

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: P332830

Luminaire Tested: **S124DIW-S1020D1560U835-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D1560U835-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10019.3 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: General Diffuse

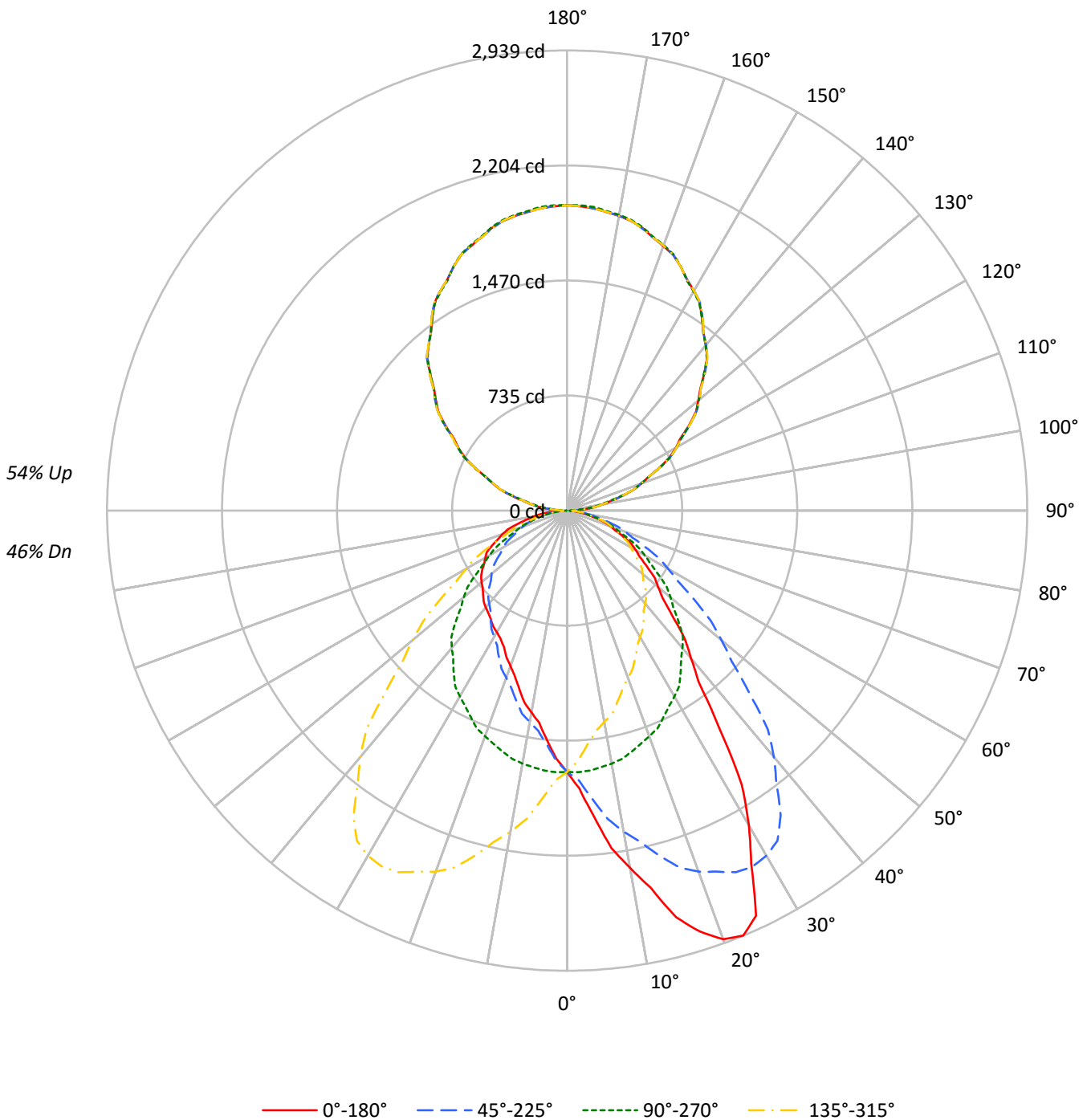
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46								
1	97	93	89	86	89	85	82	79	71	69	67	58	57	55	47	46	45	39								
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	41	40	38	33								
3	81	72	64	59	74	66	60	55	56	51	47	46	42	40	37	34	33	28								
4	74	64	56	50	68	59	52	47	49	44	40	41	37	34	33	30	28	24								
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	21								
6	63	51	43	37	57	47	40	35	40	35	30	33	29	26	27	24	22	19								
7	58	46	38	33	53	43	36	31	36	31	27	30	26	23	25	22	19	17								
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15								
9	50	38	31	26	46	35	29	24	30	25	21	26	21	19	21	18	16	14								
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	16	14	12								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13472	13472	13472	13472
5°	15866	13507	11921	13507
10°	18996	13448	10733	13448
15°	22476	13312	9857	13312
20°	25027	13173	9075	13173
25°	25432	12968	8535	12968
30°	21640	12773	8364	12773
35°	16638	12454	8366	12454
40°	12968	12079	8524	12079
45°	10813	11515	8667	11515
50°	9516	10827	8960	10827
55°	8718	10003	9322	10003
60°	8170	9265	9755	9265
65°	7607	8437	10115	8437
70°	6951	7619	10346	7619
75°	6210	6706	10221	6706
80°	5207	5495	9898	5495
85°	3844	3974	9476	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	1.6
10°-20°	501.1	5.0
20°-30°	794.6	7.9
30°-40°	884.3	8.8
40°-50°	805.0	8.0
50°-60°	657.8	6.6
60°-70°	469.6	4.7
70°-80°	258.6	2.6
80°-90°	76.4	0.8
90°-100°	128.6	1.3
100°-110°	380.9	3.8
110°-120°	646.6	6.5
120°-130°	852.5	8.5
130°-140°	957.5	9.6
140°-150°	940.9	9.4
150°-160°	791.3	7.9
160°-170°	526.5	5.3
170°-180°	184.4	1.8
0°-30°	1458.3	14.6
0°-40°	2342.7	23.4
0°-60°	3805.5	38.0
0°-90°	4610.1	46.0
90°-120°	1156.1	11.5
90°-150°	3906.9	39.0
90°-180°	5409.0	54.0
0°-180°	10019.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1669	1669	1669	1669	1669	
5°	1958	1667	1471	1667	1958	199
15°	2689	1593	1179	1593	2689	760
