

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: P331412-840

Luminaire Tested: **S122DIP-S865D1080U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331412-840  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122DIP-S865D1080U840-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 865 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7739.1 lumens  
Efficiency: N/A  
Efficacy: 118.3 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: General Diffuse

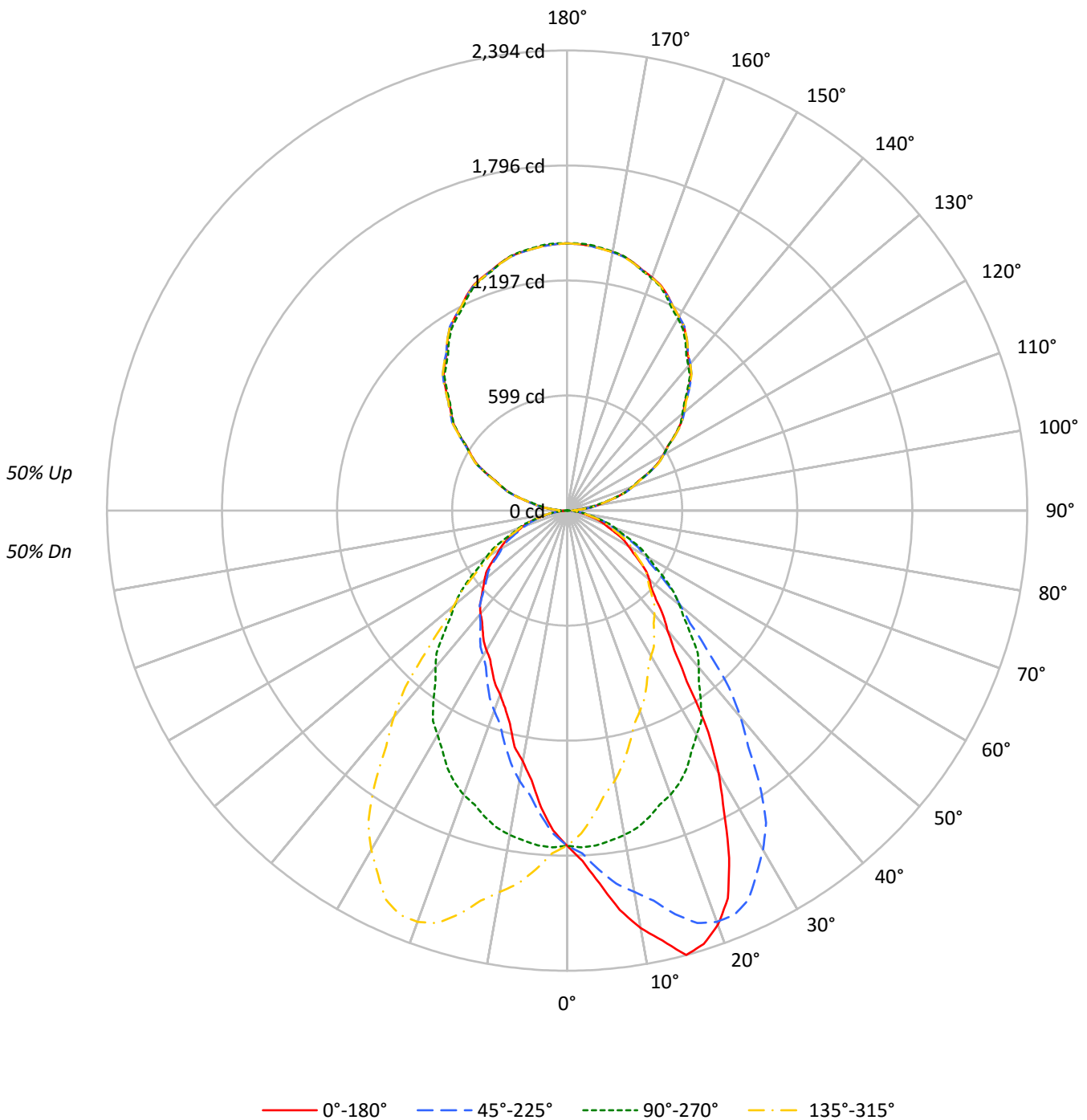
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20			20			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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43
2	90	83	77	72	83	77	71	67	65	61	58	54	52	49	45	43	41	37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	42	40	38	36	32
4	75	65	57	52	69	60	54	48	52	47	43	44	40	37	36	33	31	28
5	69	58	50	44	64	54	47	42	46	41	37	39	35	32	33	30	27	24
6	64	52	44	39	59	49	42	37	42	37	33	36	32	28	30	27	24	22
7	59	47	40	34	55	44	37	32	38	33	29	33	28	25	27	24	22	19
8	55	43	36	30	51	40	34	29	35	30	26	30	26	23	25	22	20	17
9	51	40	32	27	48	37	30	26	32	27	23	28	24	21	23	20	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	28150	28150	28150	28150
5°	31561	28336	25109	28336
10°	36166	28103	21730	28103
15°	40010	27587	19198	27587
20°	39400	27034	17500	27034
25°	35527	26298	16425	26298
30°	29358	25124	15642	25124
35°	21396	23893	15084	23893
40°	17089	22443	14773	22443
45°	14933	20763	14351	20763
50°	14039	19138	14071	19138
55°	12940	17486	13695	17486
60°	11858	15733	13114	15733
65°	10804	14155	12542	14155
70°	9805	12623	11703	12623
75°	8696	10911	10368	10911
80°	7476	9028	8350	9028
85°	6706	6706	4965	6706



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.1	2.1
10°-20°	482.7	6.2
20°-30°	700.6	9.1
30°-40°	739.3	9.6
40°-50°	654.6	8.5
50°-60°	522.4	6.8
60°-70°	355.1	4.6
70°-80°	182.0	2.4
80°-90°	49.4	0.6
90°-100°	88.1	1.1
100°-110°	273.6	3.5
110°-120°	467.6	6.0
120°-130°	614.9	7.9
130°-140°	690.2	8.9
140°-150°	676.7	8.7
150°-160°	567.6	7.3
160°-170°	376.5	4.9
170°-180°	131.6	1.7
0°-30°	1349.4	17.4
0°-40°	2088.7	27.0
0°-60°	3265.7	42.2
0°-90°	3852.2	49.8
90°-120°	829.3	10.7
90°-150°	2811.1	36.3
90°-180°	3887.0	50.2
0°-180°	7739.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1744	1744	1744	1744	1744	
5°	1947	1748	1549	1748	1947	194
15°	2394	1650	1148	1650	2394	660
25°	1994	1476	922	1476	1994	901
35°	1086	1212	765	1212	1086	706
45°	654	909	628	909	654	514
55°	460	621	486	621	460	412
65°	283	370	328	370	283	281
75°	139	175	166	175	139	149
85°	36	36	27	36	36	41
90°	40	1	40	1	40	19
95°	73	61	73	61	73	81
105°	260	252	260	252	260	274
115°	469	469	469	469	469	463
125°	685	683	685	683	685	611
135°	894	883	894	883	894	688
145°	1084	1072	1084	1072	1084	677
155°	1235	1226	1235	1226	1235	568
165°	1335	1334	1335	1334	1335	376
175°	1383	1388	1383	1388	1383	131
180°	1390	1390	1390	1390	1390	



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1824.0	1824.5	1825.6	1817.1	1815.9	1815.9	1808.5	1802.0	1794.5	1784.3	1785.4
5°	1947.3	1954.7	1957.3	1949.3	1937.2	1935.9	1924.5	1905.7	1888.3	1874.2	1864.2
7.5°	2094.5	2097.4	2090.8	2080.2	2071.2	2055.2	2034.0	2013.3	1984.2	1957.5	1937.6
10°	2205.9	2210.0	2198.6	2183.1	2170.4	2151.6	2120.8	2089.3	2051.1	2014.3	1984.8
12.5°	2290.7	2300.6	2285.9	2283.9	2262.1	2236.3	2199.7	2183.7	2130.0	2078.6	2047.0
15°	2393.6	2392.9	2394.3	2381.5	2365.4	2361.4	2322.6	2280.4	2204.6	2174.4	2122.2
17.5°	2363.8	2374.0	2378.7	2378.5	2378.1	2375.6	2363.2	2336.5	2298.6	2249.7	2189.3
20°	2293.1	2306.4	2308.5	2323.9	2332.6	2344.0	2348.6	2341.3	2317.8	2276.9	2224.7
22.5°	2183.7	2187.5	2193.7	2217.8	2236.6	2265.2	2280.1	2304.8	2295.8	2275.9	2232.2
25°	1994.2	1987.5	2010.9	2023.0	2066.6	2112.1	2145.0	2181.1	2213.3	2232.7	2220.0
27.5°	1766.7	1756.6	1791.7	1823.7	1859.1	1908.4	1959.6	2020.0	2070.3	2133.1	2154.7
30°	1574.7	1580.7	1614.3	1648.4	1702.0	1771.7	1829.4	1895.7	1967.4	2037.7	2086.7
32.5°	1367.8	1391.0	1412.2	1464.5	1511.8	1589.4	1673.9	1756.9	1846.2	1926.2	2002.0
35°	1085.5	1112.4	1141.9	1180.0	1246.4	1323.4	1405.8	1517.7	1639.7	1749.0	1838.8
37.5°	913.7	909.5	926.3	953.9	1007.6	1069.9	1164.8	1275.4	1418.9	1547.2	1673.9
40°	810.8	808.1	820.2	845.7	886.6	932.1	1015.2	1112.4	1245.7	1402.5	1553.3
42.5°	740.0	741.6	748.3	766.3	794.4	831.8	894.0	976.7	1098.8	1246.5	1408.6
45°	654.0	658.7	666.1	674.8	690.8	721.6	756.5	815.5	912.0	1035.3	1194.8
47.5°	592.1	592.2	599.8	607.3	616.9	634.3	662.7	699.7	767.8	868.2	1005.3
50°	558.9	554.2	559.6	565.5	575.6	587.6	606.4	641.3	686.8	767.9	882.5
52.5°	518.2	518.3	523.1	525.3	534.3	546.4	563.5	587.6	628.9	692.4	786.6
55°	459.7	463.0	465.7	469.7	477.8	486.5	499.9	515.9	548.2	595.7	665.4
57.5°	404.8	405.8	408.5	416.2	421.2	429.3	442.0	456.6	477.5	512.7	565.1
60°	367.2	367.2	372.5	375.9	382.6	390.6	400.7	414.8	433.5	462.3	504.6
62.5°	333.0	332.3	334.5	340.0	345.1	352.6	362.6	374.6	392.2	417.9	452.6
