

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: P332063-840

Luminaire Tested: **S123DIP-S1165D805U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332063-840
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-S1165D805U840-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 805 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8187.9 lumens
Efficiency: N/A
Efficacy: 134.9 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: Semi-Direct

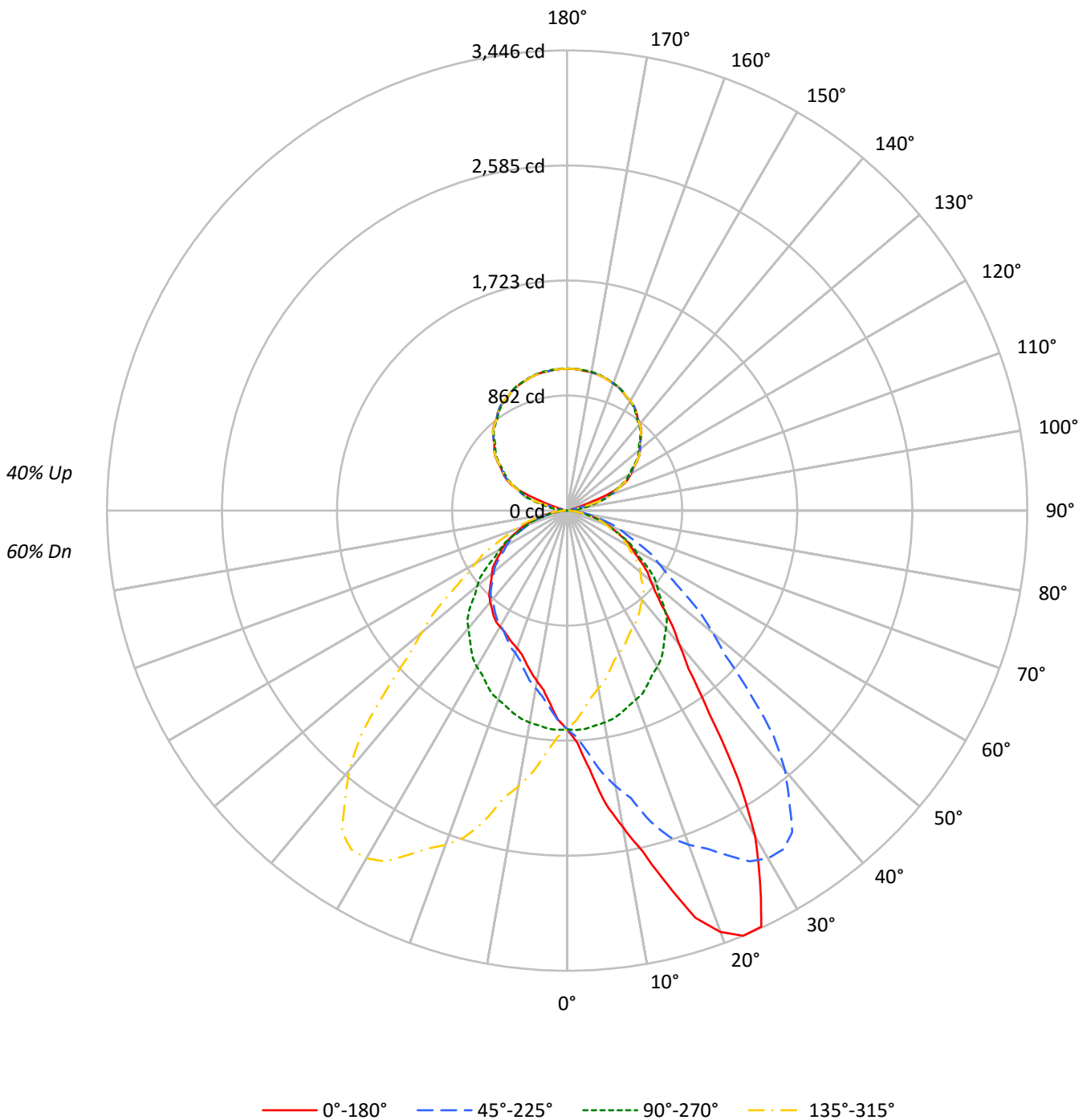
Input Watts (W): 60.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