25°	2855	1456	958	1456	2855	1259
35°	1688	1264	849	1264	1688	1072
45°	947	1009	759	1009	947	746
55°	619	711	662	711	619	560
65°	398	442	530	442	398	394
75°	199	215	328	215	199	212
85°	42	43	102	43	42	52
90°	45	4	45	4	45	24
95°	119	90	119	90	119	124
105°	368	351	368	351	368	388
115°	651	657	651	657	651	644
125°	950	958	950	958	950	847
135°	1236	1235	1236	1235	1236	955
145°	1502	1500	1502	1500	1502	940
155°	1717	1719	1717	1719	1717	791
165°	1867	1871	1867	1871	1867	526
175°	1938	1947	1938	1947	1938	184
180°	1950	1950	1950	1950	1950	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1776.1	1775.6	1770.0	1768.9	1765.0	1760.1	1759.0	1750.1	1732.4	1724.1	1721.9
5°	1957.8	1971.6	1953.6	1950.2	1948.1	1925.3	1913.5	1899.7	1867.9	1849.2	1834.7
7.5°	2174.6	2176.2	2168.4	2162.0	2144.4	2124.5	2094.7	2062.9	2025.0	1985.6	1955.8
10°	2317.3	2322.8	2313.8	2312.4	2277.2	2255.0	2210.8	2173.5	2130.6	2082.9	2039.4
12.5°	2467.7	2459.9	2455.4	2425.8	2419.3	2378.9	2327.5	2289.1	2223.0	2168.1	2110.1
15°	2689.2	2674.0	2664.3	2623.5	2603.5	2547.5	2492.8	2450.7	2364.3	2282.0	2219.8
17.5°	2819.1	2834.4	2812.0	2795.2	2743.4	2704.1	2648.3	2559.8	2492.2	2390.0	2311.5
20°	2913.2	2914.5	2902.1	2884.8	2844.0	2794.3	2733.4	2636.6	2555.8	2454.1	2346.3
22.5°	2938.6	2938.9	2933.6	2917.4	2886.6	2846.2	2784.9	2704.1	2606.1	2495.6	2387.8
25°	2855.1	2852.3	2858.6	2876.5	2864.8	2852.3	2817.1	2756.9	2665.7	2548.8	2432.7
27.5°	2544.8	2563.9	2599.0	2643.3	2685.9	2718.4	2727.5	2715.2	2658.6	2562.5	2440.9
30°	2321.4	2344.9	2371.2	2415.4	2501.1	2550.2	2604.2	2644.9	2622.1	2545.4	2432.0
32.5°	2075.9	2081.7	2120.7	2171.0	2249.5	2343.9	2429.4	2512.2	2539.7	2499.5	2404.9
35°	1688.2	1697.8	1740.0	1789.8	1885.9	2001.3	2129.9	2244.7	2339.4	2377.4	2329.0
37.5°	1377.6	1405.4	1435.2	1488.7	1573.3	1677.2	1810.8	1959.3	2100.5	2195.0	2211.1
40°	1230.5	1247.8	1269.2	1310.0	1381.9	1484.2	1599.0	1769.1	1919.1	2054.6	2098.8
42.5°	1114.4	1124.5	1137.6	1174.5	1229.3	1331.0	1435.8	1585.4	1736.0	1898.0	1972.2
45°	947.1	957.5	979.6	1001.0	1042.5	1113.0	1210.5	1333.5	1484.9	1641.2	1778.0
47.5°	826.2	832.9	846.0	869.0	904.2	950.7	1030.0	1132.8	1273.1	1424.8	1570.6
50°	757.7	763.2	773.6	794.3	821.3	862.7	927.7	1023.8	1133.7	1286.5	1429.6
52.5°	703.5	705.7	713.3	727.4	748.8	783.7	837.0	916.5	1018.7	1154.9	1297.4
