

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: P332081-840

Luminaire Tested: **S123DIP-S1165D1195U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332081-840
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-S1165D1195U840-4F0-1E-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: 9764.5 lumens
Efficiency: N/A
Efficacy: 136.2 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

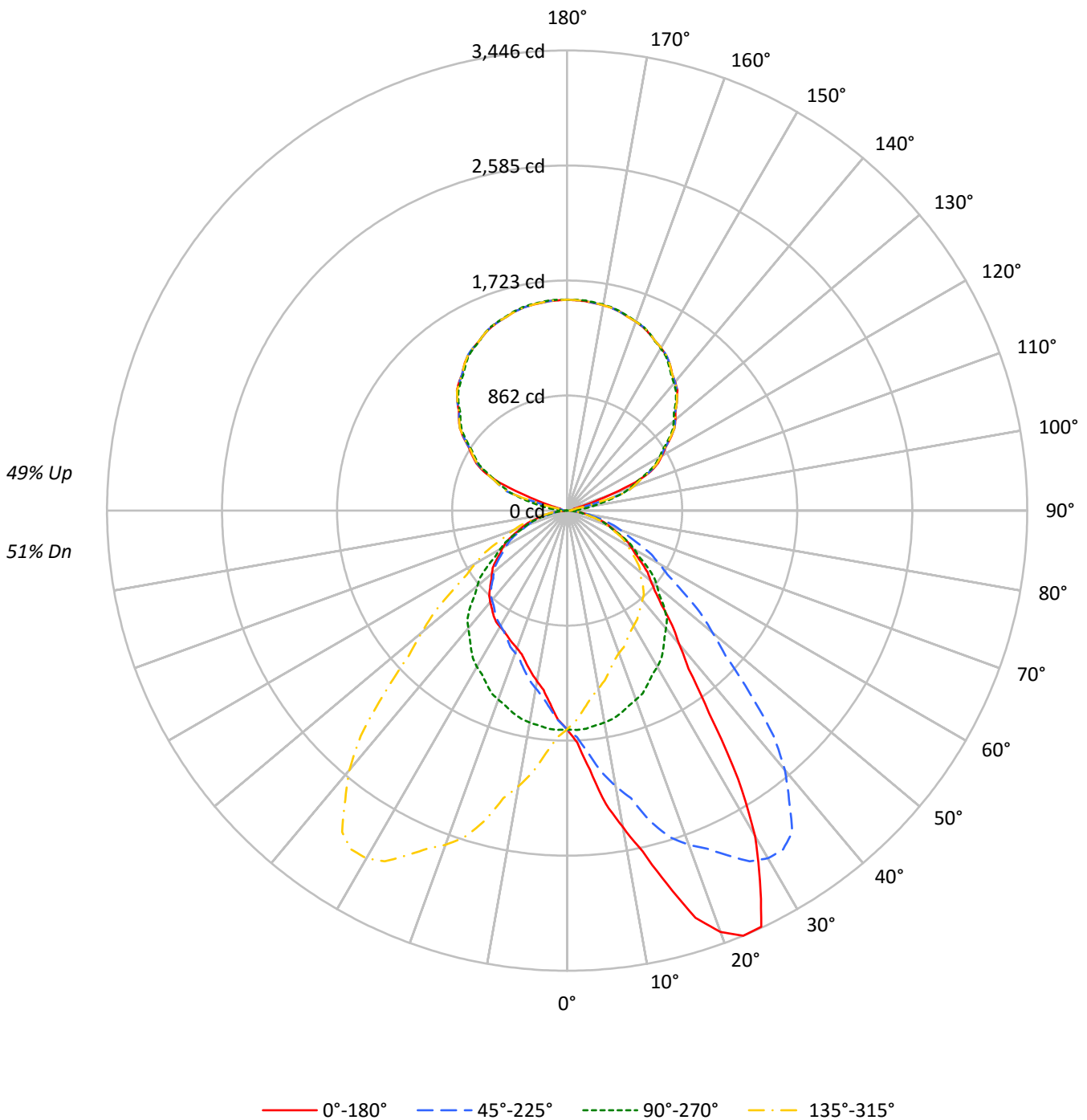
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

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

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: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.7
10°-20°	517.4	5.3
20°-30°	868.4	8.9
30°-40°	983.3	10.1
40°-50°	881.8	9.0
50°-60°	711.6	7.3
60°-70°	495.9	5.1
70°-80°	260.6	2.7
80°-90°	68.2	0.7
90°-100°	57.4	0.6
100°-110°	273.6	2.8
110°-120°	657.3	6.7
120°-130°	837.0	8.6
130°-140°	894.3	9.2
140°-150°	836.3	8.6
150°-160°	674.6	6.9
160°-170°	435.4	4.5
170°-180°	150.0	1.5
0°-30°	1547.2	15.8
0°-40°	2530.6	25.9
0°-60°	4124.0	42.2
0°-90°	4948.7	50.7
90°-120°	988.3	10.1
90°-150°	3555.9	36.4
90°-180°	4816.0	49.3
0°-180°	9764.5	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°	35	1	35	1	35	19
95°	44	72	44	72	44	37
105°	52	350	52	350	52	118
115°	690	656	690	656	690	637
125°	943	924	943	924	943	842
135°	1163	1151	1163	1151	1163	897
145°	1341	1328	1341	1328	1341	837
155°	1461	1463	1461	1463	1461	674
165°	1539	1543	1539	1543	1539	435
175°	1573	1579	1573	1579	1573	150
180°	1579	1579	1579	1579	1579	



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	26.1	24.7	25.2	25.8	25.0	25.5	26.0	26.4	26.8	27.3	27.2
90°	35.2	34.6	34.1	33.6	33.1	32.3	31.3	30.2	29.2	28.2	24.7
92.5°	39.0	38.7	38.4	38.0	37.7	36.8	35.0	33.3	31.7	30.0	27.5
95°	44.5	44.5	44.5	44.5	44.5	43.6	41.8	40.0	38.2	36.4	33.5
97.5°	48.4	48.1	47.9	47.6	47.3	46.2	44.0	41.9	39.9	37.8	35.6
100°	49.3	49.0	48.8	48.5	48.3	47.1	44.9	42.9	40.8	38.7	37.4
102.5°	50.2	49.8	49.3	48.8	48.4	51.3	57.8	64.2	70.7	77.2	121.6
105°	51.6	51.1	50.6	50.1	49.6	72.3	118.5	164.6	210.8	256.9	280.4
107.5°	162.2	196.9	231.7	266.5	301.2	335.6	369.4	403.2	437.1	471.0	467.3
110°	322.7	359.9	397.2	434.5	471.8	494.7	503.3	511.9	520.6	529.2	526.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	553.5	561.4	569.3	577.1	585.0	589.0	588.8	588.5	588.4	588.2	585.4
115°	689.8	688.8	687.8	686.7	685.7	683.9	681.3	678.6	676.1	673.5	671.2
117.5°	766.4	766.2	766.0	765.8	765.6	764.4	762.3	760.2	758.1	756.1	754.9
120°	818.9	818.9	818.9	818.9	818.9	817.9	815.8	813.7	811.6	809.5	808.8
122.5°	870.6	870.4	870.1	869.9	869.7	868.9	867.5	866.0	864.5	863.0	862.0
125°	943.3	942.8	942.3	941.7	941.2	940.7	940.2	939.7	939.2	938.6	937.6
