.1	824.4	839.2	851.9	877.0	920.0	987.4	1074.9
42.5°	794.1	792.3	789.5	787.4	796.1	807.3	820.5	842.7	885.6	949.0	1031.6
45°	751.1	749.7	748.2	746.7	751.9	762.2	772.6	788.9	826.0	887.4	962.2
47.5°	703.3	701.3	701.9	699.6	704.6	711.6	718.9	736.3	771.8	821.5	876.2
50°	668.9	668.2	668.2	668.2	669.7	677.8	684.5	697.8	730.4	780.0	819.3
52.5°	636.3	633.2	633.2	634.4	637.1	642.2	646.6	661.1	689.5	730.3	765.9
55°	585.2	579.3	577.8	579.3	581.5	586.0	590.4	602.3	626.7	657.0	677.8
57.5°	528.6	525.4	523.4	523.7	524.9	528.5	531.9	544.8	564.0	579.9	593.2
60°	488.9	490.4	483.7	485.2	485.2	488.1	493.3	501.5	517.8	528.9	542.2
62.5°	451.6	449.5	447.6	445.5	445.5	446.7	453.6	460.1	473.9	479.8	490.1
65°	393.3	393.3	388.9	390.4	391.2	386.0	389.6	397.1	406.0	408.1	417.8
67.5°	334.4	332.3	329.8	327.5	327.5	327.2	329.0	332.7	339.4	340.2	347.6
70°	294.1	292.6	291.9	289.6	286.7	290.4	288.1	291.9	295.6	296.3	300.8
72.5°	255.0	253.4	252.1	250.0	248.7	248.3	248.5	252.8	255.2	254.2	259.3
75°	199.3	197.7	196.3	192.6	192.6	190.4	191.1	194.1	197.1	194.8	199.3
77.5°	146.4	141.8	141.5	142.5	140.0	140.4	139.6	139.1	140.4	140.6	144.6
80°	112.6	107.4	108.9	108.1	107.4	106.7	105.2	105.9	106.7	107.4	109.6
82.5°	81.2	80.8	79.3	79.1	78.4	76.4	75.6	76.9	77.7	77.2	78.8
85°	41.5	39.3	40.7	40.0	40.7	40.0	37.8	37.8	39.3	38.5	40.0
87.5°	17.9	17.7	16.5	16.4	15.2	15.2	14.0	14.1	14.2	13.8	14.4
90°	27.2	26.3	23.1	20.0	16.8	13.7	10.8	8.4	5.9	3.5	1.1
92.5°	29.6	28.0	25.6	23.3	20.9	18.5	17.6	18.3	19.0	19.7	20.4
95°	35.6	33.9	31.3	28.6	25.9	23.3	26.9	36.9	46.8	56.8	66.8
97.5°	37.2	35.3	52.8	70.3	87.8	105.4	116.3	120.8	125.3	129.8	134.2
100°	38.1	36.1	74.1	112.1	150.1	187.9	204.5	199.6	194.8	189.9	185.0
102.5°	66.0	72.0	113.5	155.0	196.4	237.9	256.9	253.4	249.9	246.4	242.9
105°	196.7	239.8	261.7	283.6	305.5	327.4	337.1	334.3	331.7	329.0	326.3
107.5°	407.9	439.6	436.1	432.6	429.2	425.7	422.9	420.8	418.7	416.5	414.3
110°	485.9	493.9	491.2	488.5	485.9	483.1	480.9	478.9	476.9	475.0	473.1



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	549.2	549.0	546.4	543.8	541.0	538.4	536.1	534.4	532.6	530.8	529.1
115°	631.0	628.6	626.4	624.2	622.0	619.8	617.9	616.5	615.0	613.6	612.2
117.5°	707.6	705.7	704.6	703.4	702.3	701.2	699.7	698.0	696.1	694.3	692.5