Luminous Intensity Polar Plot





TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	100	96	92	89	94	90	87	84	79	76	74	68	66	65	59	57	56	52
2	92	84	78	73	86	79	74	69	69	65	62	60	57	55	52	50	48	44
3	84	74	67	61	78	70	63	58	61	56	52	54	50	47	46	43	41	37
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	38	36	32
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27	25
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	31	27	24	22
8	56	44	36	31	52	41	34	29	37	31	27	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	23	20	18
10	49	37	29	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	2.0
10°-20°	517.4	6.3
20°-30°	868.4	10.6
30°-40°	983.3	12.0
40°-50°	881.8	10.8
50°-60°	711.6	8.7
60°-70°	495.9	6.1
70°-80°	260.6	3.2
80°-90°	66.7	0.8
90°-100°	38.6	0.5
100°-110°	184.1	2.2
110°-120°	442.3	5.4
120°-130°	563.2	6.9
130°-140°	601.8	7.3
140°-150°	562.7	6.9
150°-160°	453.9	5.5
160°-170°	293.0	3.6
170°-180°	101.0	1.2
0°-30°	1547.2	18.9
0°-40°	2530.6	30.9
0°-60°	4124.0	50.4
0°-90°	4947.2	60.4
90°-120°	665.1	8.1
90°-150°	2392.8	29.2
90°-180°	3241.0	39.6
0°-180°	8187.9	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°	24	1	24	1	24	13
95°	30	48	30	48	30	25
105°	35	235	35	235	35	79
115°	464	441	464	441	464	429
125°	635	622	635	622	635	567
135°	782	774	782	774	782	603
145°	902	894	902	894	902	563
155°	983	984	983	984	983	453
165°	1036	1038	1036	1038	1036	292
175°	1059	1063	1059	1063	1059	101
180°	1063	1063	1063	1063	1063	



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	23.8	22.4	23.0	23.5	22.8	23.4	23.9	24.4	24.8	25.3	25.5
90°	23.7	23.3	23.0	22.6	22.3	21.7	21.0	20.4	19.7	19.0	16.7
92.5°	26.3	26.0	25.8	25.5	25.3	24.7	23.5	22.4	21.3	20.2	18.5
95°	30.0	30.0	30.0	30.0	30.0	29.4	28.2	27.0	25.8	24.4	22.5
97.5°	32.5	32.3	32.2	32.0	31.8	31.0	29.6	28.3	26.9	25.4	38.1
100°	33.1	33.0	32.8	32.6	32.4	31.7	30.3	28.9	27.5	26.1	53.4
102.5°	33.8	33.4	33.1	32.8	32.5	34.5	38.9	43.2	47.6	51.9	81.8
105°	34.7	34.4	34.0	33.7	33.3	48.7	79.8	110.8	141.9	172.9	188.6
107.5°	109.1	132.5	155.9	179.4	202.7	225.8	248.6	271.4	294.2	316.9	314.4
110°	217.1	242.2	267.3	292.4	317.5	333.0	338.7	344.5	350.3	356.1	354.2