65°	282.8	281.4	285.5	286.8	292.2	299.5	307.6	320.3	334.4	353.1	384.0
67.5°	234.5	236.1	238.3	240.9	243.8	251.6	256.9	265.9	277.8	293.4	314.3
70°	207.7	207.7	207.7	209.7	213.8	217.8	223.2	230.6	241.9	255.3	274.1
72.5°	177.7	179.9	182.0	180.8	185.9	188.3	194.7	198.8	209.7	218.3	234.9
75°	139.4	139.4	139.4	142.7	144.7	146.7	150.8	154.8	160.2	170.9	179.6
77.5°	104.0	103.7	104.4	105.2	107.3	109.8	111.0	114.6	119.6	124.5	131.9
80°	80.4	81.8	82.4	83.7	83.7	85.1	85.7	90.5	93.8	97.1	101.9
82.5°	62.2	62.4	62.6	62.8	63.4	64.2	65.9	67.5	68.6	71.4	75.0
85°	36.2	35.5	35.5	36.9	36.2	36.2	37.6	38.9	38.9	39.5	41.5
87.5°	21.9	21.8	22.3	21.7	21.7	22.3	22.4	21.9	22.6	23.2	22.6
90°	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0	40.5	41.1	35.3
92.5°	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5	37.4	37.3	36.0
95°	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0	75.0	75.0	74.5
97.5°	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2	126.2	126.2	125.2
100°	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9	161.9	161.9	161.1
102.5°	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8	200.6	200.4	199.3
105°	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1	258.6	258.0	257.5
107.5°	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0	321.8	321.6	321.6
110°	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9	364.9	364.9	364.9



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7	408.3	408.9	409.1
115°	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4	473.6	473.9	474.4
117.5°	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9	537.6	538.2	539.7
120°	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5	579.5	579.5	581.6
122.5°	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3	623.9	624.5	626.0
125°	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2	688.9	689.7	690.5
127.5°	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2	752.1	753.1	754.1
130°	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3	794.8	795.4	795.9
132.5°	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2	837.4	838.5	838.4
135°	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1	898.3	898.6	898.1
137.5°	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3	957.5	957.7	956.9
140°	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0	997.0	997.0	995.8
142.5°	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2	1033.0	1032.8	1031.9
145°	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9	1087.6	1087.4	1085.8
147.5°	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0	1135.4	1134.8	1133.8
150°	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9	1163.8
152.5°	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9	1193.7
155°	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5	1234.2	1232.8	1232.1
157.5°	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1	1269.4	1267.6	1267.1
160°	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3	1290.7	1289.2	1288.9
162.5°	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5	1309.7	1308.0	1307.7
165°	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3	1334.4	1332.6	1332.6
167.5°	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7	1354.8	1353.0	1353.0
170°	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9	1366.0	1364.2	1364.5
172.5°	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3	1374.5	1372.7	1372.9
175°	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5	1383.7	1381.8	1382.4
177.5°	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3	1387.7
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1789.2	1784.8	1782.2	1772.5	1763.9	1755.3	1752.7	1753.7	1742.0	1730.7	1725.9
5°	1858.9	1845.4	1832.7	1814.6	1793.2	1769.7	1757.7	1748.3	1724.8	1699.4	1684.7
7.5°	1921.3	1902.1	1877.6	1843.6	1812.3	1775.4	1752.0	1731.2	1697.0	1661.0	1639.0
10°	1959.3	1933.2	1901.7	1860.2	1822.0	1777.1	1745.6	1714.1	1673.9	1631.0	1604.2
12.5°	1992.1	1956.8	1925.8	1872.5	1827.4	1771.2	1733.8	1689.4	1647.1	1596.2	1569.9
15°	2069.9	2004.9	1945.9	1885.6	1830.0	1751.6	1710.1	1650.4	1594.8	1531.9	1501.7
17.5°	2130.1	2057.1	1964.2	1887.5	1822.6	1735.9	1674.9	1603.4	1537.6	1465.6	1424.6
20°	2164.4	2080.6	1980.7	1889.7	1811.9	1712.7	1646.4	1573.4	1496.3	1415.2	1371.0
22.5°	2184.7	2096.7	1997.9	1881.6	1790.5	1693.9	1610.5	1530.5	1452.4	1364.8	1318.5
25°	2191.2	2110.8	2006.3	1874.9	1763.7	1654.5	1554.0	1476.2	1381.7	1300.0	1232.3
27.5°	2159.3	2101.6	2001.1	1862.3	1732.7	1605.0	1493.0	1404.9	1305.3	1216.5	1148.4
30°	2120.2	2086.7	1988.8	1849.5	1708.1	1570.7	1447.4	1347.6	1248.4	1158.6	1088.9
32.5°	2059.6	2052.3	1966.3	1831.2	1681.8	1527.3	1399.7	1298.8	1188.9	1100.7	1034.2
35°	1940.6	1972.8	1918.4	1790.5	1632.3	1465.5	1327.5	1212.2	1098.3	1013.8	951.5
37.5°	1781.1	1861.0	1846.7	1730.8	1565.6	1398.3	1245.9	1125.4	1016.8	931.6	870.4
40°	1671.2	1773.0	1787.8	1685.3	1518.4	1346.3	1184.8	1064.8	958.9	881.2	819.5
42.5°	1553.3	1672.2	1712.7	1630.6	1466.9	1291.5	1130.0	1005.8	901.0	825.5	770.7