127.5°	1013.2	1013.8	1014.3	1014.8	1015.3	1015.1	1014.3	1013.5	1012.7	1011.8	1010.6
130°	1058.3	1058.8	1059.3	1059.9	1060.4	1060.2	1059.0	1058.0	1057.0	1055.9	1054.9
132.5°	1099.5	1100.3	1101.1	1101.8	1102.5	1102.4	1101.4	1100.2	1099.2	1098.2	1097.3
135°	1162.8	1163.5	1164.3	1165.1	1165.9	1165.9	1165.1	1164.3	1163.5	1162.8	1161.6
137.5°	1222.0	1222.6	1223.1	1223.7	1224.2	1223.8	1222.5	1221.3	1220.0	1218.8	1218.2
140°	1257.8	1258.3	1258.8	1259.3	1259.8	1259.6	1258.5	1257.5	1256.5	1255.4	1254.7
142.5°	1290.6	1291.3	1292.0	1292.8	1293.5	1293.4	1292.6	1291.8	1291.0	1290.1	1289.4
145°	1341.0	1341.0	1341.0	1341.0	1341.0	1340.8	1340.3	1339.8	1339.2	1338.7	1338.2
147.5°	1378.6	1379.8	1381.0	1382.2	1383.4	1383.7	1383.2	1382.7	1382.2	1381.6	1381.1
150°	1406.7	1407.5	1408.4	1409.1	1409.9	1410.0	1409.5	1409.0	1408.5	1408.0	1407.4
152.5°	1429.3	1430.5	1431.7	1432.9	1434.1	1434.2	1433.3	1432.3	1431.4	1430.5	1430.2
155°	1460.8	1462.3	1463.9	1465.4	1466.9	1467.1	1465.8	1464.5	1463.2	1461.9	1461.7
157.5°	1487.2	1489.2	1491.3	1493.4	1495.4	1495.6	1494.0	1492.5	1491.0	1489.3	1489.7
160°	1504.1	1505.9	1507.8	1509.6	1511.5	1511.6	1510.0	1508.4	1506.9	1505.3	1505.6
162.5°	1520.0	1521.7	1523.3	1524.9	1526.5	1526.5	1524.7	1523.0	1521.2	1519.3	1519.6
165°	1539.3	1541.2	1543.0	1544.8	1546.6	1546.5	1544.4	1542.4	1540.2	1538.1	1538.4
167.5°	1553.2	1555.3	1557.3	1559.4	1561.6	1561.6	1559.4	1557.3	1555.3	1553.2	1553.2
170°	1561.7	1563.7	1565.8	1567.9	1569.9	1569.9	1567.9	1565.8	1563.7	1561.7	1561.7
172.5°	1566.3	1568.6	1570.9	1573.2	1575.5	1575.6	1573.5	1571.5	1569.3	1567.2	1567.0
175°	1573.4	1575.5	1577.5	1579.6	1581.7	1581.9	1580.0	1578.2	1576.4	1574.5	1574.3
177.5°	1575.5	1577.5	1579.6	1581.8	1583.8	1584.0	1582.4	1580.6	1579.0	1577.3	1577.1
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	27.8	27.8	25.1	22.0	20.2	17.8	17.3	15.5	14.7	15.2	15.1
90°	21.4	18.0	14.6	11.6	9.0	6.4	3.7	1.2	3.7	6.4	9.0
92.5°	24.9	22.4	19.8	18.9	19.6	20.4	21.1	21.8	21.1	20.4	19.6
95°	30.6	27.8	24.9	28.8	39.5	50.2	60.9	71.6	60.9	50.2	39.5
97.5°	75.3	94.1	112.9	124.6	129.5	134.2	139.1	143.8	139.1	134.2	129.5
100°	120.1	160.8	201.4	219.1	213.9	208.7	203.5	198.2	203.5	208.7	213.9
102.5°	166.0	210.5	254.9	275.3	271.5	267.7	264.0	260.2	264.0	267.7	271.5
105°	303.9	327.3	350.8	361.1	358.2	355.4	352.5	349.6	352.5	355.4	358.2
107.5°	463.5	459.9	456.2	453.1	450.8	448.6	446.3	443.9	446.3	448.6	450.8
110°	523.4	520.6	517.7	515.2	513.1	511.0	509.0	506.9	509.0	511.0	513.1



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	582.6	579.7	576.8	574.4	572.6	570.7	568.8	566.9	568.8	570.7	572.6
115°	668.7	666.4	664.1	662.1	660.6	658.9	657.4	655.9	657.4	658.9	660.6