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	372.5	377.8	383.0	388.4	393.6	396.3	396.2	396.1	396.0	395.9	393.9
115°	464.2	463.5	462.8	462.1	461.4	460.2	458.5	456.7	454.9	453.2	451.6
117.5°	515.7	515.5	515.4	515.3	515.1	514.3	513.0	511.6	510.2	508.8	508.0
120°	551.1	551.1	551.1	551.1	551.1	550.4	549.0	547.5	546.1	544.7	544.2
122.5°	585.8	585.7	585.5	585.4	585.2	584.7	583.7	582.7	581.8	580.8	580.1
125°	634.8	634.4	634.1	633.7	633.4	633.0	632.7	632.3	632.0	631.6	630.9
127.5°	681.9	682.2	682.6	682.9	683.2	683.1	682.6	682.0	681.5	680.9	680.0
130°	712.2	712.5	712.9	713.2	713.6	713.4	712.7	712.0	711.2	710.5	709.8
132.5°	739.9	740.4	740.9	741.4	741.8	741.7	741.0	740.3	739.7	739.0	738.4
135°	782.4	782.9	783.5	784.0	784.5	784.5	784.0	783.5	782.9	782.4	781.7
137.5°	822.3	822.7	823.0	823.4	823.7	823.5	822.6	821.8	821.0	820.1	819.7
140°	846.4	846.7	847.1	847.4	847.8	847.6	846.9	846.2	845.5	844.8	844.2
142.5°	868.5	869.0	869.4	869.9	870.4	870.4	869.8	869.3	868.7	868.2	867.6
145°	902.4	902.4	902.4	902.4	902.4	902.2	901.9	901.5	901.2	900.8	900.5
147.5°	927.7	928.5	929.3	930.1	930.9	931.1	930.8	930.4	930.1	929.7	929.4
150°	946.6	947.2	947.7	948.2	948.8	948.8	948.5	948.1	947.8	947.5	947.1
152.5°	961.8	962.6	963.4	964.2	965.0	965.1	964.4	963.8	963.2	962.6	962.4
155°	982.9	984.0	985.0	986.1	987.1	987.2	986.3	985.5	984.6	983.7	983.5
157.5°	1000.8	1002.2	1003.5	1004.9	1006.2	1006.4	1005.3	1004.3	1003.3	1002.2	1002.4
160°	1012.2	1013.4	1014.6	1015.8	1017.0	1017.1	1016.1	1015.0	1014.0	1012.9	1013.1
162.5°	1022.9	1024.0	1025.0	1026.1	1027.2	1027.1	1026.0	1024.8	1023.6	1022.4	1022.6
165°	1035.8	1037.0	1038.2	1039.6	1040.8	1040.7	1039.3	1037.8	1036.4	1035.0	1035.2
167.5°	1045.1	1046.5	1047.9	1049.4	1050.8	1050.8	1049.4	1047.9	1046.5	1045.1	1045.1
170°	1050.9	1052.3	1053.6	1055.0	1056.4	1056.4	1055.0	1053.6	1052.3	1050.9	1050.9
172.5°	1054.0	1055.5	1057.1	1058.6	1060.2	1060.3	1058.8	1057.4	1056.0	1054.6	1054.5
175°	1058.7	1060.2	1061.6	1063.0	1064.3	1064.4	1063.2	1062.0	1060.8	1059.6	1059.3
177.5°	1060.2	1061.6	1063.0	1064.4	1065.8	1065.9	1064.8	1063.7	1062.6	1061.4	1061.3
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	26.4	26.6	24.2	21.2	19.6	17.4	17.1	15.3	14.4	14.8	14.5
90°	14.3	12.1	9.8	7.8	6.1	4.3	2.5	0.8	2.5	4.3	6.1
92.5°	16.8	15.0	13.3	12.7	13.2	13.7	14.2	14.6	14.2	13.7	13.2
95°	20.6	18.7	16.8	19.4	26.6	33.7	41.0	48.2	41.0	33.7	26.6
97.5°	50.7	63.3	75.9	83.9	87.2	90.4	93.6	96.7	93.6	90.4	87.2
100°	80.8	108.2	135.5	147.4	143.9	140.5	136.9	133.4	136.9	140.5	143.9
102.5°	111.7	141.7	171.6	185.2	182.7	180.2	177.6	175.1	177.6	180.2	182.7
105°	204.5	220.3	236.1	243.0	241.1	239.1	237.2	235.3	237.2	239.1	241.1
107.5°	311.9	309.4	306.9	304.9	303.4	301.8	300.3	298.7	300.3	301.8	303.4
110°	352.2	350.3	348.3	346.7	345.3	343.9	342.4	341.0	342.4	343.9	345.3