45°	1355.6	1513.1	1586.1	1539.2	1381.1	1201.4	1035.3	909.3	814.2	743.2	700.9
47.5°	1170.7	1342.8	1441.1	1424.5	1285.5	1107.6	943.3	822.4	729.8	673.2	635.4
50°	1040.0	1216.9	1335.4	1340.9	1216.9	1040.7	875.9	761.9	676.8	623.9	593.0
52.5°	926.3	1095.2	1224.6	1252.9	1140.2	971.0	815.3	701.9	626.9	578.2	550.7
55°	778.0	920.7	1064.1	1116.4	1025.9	865.1	721.0	621.2	550.8	517.4	493.2
57.5°	646.8	765.8	898.2	955.9	900.2	762.5	627.4	540.8	483.6	454.3	435.9
60°	577.6	671.5	789.4	858.4	810.1	687.5	569.6	487.2	440.3	414.1	396.7
62.5°	513.3	596.4	696.1	759.2	733.0	617.3	511.7	438.9	398.4	374.0	361.3
65°	423.5	489.2	566.2	624.5	607.1	519.3	432.9	370.5	338.4	318.9	308.9
67.5°	348.7	396.2	449.6	500.7	486.7	424.4	355.0	306.5	282.6	265.8	259.7
70°	301.5	337.7	385.3	426.2	414.8	363.9	308.9	267.4	246.6	232.6	226.5
72.5°	256.5	286.3	322.6	356.0	348.3	306.0	260.1	228.7	212.8	199.9	194.9
75°	193.7	216.4	238.5	260.6	258.6	225.8	199.0	174.9	162.2	152.1	150.1
77.5°	143.0	155.7	170.8	183.9	180.3	161.5	140.5	126.6	117.2	110.6	109.5
80°	109.3	116.6	127.3	136.7	132.0	124.0	107.2	97.1	90.5	83.7	81.1
82.5°	79.2	86.5	93.0	98.1	94.5	86.9	76.6	69.8	65.8	61.2	60.2
85°	41.5	45.5	48.3	49.6	48.3	43.5	38.9	36.2	32.8	30.8	30.2
87.5°	22.0	20.8	19.7	19.9	17.7	17.1	14.2	12.0	12.1	12.2	11.7
90°	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2	4.3	7.5	10.6
92.5°	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9	23.1	25.4	27.8
95°	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0	63.6	66.2	68.8
97.5°	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5	113.7	116.0	118.4
100°	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0	151.1	153.2	155.2
102.5°	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4	190.1	191.8	193.4
105°	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2	253.0	253.8	254.6
107.5°	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5	317.6	318.8	319.9
110°	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8	359.3	360.9	362.4





TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8	404.3	406.0	407.5
115°	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2	470.8	472.3	473.9
117.5°	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3	537.5	539.6	541.6
120°	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	581.6	583.7	585.7
122.5°	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9	622.4	624.8	627.3
125°	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7	685.1	687.4	689.7
127.5°	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0	746.9	749.9	752.9
130°	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4	785.8	789.2	792.5
132.5°	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6	828.4	831.1	833.8
135°	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3	886.2	889.1	891.9
137.5°	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0	946.4	948.8	951.1
140°	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7	983.0	985.3	987.7
142.5°	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2	1020.6	1022.9	1025.2
145°	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2	1074.0	1075.8	1077.6
147.5°	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2	1122.5	1124.6	1126.8
150°	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1	1154.7	1156.2	1157.8
152.5°	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1	1183.8	1185.3	1186.9
155°	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9	1226.6	1227.4	1228.2
157.5°	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1	1263.6	1264.1	1264.7
160°	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7	1286.2	1286.7	1287.2
162.5°	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3	1306.4	1306.5	1306.6
165°	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7	1333.5	1333.2	1332.9
167.5°	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8	1355.9	1355.1	1354.4
170°	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0	1368.2	1367.4	1366.5
172.5°	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4	1376.6	1375.8	1375.0
175°	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8	1386.9	1386.1	1385.3
177.5°	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9	1391.3	1390.7	1390.1
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1720.5	1717.3	1706.1	1700.2	1690.5	1681.4	1675.5	1678.2	1680.3	1679.2	1677.7
5°	1671.2	1658.5	1639.0	1622.2	1610.2	1588.1	1578.7	1574.1	1570.0	1565.3	1560.6
7.5°	1612.6	1592.5	1564.5	1540.7	1518.1	1490.7	1475.0	1465.6	1456.0	1445.4	1436.0
10°	1570.7	1542.6	1513.1	1479.6	1452.8	1427.9	1405.8	1391.1	1377.8	1364.9	1355.6
12.5°	1526.7	1494.3	1457.8	1412.0	1382.5	1347.1	1343.6	1317.7	1296.8	1288.9	1277.9
15°	1456.8	1411.2	1364.9	1310.7	1287.3	1255.1	1235.0	1214.9	1196.8	1184.1	1180.7
17.5°	1377.4	1318.4	1272.3	1233.3	1194.9	1162.0	1143.5	1127.4	1112.5	1095.5	1093.2
20°	1316.8	1265.8	1215.6	1181.3	1141.9	1108.3	1085.5	1069.4	1056.7	1046.7	1037.9
22.5°	1259.4	1203.7	1157.6	1120.2	1081.3	1054.2	1036.2	1020.7	1010.1	999.0	990.8