120°	757.5	755.5	754.9	754.1	753.4	752.7	751.2	749.0	746.9	744.6	742.4
122.5°	806.9	805.5	804.6	803.7	802.8	801.8	800.5	798.6	796.8	795.0	793.2
125°	876.6	876.0	875.1	874.1	873.1	872.1	870.7	868.7	866.8	864.9	862.9
127.5°	945.2	944.3	943.2	942.1	940.8	939.7	938.1	936.2	934.2	932.3	930.4
130°	986.6	985.5	984.6	983.6	982.6	981.7	980.1	978.3	976.3	974.4	972.4
132.5°	1026.0	1025.0	1024.2	1023.4	1022.7	1021.8	1020.5	1018.5	1016.6	1014.6	1012.7
135°	1085.9	1085.2	1084.2	1083.3	1082.3	1081.3	1080.1	1078.6	1077.1	1075.7	1074.2
137.5°	1138.7	1137.6	1137.0	1136.5	1136.0	1135.4	1134.3	1132.4	1130.5	1128.7	1126.8
140°	1172.7	1171.7	1171.0	1170.3	1169.5	1168.8	1167.7	1166.2	1164.8	1163.3	1161.9
142.5°	1204.9	1204.1	1203.4	1202.7	1201.9	1201.2	1200.1	1198.6	1197.2	1195.7	1194.3
145°	1249.9	1249.4	1249.0	1248.5	1248.0	1247.5	1246.4	1244.7	1243.0	1241.3	1239.6
147.5°	1290.1	1289.5	1289.0	1288.5	1288.1	1287.6	1286.8	1285.6	1284.6	1283.5	1282.3
150°	1314.6	1314.1	1313.6	1313.1	1312.6	1312.1	1311.5	1310.8	1310.0	1309.3	1308.6
152.5°	1336.0	1335.1	1334.8	1334.5	1334.2	1333.9	1333.6	1333.2	1332.9	1332.6	1332.3
155°	1365.6	1364.4	1364.2	1364.0	1363.7	1363.5	1363.6	1364.0	1364.5	1365.1	1365.6
157.5°	1391.6	1390.1	1390.3	1390.5	1390.8	1391.0	1391.2	1391.2	1391.3	1391.3	1391.4
160°	1406.5	1405.0	1405.2	1405.4	1405.7	1405.9	1406.2	1406.5	1406.7	1406.9	1407.1
162.5°	1419.8	1418.1	1418.3	1418.6	1418.8	1419.1	1419.5	1420.1	1420.8	1421.4	1422.0
165°	1437.6	1435.6	1435.9	1436.1	1436.3	1436.6	1437.1	1437.8	1438.5	1439.3	1440.0
167.5°	1451.6	1449.6	1449.6	1449.6	1449.6	1449.6	1450.1	1451.1	1452.1	1453.0	1454.1
170°	1459.4	1457.5	1457.5	1457.5	1457.5	1457.5	1458.0	1459.0	1460.0	1460.9	1461.9
172.5°	1464.7	1462.7	1462.5	1462.4	1462.2	1462.0	1462.4	1463.7	1464.8	1466.0	1467.2
175°	1471.3	1469.5	1469.3	1469.0	1468.9	1468.6	1469.0	1470.3	1471.5	1472.7	1473.9
177.5°	1473.8	1472.2	1472.0	1471.8	1471.6	1471.4	1471.8	1472.8	1473.8	1474.7	1475.7
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1538.4	1541.3	1551.4	1558.6	1566.9	1571.6	1576.3	1579.9	1584.6	1585.8	1603.0
5°	1545.2	1560.1	1586.0	1605.2	1628.9	1654.8	1672.6	1680.8	1702.2	1720.0	1755.6
7.5°	1543.3	1574.9	1614.0	1654.5	1698.1	1738.4	1773.4	1814.9	1844.4	1888.7	1932.4
10°	1541.5	1583.8	1634.1	1686.0	1746.7	1803.0	1853.4	1909.7	1956.3	2017.8	2070.4