117.5°	753.7	752.5	751.2	749.7	747.8	745.8	743.9	741.9	743.9	745.8	747.8
120°	808.0	807.2	806.5	804.9	802.5	800.2	797.8	795.5	797.8	800.2	802.5
122.5°	861.1	860.1	859.1	857.7	855.7	853.7	851.8	849.9	851.8	853.7	855.7
125°	936.5	935.4	934.4	932.9	930.8	928.7	926.7	924.5	926.7	928.7	930.8
127.5°	1009.4	1008.0	1006.8	1005.1	1003.1	1001.0	998.9	996.8	998.9	1001.0	1003.1
130°	1053.9	1052.8	1051.8	1050.2	1048.1	1046.0	1044.0	1041.9	1044.0	1046.0	1048.1
132.5°	1096.5	1095.7	1094.8	1093.4	1091.3	1089.2	1087.1	1085.0	1087.1	1089.2	1091.3
135°	1160.6	1159.6	1158.5	1157.2	1155.7	1154.1	1152.6	1150.9	1152.6	1154.1	1155.7
137.5°	1217.7	1217.1	1216.5	1215.3	1213.3	1211.2	1209.3	1207.3	1209.3	1211.2	1213.3
140°	1253.8	1253.0	1252.2	1251.1	1249.5	1248.0	1246.4	1244.9	1246.4	1248.0	1249.5
142.5°	1288.6	1287.8	1287.0	1285.9	1284.2	1282.7	1281.1	1279.6	1281.1	1282.7	1284.2
145°	1337.7	1337.2	1336.7	1335.4	1333.6	1331.8	1330.0	1328.2	1330.0	1331.8	1333.6
147.5°	1380.6	1380.1	1379.6	1378.7	1377.5	1376.3	1375.1	1373.9	1375.1	1376.3	1377.5
150°	1406.8	1406.3	1405.8	1405.2	1404.4	1403.6	1402.8	1402.1	1402.8	1403.6	1404.4
152.5°	1429.9	1429.5	1429.2	1428.9	1428.5	1428.2	1427.7	1427.4	1427.7	1428.2	1428.5
155°	1461.4	1461.1	1460.9	1461.0	1461.5	1462.0	1462.6	1463.1	1462.6	1462.0	1461.5
157.5°	1489.9	1490.2	1490.4	1490.6	1490.6	1490.7	1490.7	1490.8	1490.7	1490.7	1490.6
160°	1505.8	1506.1	1506.3	1506.6	1506.9	1507.1	1507.4	1507.6	1507.4	1507.1	1506.9
162.5°	1519.9	1520.1	1520.5	1520.9	1521.6	1522.3	1523.0	1523.6	1523.0	1522.3	1521.6
165°	1538.6	1538.9	1539.2	1539.7	1540.5	1541.3	1542.1	1542.9	1542.1	1541.3	1540.5
167.5°	1553.2	1553.2	1553.2	1553.7	1554.8	1555.8	1556.8	1557.9	1556.8	1555.8	1554.8
170°	1561.7	1561.7	1561.7	1562.2	1563.2	1564.3	1565.3	1566.3	1565.3	1564.3	1563.2
172.5°	1566.8	1566.6	1566.4	1566.9	1568.2	1569.4	1570.7	1572.0	1570.7	1569.4	1568.2
175°	1574.0	1573.8	1573.5	1574.0	1575.3	1576.6	1577.9	1579.2	1577.9	1576.6	1575.3
177.5°	1576.9	1576.7	1576.5	1576.9	1578.0	1579.0	1580.0	1581.1	1580.0	1579.0	1578.0
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	15.0	16.3	16.3	17.6	17.7	19.0	19.2	18.1	18.3	20.4	18.1
90°	11.6	14.6	18.0	21.4	24.7	28.2	29.2	30.2	31.3	32.3	33.1
92.5°	18.9	19.8	22.4	24.9	27.5	30.0	31.7	33.3	35.0	36.8	37.7
95°	28.8	24.9	27.8	30.6	33.5	36.4	38.2	40.0	41.8	43.6	44.5
97.5°	124.6	112.9	94.1	75.3	56.6	37.8	39.9	41.9	44.0	46.2	47.3
100°	219.1	201.4	160.8	120.1	79.4	38.7	40.8	42.9	44.9	47.1	48.3
102.5°	275.3	254.9	210.5	166.0	121.6	77.2	70.7	64.2	57.8	51.3	48.4
105°	361.1	350.8	327.3	303.9	280.4	256.9	210.8	164.6	118.5	72.3	49.6
107.5°	453.1	456.2	459.9	463.5	467.3	471.0	437.1	403.2	369.4	335.6	301.2