25°	1167.3	1123.8	1073.5	1031.3	999.1	981.7	966.9	953.5	946.8	939.5	930.1
27.5°	1086.7	1038.3	991.4	958.7	930.4	914.9	904.5	895.3	889.1	884.7	879.4
30°	1030.0	981.0	944.1	912.0	888.6	873.1	866.5	861.1	853.7	851.0	848.4
32.5°	975.2	931.2	899.7	871.8	849.4	839.4	833.2	828.4	822.6	819.9	814.6
35°	898.0	861.1	830.2	814.9	796.8	788.0	783.4	776.7	771.2	768.6	767.9
37.5°	825.2	793.1	772.8	753.1	745.4	740.0	733.7	729.0	727.4	727.0	726.4
40°	778.0	751.8	733.8	717.7	714.3	706.3	700.9	696.9	696.9	697.6	696.9
42.5°	735.1	711.7	695.7	681.8	677.8	673.1	667.7	667.4	668.5	670.8	668.5
45°	670.0	653.4	642.0	635.2	627.8	623.2	622.5	624.5	625.2	625.9	627.8
47.5°	610.4	599.2	588.9	581.5	578.2	577.4	576.6	580.2	583.4	584.6	587.6
50°	574.9	562.2	553.5	548.8	546.1	544.8	546.1	550.2	552.8	556.1	558.2
52.5°	535.2	526.2	520.3	516.6	515.5	516.3	516.6	521.2	525.5	526.6	527.7
55°	480.5	473.7	472.4	466.4	469.1	468.4	471.7	474.4	478.5	482.5	483.1
57.5°	425.8	420.4	416.8	417.4	418.2	421.1	423.9	428.6	432.9	437.2	437.6
60°	389.3	386.7	384.7	384.7	386.0	390.0	393.3	398.0	400.7	403.4	405.4
62.5°	356.1	353.5	351.4	352.4	356.0	358.4	362.2	364.8	367.5	370.1	371.1
65°	303.6	302.3	304.3	305.6	306.2	309.6	314.3	316.3	318.9	320.3	325.0
67.5°	255.2	255.4	255.2	257.0	260.9	261.8	266.2	270.8	271.4	274.0	277.0
70°	222.5	223.8	225.2	226.5	229.8	231.2	234.5	236.5	239.2	241.3	243.3
72.5°	192.5	192.7	194.1	193.8	196.6	199.5	202.4	204.4	207.0	209.6	211.6
75°	148.0	148.0	149.5	150.1	153.5	156.8	156.1	157.4	160.2	162.8	164.2
77.5°	108.2	106.6	108.2	108.9	109.9	112.7	113.2	115.1	118.2	117.2	118.8
80°	82.4	80.4	82.4	83.1	83.1	86.4	86.4	87.8	89.8	87.8	89.8
82.5°	58.9	57.9	59.4	59.5	60.6	60.7	61.8	62.0	64.0	63.1	64.0
85°	29.5	28.8	29.5	28.8	29.5	30.2	30.2	29.5	29.5	30.8	28.8
87.5°	11.8	12.2	12.8	13.9	14.5	15.1	14.5	14.4	14.3	13.1	13.1
90°	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0	39.5	39.0	38.9
92.5°	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5	37.6	37.8	37.8
95°	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0	75.0	75.0	74.8
97.5°	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2	126.2	126.2	126.2
100°	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9	161.9	161.9	161.8
102.5°	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8	201.0	201.2	201.2
105°	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1	259.6	260.1	260.4
107.5°	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0	322.2	322.4	321.9
110°	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.9	364.5



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7	407.1	406.5	405.9
115°	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4	473.1	472.8	472.3
117.5°	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9	536.3	535.7	535.0
120°	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5	579.5	579.5	579.1
122.5°	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3	622.7	622.0	621.5
125°	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2	687.4	686.6	686.1
127.5°	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2	750.2	749.3	748.4
130°	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3	793.8	793.2	792.4
132.5°	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2	835.1	833.9	832.9
135°	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1	897.8	897.5	897.0
137.5°	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3	957.0	956.8	956.2
140°	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0	997.0	997.0	996.5
142.5°	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2	1033.4	1033.6	1033.2
145°	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9	1088.2	1088.4	1088.0
147.5°	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0	1136.5	1137.1	1136.9
150°	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0
152.5°	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8
155°	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5	1236.8	1238.1	1238.3
157.5°	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1	1272.9	1274.7	1275.0
160°	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3	1293.8	1295.5	1295.7
162.5°	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5	1313.2	1315.0	1315.2
165°	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3	1338.1	1339.9	1340.1
167.5°	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7	1358.5	1360.3	1360.5
170°	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9	1369.7	1371.5	1371.7
172.5°	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3	1378.2	1380.0	1380.1
175°	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5	1387.4	1389.2	1389.3
177.5°	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1672.2	1671.2	1671.2	1666.4	1671.2	1671.2	1672.2	1677.7	1679.2	1680.3	1678.2
5°	1551.3	1549.2	1545.9	1549.2	1545.9	1549.2	1551.3	1560.6	1565.3	1570.0	1574.1
7.5°	1431.6	1423.5	1422.3	1414.4	1422.3	1423.5	1431.6	1436.0	1445.4	1456.0	1465.6
