

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: P332072-840

Luminaire Tested: **S123DIP-S1165D1025U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332072-840
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-S1165D1025U840-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1025 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9085.5 lumens
Efficiency: N/A
Efficacy: 136.0 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

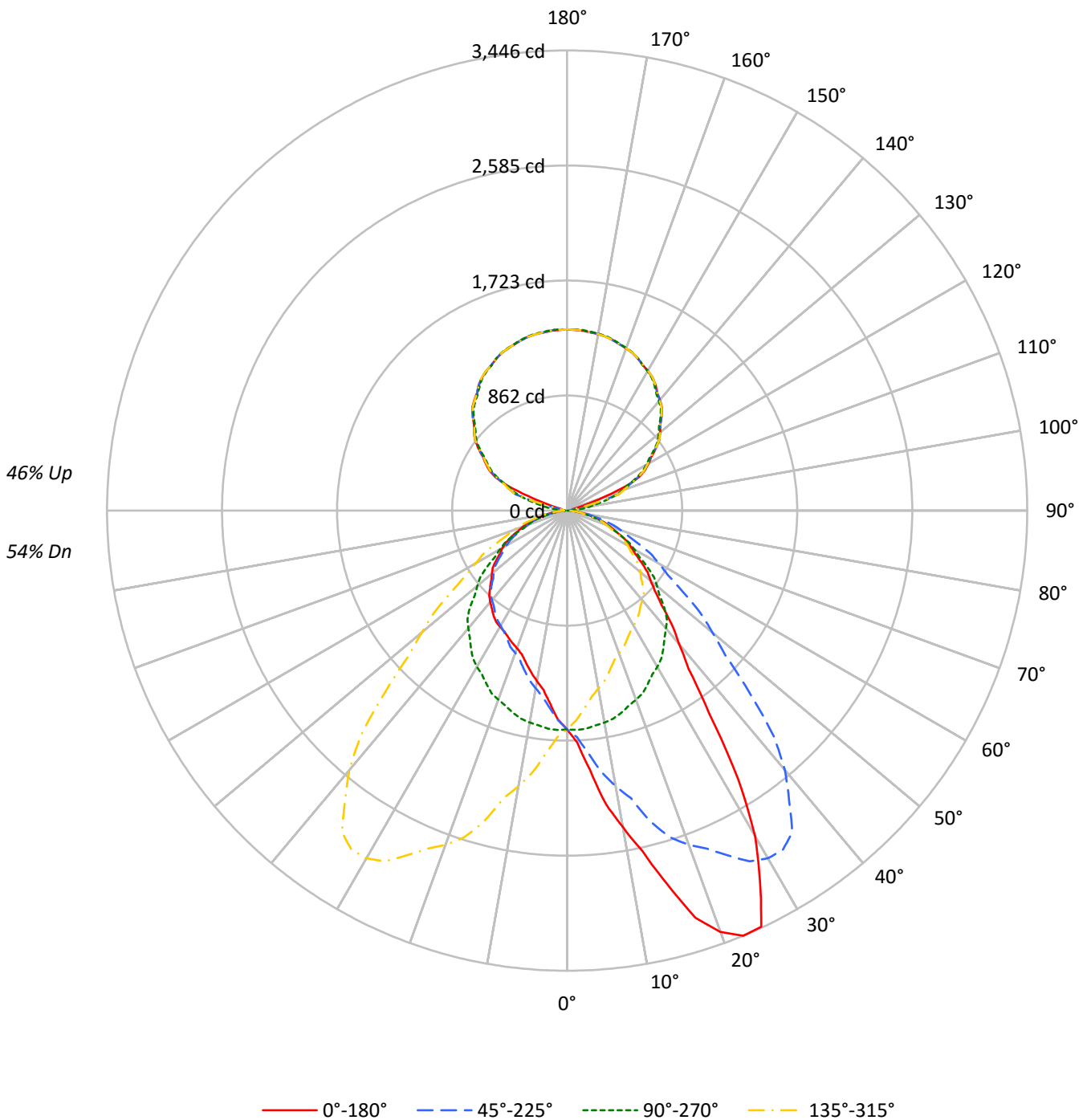
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	86	86	72	72	72	60	60	60	54
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	53	51	46
2	90	83	77	72	84	77	72	68	67	63	59	57	54	51	48	46	44	39
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	40	38	34
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	38	35	33	29
5	70	58	50	44	64	54	47	42	47	42	37	41	36	33	34	31	28	25
6	64	52	44	38	59	49	42	36	43	37	33	37	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	39	33	29	33	29	26	29	25	22	20
8	55	43	35	30	51	40	33	28	35	30	26	31	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	21	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



TEST NUMBER: P332072-840

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.8
10°-20°	517.4	5.7
20°-30°	868.4	9.6
30°-40°	983.3	10.8
40°-50°	881.8	9.7
50°-60°	711.6	7.8
60°-70°	495.9	5.5
70°-80°	260.6	2.9
80°-90°	67.5	0.7
90°-100°	49.3	0.5
100°-110°	235.1	2.6
110°-120°	564.7	6.2
120°-130°	719.1	7.9
130°-140°	768.3	8.5
140°-150°	718.5	7.9
150°-160°	579.5	6.4
160°-170°	374.0	4.1
170°-180°	128.9	1.4
0°-30°	1547.2	17.0
0°-40°	2530.6	27.9
0°-60°	4124.0	45.4
0°-90°	4948.0	54.5
90°-120°	849.1	9.3
90°-150°	3055.0	33.6
90°-180°	4137.0	45.5
0°-180°	9085.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	63
90°	30	1	30	1	30	16
95°	38	62	38	62	38	32
105°	44	300	44	300	44	101
115°	593	564	593	564	593	548
125°	810	794	810	794	810	724
135°	999	989	999	989	999	770
145°	1152	1141	1152	1141	1152	719
155°	1255	1257	1255	1257	1255	579
165°	1322	1326	1322	1326	1322	373
175°	1352	1357	1352	1357	1352	129
180°	1357	1357	1357	1357	1357	



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	25.1	23.7	24.2	24.8	24.1	24.6	25.0	25.5	26.0	26.5	26.5
90°	30.2	29.8	29.4	28.9	28.5	27.8	26.9	26.0	25.0	24.2	21.3
92.5°	33.4	33.2	32.9	32.6	32.4	31.5	30.1	28.7	27.3	25.9	23.6
95°	38.3	38.3	38.3	38.3	38.3	37.6	36.0	34.3	32.8	31.2	28.8
97.5°	41.5	41.3	41.1	40.9	40.6	39.6	37.9	36.1	34.2	32.4	48.6
100°	42.3	42.1	41.9	41.7	41.4	40.4	38.7	36.9	35.0	33.2	68.2
102.5°	43.1	42.7	42.3	41.9	41.5	44.1	49.7	55.2	60.8	66.3	104.5
105°	44.3	43.9	43.4	43.0	42.5	62.2	101.8	141.5	181.1	220.8	241.0
107.5°	139.3	169.2	199.0	228.9	258.8	288.3	317.4	346.5	375.6	404.7	401.4