110°	515.2	517.7	520.6	523.4	526.2	529.2	520.6	511.9	503.3	494.7	471.8



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	574.4	576.8	579.7	582.6	585.4	588.2	588.4	588.5	588.8	589.0	585.0
115°	662.1	664.1	666.4	668.7	671.2	673.5	676.1	678.6	681.3	683.9	685.7
117.5°	749.7	751.2	752.5	753.7	754.9	756.1	758.1	760.2	762.3	764.4	765.6
120°	804.9	806.5	807.2	808.0	808.8	809.5	811.6	813.7	815.8	817.9	818.9
122.5°	857.7	859.1	860.1	861.1	862.0	863.0	864.5	866.0	867.5	868.9	869.7
125°	932.9	934.4	935.4	936.5	937.6	938.6	939.2	939.7	940.2	940.7	941.2
127.5°	1005.1	1006.8	1008.0	1009.4	1010.6	1011.8	1012.7	1013.5	1014.3	1015.1	1015.3
130°	1050.2	1051.8	1052.8	1053.9	1054.9	1055.9	1057.0	1058.0	1059.0	1060.2	1060.4
132.5°	1093.4	1094.8	1095.7	1096.5	1097.3	1098.2	1099.2	1100.2	1101.4	1102.4	1102.5
135°	1157.2	1158.5	1159.6	1160.6	1161.6	1162.8	1163.5	1164.3	1165.1	1165.9	1165.9
137.5°	1215.3	1216.5	1217.1	1217.7	1218.2	1218.8	1220.0	1221.3	1222.5	1223.8	1224.2
140°	1251.1	1252.2	1253.0	1253.8	1254.7	1255.4	1256.5	1257.5	1258.5	1259.6	1259.8
142.5°	1285.9	1287.0	1287.8	1288.6	1289.4	1290.1	1291.0	1291.8	1292.6	1293.4	1293.5
145°	1335.4	1336.7	1337.2	1337.7	1338.2	1338.7	1339.2	1339.8	1340.3	1340.8	1341.0
147.5°	1378.7	1379.6	1380.1	1380.6	1381.1	1381.6	1382.2	1382.7	1383.2	1383.7	1383.4
150°	1405.2	1405.8	1406.3	1406.8	1407.4	1408.0	1408.5	1409.0	1409.5	1410.0	1409.9
152.5°	1428.9	1429.2	1429.5	1429.9	1430.2	1430.5	1431.4	1432.3	1433.3	1434.2	1434.1
155°	1461.0	1460.9	1461.1	1461.4	1461.7	1461.9	1463.2	1464.5	1465.8	1467.1	1466.9
157.5°	1490.6	1490.4	1490.2	1489.9	1489.7	1489.3	1491.0	1492.5	1494.0	1495.6	1495.4
160°	1506.6	1506.3	1506.1	1505.8	1505.6	1505.3	1506.9	1508.4	1510.0	1511.6	1511.5
162.5°	1520.9	1520.5	1520.1	1519.9	1519.6	1519.3	1521.2	1523.0	1524.7	1526.5	1526.5
165°	1539.7	1539.2	1538.9	1538.6	1538.4	1538.1	1540.2	1542.4	1544.4	1546.5	1546.6
167.5°	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1555.3	1557.3	1559.4	1561.6	1561.6
170°	1562.2	1561.7	1561.7	1561.7	1561.7	1561.7	1563.7	1565.8	1567.9	1569.9	1569.9
172.5°	1566.9	1566.4	1566.6	1566.8	1567.0	1567.2	1569.3	1571.5	1573.5	1575.6	1575.5
175°	1574.0	1573.5	1573.8	1574.0	1574.3	1574.5	1576.4	1578.2	1580.0	1581.9	1581.7
177.5°	1576.9	1576.5	1576.7	1576.9	1577.1	1577.3	1579.0	1580.6	1582.4	1584.0	1583.8
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	18.2	18.3	17.8	17.2	17.8	18.3	18.2	18.1	20.4	18.3	18.1
90°	33.6	34.1	34.6	35.2	34.6	34.1	33.6	33.1	32.3	31.3	30.2
92.5°	38.0	38.4	38.7	39.0	38.7	38.4	38.0	37.7	36.8	35.0	33.3
95°	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	43.6	41.8	40.0