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	392.0	390.1	388.1	386.6	385.3	384.1	382.7	381.5	382.7	384.1	385.3
115°	450.0	448.5	446.9	445.6	444.5	443.4	442.4	441.3	442.4	443.4	444.5
117.5°	507.2	506.3	505.5	504.4	503.2	501.9	500.6	499.3	500.6	501.9	503.2
120°	543.7	543.2	542.7	541.6	540.0	538.5	536.8	535.3	536.8	538.5	540.0
122.5°	579.5	578.8	578.0	577.1	575.8	574.5	573.2	571.9	573.2	574.5	575.8
125°	630.2	629.5	628.8	627.7	626.3	624.9	623.5	622.2	623.5	624.9	626.3
127.5°	679.2	678.3	677.5	676.4	675.0	673.6	672.2	670.8	672.2	673.6	675.0
130°	709.1	708.4	707.7	706.7	705.3	703.9	702.5	701.0	702.5	703.9	705.3
132.5°	737.8	737.3	736.7	735.8	734.4	733.0	731.5	730.1	731.5	733.0	734.4
135°	781.0	780.3	779.6	778.7	777.7	776.6	775.6	774.5	775.6	776.6	777.7
137.5°	819.4	819.0	818.6	817.7	816.4	815.1	813.7	812.4	813.7	815.1	816.4
140°	843.7	843.2	842.6	841.9	840.8	839.8	838.7	837.7	838.7	839.8	840.8
142.5°	867.1	866.6	866.1	865.3	864.2	863.1	862.1	861.0	862.1	863.1	864.2
145°	900.1	899.8	899.4	898.7	897.4	896.2	894.9	893.7	894.9	896.2	897.4
147.5°	929.0	928.7	928.4	927.8	927.0	926.1	925.3	924.5	925.3	926.1	927.0
150°	946.7	946.3	946.0	945.5	945.0	944.5	944.0	943.4	944.0	944.5	945.0
152.5°	962.1	961.9	961.7	961.5	961.3	961.0	960.8	960.5	960.8	961.0	961.3
155°	983.4	983.2	983.0	983.1	983.5	983.8	984.2	984.5	984.2	983.8	983.5
157.5°	1002.6	1002.7	1002.9	1003.0	1003.0	1003.1	1003.1	1003.1	1003.1	1003.1	1003.0
160°	1013.3	1013.5	1013.6	1013.8	1014.0	1014.2	1014.3	1014.5	1014.3	1014.2	1014.0
162.5°	1022.8	1022.9	1023.1	1023.4	1023.9	1024.3	1024.8	1025.2	1024.8	1024.3	1023.9
165°	1035.4	1035.6	1035.7	1036.1	1036.6	1037.1	1037.6	1038.2	1037.6	1037.1	1036.6
167.5°	1045.1	1045.1	1045.1	1045.5	1046.2	1046.9	1047.6	1048.3	1047.6	1046.9	1046.2
170°	1050.9	1050.9	1050.9	1051.2	1051.9	1052.6	1053.3	1054.0	1053.3	1052.6	1051.9
172.5°	1054.3	1054.2	1054.1	1054.4	1055.2	1056.1	1056.9	1057.7	1056.9	1056.1	1055.2
175°	1059.1	1058.9	1058.8	1059.1	1060.1	1061.0	1061.8	1062.7	1061.8	1061.0	1060.1
177.5°	1061.2	1061.0	1060.9	1061.2	1061.9	1062.6	1063.3	1063.9	1063.3	1062.6	1061.9
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	14.2	15.2	15.1	16.3	16.1	17.2	17.3	16.2	16.3	18.3	15.9
90°	7.8	9.8	12.1	14.3	16.7	19.0	19.7	20.4	21.0	21.7	22.3
92.5°	12.7	13.3	15.0	16.8	18.5	20.2	21.3	22.4	23.5	24.7	25.3
95°	19.4	16.8	18.7	20.6	22.5	24.4	25.8	27.0	28.2	29.4	30.0
97.5°	83.9	75.9	63.3	50.7	38.1	25.4	26.9	28.3	29.6	31.0	31.8
100°	147.4	135.5	108.2	80.8	53.4	26.1	27.5	28.9	30.3	31.7	32.4
102.5°	185.2	171.6	141.7	111.7	81.8	51.9	47.6	43.2	38.9	34.5	32.5
105°	243.0	236.1	220.3	204.5	188.6	172.9	141.9	110.8	79.8	48.7	33.3
107.5°	304.9	306.9	309.4	311.9	314.4	316.9	294.2	271.4	248.6	225.8	202.7
110°	346.7	348.3	350.3	352.2	354.2	356.1	350.3	344.5	338.7	333.0	317.5