110°	277.2	309.2	341.2	373.2	405.4	425.1	432.4	439.8	447.2	454.6	452.1



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	475.5	482.3	489.1	495.8	502.6	505.9	505.8	505.6	505.5	505.4	502.9
115°	592.7	591.8	590.9	590.0	589.2	587.5	585.3	583.1	580.9	578.6	576.5
117.5°	658.4	658.2	658.0	657.9	657.7	656.7	654.9	653.2	651.4	649.5	648.5
120°	703.6	703.6	703.6	703.6	703.6	702.7	700.8	699.1	697.3	695.5	694.9
122.5°	747.9	747.7	747.6	747.4	747.2	746.5	745.3	744.0	742.8	741.4	740.6
125°	810.4	810.0	809.5	809.1	808.6	808.2	807.7	807.3	806.9	806.4	805.5
127.5°	870.5	870.9	871.4	871.8	872.3	872.1	871.4	870.7	870.0	869.3	868.2
130°	909.2	909.7	910.1	910.6	911.0	910.8	909.9	909.0	908.1	907.2	906.3
132.5°	944.7	945.3	945.9	946.5	947.2	947.1	946.1	945.2	944.4	943.5	942.8
135°	999.0	999.6	1000.3	1001.0	1001.6	1001.6	1001.0	1000.3	999.6	999.0	998.0
137.5°	1050.0	1050.4	1050.9	1051.3	1051.7	1051.4	1050.4	1049.2	1048.1	1047.1	1046.6
140°	1080.6	1081.1	1081.5	1081.9	1082.4	1082.2	1081.3	1080.4	1079.4	1078.5	1077.9
142.5°	1108.8	1109.4	1110.0	1110.6	1111.3	1111.3	1110.5	1109.8	1109.1	1108.4	1107.7
145°	1152.2	1152.2	1152.2	1152.2	1152.2	1152.0	1151.4	1151.0	1150.5	1150.1	1149.6
147.5°	1184.4	1185.4	1186.5	1187.5	1188.5	1188.8	1188.3	1187.9	1187.5	1187.0	1186.6
150°	1208.6	1209.2	1209.9	1210.6	1211.2	1211.4	1210.9	1210.5	1210.0	1209.6	1209.1
152.5°	1227.9	1229.0	1230.0	1231.0	1232.0	1232.1	1231.3	1230.5	1229.7	1228.9	1228.7
155°	1255.0	1256.3	1257.7	1259.0	1260.3	1260.4	1259.3	1258.2	1257.1	1256.0	1255.8
157.5°	1277.8	1279.5	1281.2	1282.9	1284.8	1285.0	1283.5	1282.2	1280.9	1279.5	1279.8
160°	1292.2	1293.8	1295.4	1297.0	1298.5	1298.6	1297.3	1296.0	1294.6	1293.2	1293.4
162.5°	1306.0	1307.4	1308.7	1310.1	1311.5	1311.4	1309.9	1308.4	1306.9	1305.4	1305.6
165°	1322.5	1324.0	1325.6	1327.2	1328.8	1328.7	1326.9	1325.0	1323.2	1321.5	1321.7
167.5°	1334.3	1336.2	1338.0	1339.8	1341.5	1341.5	1339.8	1338.0	1336.2	1334.3	1334.3
170°	1341.6	1343.4	1345.2	1347.1	1348.8	1348.8	1347.1	1345.2	1343.4	1341.6	1341.6
172.5°	1345.6	1347.7	1349.6	1351.6	1353.5	1353.6	1351.8	1350.1	1348.3	1346.5	1346.3
175°	1351.7	1353.5	1355.3	1357.1	1358.9	1359.0	1357.5	1355.8	1354.3	1352.7	1352.5
177.5°	1353.5	1355.3	1357.2	1358.9	1360.7	1360.9	1359.5	1358.0	1356.6	1355.1	1354.9
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	27.2	27.3	24.7	21.7	20.0	17.6	17.2	15.5	14.6	15.0	14.8
90°	18.4	15.5	12.5	10.0	7.8	5.5	3.2	1.0	3.2	5.5	7.8
92.5°	21.4	19.2	17.1	16.3	16.9	17.5	18.1	18.8	18.1	17.5	16.9
95°	26.4	23.8	21.4	24.7	33.9	43.1	52.3	61.5	52.3	43.1	33.9
97.5°	64.7	80.9	96.9	107.0	111.2	115.3	119.5	123.6	119.5	115.3	111.2
100°	103.1	138.0	173.0	188.2	183.8	179.4	174.8	170.4	174.8	179.4	183.8