10°	1344.2	1338.9	1338.2	1325.4	1338.2	1338.9	1344.2	1355.6	1364.9	1377.8	1391.1
12.5°	1277.8	1264.9	1267.4	1260.0	1267.4	1264.9	1277.8	1277.9	1288.9	1296.8	1317.7
15°	1162.7	1162.7	1159.9	1148.5	1159.9	1162.7	1162.7	1180.7	1184.1	1196.8	1214.9
17.5°	1079.9	1078.5	1072.2	1075.4	1072.2	1078.5	1079.9	1093.2	1095.5	1112.5	1127.4
20°	1030.6	1026.6	1018.5	1018.5	1018.5	1026.6	1030.6	1037.9	1046.7	1056.7	1069.4
22.5°	984.0	983.7	975.1	977.8	975.1	983.7	984.0	990.8	999.0	1010.1	1020.7
25°	929.4	924.0	920.1	922.0	920.1	924.0	929.4	930.1	939.5	946.8	953.5
27.5°	877.7	874.7	874.4	869.0	874.4	874.7	877.7	879.4	884.7	889.1	895.3
30°	847.7	841.0	842.3	839.0	842.3	841.0	847.7	848.4	851.0	853.7	861.1
32.5°	813.3	810.9	809.6	806.8	809.6	810.9	813.3	814.6	819.9	822.6	828.4
35°	766.6	767.3	763.9	765.3	763.9	767.3	766.6	767.9	768.6	771.2	776.7
37.5°	725.7	727.8	726.3	726.7	726.3	727.8	725.7	726.4	727.0	727.4	729.0
40°	698.9	698.9	698.9	700.9	698.9	698.9	698.9	696.9	697.6	696.9	696.9
42.5°	673.2	672.1	671.1	670.9	671.1	672.1	673.2	668.5	670.8	668.5	667.4
45°	629.2	631.3	631.9	628.5	631.9	631.3	629.2	627.8	625.9	625.2	624.5
47.5°	589.5	589.7	589.5	592.4	589.5	589.7	589.5	587.6	584.6	583.4	580.2
50°	561.6	560.2	561.6	560.2	561.6	560.2	561.6	558.2	556.1	552.8	550.2
52.5°	532.1	532.3	531.5	531.3	531.5	532.3	532.1	527.7	526.6	525.5	521.2
55°	485.8	487.2	486.5	486.5	486.5	487.2	485.8	483.1	482.5	478.5	474.4
57.5°	438.0	439.2	440.1	437.2	440.1	439.2	438.0	437.6	437.2	432.9	428.6
60°	404.8	408.1	407.4	406.1	407.4	408.1	404.8	405.4	403.4	400.7	398.0
62.5°	374.2	375.4	375.3	375.0	375.3	375.4	374.2	371.1	370.1	367.5	364.8
65°	327.0	328.3	326.3	328.3	326.3	328.3	327.0	325.0	320.3	318.9	316.3
67.5°	276.2	276.6	278.1	279.0	278.1	276.6	276.2	277.0	274.0	271.4	270.8
70°	244.6	243.9	245.9	247.9	245.9	243.9	244.6	243.3	241.3	239.2	236.5
72.5°	211.4	212.8	212.2	213.6	212.2	212.8	211.4	211.6	209.6	207.0	204.4
75°	162.8	164.8	164.2	166.2	164.2	164.8	162.8	164.2	162.8	160.2	157.4
77.5°	117.6	118.0	117.6	118.8	117.6	118.0	117.6	118.8	117.2	118.2	115.1
80°	89.8	88.5	87.2	89.8	87.2	88.5	89.8	89.8	87.8	89.8	87.8
82.5°	62.4	63.2	61.9	61.9	61.9	63.2	62.4	64.0	63.1	64.0	62.0
85°	28.8	28.2	26.8	26.8	26.8	28.2	28.8	28.8	30.8	29.5	29.5
87.5°	13.2	12.7	12.7	12.2	12.7	12.7	13.2	13.1	13.1	14.3	14.4
90°	39.1	39.4	39.6	39.9	39.6	39.4	39.1	38.9	39.0	39.5	40.0
92.5°	37.9	37.9	38.0	38.0	38.0	37.9	37.9	37.8	37.8	37.6	37.5
95°	74.3	73.8	73.2	72.7	73.2	73.8	74.3	74.8	75.0	75.0	75.0
97.5°	126.1	126.1	126.0	126.0	126.0	126.1	126.1	126.2	126.2	126.2	126.2
100°	161.5	161.3	161.0	160.7	161.0	161.3	161.5	161.8	161.9	161.9	161.9
102.5°	200.9	200.7	200.4	200.2	200.4	200.7	200.9	201.2	201.2	201.0	200.8
105°	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.4	260.1	259.6	259.1
107.5°	320.8	319.6	318.4	317.2	318.4	319.6	320.8	321.9	322.4	322.2	322.0
110°	363.7	362.8	362.0	361.3	362.0	362.8	363.7	364.5	364.9	364.9	364.9



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	405.3	404.7	404.1	403.5	404.1	404.7	405.3	405.9	406.5	407.1	407.7
115°	471.6	470.8	470.0	469.2	470.0	470.8	471.6	472.3	472.8	473.1	473.4
117.5°	534.2	533.4	532.6	531.9	532.6	533.4	534.2	535.0	535.7	536.3	536.9
120°	578.3	577.5	576.7	575.9	576.7	577.5	578.3	579.1	579.5	579.5	579.5
122.5°	620.9	620.3	619.8	619.1	619.8	620.3	620.9	621.5	622.0	622.7	623.3
125°	685.8	685.6	685.3	685.1	685.3	685.6	685.8	686.1	686.6	687.4	688.2
127.5°	747.6	746.8	746.0	745.1	746.0	746.8	747.6	748.4	749.3	750.2	751.2
130°	791.4	790.3	789.3	788.3	789.3	790.3	791.4	792.4	793.2	793.8	794.3
132.5°	832.1	831.2	830.4	829.6	830.4	831.2	832.1	832.9	833.9	835.1	836.2
135°	896.2	895.4	894.6	893.8	894.6	895.4	896.2	897.0	897.5	897.8	898.1
137.5°	955.1	954.1	953.1	952.0	953.1	954.1	955.1	956.2	956.8	957.0	957.3
140°	995.5	994.5	993.4	992.4	993.4	994.5	995.5	996.5	997.0	997.0	997.0
142.5°	1032.1	1031.1	1030.1	1029.0	1030.1	1031.1	1032.1	1033.2	1033.6	1033.4	1033.2
145°	1087.0	1086.0	1084.9	1083.9	1084.9	1086.0	1087.0	1088.0	1088.4	1088.2	1087.9
147.5°	1135.9	1134.9	1133.9	1133.0	1133.9	1134.9	1135.9	1136.9	1137.1	1136.5	1136.0
150°	1167.2	1166.4	1165.6	1164.9	1165.6	1166.4	1167.2	1168.0	1168.0	1167.2	1166.4
152.5°	1197.8	1196.9	1195.9	1194.9	1195.9	1196.9	1197.8	1198.8	1198.8	1197.8	1196.9
155°	1237.6	1236.8	1236.0	1235.2	1236.0	1236.8	1237.6	1238.3	1238.1	1236.8	1235.5
157.5°	1273.6	1272.4	1271.2	1269.9	1271.2	1272.4	1273.6	1275.0	1274.7	1272.9	1271.1
160°	1294.6	1293.6	1292.5	1291.5	1292.5	1293.6	1294.6	1295.7	1295.5	1293.8	1292.3
162.5°	1314.0	1312.8	1311.5	1310.3	1311.5	1312.8	1314.0	1315.2	1315.0	1313.2	1311.5
165°	1338.9	1337.6	1336.3	1334.9	1336.3	1337.6	1338.9	1340.1	1339.9	1338.1	1336.3
167.5°	1359.2	1357.8	1356.5	1355.1	1356.5	1357.8	1359.2	1360.5	1360.3	1358.5	1356.7
170°	1370.1	1368.6	1367.0	1365.4	1367.0	1368.6	1370.1	1371.7	1371.5	1369.7	1367.9
172.5°	1378.6	1377.0	1375.4	1373.8	1375.4	1377.0	1378.6	1380.1	1380.0	1378.2	1376.3
175°	1387.8	1386.1	1384.6	1383.0	1384.6	1386.1	1387.8	1389.3	1389.2	1387.4	1385.5