12.5°	1536.2	1587.3	1657.3	1718.5	1792.3	1870.0	1944.7	2016.9	2058.3	2160.7	2209.1
15°	1523.1	1583.8	1671.1	1764.5	1866.0	1957.8	2052.7	2128.3	2250.4	2340.1	2397.1
17.5°	1497.8	1582.9	1686.6	1799.1	1922.6	2043.6	2151.1	2265.7	2395.4	2503.8	2619.3
20°	1486.0	1579.3	1694.9	1819.3	1947.5	2084.5	2206.8	2344.5	2486.1	2592.7	2740.8
22.5°	1464.1	1569.8	1694.3	1833.0	1970.0	2111.8	2254.8	2393.7	2557.1	2704.1	2845.2
25°	1428.2	1546.7	1675.7	1830.4	1991.2	2133.4	2304.5	2489.0	2659.4	2848.3	2989.0
27.5°	1390.5	1517.1	1646.2	1790.3	1963.1	2131.9	2347.2	2555.6	2763.9	2927.1	3031.2
30°	1361.5	1484.5	1617.9	1763.0	1934.1	2134.9	2375.6	2603.0	2806.0	2946.0	3004.5
32.5°	1330.1	1454.8	1572.8	1725.1	1907.4	2133.1	2393.4	2630.9	2808.4	2901.6	2890.2
35°	1280.8	1385.3	1500.1	1646.7	1861.5	2120.1	2403.8	2633.4	2742.3	2722.3	2571.2
37.5°	1209.7	1297.5	1410.6	1571.1	1808.2	2092.6	2383.0	2555.3	2548.3	2385.4	2166.4
40°	1165.3	1240.0	1349.0	1517.9	1766.7	2074.9	2350.4	2462.3	2367.5	2140.0	1877.8
42.5°	1107.1	1176.0	1285.0	1458.6	1721.1	2038.7	2288.2	2320.6	2135.1	1873.4	1633.0
45°	1017.1	1077.8	1190.4	1369.7	1652.7	1960.0	2136.4	2057.1	1807.4	1537.1	1354.2
47.5°	920.3	983.4	1091.7	1275.9	1553.7	1841.7	1925.7	1757.1	1500.8	1281.5	1113.5
50°	859.3	920.0	1026.0	1211.9	1486.7	1744.5	1779.3	1561.5	1326.0	1133.4	995.6
52.5°	797.7	854.9	959.0	1145.5	1408.5	1631.9	1610.4	1388.5	1171.9	1007.8	899.6
55°	706.0	760.1	859.3	1034.1	1273.4	1450.4	1372.6	1160.7	981.5	854.1	771.8
57.5°	623.9	675.7	761.4	919.3	1127.3	1249.0	1150.0	971.5	828.9	730.8	669.5
60°	568.2	614.1	695.6	842.3	1023.0	1115.6	1017.9	860.1	740.0	661.5	606.7
62.5°	515.4	555.4	630.9	764.0	921.1	998.8	899.8	766.4	664.2	594.6	548.0
65°	435.5	471.8	538.6	642.2	771.1	823.0	737.8	629.6	550.4	498.5	467.4
67.5°	362.7	393.5	451.1	532.7	627.5	665.3	600.5	516.8	457.0	415.4	390.7
70°	314.1	340.7	386.0	456.3	542.2	571.1	510.4	441.5	397.8	364.5	341.5
72.5°	273.1	292.8	333.8	388.1	459.9	482.9	440.5	379.8	339.1	314.1	295.9
75°	208.1	224.4	251.1	294.8	344.5	357.8	325.9	288.1	260.7	243.0	228.8
77.5°	150.1	162.1	181.3	208.3	242.7	254.7	234.5	209.3	189.4	177.3	169.5
80°	113.3	123.0	139.3	161.5	182.2	188.9	177.0	157.8	143.7	137.0	130.4
82.5°	83.7	89.2	99.0	114.0	128.3	136.2	126.1	114.5	107.0	100.9	98.4