97.5°	47.6	47.9	48.1	48.4	48.1	47.9	47.6	47.3	46.2	44.0	41.9
100°	48.5	48.8	49.0	49.3	49.0	48.8	48.5	48.3	47.1	44.9	42.9
102.5°	48.8	49.3	49.8	50.2	49.8	49.3	48.8	48.4	51.3	57.8	64.2
105°	50.1	50.6	51.1	51.6	51.1	50.6	50.1	49.6	72.3	118.5	164.6
107.5°	266.5	231.7	196.9	162.2	196.9	231.7	266.5	301.2	335.6	369.4	403.2
110°	434.5	397.2	359.9	322.7	359.9	397.2	434.5	471.8	494.7	503.3	511.9



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	577.1	569.3	561.4	553.5	561.4	569.3	577.1	585.0	589.0	588.8	588.5
115°	686.7	687.8	688.8	689.8	688.8	687.8	686.7	685.7	683.9	681.3	678.6
117.5°	765.8	766.0	766.2	766.4	766.2	766.0	765.8	765.6	764.4	762.3	760.2
120°	818.9	818.9	818.9	818.9	818.9	818.9	818.9	818.9	817.9	815.8	813.7
122.5°	869.9	870.1	870.4	870.6	870.4	870.1	869.9	869.7	868.9	867.5	866.0
125°	941.7	942.3	942.8	943.3	942.8	942.3	941.7	941.2	940.7	940.2	939.7
127.5°	1014.8	1014.3	1013.8	1013.2	1013.8	1014.3	1014.8	1015.3	1015.1	1014.3	1013.5
130°	1059.9	1059.3	1058.8	1058.3	1058.8	1059.3	1059.9	1060.4	1060.2	1059.0	1058.0
132.5°	1101.8	1101.1	1100.3	1099.5	1100.3	1101.1	1101.8	1102.5	1102.4	1101.4	1100.2
135°	1165.1	1164.3	1163.5	1162.8	1163.5	1164.3	1165.1	1165.9	1165.9	1165.1	1164.3
137.5°	1223.7	1223.1	1222.6	1222.0	1222.6	1223.1	1223.7	1224.2	1223.8	1222.5	1221.3
140°	1259.3	1258.8	1258.3	1257.8	1258.3	1258.8	1259.3	1259.8	1259.6	1258.5	1257.5
142.5°	1292.8	1292.0	1291.3	1290.6	1291.3	1292.0	1292.8	1293.5	1293.4	1292.6	1291.8
145°	1341.0	1341.0	1341.0	1341.0	1341.0	1341.0	1341.0	1341.0	1340.8	1340.3	1339.8
147.5°	1382.2	1381.0	1379.8	1378.6	1379.8	1381.0	1382.2	1383.4	1383.7	1383.2	1382.7
150°	1409.1	1408.4	1407.5	1406.7	1407.5	1408.4	1409.1	1409.9	1410.0	1409.5	1409.0
152.5°	1432.9	1431.7	1430.5	1429.3	1430.5	1431.7	1432.9	1434.1	1434.2	1433.3	1432.3
155°	1465.4	1463.9	1462.3	1460.8	1462.3	1463.9	1465.4	1466.9	1467.1	1465.8	1464.5
157.5°	1493.4	1491.3	1489.2	1487.2	1489.2	1491.3	1493.4	1495.4	1495.6	1494.0	1492.5
160°	1509.6	1507.8	1505.9	1504.1	1505.9	1507.8	1509.6	1511.5	1511.6	1510.0	1508.4
162.5°	1524.9	1523.3	1521.7	1520.0	1521.7	1523.3	1524.9	1526.5	1526.5	1524.7	1523.0
165°	1544.8	1543.0	1541.2	1539.3	1541.2	1543.0	1544.8	1546.6	1546.5	1544.4	1542.4
167.5°	1559.4	1557.3	1555.3	1553.2	1555.3	1557.3	1559.4	1561.6	1561.6	1559.4	1557.3
170°	1567.9	1565.8	1563.7	1561.7	1563.7	1565.8	1567.9	1569.9	1569.9	1567.9	1565.8
172.5°	1573.2	1570.9	1568.6	1566.3	1568.6	1570.9	1573.2	1575.5	1575.6	1573.5	1571.5
175°	1579.6	1577.5	1575.5	1573.4	1575.5	1577.5	1579.6	1581.7	1581.9	1580.0	1578.2
177.5°	1581.8	1579.6	1577.5	1575.5	1577.5	1579.6	1581.8	1583.8	1584.0	1582.4	1580.6
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	19.2	19.0	17.7	17.6	16.3	16.3	15.0	15.1	15.2	14.7	15.5