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	386.6	388.1	390.1	392.0	393.9	395.9	396.0	396.1	396.2	396.3	393.6
115°	445.6	446.9	448.5	450.0	451.6	453.2	454.9	456.7	458.5	460.2	461.4
117.5°	504.4	505.5	506.3	507.2	508.0	508.8	510.2	511.6	513.0	514.3	515.1
120°	541.6	542.7	543.2	543.7	544.2	544.7	546.1	547.5	549.0	550.4	551.1
122.5°	577.1	578.0	578.8	579.5	580.1	580.8	581.8	582.7	583.7	584.7	585.2
125°	627.7	628.8	629.5	630.2	630.9	631.6	632.0	632.3	632.7	633.0	633.4
127.5°	676.4	677.5	678.3	679.2	680.0	680.9	681.5	682.0	682.6	683.1	683.2
130°	706.7	707.7	708.4	709.1	709.8	710.5	711.2	712.0	712.7	713.4	713.6
132.5°	735.8	736.7	737.3	737.8	738.4	739.0	739.7	740.3	741.0	741.7	741.8
135°	778.7	779.6	780.3	781.0	781.7	782.4	782.9	783.5	784.0	784.5	784.5
137.5°	817.7	818.6	819.0	819.4	819.7	820.1	821.0	821.8	822.6	823.5	823.7
140°	841.9	842.6	843.2	843.7	844.2	844.8	845.5	846.2	846.9	847.6	847.8
142.5°	865.3	866.1	866.6	867.1	867.6	868.2	868.7	869.3	869.8	870.4	870.4
145°	898.7	899.4	899.8	900.1	900.5	900.8	901.2	901.5	901.9	902.2	902.4
147.5°	927.8	928.4	928.7	929.0	929.4	929.7	930.1	930.4	930.8	931.1	930.9
150°	945.5	946.0	946.3	946.7	947.1	947.5	947.8	948.1	948.5	948.8	948.8
152.5°	961.5	961.7	961.9	962.1	962.4	962.6	963.2	963.8	964.4	965.1	965.0
155°	983.1	983.0	983.2	983.4	983.5	983.7	984.6	985.5	986.3	987.2	987.1
157.5°	1003.0	1002.9	1002.7	1002.6	1002.4	1002.2	1003.3	1004.3	1005.3	1006.4	1006.2
160°	1013.8	1013.6	1013.5	1013.3	1013.1	1012.9	1014.0	1015.0	1016.1	1017.1	1017.0
162.5°	1023.4	1023.1	1022.9	1022.8	1022.6	1022.4	1023.6	1024.8	1026.0	1027.1	1027.2
165°	1036.1	1035.7	1035.6	1035.4	1035.2	1035.0	1036.4	1037.8	1039.3	1040.7	1040.8
167.5°	1045.5	1045.1	1045.1	1045.1	1045.1	1045.1	1046.5	1047.9	1049.4	1050.8	1050.8
170°	1051.2	1050.9	1050.9	1050.9	1050.9	1050.9	1052.3	1053.6	1055.0	1056.4	1056.4
172.5°	1054.4	1054.1	1054.2	1054.3	1054.5	1054.6	1056.0	1057.4	1058.8	1060.3	1060.2
175°	1059.1	1058.8	1058.9	1059.1	1059.3	1059.6	1060.8	1062.0	1063.2	1064.4	1064.3
177.5°	1061.2	1060.9	1061.0	1061.2	1061.3	1061.4	1062.6	1063.7	1064.8	1065.9	1065.8
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	16.0	16.1	15.5	14.9	15.5	16.1	16.0	15.9	18.3	16.3	16.2
90°	22.6	23.0	23.3	23.7	23.3	23.0	22.6	22.3	21.7	21.0	20.4
92.5°	25.5	25.8	26.0	26.3	26.0	25.8	25.5	25.3	24.7	23.5	22.4
95°	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.4	28.2	27.0
97.5°	32.0	32.2	32.3	32.5	32.3	32.2	32.0	31.8	31.0	29.6	28.3
100°	32.6	32.8	33.0	33.1	33.0	32.8	32.6	32.4	31.7	30.3	28.9
102.5°	32.8	33.1	33.4	33.8	33.4	33.1	32.8	32.5	34.5	38.9	43.2
105°	33.7	34.0	34.4	34.7	34.4	34.0	33.7	33.3	48.7	79.8	110.8
107.5°	179.4	155.9	132.5	109.1	132.5	155.9	179.4	202.7	225.8	248.6	271.4
110°	292.4	267.3	242.2	217.1	242.2	267.3	292.4	317.5	333.0	338.7	344.5