102.5°	142.7	180.9	219.0	236.5	233.3	230.0	226.8	223.6	226.8	230.0	233.3
105°	261.1	281.2	301.3	310.2	307.8	305.3	302.9	300.3	302.9	305.3	307.8
107.5°	398.3	395.1	391.9	389.3	387.4	385.4	383.4	381.4	383.4	385.4	387.4
110°	449.7	447.2	444.7	442.6	440.8	439.0	437.3	435.5	437.3	439.0	440.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	500.5	498.1	495.5	493.5	491.9	490.3	488.7	487.1	488.7	490.3	491.9
115°	574.5	572.5	570.6	568.9	567.5	566.1	564.8	563.5	564.8	566.1	567.5
117.5°	647.5	646.4	645.4	644.1	642.5	640.8	639.1	637.4	639.1	640.8	642.5
120°	694.2	693.5	692.9	691.5	689.4	687.4	685.4	683.4	685.4	687.4	689.4
122.5°	739.8	738.9	738.1	736.8	735.2	733.5	731.8	730.2	731.8	733.5	735.2
125°	804.6	803.8	802.8	801.4	799.7	797.9	796.1	794.3	796.1	797.9	799.7
127.5°	867.2	866.1	864.9	863.5	861.7	860.0	858.2	856.4	858.2	860.0	861.7
130°	905.4	904.5	903.6	902.3	900.5	898.7	896.9	895.1	896.9	898.7	900.5
132.5°	942.0	941.3	940.6	939.4	937.6	935.7	934.0	932.2	934.0	935.7	937.6
135°	997.1	996.2	995.3	994.2	992.9	991.5	990.2	988.9	990.2	991.5	992.9
137.5°	1046.1	1045.6	1045.1	1044.0	1042.4	1040.7	1038.9	1037.2	1038.9	1040.7	1042.4
140°	1077.2	1076.5	1075.9	1074.9	1073.5	1072.2	1070.9	1069.4	1070.9	1072.2	1073.5
142.5°	1107.0	1106.4	1105.7	1104.7	1103.4	1102.0	1100.7	1099.3	1100.7	1102.0	1103.4
145°	1149.2	1148.8	1148.3	1147.3	1145.8	1144.2	1142.7	1141.0	1142.7	1144.2	1145.8
147.5°	1186.1	1185.7	1185.2	1184.5	1183.5	1182.5	1181.4	1180.3	1181.4	1182.5	1183.5
150°	1208.7	1208.2	1207.8	1207.2	1206.6	1205.9	1205.3	1204.6	1205.3	1205.9	1206.6
152.5°	1228.4	1228.1	1227.9	1227.6	1227.3	1227.0	1226.7	1226.3	1226.7	1227.0	1227.3
155°	1255.5	1255.3	1255.1	1255.2	1255.7	1256.1	1256.5	1257.0	1256.5	1256.1	1255.7
157.5°	1280.0	1280.2	1280.4	1280.6	1280.6	1280.7	1280.7	1280.7	1280.7	1280.7	1280.6
160°	1293.7	1293.9	1294.1	1294.3	1294.6	1294.8	1295.1	1295.3	1295.1	1294.8	1294.6
162.5°	1305.8	1306.1	1306.3	1306.7	1307.3	1307.8	1308.4	1309.0	1308.4	1307.8	1307.3
165°	1321.9	1322.1	1322.4	1322.8	1323.5	1324.1	1324.8	1325.5	1324.8	1324.1	1323.5
167.5°	1334.3	1334.3	1334.3	1334.8	1335.7	1336.7	1337.6	1338.4	1337.6	1336.7	1335.7
170°	1341.6	1341.6	1341.6	1342.1	1343.0	1343.9	1344.7	1345.6	1344.7	1343.9	1343.0
172.5°	1346.2	1345.9	1345.7	1346.3	1347.3	1348.4	1349.5	1350.5	1349.5	1348.4	1347.3
175°	1352.3	1352.0	1351.8	1352.3	1353.4	1354.5	1355.6	1356.8	1355.6	1354.5	1353.4
177.5°	1354.8	1354.6	1354.4	1354.8	1355.6	1356.6	1357.5	1358.4	1357.5	1356.6	1355.6
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	14.6	15.9	15.8	17.0	17.0	18.2	18.4	17.3	17.5	19.5	17.2
90°	10.0	12.5	15.5	18.4	21.3	24.2	25.0	26.0	26.9	27.8	28.5
92.5°	16.3	17.1	19.2	21.4	23.6	25.9	27.3	28.7	30.1	31.5	32.4