85°	42.2	45.1	49.7	55.5	64.5	67.4	63.7	60.7	56.3	52.6	52.6
87.5°	16.1	16.6	18.9	20.5	23.5	25.9	25.9	25.4	25.4	25.0	24.6
90°	3.5	5.9	8.4	10.8	13.7	16.8	20.0	23.1	26.3	27.2	28.2
92.5°	19.7	19.0	18.3	17.6	18.5	20.9	23.3	25.6	28.0	29.6	31.1
95°	56.8	46.8	36.9	26.9	23.3	25.9	28.6	31.3	33.9	35.6	37.3
97.5°	129.8	125.3	120.8	116.3	105.4	87.8	70.3	52.8	35.3	37.2	39.1
100°	189.9	194.8	199.6	204.5	187.9	150.1	112.1	74.1	36.1	38.1	40.1
102.5°	246.4	249.9	253.4	256.9	237.9	196.4	155.0	113.5	72.0	66.0	59.9
105°	329.0	331.7	334.3	337.1	327.4	305.5	283.6	261.7	239.8	196.7	153.6
107.5°	416.5	418.7	420.8	422.9	425.7	429.2	432.6	436.1	439.6	407.9	376.4
110°	475.0	476.9	478.9	480.9	483.1	485.9	488.5	491.2	493.9	485.9	477.8



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	530.8	532.6	534.4	536.1	538.4	541.0	543.8	546.4	549.0	549.2	549.3
115°	613.6	615.0	616.5	617.9	619.8	622.0	624.2	626.4	628.6	631.0	633.4
117.5°	694.3	696.1	698.0	699.7	701.2	702.3	703.4	704.6	705.7	707.6	709.5
120°	744.6	746.9	749.0	751.2	752.7	753.4	754.1	754.9	755.5	757.5	759.5
122.5°	795.0	796.8	798.6	800.5	801.8	802.8	803.7	804.6	805.5	806.9	808.2
125°	864.9	866.8	868.7	870.7	872.1	873.1	874.1	875.1	876.0	876.6	877.0
127.5°	932.3	934.2	936.2	938.1	939.7	940.8	942.1	943.2	944.3	945.2	945.9
130°	974.4	976.3	978.3	980.1	981.7	982.6	983.6	984.6	985.5	986.6	987.5
132.5°	1014.6	1016.6	1018.5	1020.5	1021.8	1022.7	1023.4	1024.2	1025.0	1026.0	1026.9
135°	1075.7	1077.1	1078.6	1080.1	1081.3	1082.3	1083.3	1084.2	1085.2	1085.9	1086.7
137.5°	1128.7	1130.5	1132.4	1134.3	1135.4	1136.0	1136.5	1137.0	1137.6	1138.7	1139.9
140°	1163.3	1164.8	1166.2	1167.7	1168.8	1169.5	1170.3	1171.0	1171.7	1172.7	1173.7
142.5°	1195.7	1197.2	1198.6	1200.1	1201.2	1201.9	1202.7	1203.4	1204.1	1204.9	1205.7
145°	1241.3	1243.0	1244.7	1246.4	1247.5	1248.0	1248.5	1249.0	1249.4	1249.9	1250.5
147.5°	1283.5	1284.6	1285.6	1286.8	1287.6	1288.1	1288.5	1289.0	1289.5	1290.1	1290.5
150°	1309.3	1310.0	1310.8	1311.5	1312.1	1312.6	1313.1	1313.6	1314.1	1314.6	1315.0
152.5°	1332.6	1332.9	1333.2	1333.6	1333.9	1334.2	1334.5	1334.8	1335.1	1336.0	1336.8
155°	1365.1	1364.5	1364.0	1363.6	1363.5	1363.7	1364.0	1364.2	1364.4	1365.6	1366.9
157.5°	1391.3	1391.3	1391.2	1391.2	1391.0	1390.8	1390.5	1390.3	1390.1	1391.6	1393.0