55°	619.4	622.2	629.1	639.5	658.1	680.2	721.0	780.5	869.7	987.9	1111.6
57.5°	550.3	552.2	558.0	562.0	577.4	595.4	626.7	669.2	736.8	837.0	947.5
60°	506.0	504.7	511.6	515.0	525.4	540.6	564.8	605.6	664.3	745.2	846.8
62.5°	462.9	461.0	466.8	471.3	477.3	490.3	510.0	542.0	589.7	662.8	750.6
65°	398.2	395.4	398.9	404.4	409.9	416.9	431.4	459.7	497.7	550.3	617.3
67.5°	333.2	336.1	336.7	339.4	342.6	352.0	362.0	382.0	408.8	450.9	507.7
70°	294.5	295.2	298.0	298.0	300.0	308.3	316.6	328.4	354.6	393.4	439.7
72.5°	255.8	258.7	257.6	259.8	261.3	266.8	272.9	284.1	306.5	335.3	374.4
75°	199.1	201.2	201.2	201.9	203.9	206.0	210.8	219.1	235.0	256.5	283.4
77.5°	145.2	145.5	146.4	148.9	148.9	152.2	155.8	162.5	170.3	185.0	201.4
80°	112.0	113.4	112.7	114.1	114.1	116.8	118.2	126.5	130.0	139.6	152.8
82.5°	82.1	83.5	83.4	85.3	86.4	87.0	88.9	92.2	95.7	104.2	109.6
85°	41.5	42.9	41.5	42.9	44.9	45.6	47.7	48.4	51.2	53.2	58.1
87.5°	21.2	22.7	22.6	23.0	24.0	24.3	24.4	23.5	25.3	25.4	27.1
90°	45.2	44.6	43.9	43.2	42.6	41.2	39.2	37.2	35.2	33.2	30.5
92.5°	66.9	66.5	66.1	65.7	65.3	64.5	63.3	62.1	60.9	59.7	57.8
95°	119.1	119.1	119.1	119.1	119.1	118.6	117.6	116.6	115.6	114.6	112.3
97.5°	186.7	186.7	186.7	186.7	186.7	186.1	184.9	183.7	182.4	181.2	178.5
100°	233.7	233.7	233.7	233.7	233.7	233.4	232.7	232.0	231.4	230.7	227.7
102.5°	286.8	286.5	286.3	286.0	285.7	285.1	284.2	283.2	282.3	281.4	278.6
105°	367.9	366.9	365.9	364.9	363.9	362.9	361.9	360.9	359.9	358.9	357.5
107.5°	446.9	447.0	447.1	447.1	447.2	446.8	445.8	444.9	443.9	443.0	442.8
110°	503.6	502.6	501.6	500.6	499.6	499.4	500.1	500.8	501.4	502.1	502.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	561.5	561.3	561.1	560.9	560.7	560.7	560.8	560.9	561.1	561.2	561.8
115°	651.4	651.7	652.1	652.4	652.7	653.1	653.4	653.7	654.1	654.4	655.1
117.5°	737.0	737.7	738.4	739.0	739.7	740.6	741.8	742.9	744.0	745.2	745.6
120°	802.2	801.5	800.8	800.2	799.5	800.0	801.7	803.3	805.0	806.7	807.7
122.5°	856.5	857.7	858.9	860.1	861.3	862.5	863.6	864.7	865.9	867.0	867.5
125°	949.9	950.6	951.3	951.9	952.6	953.3	954.0	954.6	955.3	956.0	956.3
127.5°	1036.5	1037.0	1037.6	1038.1	1038.6	1039.2	1039.9	1040.6	1041.2	1041.9	1042.5
130°	1093.2	1094.5	1095.9	1097.2	1098.5	1099.5	1100.2	1100.9	1101.6	1102.2	1102.2