95°	24.7	21.4	23.8	26.4	28.8	31.2	32.8	34.3	36.0	37.6	38.3
97.5°	107.0	96.9	80.9	64.7	48.6	32.4	34.2	36.1	37.9	39.6	40.6
100°	188.2	173.0	138.0	103.1	68.2	33.2	35.0	36.9	38.7	40.4	41.4
102.5°	236.5	219.0	180.9	142.7	104.5	66.3	60.8	55.2	49.7	44.1	41.5
105°	310.2	301.3	281.2	261.1	241.0	220.8	181.1	141.5	101.8	62.2	42.5
107.5°	389.3	391.9	395.1	398.3	401.4	404.7	375.6	346.5	317.4	288.3	258.8
110°	442.6	444.7	447.2	449.7	452.1	454.6	447.2	439.8	432.4	425.1	405.4



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	493.5	495.5	498.1	500.5	502.9	505.4	505.5	505.6	505.8	505.9	502.6
115°	568.9	570.6	572.5	574.5	576.5	578.6	580.9	583.1	585.3	587.5	589.2
117.5°	644.1	645.4	646.4	647.5	648.5	649.5	651.4	653.2	654.9	656.7	657.7
120°	691.5	692.9	693.5	694.2	694.9	695.5	697.3	699.1	700.8	702.7	703.6
122.5°	736.8	738.1	738.9	739.8	740.6	741.4	742.8	744.0	745.3	746.5	747.2
125°	801.4	802.8	803.8	804.6	805.5	806.4	806.9	807.3	807.7	808.2	808.6
127.5°	863.5	864.9	866.1	867.2	868.2	869.3	870.0	870.7	871.4	872.1	872.3
130°	902.3	903.6	904.5	905.4	906.3	907.2	908.1	909.0	909.9	910.8	911.0
132.5°	939.4	940.6	941.3	942.0	942.8	943.5	944.4	945.2	946.1	947.1	947.2
135°	994.2	995.3	996.2	997.1	998.0	999.0	999.6	1000.3	1001.0	1001.6	1001.6
137.5°	1044.0	1045.1	1045.6	1046.1	1046.6	1047.1	1048.1	1049.2	1050.4	1051.4	1051.7
140°	1074.9	1075.9	1076.5	1077.2	1077.9	1078.5	1079.4	1080.4	1081.3	1082.2	1082.4
142.5°	1104.7	1105.7	1106.4	1107.0	1107.7	1108.4	1109.1	1109.8	1110.5	1111.3	1111.3
145°	1147.3	1148.3	1148.8	1149.2	1149.6	1150.1	1150.5	1151.0	1151.4	1152.0	1152.2
147.5°	1184.5	1185.2	1185.7	1186.1	1186.6	1187.0	1187.5	1187.9	1188.3	1188.8	1188.5
150°	1207.2	1207.8	1208.2	1208.7	1209.1	1209.6	1210.0	1210.5	1210.9	1211.4	1211.2
152.5°	1227.6	1227.9	1228.1	1228.4	1228.7	1228.9	1229.7	1230.5	1231.3	1232.1	1232.0
155°	1255.2	1255.1	1255.3	1255.5	1255.8	1256.0	1257.1	1258.2	1259.3	1260.4	1260.3
157.5°	1280.6	1280.4	1280.2	1280.0	1279.8	1279.5	1280.9	1282.2	1283.5	1285.0	1284.8
160°	1294.3	1294.1	1293.9	1293.7	1293.4	1293.2	1294.6	1296.0	1297.3	1298.6	1298.5
162.5°	1306.7	1306.3	1306.1	1305.8	1305.6	1305.4	1306.9	1308.4	1309.9	1311.4	1311.5
165°	1322.8	1322.4	1322.1	1321.9	1321.7	1321.5	1323.2	1325.0	1326.9	1328.7	1328.8
167.5°	1334.8	1334.3	1334.3	1334.3	1334.3	1334.3	1336.2	1338.0	1339.8	1341.5	1341.5
170°	1342.1	1341.6	1341.6	1341.6	1341.6	1341.6	1343.4	1345.2	1347.1	1348.8	1348.8
172.5°	1346.3	1345.7	1345.9	1346.2	1346.3	1346.5	1348.3	1350.1	1351.8	1353.6	1353.5
175°	1352.3	1351.8	1352.0	1352.3	1352.5	1352.7	1354.3	1355.8	1357.5	1359.0	1358.9
177.5°	1354.8	1354.4	1354.6	1354.8	1354.9	1355.1	1356.6	1358.0	1359.5	1360.9	1360.7