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	388.4	383.0	377.8	372.5	377.8	383.0	388.4	393.6	396.3	396.2	396.1
115°	462.1	462.8	463.5	464.2	463.5	462.8	462.1	461.4	460.2	458.5	456.7
117.5°	515.3	515.4	515.5	515.7	515.5	515.4	515.3	515.1	514.3	513.0	511.6
120°	551.1	551.1	551.1	551.1	551.1	551.1	551.1	551.1	550.4	549.0	547.5
122.5°	585.4	585.5	585.7	585.8	585.7	585.5	585.4	585.2	584.7	583.7	582.7
125°	633.7	634.1	634.4	634.8	634.4	634.1	633.7	633.4	633.0	632.7	632.3
127.5°	682.9	682.6	682.2	681.9	682.2	682.6	682.9	683.2	683.1	682.6	682.0
130°	713.2	712.9	712.5	712.2	712.5	712.9	713.2	713.6	713.4	712.7	712.0
132.5°	741.4	740.9	740.4	739.9	740.4	740.9	741.4	741.8	741.7	741.0	740.3
135°	784.0	783.5	782.9	782.4	782.9	783.5	784.0	784.5	784.5	784.0	783.5
137.5°	823.4	823.0	822.7	822.3	822.7	823.0	823.4	823.7	823.5	822.6	821.8
140°	847.4	847.1	846.7	846.4	846.7	847.1	847.4	847.8	847.6	846.9	846.2
142.5°	869.9	869.4	869.0	868.5	869.0	869.4	869.9	870.4	870.4	869.8	869.3
145°	902.4	902.4	902.4	902.4	902.4	902.4	902.4	902.4	902.2	901.9	901.5
147.5°	930.1	929.3	928.5	927.7	928.5	929.3	930.1	930.9	931.1	930.8	930.4
150°	948.2	947.7	947.2	946.6	947.2	947.7	948.2	948.8	948.8	948.5	948.1
152.5°	964.2	963.4	962.6	961.8	962.6	963.4	964.2	965.0	965.1	964.4	963.8
155°	986.1	985.0	984.0	982.9	984.0	985.0	986.1	987.1	987.2	986.3	985.5
157.5°	1004.9	1003.5	1002.2	1000.8	1002.2	1003.5	1004.9	1006.2	1006.4	1005.3	1004.3
160°	1015.8	1014.6	1013.4	1012.2	1013.4	1014.6	1015.8	1017.0	1017.1	1016.1	1015.0
162.5°	1026.1	1025.0	1024.0	1022.9	1024.0	1025.0	1026.1	1027.2	1027.1	1026.0	1024.8
165°	1039.6	1038.2	1037.0	1035.8	1037.0	1038.2	1039.6	1040.8	1040.7	1039.3	1037.8
167.5°	1049.4	1047.9	1046.5	1045.1	1046.5	1047.9	1049.4	1050.8	1050.8	1049.4	1047.9
170°	1055.0	1053.6	1052.3	1050.9	1052.3	1053.6	1055.0	1056.4	1056.4	1055.0	1053.6
172.5°	1058.6	1057.1	1055.5	1054.0	1055.5	1057.1	1058.6	1060.2	1060.3	1058.8	1057.4
175°	1063.0	1061.6	1060.2	1058.7	1060.2	1061.6	1063.0	1064.3	1064.4	1063.2	1062.0
177.5°	1064.4	1063.0	1061.6	1060.2	1061.6	1063.0	1064.4	1065.8	1065.9	1064.8	1063.7
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	17.3	17.2	16.1	16.3	15.1	15.2	14.2	14.5	14.8	14.4	15.3
90°	19.7	19.0	16.7	14.3	12.1	9.8	7.8	6.1	4.3	2.5	0.8
92.5°	21.3	20.2	18.5	16.8	15.0	13.3	12.7	13.2	13.7	14.2	14.6
95°	25.8	24.4	22.5	20.6	18.7	16.8	19.4	26.6	33.7	41.0	48.2
97.5°	26.9	25.4	38.1	50.7	63.3	75.9	83.9	87.2	90.4	93.6	96.7
100°	27.5	26.1	53.4	80.8	108.2	135.5	147.4	143.9	140.5	136.9	133.4
102.5°	47.6	51.9	81.8	111.7	141.7	171.6	185.2	182.7	180.2	177.6	175.1
105°	141.9	172.9	188.6	204.5	220.3	236.1	243.0	241.1	239.1	237.2	235.3
107.5°	294.2	316.9	314.4	311.9	309.4	306.9	304.9	303.4	301.8	300.3	298.7
110°	350.3	356.1	354.2	352.2	350.3	348.3	346.7	345.3	343.9	342.4	341.0