90°	29.2	28.2	24.7	21.4	18.0	14.6	11.6	9.0	6.4	3.7	1.2
92.5°	31.7	30.0	27.5	24.9	22.4	19.8	18.9	19.6	20.4	21.1	21.8
95°	38.2	36.4	33.5	30.6	27.8	24.9	28.8	39.5	50.2	60.9	71.6
97.5°	39.9	37.8	56.6	75.3	94.1	112.9	124.6	129.5	134.2	139.1	143.8
100°	40.8	38.7	79.4	120.1	160.8	201.4	219.1	213.9	208.7	203.5	198.2
102.5°	70.7	77.2	121.6	166.0	210.5	254.9	275.3	271.5	267.7	264.0	260.2
105°	210.8	256.9	280.4	303.9	327.3	350.8	361.1	358.2	355.4	352.5	349.6
107.5°	437.1	471.0	467.3	463.5	459.9	456.2	453.1	450.8	448.6	446.3	443.9
110°	520.6	529.2	526.2	523.4	520.6	517.7	515.2	513.1	511.0	509.0	506.9



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	588.4	588.2	585.4	582.6	579.7	576.8	574.4	572.6	570.7	568.8	566.9
115°	676.1	673.5	671.2	668.7	666.4	664.1	662.1	660.6	658.9	657.4	655.9
117.5°	758.1	756.1	754.9	753.7	752.5	751.2	749.7	747.8	745.8	743.9	741.9
120°	811.6	809.5	808.8	808.0	807.2	806.5	804.9	802.5	800.2	797.8	795.5
122.5°	864.5	863.0	862.0	861.1	860.1	859.1	857.7	855.7	853.7	851.8	849.9
125°	939.2	938.6	937.6	936.5	935.4	934.4	932.9	930.8	928.7	926.7	924.5
127.5°	1012.7	1011.8	1010.6	1009.4	1008.0	1006.8	1005.1	1003.1	1001.0	998.9	996.8
130°	1057.0	1055.9	1054.9	1053.9	1052.8	1051.8	1050.2	1048.1	1046.0	1044.0	1041.9
132.5°	1099.2	1098.2	1097.3	1096.5	1095.7	1094.8	1093.4	1091.3	1089.2	1087.1	1085.0
135°	1163.5	1162.8	1161.6	1160.6	1159.6	1158.5	1157.2	1155.7	1154.1	1152.6	1150.9
137.5°	1220.0	1218.8	1218.2	1217.7	1217.1	1216.5	1215.3	1213.3	1211.2	1209.3	1207.3
140°	1256.5	1255.4	1254.7	1253.8	1253.0	1252.2	1251.1	1249.5	1248.0	1246.4	1244.9
142.5°	1291.0	1290.1	1289.4	1288.6	1287.8	1287.0	1285.9	1284.2	1282.7	1281.1	1279.6
145°	1339.2	1338.7	1338.2	1337.7	1337.2	1336.7	1335.4	1333.6	1331.8	1330.0	1328.2
147.5°	1382.2	1381.6	1381.1	1380.6	1380.1	1379.6	1378.7	1377.5	1376.3	1375.1	1373.9
150°	1408.5	1408.0	1407.4	1406.8	1406.3	1405.8	1405.2	1404.4	1403.6	1402.8	1402.1
152.5°	1431.4	1430.5	1430.2	1429.9	1429.5	1429.2	1428.9	1428.5	1428.2	1427.7	1427.4
155°	1463.2	1461.9	1461.7	1461.4	1461.1	1460.9	1461.0	1461.5	1462.0	1462.6	1463.1
157.5°	1491.0	1489.3	1489.7	1489.9	1490.2	1490.4	1490.6	1490.6	1490.7	1490.7	1490.8
160°	1506.9	1505.3	1505.6	1505.8	1506.1	1506.3	1506.6	1506.9	1507.1	1507.4	1507.6
162.5°	1521.2	1519.3	1519.6	1519.9	1520.1	1520.5	1520.9	1521.6	1522.3	1523.0	1523.6
165°	1540.2	1538.1	1538.4	1538.6	1538.9	1539.2	1539.7	1540.5	1541.3	1542.1	1542.9
167.5°	1555.3	1553.2	1553.2	1553.2	1553.2	1553.2	1553.7	1554.8	1555.8	1556.8	1557.9
170°	1563.7	1561.7	1561.7	1561.7	1561.7	1561.7	1562.2	1563.2	1564.3	1565.3	1566.3