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	17.2	17.3	16.8	16.2	16.8	17.3	17.2	17.2	19.5	17.5	17.3
90°	28.9	29.4	29.8	30.2	29.8	29.4	28.9	28.5	27.8	26.9	26.0
92.5°	32.6	32.9	33.2	33.4	33.2	32.9	32.6	32.4	31.5	30.1	28.7
95°	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	37.6	36.0	34.3
97.5°	40.9	41.1	41.3	41.5	41.3	41.1	40.9	40.6	39.6	37.9	36.1
100°	41.7	41.9	42.1	42.3	42.1	41.9	41.7	41.4	40.4	38.7	36.9
102.5°	41.9	42.3	42.7	43.1	42.7	42.3	41.9	41.5	44.1	49.7	55.2
105°	43.0	43.4	43.9	44.3	43.9	43.4	43.0	42.5	62.2	101.8	141.5
107.5°	228.9	199.0	169.2	139.3	169.2	199.0	228.9	258.8	288.3	317.4	346.5
110°	373.2	341.2	309.2	277.2	309.2	341.2	373.2	405.4	425.1	432.4	439.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	495.8	489.1	482.3	475.5	482.3	489.1	495.8	502.6	505.9	505.8	505.6
115°	590.0	590.9	591.8	592.7	591.8	590.9	590.0	589.2	587.5	585.3	583.1
117.5°	657.9	658.0	658.2	658.4	658.2	658.0	657.9	657.7	656.7	654.9	653.2
120°	703.6	703.6	703.6	703.6	703.6	703.6	703.6	703.6	702.7	700.8	699.1
122.5°	747.4	747.6	747.7	747.9	747.7	747.6	747.4	747.2	746.5	745.3	744.0
125°	809.1	809.5	810.0	810.4	810.0	809.5	809.1	808.6	808.2	807.7	807.3
127.5°	871.8	871.4	870.9	870.5	870.9	871.4	871.8	872.3	872.1	871.4	870.7
130°	910.6	910.1	909.7	909.2	909.7	910.1	910.6	911.0	910.8	909.9	909.0
132.5°	946.5	945.9	945.3	944.7	945.3	945.9	946.5	947.2	947.1	946.1	945.2
135°	1001.0	1000.3	999.6	999.0	999.6	1000.3	1001.0	1001.6	1001.6	1001.0	1000.3
137.5°	1051.3	1050.9	1050.4	1050.0	1050.4	1050.9	1051.3	1051.7	1051.4	1050.4	1049.2
140°	1081.9	1081.5	1081.1	1080.6	1081.1	1081.5	1081.9	1082.4	1082.2	1081.3	1080.4
142.5°	1110.6	1110.0	1109.4	1108.8	1109.4	1110.0	1110.6	1111.3	1111.3	1110.5	1109.8
145°	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.2	1152.0	1151.4	1151.0
147.5°	1187.5	1186.5	1185.4	1184.4	1185.4	1186.5	1187.5	1188.5	1188.8	1188.3	1187.9
150°	1210.6	1209.9	1209.2	1208.6	1209.2	1209.9	1210.6	1211.2	1211.4	1210.9	1210.5
152.5°	1231.0	1230.0	1229.0	1227.9	1229.0	1230.0	1231.0	1232.0	1232.1	1231.3	1230.5
155°	1259.0	1257.7	1256.3	1255.0	1256.3	1257.7	1259.0	1260.3	1260.4	1259.3	1258.2
157.5°	1282.9	1281.2	1279.5	1277.8	1279.5	1281.2	1282.9	1284.8	1285.0	1283.5	1282.2
160°	1297.0	1295.4	1293.8	1292.2	1293.8	1295.4	1297.0	1298.5	1298.6	1297.3	1296.0
162.5°	1310.1	1308.7	1307.4	1306.0	1307.4	1308.7	1310.1	1311.5	1311.4	1309.9	1308.4
165°	1327.2	1325.6	1324.0	1322.5	1324.0	1325.6	1327.2	1328.8	1328.7	1326.9	1325.0
167.5°	1339.8	1338.0	1336.2	1334.3	1336.2	1338.0	1339.8	1341.5	1341.5	1339.8	1338.0
170°	1347.1	1345.2	1343.4	1341.6	1343.4	1345.2	1347.1	1348.8	1348.8	1347.1	1345.2
172.5°	1351.6	1349.6	1347.7	1345.6	1347.7	1349.6	1351.6	1353.5	1353.6	1351.8	1350.1