160°	1406.9	1406.7	1406.5	1406.2	1405.9	1405.7	1405.4	1405.2	1405.0	1406.5	1407.9
162.5°	1421.4	1420.8	1420.1	1419.5	1419.1	1418.8	1418.6	1418.3	1418.1	1419.8	1421.4
165°	1439.3	1438.5	1437.8	1437.1	1436.6	1436.3	1436.1	1435.9	1435.6	1437.6	1439.5
167.5°	1453.0	1452.1	1451.1	1450.1	1449.6	1449.6	1449.6	1449.6	1449.6	1451.6	1453.5
170°	1460.9	1460.0	1459.0	1458.0	1457.5	1457.5	1457.5	1457.5	1457.5	1459.4	1461.4
172.5°	1466.0	1464.8	1463.7	1462.4	1462.0	1462.2	1462.4	1462.5	1462.7	1464.7	1466.7
175°	1472.7	1471.5	1470.3	1469.0	1468.6	1468.9	1469.0	1469.3	1469.5	1471.3	1473.0
177.5°	1474.7	1473.8	1472.8	1471.8	1471.4	1471.6	1471.8	1472.0	1472.2	1473.8	1475.3
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9	1528.9
2.5°	1608.9	1609.5	1616.1	1620.8	1618.4	1621.4	1622.6
5°	1757.8	1784.5	1798.6	1808.9	1809.7	1810.4	1816.4
7.5°	1969.0	1997.5	2018.5	2050.1	2059.6	2070.4	2067.3
10°	2123.1	2165.2	2201.6	2220.8	2241.6	2271.9	2247.5
12.5°	2267.0	2341.8	2397.1	2427.0	2446.6	2452.7	2440.7
15°	2504.5	2602.3	2654.9	2653.4	2720.1	2749.0	2703.8
17.5°	2722.3	2812.5	2884.8	2921.9	2977.4	2989.7	2984.1
20°	2855.6	2954.2	3010.5	3074.2	3103.0	3129.0	3133.4
22.5°	2970.6	3059.0	3119.5	3172.5	3196.7	3209.0	3216.4
25°	3089.0	3158.6	3194.9	3213.4	3220.1	3218.6	3209.0
27.5°	3080.8	3086.2	3046.2	3006.9	2971.8	2932.2	2918.6
30°	3000.9	2938.6	2827.5	2764.6	2671.9	2598.6	2628.2
32.5°	2790.5	2666.6	2541.8	2404.2	2290.3	2257.9	2225.2
35°	2381.5	2163.8	2036.4	1888.2	1828.9	1769.7	1728.9
37.5°	1926.7	1758.3	1607.1	1510.2	1450.9	1413.3	1393.3
40°	1665.9	1514.1	1389.7	1311.2	1265.9	1223.7	1217.9
42.5°	1458.0	1316.8	1223.1	1160.6	1117.2	1099.3	1086.3
45°	1194.1	1095.6	1032.6	988.2	959.3	948.2	933.4
47.5°	1010.7	941.0	893.8	863.6	841.8	833.5	832.4
50°	908.1	850.4	815.6	791.8	774.9	771.8	760.1
52.5°	831.1	781.1	753.9	733.2	721.0	712.7	709.1
55°	721.5	688.2	663.7	651.9	642.2	634.0	634.0
57.5°	631.3	603.4	587.3	577.2	574.2	568.4	564.8
60°	575.6	551.9	539.3	530.4	524.4	525.2	518.5
62.5°	521.0	505.7	493.6	484.7	477.7	477.8	478.2
65°	443.7	431.9	423.0	420.0	415.6	410.4	411.9
67.5°	376.0	364.9	358.0	352.9	351.4	348.6	352.9
70°	327.4	319.2	314.1	309.6	308.1	308.9	312.6
72.5°	283.0	277.2	273.8	271.7	268.4	268.6	271.1