132.5°	1153.5	1154.0	1154.6	1155.1	1155.6	1156.2	1156.9	1157.6	1158.3	1158.9	1159.2
135°	1236.4	1237.4	1238.4	1239.4	1240.4	1241.3	1242.0	1242.6	1243.3	1244.0	1244.0
137.5°	1323.6	1323.4	1323.2	1323.0	1322.8	1323.1	1324.0	1324.9	1325.7	1326.6	1326.1
140°	1376.7	1377.0	1377.3	1377.7	1378.0	1378.3	1378.7	1379.0	1379.3	1379.7	1379.7
142.5°	1429.7	1429.8	1429.9	1429.9	1430.0	1430.1	1430.1	1430.2	1430.3	1430.3	1430.6
145°	1501.8	1502.8	1503.8	1504.8	1505.8	1506.5	1506.8	1507.2	1507.5	1507.8	1507.5
147.5°	1574.8	1575.1	1575.5	1575.8	1576.1	1576.4	1576.7	1577.0	1577.2	1577.5	1577.8
150°	1619.4	1619.8	1620.1	1620.4	1620.8	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9
152.5°	1660.4	1661.3	1662.2	1663.0	1663.9	1663.9	1663.1	1662.3	1661.5	1660.7	1660.5
155°	1717.4	1718.8	1720.1	1721.4	1722.8	1722.8	1721.4	1720.1	1718.8	1717.4	1717.8
157.5°	1768.4	1769.5	1770.7	1771.8	1772.9	1773.0	1772.0	1771.0	1770.0	1769.0	1769.1
160°	1797.3	1799.0	1800.7	1802.4	1804.0	1804.4	1803.4	1802.4	1801.4	1800.4	1800.7
162.5°	1827.5	1829.2	1830.9	1832.5	1834.2	1834.1	1832.3	1830.5	1828.7	1826.9	1827.2
165°	1866.7	1868.0	1869.4	1870.7	1872.1	1871.7	1869.7	1867.7	1865.7	1863.7	1864.4
167.5°	1894.7	1896.8	1898.9	1901.0	1903.1	1903.1	1901.1	1899.1	1897.1	1895.1	1895.0
170°	1910.4	1912.8	1915.1	1917.5	1919.8	1920.0	1918.0	1916.0	1913.9	1911.9	1911.6
172.5°	1923.7	1926.0	1928.4	1930.7	1933.1	1933.1	1930.8	1928.6	1926.3	1924.0	1923.9
175°	1937.6	1939.9	1942.3	1944.6	1947.0	1947.0	1944.6	1942.3	1939.9	1937.6	1937.9
177.5°	1944.8	1947.0	1949.1	1951.2	1953.4	1953.5	1951.6	1949.8	1947.9	1946.0	1946.0
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1722.5	1714.7	1709.2	1704.8	1692.6	1685.4	1679.9	1672.1	1663.3	1653.9	1642.3
5°	1820.2	1796.7	1779.4	1753.2	1728.3	1707.5	1686.1	1666.7	1643.2	1617.7	1599.0
7.5°	1922.9	1888.0	1843.2	1804.3	1760.6	1722.6	1688.6	1653.7	1617.5	1582.4	1550.2
10°	1988.2	1943.3	1893.5	1834.7	1779.4	1730.3	1684.7	1640.5	1597.6	1554.7	1518.1
12.5°	2058.4	2002.4	1928.9	1860.2	1798.2	1732.6	1677.5	1623.3	1571.6	1526.5	1483.8
15°	2152.7	2071.8	1986.8	1894.9	1813.3	1736.6	1661.2	1592.8	1534.7	1475.2	1433.8
17.5°	2210.7	2110.6	2013.4	1917.3	1818.5	1721.8	1640.5	1561.5	1488.8	1429.8	1377.5
20°	2248.8	2149.3	2028.3	1932.2	1814.7	1715.1	1621.1	1533.3	1457.3	1394.4	1340.4