175°	1357.1	1355.3	1353.5	1351.7	1353.5	1355.3	1357.1	1358.9	1359.0	1357.5	1355.8
177.5°	1358.9	1357.2	1355.3	1353.5	1355.3	1357.2	1358.9	1360.7	1360.9	1359.5	1358.0
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	18.4	18.2	17.0	17.0	15.8	15.9	14.6	14.8	15.0	14.6	15.5
90°	25.0	24.2	21.3	18.4	15.5	12.5	10.0	7.8	5.5	3.2	1.0
92.5°	27.3	25.9	23.6	21.4	19.2	17.1	16.3	16.9	17.5	18.1	18.8
95°	32.8	31.2	28.8	26.4	23.8	21.4	24.7	33.9	43.1	52.3	61.5
97.5°	34.2	32.4	48.6	64.7	80.9	96.9	107.0	111.2	115.3	119.5	123.6
100°	35.0	33.2	68.2	103.1	138.0	173.0	188.2	183.8	179.4	174.8	170.4
102.5°	60.8	66.3	104.5	142.7	180.9	219.0	236.5	233.3	230.0	226.8	223.6
105°	181.1	220.8	241.0	261.1	281.2	301.3	310.2	307.8	305.3	302.9	300.3
107.5°	375.6	404.7	401.4	398.3	395.1	391.9	389.3	387.4	385.4	383.4	381.4
110°	447.2	454.6	452.1	449.7	447.2	444.7	442.6	440.8	439.0	437.3	435.5



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	505.5	505.4	502.9	500.5	498.1	495.5	493.5	491.9	490.3	488.7	487.1
115°	580.9	578.6	576.5	574.5	572.5	570.6	568.9	567.5	566.1	564.8	563.5
117.5°	651.4	649.5	648.5	647.5	646.4	645.4	644.1	642.5	640.8	639.1	637.4
120°	697.3	695.5	694.9	694.2	693.5	692.9	691.5	689.4	687.4	685.4	683.4
122.5°	742.8	741.4	740.6	739.8	738.9	738.1	736.8	735.2	733.5	731.8	730.2
125°	806.9	806.4	805.5	804.6	803.8	802.8	801.4	799.7	797.9	796.1	794.3
127.5°	870.0	869.3	868.2	867.2	866.1	864.9	863.5	861.7	860.0	858.2	856.4
130°	908.1	907.2	906.3	905.4	904.5	903.6	902.3	900.5	898.7	896.9	895.1
132.5°	944.4	943.5	942.8	942.0	941.3	940.6	939.4	937.6	935.7	934.0	932.2
135°	999.6	999.0	998.0	997.1	996.2	995.3	994.2	992.9	991.5	990.2	988.9
137.5°	1048.1	1047.1	1046.6	1046.1	1045.6	1045.1	1044.0	1042.4	1040.7	1038.9	1037.2
140°	1079.4	1078.5	1077.9	1077.2	1076.5	1075.9	1074.9	1073.5	1072.2	1070.9	1069.4
142.5°	1109.1	1108.4	1107.7	1107.0	1106.4	1105.7	1104.7	1103.4	1102.0	1100.7	1099.3
145°	1150.5	1150.1	1149.6	1149.2	1148.8	1148.3	1147.3	1145.8	1144.2	1142.7	1141.0
147.5°	1187.5	1187.0	1186.6	1186.1	1185.7	1185.2	1184.5	1183.5	1182.5	1181.4	1180.3
150°	1210.0	1209.6	1209.1	1208.7	1208.2	1207.8	1207.2	1206.6	1205.9	1205.3	1204.6
152.5°	1229.7	1228.9	1228.7	1228.4	1228.1	1227.9	1227.6	1227.3	1227.0	1226.7	1226.3
155°	1257.1	1256.0	1255.8	1255.5	1255.3	1255.1	1255.2	1255.7	1256.1	1256.5	1257.0
157.5°	1280.9	1279.5	1279.8	1280.0	1280.2	1280.4	1280.6	1280.6	1280.7	1280.7	1280.7
160°	1294.6	1293.2	1293.4	1293.7	1293.9	1294.1	1294.3	1294.6	1294.8	1295.1	1295.3
162.5°	1306.9	1305.4	1305.6	1305.8	1306.1	1306.3	1306.7	1307.3	1307.8	1308.4	1309.0
165°	1323.2	1321.5	1321.7	1321.9	1322.1	1322.4	1322.8	1323.5	1324.1	1324.8	1325.5