75°	222.3	217.8	214.8	212.6	211.9	211.9	211.9
77.5°	163.2	162.2	160.9	157.6	157.8	158.6	158.8
80°	128.9	126.7	125.9	124.4	122.2	120.7	124.4
82.5°	96.3	94.1	93.3	93.0	89.6	89.4	92.5
85°	51.8	49.7	50.3	49.7	49.7	48.9	48.9
87.5°	24.2	23.8	23.4	24.0	23.6	23.1	24.3
90°	29.2	30.2	30.9	31.4	31.9	32.3	32.9
92.5°	32.7	34.3	35.2	35.4	35.8	36.1	36.4
95°	39.0	40.7	41.6	41.6	41.6	41.6	41.6
97.5°	41.1	43.1	44.1	44.4	44.7	44.9	45.1
100°	41.9	43.9	45.1	45.2	45.5	45.7	46.0
102.5°	53.9	47.9	45.1	45.5	46.0	46.5	46.8
105°	110.6	67.5	46.3	46.8	47.2	47.7	48.2
107.5°	344.8	313.2	281.2	248.7	216.2	183.8	151.4
110°	469.8	461.8	440.4	405.6	370.7	335.9	301.1



TEST NUMBER: P332081-830

CATALOG NUMBER: S123DIP-S1165D1195U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	549.5	549.7	546.0	538.7	531.3	524.0	516.6
115°	635.8	638.3	640.0	640.9	642.0	642.9	643.9
117.5°	711.5	713.4	714.5	714.7	714.9	715.1	715.3
120°	761.4	763.4	764.3	764.3	764.3	764.3	764.3
122.5°	809.6	811.0	811.7	811.9	812.1	812.4	812.6
125°	877.5	878.0	878.4	878.9	879.5	880.0	880.4
127.5°	946.7	947.4	947.6	947.2	946.7	946.2	945.7
130°	988.4	989.5	989.7	989.2	988.7	988.3	987.8
132.5°	1027.9	1028.9	1029.0	1028.3	1027.7	1027.0	1026.2
135°	1087.4	1088.2	1088.2	1087.4	1086.7	1085.9	1085.2
137.5°	1141.0	1142.2	1142.6	1142.1	1141.6	1141.1	1140.6
140°	1174.6	1175.6	1175.8	1175.4	1174.9	1174.4	1173.9
142.5°	1206.5	1207.2	1207.3	1206.6	1205.9	1205.2	1204.6
145°	1250.9	1251.4	1251.6	1251.6	1251.6	1251.6	1251.6
147.5°	1291.0	1291.5	1291.2	1290.1	1288.9	1287.8	1286.7
150°	1315.5	1316.0	1315.9	1315.1	1314.5	1313.7	1313.0
152.5°	1337.8	1338.6	1338.5	1337.4	1336.2	1335.1	1334.0
155°	1368.1	1369.3	1369.1	1367.7	1366.3	1364.8	1363.4
157.5°	1394.4	1395.9	1395.7	1393.8	1391.9	1390.0	1388.1
160°	1409.3	1410.8	1410.7	1409.0	1407.3	1405.5	1403.8
162.5°	1423.1	1424.7	1424.7	1423.2	1421.7	1420.2	1418.7
165°	1441.4	1443.4	1443.5	1441.8	1440.1	1438.4	1436.7
167.5°	1455.5	1457.5	1457.5	1455.5	1453.5	1451.6	1449.6
170°	1463.4	1465.3	1465.3	1463.4	1461.4	1459.4	1457.5
172.5°	1468.6	1470.6	1470.5	1468.3	1466.2	1464.1	1461.9
175°	1474.7	1476.4	1476.2	1474.3	1472.3	1470.5	1468.5
177.5°	1476.9	1478.4	1478.2	1476.3	1474.3	1472.3	1470.5
180°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9

(END OF REPORT)