22.5°	2282.0	2167.0	2046.0	1919.5	1802.5	1696.9	1594.0	1505.7	1428.0	1361.7	1310.0
25°	2300.0	2167.9	2036.6	1910.8	1778.0	1652.9	1559.6	1455.9	1372.9	1303.1	1247.8
27.5°	2301.9	2160.7	2012.1	1872.3	1735.3	1618.8	1501.0	1408.3	1322.2	1248.4	1195.3
30°	2295.8	2148.6	1988.9	1837.5	1699.9	1573.4	1471.1	1370.2	1282.4	1209.1	1153.8
32.5°	2276.5	2123.1	1959.0	1798.8	1656.2	1532.5	1426.9	1330.9	1245.3	1173.1	1115.1
35°	2220.5	2069.1	1894.2	1727.6	1581.7	1456.6	1361.2	1263.7	1178.0	1109.5	1053.6
37.5°	2133.0	1996.1	1818.3	1645.9	1502.6	1376.9	1282.4	1194.3	1117.0	1047.5	990.1
40°	2056.6	1936.3	1758.0	1590.0	1435.2	1315.6	1227.1	1146.2	1069.5	1003.8	949.2
42.5°	1968.7	1863.9	1699.4	1521.4	1372.1	1252.0	1165.7	1093.1	1020.8	960.1	905.5
45°	1811.9	1742.8	1587.9	1423.4	1267.9	1154.5	1072.2	1008.6	947.8	888.3	842.7
47.5°	1631.6	1597.3	1467.0	1310.7	1163.1	1051.3	980.0	921.2	867.9	817.5	777.3
50°	1510.5	1493.9	1381.2	1230.5	1089.5	984.4	912.5	862.1	816.4	772.2	734.2
52.5°	1391.0	1390.5	1288.9	1150.9	1020.4	919.2	847.8	800.7	761.1	725.2	691.0
55°	1208.4	1227.8	1148.3	1025.2	908.4	817.1	752.8	710.7	683.0	653.3	627.7
57.5°	1040.7	1072.8	1007.2	898.8	801.4	717.3	661.3	629.6	600.2	582.2	563.6
60°	931.2	961.6	910.5	819.2	727.3	655.4	602.1	573.8	548.2	535.8	522.6
62.5°	833.9	861.0	823.1	738.5	658.7	589.5	544.6	517.4	500.1	486.5	477.8
65°	694.8	717.6	685.1	623.6	555.1	499.8	463.2	441.7	425.2	419.6	409.9
67.5°	561.6	582.4	564.8	512.5	457.6	415.8	387.1	366.5	356.7	351.9	345.0
70°	482.5	503.3	484.6	439.0	396.8	361.6	334.6	322.8	312.5	310.4	300.7
72.5°	415.6	429.7	411.1	375.4	339.3	309.6	288.7	276.4	271.0	267.3	262.0
75°	311.8	324.2	311.8	284.1	258.5	237.8	219.8	215.0	208.8	206.7	203.2
77.5°	220.7	231.4	221.9	204.6	185.5	169.5	159.8	153.6	152.2	148.6	150.3
80°	168.7	175.6	166.6	154.9	139.6	128.6	121.7	118.2	114.1	112.7	115.4
82.5°	121.1	124.2	119.6	111.7	100.4	93.2	88.5	84.5	83.6	83.9	83.9
85°	62.9	62.2	61.5	54.6	51.2	46.3	43.6	42.9	42.2	43.6	44.9
87.5°	26.6	26.6	25.5	22.7	20.3	17.9	16.6	15.3	16.6	17.9	19.2
90°	27.8	25.1	22.5	19.3	15.6	11.9	8.2	4.5	8.2	11.9	15.6
92.5°	56.0	54.1	52.2	49.2	44.9	40.7	36.5	32.3	36.5	40.7	44.9
95°	109.9	107.6	105.2	102.5	99.5	96.5	93.5	90.5	93.5	96.5	99.5
97.5°	175.7	173.0	170.3	167.7	165.3	162.8	160.4	158.0	160.4	162.8	165.3