172.5°	1569.3	1567.2	1567.0	1566.8	1566.6	1566.4	1566.9	1568.2	1569.4	1570.7	1572.0
175°	1576.4	1574.5	1574.3	1574.0	1573.8	1573.5	1574.0	1575.3	1576.6	1577.9	1579.2
177.5°	1579.0	1577.3	1577.1	1576.9	1576.7	1576.5	1576.9	1578.0	1579.0	1580.0	1581.1
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	17.3	17.8	20.2	22.0	25.1	27.8	27.8	27.2	27.3	26.8	26.4
90°	3.7	6.4	9.0	11.6	14.6	18.0	21.4	24.7	28.2	29.2	30.2
92.5°	21.1	20.4	19.6	18.9	19.8	22.4	24.9	27.5	30.0	31.7	33.3
95°	60.9	50.2	39.5	28.8	24.9	27.8	30.6	33.5	36.4	38.2	40.0
97.5°	139.1	134.2	129.5	124.6	112.9	94.1	75.3	56.6	37.8	39.9	41.9
100°	203.5	208.7	213.9	219.1	201.4	160.8	120.1	79.4	38.7	40.8	42.9
102.5°	264.0	267.7	271.5	275.3	254.9	210.5	166.0	121.6	77.2	70.7	64.2
105°	352.5	355.4	358.2	361.1	350.8	327.3	303.9	280.4	256.9	210.8	164.6
107.5°	446.3	448.6	450.8	453.1	456.2	459.9	463.5	467.3	471.0	437.1	403.2
110°	509.0	511.0	513.1	515.2	517.7	520.6	523.4	526.2	529.2	520.6	511.9



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	568.8	570.7	572.6	574.4	576.8	579.7	582.6	585.4	588.2	588.4	588.5
115°	657.4	658.9	660.6	662.1	664.1	666.4	668.7	671.2	673.5	676.1	678.6
117.5°	743.9	745.8	747.8	749.7	751.2	752.5	753.7	754.9	756.1	758.1	760.2
120°	797.8	800.2	802.5	804.9	806.5	807.2	808.0	808.8	809.5	811.6	813.7
122.5°	851.8	853.7	855.7	857.7	859.1	860.1	861.1	862.0	863.0	864.5	866.0
125°	926.7	928.7	930.8	932.9	934.4	935.4	936.5	937.6	938.6	939.2	939.7
127.5°	998.9	1001.0	1003.1	1005.1	1006.8	1008.0	1009.4	1010.6	1011.8	1012.7	1013.5
130°	1044.0	1046.0	1048.1	1050.2	1051.8	1052.8	1053.9	1054.9	1055.9	1057.0	1058.0
132.5°	1087.1	1089.2	1091.3	1093.4	1094.8	1095.7	1096.5	1097.3	1098.2	1099.2	1100.2
135°	1152.6	1154.1	1155.7	1157.2	1158.5	1159.6	1160.6	1161.6	1162.8	1163.5	1164.3
137.5°	1209.3	1211.2	1213.3	1215.3	1216.5	1217.1	1217.7	1218.2	1218.8	1220.0	1221.3
140°	1246.4	1248.0	1249.5	1251.1	1252.2	1253.0	1253.8	1254.7	1255.4	1256.5	1257.5
142.5°	1281.1	1282.7	1284.2	1285.9	1287.0	1287.8	1288.6	1289.4	1290.1	1291.0	1291.8
145°	1330.0	1331.8	1333.6	1335.4	1336.7	1337.2	1337.7	1338.2	1338.7	1339.2	1339.8
147.5°	1375.1	1376.3	1377.5	1378.7	1379.6	1380.1	1380.6	1381.1	1381.6	1382.2	1382.7
150°	1402.8	1403.6	1404.4	1405.2	1405.8	1406.3	1406.8	1407.4	1408.0	1408.5	1409.0
152.5°	1427.7	1428.2	1428.5	1428.9	1429.2	1429.5	1429.9	1430.2	1430.5	1431.4	1432.3
155°	1462.6	1462.0	1461.5	1461.0	1460.9	1461.1	1461.4	1461.7	1461.9	1463.2	1464.5
157.5°	1490.7	1490.7	1490.6	1490.6	1490.4	1490.2	1489.9	1489.7	1489.3	1491.0	1492.5
160°	1507.4	1507.1	1506.9	1506.6	1506.3	1506.1	1505.8	1505.6	1505.3	1506.9	1508.4
162.5°	1523.0	1522.3	1521.6	1520.9	1520.5	1520.1	1519.9	1519.6	1519.3	1521.2	1523.0