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	396.0	395.9	393.9	392.0	390.1	388.1	386.6	385.3	384.1	382.7	381.5
115°	454.9	453.2	451.6	450.0	448.5	446.9	445.6	444.5	443.4	442.4	441.3
117.5°	510.2	508.8	508.0	507.2	506.3	505.5	504.4	503.2	501.9	500.6	499.3
120°	546.1	544.7	544.2	543.7	543.2	542.7	541.6	540.0	538.5	536.8	535.3
122.5°	581.8	580.8	580.1	579.5	578.8	578.0	577.1	575.8	574.5	573.2	571.9
125°	632.0	631.6	630.9	630.2	629.5	628.8	627.7	626.3	624.9	623.5	622.2
127.5°	681.5	680.9	680.0	679.2	678.3	677.5	676.4	675.0	673.6	672.2	670.8
130°	711.2	710.5	709.8	709.1	708.4	707.7	706.7	705.3	703.9	702.5	701.0
132.5°	739.7	739.0	738.4	737.8	737.3	736.7	735.8	734.4	733.0	731.5	730.1
135°	782.9	782.4	781.7	781.0	780.3	779.6	778.7	777.7	776.6	775.6	774.5
137.5°	821.0	820.1	819.7	819.4	819.0	818.6	817.7	816.4	815.1	813.7	812.4
140°	845.5	844.8	844.2	843.7	843.2	842.6	841.9	840.8	839.8	838.7	837.7
142.5°	868.7	868.2	867.6	867.1	866.6	866.1	865.3	864.2	863.1	862.1	861.0
145°	901.2	900.8	900.5	900.1	899.8	899.4	898.7	897.4	896.2	894.9	893.7
147.5°	930.1	929.7	929.4	929.0	928.7	928.4	927.8	927.0	926.1	925.3	924.5
150°	947.8	947.5	947.1	946.7	946.3	946.0	945.5	945.0	944.5	944.0	943.4
152.5°	963.2	962.6	962.4	962.1	961.9	961.7	961.5	961.3	961.0	960.8	960.5
155°	984.6	983.7	983.5	983.4	983.2	983.0	983.1	983.5	983.8	984.2	984.5
157.5°	1003.3	1002.2	1002.4	1002.6	1002.7	1002.9	1003.0	1003.0	1003.1	1003.1	1003.1
160°	1014.0	1012.9	1013.1	1013.3	1013.5	1013.6	1013.8	1014.0	1014.2	1014.3	1014.5
162.5°	1023.6	1022.4	1022.6	1022.8	1022.9	1023.1	1023.4	1023.9	1024.3	1024.8	1025.2
165°	1036.4	1035.0	1035.2	1035.4	1035.6	1035.7	1036.1	1036.6	1037.1	1037.6	1038.2
167.5°	1046.5	1045.1	1045.1	1045.1	1045.1	1045.1	1045.5	1046.2	1046.9	1047.6	1048.3
170°	1052.3	1050.9	1050.9	1050.9	1050.9	1050.9	1051.2	1051.9	1052.6	1053.3	1054.0
172.5°	1056.0	1054.6	1054.5	1054.3	1054.2	1054.1	1054.4	1055.2	1056.1	1056.9	1057.7
175°	1060.8	1059.6	1059.3	1059.1	1058.9	1058.8	1059.1	1060.1	1061.0	1061.8	1062.7
177.5°	1062.6	1061.4	1061.3	1061.2	1061.0	1060.9	1061.2	1061.9	1062.6	1063.3	1063.9
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	17.1	17.4	19.6	21.2	24.2	26.6	26.4	25.5	25.3	24.8	24.4
90°	2.5	4.3	6.1	7.8	9.8	12.1	14.3	16.7	19.0	19.7	20.4
92.5°	14.2	13.7	13.2	12.7	13.3	15.0	16.8	18.5	20.2	21.3	22.4
95°	41.0	33.7	26.6	19.4	16.8	18.7	20.6	22.5	24.4	25.8	27.0
97.5°	93.6	90.4	87.2	83.9	75.9	63.3	50.7	38.1	25.4	26.9	28.3
100°	136.9	140.5	143.9	147.4	135.5	108.2	80.8	53.4	26.1	27.5	28.9
102.5°	177.6	180.2	182.7	185.2	171.6	141.7	111.7	81.8	51.9	47.6	43.2
105°	237.2	239.1	241.1	243.0	236.1	220.3	204.5	188.6	172.9	141.9	110.8
107.5°	300.3	301.8	303.4	304.9	306.9	309.4	311.9	314.4	316.9	294.2	271.4
110°	342.4	343.9	345.3	346.7	348.3	350.3	352.2	354.2	356.1	350.3	344.5