167.5°	1336.2	1334.3	1334.3	1334.3	1334.3	1334.3	1334.8	1335.7	1336.7	1337.6	1338.4
170°	1343.4	1341.6	1341.6	1341.6	1341.6	1341.6	1342.1	1343.0	1343.9	1344.7	1345.6
172.5°	1348.3	1346.5	1346.3	1346.2	1345.9	1345.7	1346.3	1347.3	1348.4	1349.5	1350.5
175°	1354.3	1352.7	1352.5	1352.3	1352.0	1351.8	1352.3	1353.4	1354.5	1355.6	1356.8
177.5°	1356.6	1355.1	1354.9	1354.8	1354.6	1354.4	1354.8	1355.6	1356.6	1357.5	1358.4
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	17.2	17.6	20.0	21.7	24.7	27.3	27.2	26.5	26.5	26.0	25.5
90°	3.2	5.5	7.8	10.0	12.5	15.5	18.4	21.3	24.2	25.0	26.0
92.5°	18.1	17.5	16.9	16.3	17.1	19.2	21.4	23.6	25.9	27.3	28.7
95°	52.3	43.1	33.9	24.7	21.4	23.8	26.4	28.8	31.2	32.8	34.3
97.5°	119.5	115.3	111.2	107.0	96.9	80.9	64.7	48.6	32.4	34.2	36.1
100°	174.8	179.4	183.8	188.2	173.0	138.0	103.1	68.2	33.2	35.0	36.9
102.5°	226.8	230.0	233.3	236.5	219.0	180.9	142.7	104.5	66.3	60.8	55.2
105°	302.9	305.3	307.8	310.2	301.3	281.2	261.1	241.0	220.8	181.1	141.5
107.5°	383.4	385.4	387.4	389.3	391.9	395.1	398.3	401.4	404.7	375.6	346.5
110°	437.3	439.0	440.8	442.6	444.7	447.2	449.7	452.1	454.6	447.2	439.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	488.7	490.3	491.9	493.5	495.5	498.1	500.5	502.9	505.4	505.5	505.6
115°	564.8	566.1	567.5	568.9	570.6	572.5	574.5	576.5	578.6	580.9	583.1
117.5°	639.1	640.8	642.5	644.1	645.4	646.4	647.5	648.5	649.5	651.4	653.2
120°	685.4	687.4	689.4	691.5	692.9	693.5	694.2	694.9	695.5	697.3	699.1
122.5°	731.8	733.5	735.2	736.8	738.1	738.9	739.8	740.6	741.4	742.8	744.0
125°	796.1	797.9	799.7	801.4	802.8	803.8	804.6	805.5	806.4	806.9	807.3
127.5°	858.2	860.0	861.7	863.5	864.9	866.1	867.2	868.2	869.3	870.0	870.7
130°	896.9	898.7	900.5	902.3	903.6	904.5	905.4	906.3	907.2	908.1	909.0
132.5°	934.0	935.7	937.6	939.4	940.6	941.3	942.0	942.8	943.5	944.4	945.2
135°	990.2	991.5	992.9	994.2	995.3	996.2	997.1	998.0	999.0	999.6	1000.3
137.5°	1038.9	1040.7	1042.4	1044.0	1045.1	1045.6	1046.1	1046.6	1047.1	1048.1	1049.2
140°	1070.9	1072.2	1073.5	1074.9	1075.9	1076.5	1077.2	1077.9	1078.5	1079.4	1080.4
142.5°	1100.7	1102.0	1103.4	1104.7	1105.7	1106.4	1107.0	1107.7	1108.4	1109.1	1109.8
145°	1142.7	1144.2	1145.8	1147.3	1148.3	1148.8	1149.2	1149.6	1150.1	1150.5	1151.0
147.5°	1181.4	1182.5	1183.5	1184.5	1185.2	1185.7	1186.1	1186.6	1187.0	1187.5	1187.9
150°	1205.3	1205.9	1206.6	1207.2	1207.8	1208.2	1208.7	1209.1	1209.6	1210.0	1210.5
152.5°	1226.7	1227.0	1227.3	1227.6	1227.9	1228.1	1228.4	1228.7	1228.9	1229.7	1230.5
155°	1256.5	1256.1	1255.7	1255.2	1255.1	1255.3	1255.5	1255.8	1256.0	1257.1	1258.2
157.5°	1280.7	1280.7	1280.6	1280.6	1280.4	1280.2	1280.0	1279.8	1279.5	1280.9	1282.2
160°	1295.1	1294.8	1294.6	1294.3	1294.1	1293.9	1293.7	1293.4	1293.2	1294.6	1296.0