177.5°	1391.0	1389.8	1388.5	1387.3	1388.5	1389.8	1391.0	1392.2	1392.2	1391.0	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1675.5	1681.4	1690.5	1700.2	1706.1	1717.3	1720.5	1725.9	1730.7	1742.0	1753.7
5°	1578.7	1588.1	1610.2	1622.2	1639.0	1658.5	1671.2	1684.7	1699.4	1724.8	1748.3
7.5°	1475.0	1490.7	1518.1	1540.7	1564.5	1592.5	1612.6	1639.0	1661.0	1697.0	1731.2
10°	1405.8	1427.9	1452.8	1479.6	1513.1	1542.6	1570.7	1604.2	1631.0	1673.9	1714.1
12.5°	1343.6	1347.1	1382.5	1412.0	1457.8	1494.3	1526.7	1569.9	1596.2	1647.1	1689.4
15°	1235.0	1255.1	1287.3	1310.7	1364.9	1411.2	1456.8	1501.7	1531.9	1594.8	1650.4
17.5°	1143.5	1162.0	1194.9	1233.3	1272.3	1318.4	1377.4	1424.6	1465.6	1537.6	1603.4
20°	1085.5	1108.3	1141.9	1181.3	1215.6	1265.8	1316.8	1371.0	1415.2	1496.3	1573.4
22.5°	1036.2	1054.2	1081.3	1120.2	1157.6	1203.7	1259.4	1318.5	1364.8	1452.4	1530.5
25°	966.9	981.7	999.1	1031.3	1073.5	1123.8	1167.3	1232.3	1300.0	1381.7	1476.2
27.5°	904.5	914.9	930.4	958.7	991.4	1038.3	1086.7	1148.4	1216.5	1305.3	1404.9
30°	866.5	873.1	888.6	912.0	944.1	981.0	1030.0	1088.9	1158.6	1248.4	1347.6
32.5°	833.2	839.4	849.4	871.8	899.7	931.2	975.2	1034.2	1100.7	1188.9	1298.8
35°	783.4	788.0	796.8	814.9	830.2	861.1	898.0	951.5	1013.8	1098.3	1212.2
37.5°	733.7	740.0	745.4	753.1	772.8	793.1	825.2	870.4	931.6	1016.8	1125.4
40°	700.9	706.3	714.3	717.7	733.8	751.8	778.0	819.5	881.2	958.9	1064.8
42.5°	667.7	673.1	677.8	681.8	695.7	711.7	735.1	770.7	825.5	901.0	1005.8
45°	622.5	623.2	627.8	635.2	642.0	653.4	670.0	700.9	743.2	814.2	909.3
47.5°	576.6	577.4	578.2	581.5	588.9	599.2	610.4	635.4	673.2	729.8	822.4
50°	546.1	544.8	546.1	548.8	553.5	562.2	574.9	593.0	623.9	676.8	761.9
52.5°	516.6	516.3	515.5	516.6	520.3	526.2	535.2	550.7	578.2	626.9	701.9
55°	471.7	468.4	469.1	466.4	472.4	473.7	480.5	493.2	517.4	550.8	621.2
57.5°	423.9	421.1	418.2	417.4	416.8	420.4	425.8	435.9	454.3	483.6	540.8
60°	393.3	390.0	386.0	384.7	384.7	386.7	389.3	396.7	414.1	440.3	487.2
62.5°	362.2	358.4	356.0	352.4	351.4	353.5	356.1	361.3	374.0	398.4	438.9
65°	314.3	309.6	306.2	305.6	304.3	302.3	303.6	308.9	318.9	338.4	370.5
67.5°	266.2	261.8	260.9	257.0	255.2	255.4	255.2	259.7	265.8	282.6	306.5
70°	234.5	231.2	229.8	226.5	225.2	223.8	222.5	226.5	232.6	246.6	267.4
72.5°	202.4	199.5	196.6	193.8	194.1	192.7	192.5	194.9	199.9	212.8	228.7
75°	156.1	156.8	153.5	150.1	149.5	148.0	148.0	150.1	152.1	162.2	174.9
77.5°	113.2	112.7	109.9	108.9	108.2	106.6	108.2	109.5	110.6	117.2	126.6
80°	86.4	86.4	83.1	83.1	82.4	80.4	82.4	81.1	83.7	90.5	97.1
82.5°	61.8	60.7	60.6	59.5	59.4	57.9	58.9	60.2	61.2	65.8	69.8
85°	30.2	30.2	29.5	28.8	29.5	28.8	29.5	30.2	30.8	32.8	36.2
87.5°	14.5	15.1	14.5	13.9	12.8	12.2	11.8	11.7	12.2	12.1	12.0
90°	40.5	41.1	35.3	29.6	23.8	18.1	13.7	10.6	7.5	4.3	1.2
92.5°	37.4	37.3	36.0	34.6	33.2	31.9	30.1	27.8	25.4	23.1	20.9
95°	75.0	75.0	74.5	74.0	73.5	73.0	71.4	68.8	66.2	63.6	61.0
97.5°	126.2	126.2	125.2	124.2	123.2	122.3	120.6	118.4	116.0	113.7	111.5
100°	161.9	161.9	161.1	160.3	159.6	158.8	157.3	155.2	153.2	151.1	149.0
102.5°	200.6	200.4	199.3	198.3	197.4	196.4	195.1	193.4	191.8	190.1	188.4
105°	258.6	258.0	257.5	257.0	256.5	256.0	255.3	254.6	253.8	253.0	252.2
107.5°	321.8	321.6	321.6	321.6	321.6	321.6	321.0	319.9	318.8	317.6	316.5
110°	364.9	364.9	364.9	364.9	364.9	364.9	364.1	362.4	360.9	359.3	357.8



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	408.3	408.9	409.1	409.3	409.5	409.8	409.1	407.5	406.0	404.3	402.8
115°	473.6	473.9	474.4	474.9	475.4	475.9	475.4	473.9	472.3	470.8	469.2
117.5°	537.6	538.2	539.7	541.1	542.6	544.0	543.7	541.6	539.6	537.5	535.3
120°	579.5	579.5	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5
122.5°	623.9	624.5	626.0	627.4	628.9	630.4	629.9	627.3	624.8	622.4	619.9
125°	688.9	689.7	690.5	691.4	692.1	692.9	692.1	689.7	687.4	685.1	682.7
127.5°	752.1	753.1	754.1	755.0	755.9	756.9	755.8	752.9	749.9	746.9	744.0
130°	794.8	795.4	795.9	796.4	796.9	797.4	796.0	792.5	789.2	785.8	782.4
132.5°	837.4	838.5	838.4	838.3	838.2	838.1	836.7	833.8	831.1	828.4	825.6
135°	898.3	898.6	898.1	897.5	897.0	896.5	894.7	891.9	889.1	886.2	883.3
137.5°	957.5	957.7	956.9	956.3	955.6	954.9	953.4	951.1	948.8	946.4	944.0
140°	997.0	997.0	995.8	994.5	993.2	991.9	990.1	987.7	985.3	983.0	980.7
142.5°	1033.0	1032.8	1031.9	1031.0	1030.1	1029.2	1027.5	1025.2	1022.9	1020.6	1018.2
145°	1087.6	1087.4	1085.8	1084.3	1082.7	1081.2	1079.4	1077.6	1075.8	1074.0	1072.2
147.5°	1135.4	1134.8	1133.8	1132.8	1131.7	1130.6	1129.0	1126.8	1124.6	1122.5	1120.2
150°	1165.6	1164.9	1163.8	1162.8	1161.7	1160.6	1159.3	1157.8	1156.2	1154.7	1153.1
152.5°	1195.9	1194.9	1193.7	1192.3	1191.1	1189.8	1188.4	1186.9	1185.3	1183.8	1182.1
155°	1234.2	1232.8	1232.1	1231.3	1230.5	1229.7	1229.0	1228.2	1227.4	1226.6	1225.9
157.5°	1269.4	1267.6	1267.1	1266.7	1266.2	1265.7	1265.3	1264.7	1264.1	1263.6	1263.1
160°	1290.7	1289.2	1288.9	1288.7	1288.4	1288.1	1287.8	1287.2	1286.7	1286.2	1285.7