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	382.7	384.1	385.3	386.6	388.1	390.1	392.0	393.9	395.9	396.0	396.1
115°	442.4	443.4	444.5	445.6	446.9	448.5	450.0	451.6	453.2	454.9	456.7
117.5°	500.6	501.9	503.2	504.4	505.5	506.3	507.2	508.0	508.8	510.2	511.6
120°	536.8	538.5	540.0	541.6	542.7	543.2	543.7	544.2	544.7	546.1	547.5
122.5°	573.2	574.5	575.8	577.1	578.0	578.8	579.5	580.1	580.8	581.8	582.7
125°	623.5	624.9	626.3	627.7	628.8	629.5	630.2	630.9	631.6	632.0	632.3
127.5°	672.2	673.6	675.0	676.4	677.5	678.3	679.2	680.0	680.9	681.5	682.0
130°	702.5	703.9	705.3	706.7	707.7	708.4	709.1	709.8	710.5	711.2	712.0
132.5°	731.5	733.0	734.4	735.8	736.7	737.3	737.8	738.4	739.0	739.7	740.3
135°	775.6	776.6	777.7	778.7	779.6	780.3	781.0	781.7	782.4	782.9	783.5
137.5°	813.7	815.1	816.4	817.7	818.6	819.0	819.4	819.7	820.1	821.0	821.8
140°	838.7	839.8	840.8	841.9	842.6	843.2	843.7	844.2	844.8	845.5	846.2
142.5°	862.1	863.1	864.2	865.3	866.1	866.6	867.1	867.6	868.2	868.7	869.3
145°	894.9	896.2	897.4	898.7	899.4	899.8	900.1	900.5	900.8	901.2	901.5
147.5°	925.3	926.1	927.0	927.8	928.4	928.7	929.0	929.4	929.7	930.1	930.4
150°	944.0	944.5	945.0	945.5	946.0	946.3	946.7	947.1	947.5	947.8	948.1
152.5°	960.8	961.0	961.3	961.5	961.7	961.9	962.1	962.4	962.6	963.2	963.8
155°	984.2	983.8	983.5	983.1	983.0	983.2	983.4	983.5	983.7	984.6	985.5
157.5°	1003.1	1003.1	1003.0	1003.0	1002.9	1002.7	1002.6	1002.4	1002.2	1003.3	1004.3
160°	1014.3	1014.2	1014.0	1013.8	1013.6	1013.5	1013.3	1013.1	1012.9	1014.0	1015.0
162.5°	1024.8	1024.3	1023.9	1023.4	1023.1	1022.9	1022.8	1022.6	1022.4	1023.6	1024.8
165°	1037.6	1037.1	1036.6	1036.1	1035.7	1035.6	1035.4	1035.2	1035.0	1036.4	1037.8
167.5°	1047.6	1046.9	1046.2	1045.5	1045.1	1045.1	1045.1	1045.1	1045.1	1046.5	1047.9
170°	1053.3	1052.6	1051.9	1051.2	1050.9	1050.9	1050.9	1050.9	1050.9	1052.3	1053.6
172.5°	1056.9	1056.1	1055.2	1054.4	1054.1	1054.2	1054.3	1054.5	1054.6	1056.0	1057.4
175°	1061.8	1061.0	1060.1	1059.1	1058.8	1058.9	1059.1	1059.3	1059.6	1060.8	1062.0
177.5°	1063.3	1062.6	1061.9	1061.2	1060.9	1061.0	1061.2	1061.3	1061.4	1062.6	1063.7
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-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°	23.9	23.4	22.8	23.5	23.0	22.4	23.8
90°	21.0	21.7	22.3	22.6	23.0	23.3	23.7
92.5°	23.5	24.7	25.3	25.5	25.8	26.0	26.3
95°	28.2	29.4	30.0	30.0	30.0	30.0	30.0
97.5°	29.6	31.0	31.8	32.0	32.2	32.3	32.5
100°	30.3	31.7	32.4	32.6	32.8	33.0	33.1
102.5°	38.9	34.5	32.5	32.8	33.1	33.4	33.8
105°	79.8	48.7	33.3	33.7	34.0	34.4	34.7
107.5°	248.6	225.8	202.7	179.4	155.9	132.5	109.1
110°	338.7	333.0	317.5	292.4	267.3	242.2	217.1



TEST NUMBER: P332063-840

CATALOG NUMBER: S123DIP-S1165D805U840-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	396.2	396.3	393.6	388.4	383.0	377.8	372.5
115°	458.5	460.2	461.4	462.1	462.8	463.5	464.2
117.5°	513.0	514.3	515.1	515.3	515.4	515.5	515.7
120°	549.0	550.4	551.1	551.1	551.1	551.1	551.1
122.5°	583.7	584.7	585.2	585.4	585.5	585.7	585.8
125°	632.7	633.0	633.4	633.7	634.1	634.4	634.8
127.5°	682.6	683.1	683.2	682.9	682.6	682.2	681.9
130°	712.7	713.4	713.6	713.2	712.9	712.5	712.2
132.5°	741.0	741.7	741.8	741.4	740.9	740.4	739.9
135°	784.0	784.5	784.5	784.0	783.5	782.9	782.4
137.5°	822.6	823.5	823.7	823.4	823.0	822.7	822.3
140°	846.9	847.6	847.8	847.4	847.1	846.7	846.4
142.5°	869.8	870.4	870.4	869.9	869.4	869.0	868.5
145°	901.9	902.2	902.4	902.4	902.4	902.4	902.4
147.5°	930.8	931.1	930.9	930.1	929.3	928.5	927.7
150°	948.5	948.8	948.8	948.2	947.7	947.2	946.6
152.5°	964.4	965.1	965.0	964.2	963.4	962.6	961.8
155°	986.3	987.2	987.1	986.1	985.0	984.0	982.9
157.5°	1005.3	1006.4	1006.2	1004.9	1003.5	1002.2	1000.8
160°	1016.1	1017.1	1017.0	1015.8	1014.6	1013.4	1012.2
162.5°	1026.0	1027.1	1027.2	1026.1	1025.0	1024.0	1022.9
165°	1039.3	1040.7	1040.8	1039.6	1038.2	1037.0	1035.8
167.5°	1049.4	1050.8	1050.8	1049.4	1047.9	1046.5	1045.1
170°	1055.0	1056.4	1056.4	1055.0	1053.6	1052.3	1050.9
172.5°	1058.8	1060.3	1060.2	1058.6	1057.1	1055.5	1054.0
175°	1063.2	1064.4	1064.3	1063.0	1061.6	1060.2	1058.7
177.5°	1064.8	1065.9	1065.8	1064.4	1063.0	1061.6	1060.2
180°	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7	1062.7

(END OF REPORT)