165°	1542.1	1541.3	1540.5	1539.7	1539.2	1538.9	1538.6	1538.4	1538.1	1540.2	1542.4
167.5°	1556.8	1555.8	1554.8	1553.7	1553.2	1553.2	1553.2	1553.2	1553.2	1555.3	1557.3
170°	1565.3	1564.3	1563.2	1562.2	1561.7	1561.7	1561.7	1561.7	1561.7	1563.7	1565.8
172.5°	1570.7	1569.4	1568.2	1566.9	1566.4	1566.6	1566.8	1567.0	1567.2	1569.3	1571.5
175°	1577.9	1576.6	1575.3	1574.0	1573.5	1573.8	1574.0	1574.3	1574.5	1576.4	1578.2
177.5°	1580.0	1579.0	1578.0	1576.9	1576.5	1576.7	1576.9	1577.1	1577.3	1579.0	1580.6
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-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°	26.0	25.5	25.0	25.8	25.2	24.7	26.1
90°	31.3	32.3	33.1	33.6	34.1	34.6	35.2
92.5°	35.0	36.8	37.7	38.0	38.4	38.7	39.0
95°	41.8	43.6	44.5	44.5	44.5	44.5	44.5
97.5°	44.0	46.2	47.3	47.6	47.9	48.1	48.4
100°	44.9	47.1	48.3	48.5	48.8	49.0	49.3
102.5°	57.8	51.3	48.4	48.8	49.3	49.8	50.2
105°	118.5	72.3	49.6	50.1	50.6	51.1	51.6
107.5°	369.4	335.6	301.2	266.5	231.7	196.9	162.2
110°	503.3	494.7	471.8	434.5	397.2	359.9	322.7



TEST NUMBER: P332081-840

CATALOG NUMBER: S123DIP-S1165D1195U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	588.8	589.0	585.0	577.1	569.3	561.4	553.5
115°	681.3	683.9	685.7	686.7	687.8	688.8	689.8
117.5°	762.3	764.4	765.6	765.8	766.0	766.2	766.4
120°	815.8	817.9	818.9	818.9	818.9	818.9	818.9
122.5°	867.5	868.9	869.7	869.9	870.1	870.4	870.6
125°	940.2	940.7	941.2	941.7	942.3	942.8	943.3
127.5°	1014.3	1015.1	1015.3	1014.8	1014.3	1013.8	1013.2
130°	1059.0	1060.2	1060.4	1059.9	1059.3	1058.8	1058.3
132.5°	1101.4	1102.4	1102.5	1101.8	1101.1	1100.3	1099.5
135°	1165.1	1165.9	1165.9	1165.1	1164.3	1163.5	1162.8
137.5°	1222.5	1223.8	1224.2	1223.7	1223.1	1222.6	1222.0
140°	1258.5	1259.6	1259.8	1259.3	1258.8	1258.3	1257.8
142.5°	1292.6	1293.4	1293.5	1292.8	1292.0	1291.3	1290.6
145°	1340.3	1340.8	1341.0	1341.0	1341.0	1341.0	1341.0
147.5°	1383.2	1383.7	1383.4	1382.2	1381.0	1379.8	1378.6
150°	1409.5	1410.0	1409.9	1409.1	1408.4	1407.5	1406.7
152.5°	1433.3	1434.2	1434.1	1432.9	1431.7	1430.5	1429.3
155°	1465.8	1467.1	1466.9	1465.4	1463.9	1462.3	1460.8
157.5°	1494.0	1495.6	1495.4	1493.4	1491.3	1489.2	1487.2
160°	1510.0	1511.6	1511.5	1509.6	1507.8	1505.9	1504.1
162.5°	1524.7	1526.5	1526.5	1524.9	1523.3	1521.7	1520.0
165°	1544.4	1546.5	1546.6	1544.8	1543.0	1541.2	1539.3
167.5°	1559.4	1561.6	1561.6	1559.4	1557.3	1555.3	1553.2
170°	1567.9	1569.9	1569.9	1567.9	1565.8	1563.7	1561.7
172.5°	1573.5	1575.6	1575.5	1573.2	1570.9	1568.6	1566.3
175°	1580.0	1581.9	1581.7	1579.6	1577.5	1575.5	1573.4
177.5°	1582.4	1584.0	1583.8	1581.8	1579.6	1577.5	1575.5
180°	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2	1579.2

(END OF REPORT)