162.5°	1309.7	1308.0	1307.7	1307.4	1307.2	1306.9	1306.8	1306.6	1306.5	1306.4	1306.3
165°	1334.4	1332.6	1332.6	1332.6	1332.6	1332.6	1332.7	1332.9	1333.2	1333.5	1333.7
167.5°	1354.8	1353.0	1353.0	1353.1	1353.1	1353.2	1353.6	1354.4	1355.1	1355.9	1356.8
170°	1366.0	1364.2	1364.5	1364.7	1365.0	1365.3	1365.8	1366.5	1367.4	1368.2	1369.0
172.5°	1374.5	1372.7	1372.9	1373.2	1373.5	1373.7	1374.2	1375.0	1375.8	1376.6	1377.4
175°	1383.7	1381.8	1382.4	1382.9	1383.4	1383.9	1384.6	1385.3	1386.1	1386.9	1387.8
177.5°	1388.5	1387.3	1387.7	1388.1	1388.5	1388.9	1389.5	1390.1	1390.7	1391.3	1391.9
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1752.7	1755.3	1763.9	1772.5	1782.2	1784.8	1789.2	1785.4	1784.3	1794.5	1802.0
5°	1757.7	1769.7	1793.2	1814.6	1832.7	1845.4	1858.9	1864.2	1874.2	1888.3	1905.7
7.5°	1752.0	1775.4	1812.3	1843.6	1877.6	1902.1	1921.3	1937.6	1957.5	1984.2	2013.3
10°	1745.6	1777.1	1822.0	1860.2	1901.7	1933.2	1959.3	1984.8	2014.3	2051.1	2089.3
12.5°	1733.8	1771.2	1827.4	1872.5	1925.8	1956.8	1992.1	2047.0	2078.6	2130.0	2183.7
15°	1710.1	1751.6	1830.0	1885.6	1945.9	2004.9	2069.9	2122.2	2174.4	2204.6	2280.4
17.5°	1674.9	1735.9	1822.6	1887.5	1964.2	2057.1	2130.1	2189.3	2249.7	2298.6	2336.5
20°	1646.4	1712.7	1811.9	1889.7	1980.7	2080.6	2164.4	2224.7	2276.9	2317.8	2341.3
22.5°	1610.5	1693.9	1790.5	1881.6	1997.9	2096.7	2184.7	2232.2	2275.9	2295.8	2304.8
25°	1554.0	1654.5	1763.7	1874.9	2006.3	2110.8	2191.2	2220.0	2232.7	2213.3	2181.1
27.5°	1493.0	1605.0	1732.7	1862.3	2001.1	2101.6	2159.3	2154.7	2133.1	2070.3	2020.0
30°	1447.4	1570.7	1708.1	1849.5	1988.8	2086.7	2120.2	2086.7	2037.7	1967.4	1895.7
32.5°	1399.7	1527.3	1681.8	1831.2	1966.3	2052.3	2059.6	2002.0	1926.2	1846.2	1756.9
35°	1327.5	1465.5	1632.3	1790.5	1918.4	1972.8	1940.6	1838.8	1749.0	1639.7	1517.7
37.5°	1245.9	1398.3	1565.6	1730.8	1846.7	1861.0	1781.1	1673.9	1547.2	1418.9	1275.4
40°	1184.8	1346.3	1518.4	1685.3	1787.8	1773.0	1671.2	1553.3	1402.5	1245.7	1112.4
42.5°	1130.0	1291.5	1466.9	1630.6	1712.7	1672.2	1553.3	1408.6	1246.5	1098.8	976.7
45°	1035.3	1201.4	1381.1	1539.2	1586.1	1513.1	1355.6	1194.8	1035.3	912.0	815.5
47.5°	943.3	1107.6	1285.5	1424.5	1441.1	1342.8	1170.7	1005.3	868.2	767.8	699.7
50°	875.9	1040.7	1216.9	1340.9	1335.4	1216.9	1040.0	882.5	767.9	686.8	641.3
52.5°	815.3	971.0	1140.2	1252.9	1224.6	1095.2	926.3	786.6	692.4	628.9	587.6
55°	721.0	865.1	1025.9	1116.4	1064.1	920.7	778.0	665.4	595.7	548.2	515.9
57.5°	627.4	762.5	900.2	955.9	898.2	765.8	646.8	565.1	512.7	477.5	456.6
60°	569.6	687.5	810.1	858.4	789.4	671.5	577.6	504.6	462.3	433.5	414.8
62.5°	511.7	617.3	733.0	759.2	696.1	596.4	513.3	452.6	417.9	392.2	374.6
65°	432.9	519.3	607.1	624.5	566.2	489.2	423.5	384.0	353.1	334.4	320.3
67.5°	355.0	424.4	486.7	500.7	449.6	396.2	348.7	314.3	293.4	277.8	265.9
70°	308.9	363.9	414.8	426.2	385.3	337.7	301.5	274.1	255.3	241.9	230.6
72.5°	260.1	306.0	348.3	356.0	322.6	286.3	256.5	234.9	218.3	209.7	198.8
75°	199.0	225.8	258.6	260.6	238.5	216.4	193.7	179.6	170.9	160.2	154.8
77.5°	140.5	161.5	180.3	183.9	170.8	155.7	143.0	131.9	124.5	119.6	114.6
80°	107.2	124.0	132.0	136.7	127.3	116.6	109.3	101.9	97.1	93.8	90.5
82.5°	76.6	86.9	94.5	98.1	93.0	86.5	79.2	75.0	71.4	68.6	67.5
85°	38.9	43.5	48.3	49.6	48.3	45.5	41.5	41.5	39.5	38.9	38.9
87.5°	14.2	17.1	17.7	19.9	19.7	20.8	22.0	22.6	23.2	22.6	21.9
90°	4.3	7.5	10.6	13.7	18.1	23.8	29.6	35.3	41.1	40.5	40.0
92.5°	23.1	25.4	27.8	30.1	31.9	33.2	34.6	36.0	37.3	37.4	37.5
95°	63.6	66.2	68.8	71.4	73.0	73.5	74.0	74.5	75.0	75.0	75.0
97.5°	113.7	116.0	118.4	120.6	122.3	123.2	124.2	125.2	126.2	126.2	126.2
100°	151.1	153.2	155.2	157.3	158.8	159.6	160.3	161.1	161.9	161.9	161.9
102.5°	190.1	191.8	193.4	195.1	196.4	197.4	198.3	199.3	200.4	200.6	200.8
105°	253.0	253.8	254.6	255.3	256.0	256.5	257.0	257.5	258.0	258.6	259.1
107.5°	317.6	318.8	319.9	321.0	321.6	321.6	321.6	321.6	321.6	321.8	322.0
110°	359.3	360.9	362.4	364.1	364.9	364.9	364.9	364.9	364.9	364.9	364.9





TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	404.3	406.0	407.5	409.1	409.8	409.5	409.3	409.1	408.9	408.3	407.7
115°	470.8	472.3	473.9	475.4	475.9	475.4	474.9	474.4	473.9	473.6	473.4
117.5°	537.5	539.6	541.6	543.7	544.0	542.6	541.1	539.7	538.2	537.6	536.9
120°	581.6	583.7	585.7	587.8	587.8	585.7	583.7	581.6	579.5	579.5	579.5
122.5°	622.4	624.8	627.3	629.9	630.4	628.9	627.4	626.0	624.5	623.9	623.3
125°	685.1	687.4	689.7	692.1	692.9	692.1	691.4	690.5	689.7	688.9	688.2
127.5°	746.9	749.9	752.9	755.8	756.9	755.9	755.0	754.1	753.1	752.1	751.2
130°	785.8	789.2	792.5	796.0	797.4	796.9	796.4	795.9	795.4	794.8	794.3
132.5°	828.4	831.1	833.8	836.7	838.1	838.2	838.3	838.4	838.5	837.4	836.2
135°	886.2	889.1	891.9	894.7	896.5	897.0	897.5	898.1	898.6	898.3	898.1
137.5°	946.4	948.8	951.1	953.4	954.9	955.6	956.3	956.9	957.7	957.5	957.3
140°	983.0	985.3	987.7	990.1	991.9	993.2	994.5	995.8	997.0	997.0	997.0
142.5°	1020.6	1022.9	1025.2	1027.5	1029.2	1030.1	1031.0	1031.9	1032.8	1033.0	1033.2