162.5°	1308.4	1307.8	1307.3	1306.7	1306.3	1306.1	1305.8	1305.6	1305.4	1306.9	1308.4
165°	1324.8	1324.1	1323.5	1322.8	1322.4	1322.1	1321.9	1321.7	1321.5	1323.2	1325.0
167.5°	1337.6	1336.7	1335.7	1334.8	1334.3	1334.3	1334.3	1334.3	1334.3	1336.2	1338.0
170°	1344.7	1343.9	1343.0	1342.1	1341.6	1341.6	1341.6	1341.6	1341.6	1343.4	1345.2
172.5°	1349.5	1348.4	1347.3	1346.3	1345.7	1345.9	1346.2	1346.3	1346.5	1348.3	1350.1
175°	1355.6	1354.5	1353.4	1352.3	1351.8	1352.0	1352.3	1352.5	1352.7	1354.3	1355.8
177.5°	1357.5	1356.6	1355.6	1354.8	1354.4	1354.6	1354.8	1354.9	1355.1	1356.6	1358.0
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	25.0	24.6	24.1	24.8	24.2	23.7	25.1
90°	26.9	27.8	28.5	28.9	29.4	29.8	30.2
92.5°	30.1	31.5	32.4	32.6	32.9	33.2	33.4
95°	36.0	37.6	38.3	38.3	38.3	38.3	38.3
97.5°	37.9	39.6	40.6	40.9	41.1	41.3	41.5
100°	38.7	40.4	41.4	41.7	41.9	42.1	42.3
102.5°	49.7	44.1	41.5	41.9	42.3	42.7	43.1
105°	101.8	62.2	42.5	43.0	43.4	43.9	44.3
107.5°	317.4	288.3	258.8	228.9	199.0	169.2	139.3
110°	432.4	425.1	405.4	373.2	341.2	309.2	277.2



TEST NUMBER: P332072-840

CATALOG NUMBER: S123DIP-S1165D1025U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	505.8	505.9	502.6	495.8	489.1	482.3	475.5
115°	585.3	587.5	589.2	590.0	590.9	591.8	592.7
117.5°	654.9	656.7	657.7	657.9	658.0	658.2	658.4
120°	700.8	702.7	703.6	703.6	703.6	703.6	703.6
122.5°	745.3	746.5	747.2	747.4	747.6	747.7	747.9
125°	807.7	808.2	808.6	809.1	809.5	810.0	810.4
127.5°	871.4	872.1	872.3	871.8	871.4	870.9	870.5
130°	909.9	910.8	911.0	910.6	910.1	909.7	909.2
132.5°	946.1	947.1	947.2	946.5	945.9	945.3	944.7
135°	1001.0	1001.6	1001.6	1001.0	1000.3	999.6	999.0
137.5°	1050.4	1051.4	1051.7	1051.3	1050.9	1050.4	1050.0
140°	1081.3	1082.2	1082.4	1081.9	1081.5	1081.1	1080.6
142.5°	1110.5	1111.3	1111.3	1110.6	1110.0	1109.4	1108.8
145°	1151.4	1152.0	1152.2	1152.2	1152.2	1152.2	1152.2
147.5°	1188.3	1188.8	1188.5	1187.5	1186.5	1185.4	1184.4
150°	1210.9	1211.4	1211.2	1210.6	1209.9	1209.2	1208.6
152.5°	1231.3	1232.1	1232.0	1231.0	1230.0	1229.0	1227.9
155°	1259.3	1260.4	1260.3	1259.0	1257.7	1256.3	1255.0
157.5°	1283.5	1285.0	1284.8	1282.9	1281.2	1279.5	1277.8
160°	1297.3	1298.6	1298.5	1297.0	1295.4	1293.8	1292.2
162.5°	1309.9	1311.4	1311.5	1310.1	1308.7	1307.4	1306.0
165°	1326.9	1328.7	1328.8	1327.2	1325.6	1324.0	1322.5
167.5°	1339.8	1341.5	1341.5	1339.8	1338.0	1336.2	1334.3
170°	1347.1	1348.8	1348.8	1347.1	1345.2	1343.4	1341.6
172.5°	1351.8	1353.6	1353.5	1351.6	1349.6	1347.7	1345.6
175°	1357.5	1359.0	1358.9	1357.1	1355.3	1353.5	1351.7
177.5°	1359.5	1360.9	1360.7	1358.9	1357.2	1355.3	1353.5
180°	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8	1356.8

(END OF REPORT)