145°	1074.0	1075.8	1077.6	1079.4	1081.2	1082.7	1084.3	1085.8	1087.4	1087.6	1087.9
147.5°	1122.5	1124.6	1126.8	1129.0	1130.6	1131.7	1132.8	1133.8	1134.8	1135.4	1136.0
150°	1154.7	1156.2	1157.8	1159.3	1160.6	1161.7	1162.8	1163.8	1164.9	1165.6	1166.4
152.5°	1183.8	1185.3	1186.9	1188.4	1189.8	1191.1	1192.3	1193.7	1194.9	1195.9	1196.9
155°	1226.6	1227.4	1228.2	1229.0	1229.7	1230.5	1231.3	1232.1	1232.8	1234.2	1235.5
157.5°	1263.6	1264.1	1264.7	1265.3	1265.7	1266.2	1266.7	1267.1	1267.6	1269.4	1271.1
160°	1286.2	1286.7	1287.2	1287.8	1288.1	1288.4	1288.7	1288.9	1289.2	1290.7	1292.3
162.5°	1306.4	1306.5	1306.6	1306.8	1306.9	1307.2	1307.4	1307.7	1308.0	1309.7	1311.5
165°	1333.5	1333.2	1332.9	1332.7	1332.6	1332.6	1332.6	1332.6	1332.6	1334.4	1336.3
167.5°	1355.9	1355.1	1354.4	1353.6	1353.2	1353.1	1353.1	1353.0	1353.0	1354.8	1356.7
170°	1368.2	1367.4	1366.5	1365.8	1365.3	1365.0	1364.7	1364.5	1364.2	1366.0	1367.9
172.5°	1376.6	1375.8	1375.0	1374.2	1373.7	1373.5	1373.2	1372.9	1372.7	1374.5	1376.3
175°	1386.9	1386.1	1385.3	1384.6	1383.9	1383.4	1382.9	1382.4	1381.8	1383.7	1385.5
177.5°	1391.3	1390.7	1390.1	1389.5	1388.9	1388.5	1388.1	1387.7	1387.3	1388.5	1389.8
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5	1743.5
2.5°	1808.5	1815.9	1815.9	1817.1	1825.6	1824.5	1824.0
5°	1924.5	1935.9	1937.2	1949.3	1957.3	1954.7	1947.3
7.5°	2034.0	2055.2	2071.2	2080.2	2090.8	2097.4	2094.5
10°	2120.8	2151.6	2170.4	2183.1	2198.6	2210.0	2205.9
12.5°	2199.7	2236.3	2262.1	2283.9	2285.9	2300.6	2290.7
15°	2322.6	2361.4	2365.4	2381.5	2394.3	2392.9	2393.6
17.5°	2363.2	2375.6	2378.1	2378.5	2378.7	2374.0	2363.8
20°	2348.6	2344.0	2332.6	2323.9	2308.5	2306.4	2293.1
22.5°	2280.1	2265.2	2236.6	2217.8	2193.7	2187.5	2183.7
25°	2145.0	2112.1	2066.6	2023.0	2010.9	1987.5	1994.2
27.5°	1959.6	1908.4	1859.1	1823.7	1791.7	1756.6	1766.7
30°	1829.4	1771.7	1702.0	1648.4	1614.3	1580.7	1574.7
32.5°	1673.9	1589.4	1511.8	1464.5	1412.2	1391.0	1367.8
35°	1405.8	1323.4	1246.4	1180.0	1141.9	1112.4	1085.5
37.5°	1164.8	1069.9	1007.6	953.9	926.3	909.5	913.7
40°	1015.2	932.1	886.6	845.7	820.2	808.1	810.8
42.5°	894.0	831.8	794.4	766.3	748.3	741.6	740.0
45°	756.5	721.6	690.8	674.8	666.1	658.7	654.0
47.5°	662.7	634.3	616.9	607.3	599.8	592.2	592.1
50°	606.4	587.6	575.6	565.5	559.6	554.2	558.9
52.5°	563.5	546.4	534.3	525.3	523.1	518.3	518.2
55°	499.9	486.5	477.8	469.7	465.7	463.0	459.7
57.5°	442.0	429.3	421.2	416.2	408.5	405.8	404.8
60°	400.7	390.6	382.6	375.9	372.5	367.2	367.2
62.5°	362.6	352.6	345.1	340.0	334.5	332.3	333.0
65°	307.6	299.5	292.2	286.8	285.5	281.4	282.8
67.5°	256.9	251.6	243.8	240.9	238.3	236.1	234.5
70°	223.2	217.8	213.8	209.7	207.7	207.7	207.7
72.5°	194.7	188.3	185.9	180.8	182.0	179.9	177.7
75°	150.8	146.7	144.7	142.7	139.4	139.4	139.4
77.5°	111.0	109.8	107.3	105.2	104.4	103.7	104.0
80°	85.7	85.1	83.7	83.7	82.4	81.8	80.4
82.5°	65.9	64.2	63.4	62.8	62.6	62.4	62.2
85°	37.6	36.2	36.2	36.9	35.5	35.5	36.2
87.5°	22.4	22.3	21.7	21.7	22.3	21.8	21.9
90°	39.5	39.0	38.9	39.1	39.4	39.6	39.9
92.5°	37.6	37.8	37.8	37.9	37.9	38.0	38.0
95°	75.0	75.0	74.8	74.3	73.8	73.2	72.7
97.5°	126.2	126.2	126.2	126.1	126.1	126.0	126.0
100°	161.9	161.9	161.8	161.5	161.3	161.0	160.7
102.5°	201.0	201.2	201.2	200.9	200.7	200.4	200.2
105°	259.6	260.1	260.4	260.4	260.4	260.4	260.4
107.5°	322.2	322.4	321.9	320.8	319.6	318.4	317.2
110°	364.9	364.9	364.5	363.7	362.8	362.0	361.3



TEST NUMBER: P331412-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	407.1	406.5	405.9	405.3	404.7	404.1	403.5
115°	473.1	472.8	472.3	471.6	470.8	470.0	469.2
117.5°	536.3	535.7	535.0	534.2	533.4	532.6	531.9
120°	579.5	579.5	579.1	578.3	577.5	576.7	575.9
122.5°	622.7	622.0	621.5	620.9	620.3	619.8	619.1
125°	687.4	686.6	686.1	685.8	685.6	685.3	685.1
127.5°	750.2	749.3	748.4	747.6	746.8	746.0	745.1
130°	793.8	793.2	792.4	791.4	790.3	789.3	788.3
132.5°	835.1	833.9	832.9	832.1	831.2	830.4	829.6
135°	897.8	897.5	897.0	896.2	895.4	894.6	893.8
137.5°	957.0	956.8	956.2	955.1	954.1	953.1	952.0
140°	997.0	997.0	996.5	995.5	994.5	993.4	992.4
142.5°	1033.4	1033.6	1033.2	1032.1	1031.1	1030.1	1029.0
145°	1088.2	1088.4	1088.0	1087.0	1086.0	1084.9	1083.9
147.5°	1136.5	1137.1	1136.9	1135.9	1134.9	1133.9	1133.0
150°	1167.2	1168.0	1168.0	1167.2	1166.4	1165.6	1164.9
152.5°	1197.8	1198.8	1198.8	1197.8	1196.9	1195.9	1194.9
155°	1236.8	1238.1	1238.3	1237.6	1236.8	1236.0	1235.2
157.5°	1272.9	1274.7	1275.0	1273.6	1272.4	1271.2	1269.9
160°	1293.8	1295.5	1295.7	1294.6	1293.6	1292.5	1291.5
162.5°	1313.2	1315.0	1315.2	1314.0	1312.8	1311.5	1310.3
165°	1338.1	1339.9	1340.1	1338.9	1337.6	1336.3	1334.9
167.5°	1358.5	1360.3	1360.5	1359.2	1357.8	1356.5	1355.1
170°	1369.7	1371.5	1371.7	1370.1	1368.6	1367.0	1365.4
172.5°	1378.2	1380.0	1380.1	1378.6	1377.0	1375.4	1373.8
175°	1387.4	1389.2	1389.3	1387.8	1386.1	1384.6	1383.0
177.5°	1391.0	1392.2	1392.2	1391.0	1389.8	1388.5	1387.3
180°	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1	1390.1

(END OF REPORT)