100°	224.7	221.7	218.6	216.5	215.1	213.8	212.4	211.1	212.4	213.8	215.1
102.5°	275.9	273.1	270.4	268.7	268.2	267.7	267.1	266.6	267.1	267.7	268.2
105°	356.2	354.8	353.5	352.7	352.3	352.0	351.7	351.3	351.7	352.0	352.3
107.5°	442.6	442.4	442.2	441.9	441.5	441.1	440.7	440.3	440.7	441.1	441.5
110°	502.8	503.1	503.5	503.3	502.6	501.9	501.3	500.6	501.3	501.9	502.6



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	562.4	563.0	563.6	563.9	563.7	563.6	563.5	563.3	563.5	563.6	563.7
115°	655.7	656.4	657.1	657.4	657.4	657.4	657.4	657.4	657.4	657.4	657.4
117.5°	746.1	746.6	747.1	747.2	746.9	746.6	746.3	746.1	746.3	746.6	746.9
120°	808.7	809.7	810.7	810.5	809.2	807.9	806.5	805.2	806.5	807.9	809.2
122.5°	867.9	868.4	868.9	868.8	868.3	867.8	867.2	866.7	867.2	867.8	868.3
125°	956.6	957.0	957.3	957.5	957.5	957.5	957.5	957.5	957.5	957.5	957.5
127.5°	1043.0	1043.5	1044.1	1043.8	1042.8	1041.8	1040.8	1039.8	1040.8	1041.8	1042.8
130°	1102.2	1102.2	1102.2	1101.7	1100.7	1099.7	1098.7	1097.7	1098.7	1099.7	1100.7
132.5°	1159.5	1159.7	1160.0	1159.8	1159.0	1158.3	1157.6	1156.8	1157.6	1158.3	1159.0
135°	1244.0	1244.0	1244.0	1243.0	1241.0	1238.9	1236.9	1234.9	1236.9	1238.9	1241.0
137.5°	1325.5	1325.0	1324.5	1323.7	1322.8	1321.8	1320.9	1320.0	1320.9	1321.8	1322.8
140°	1379.7	1379.7	1379.7	1379.3	1378.7	1378.0	1377.3	1376.7	1377.3	1378.0	1378.7
142.5°	1430.9	1431.1	1431.4	1431.2	1430.5	1429.9	1429.2	1428.5	1429.2	1429.9	1430.5
145°	1507.2	1506.8	1506.5	1505.7	1504.3	1503.0	1501.6	1500.3	1501.6	1503.0	1504.3
147.5°	1578.0	1578.3	1578.6	1577.9	1576.3	1574.7	1573.1	1571.5	1573.1	1574.7	1576.3
150°	1620.9	1620.9	1620.9	1620.3	1618.9	1617.6	1616.2	1614.9	1616.2	1617.6	1618.9
152.5°	1660.2	1659.9	1659.7	1659.1	1658.3	1657.5	1656.7	1655.9	1656.7	1657.5	1658.3
155°	1718.1	1718.4	1718.8	1718.9	1718.9	1718.9	1718.9	1718.9	1718.9	1718.9	1718.9
157.5°	1769.1	1769.2	1769.3	1769.6	1770.2	1770.8	1771.4	1772.0	1771.4	1770.8	1770.2
160°	1801.0	1801.4	1801.7	1802.0	1802.4	1802.7	1803.0	1803.4	1803.0	1802.7	1802.4
162.5°	1827.6	1827.9	1828.2	1828.8	1829.7	1830.6	1831.5	1832.3	1831.5	1830.6	1829.7
165°	1865.0	1865.7	1866.4	1867.2	1868.2	1869.2	1870.2	1871.2	1870.2	1869.2	1868.2
167.5°	1894.9	1894.9	1894.8	1895.5	1896.9	1898.3	1899.7	1901.1	1899.7	1898.3	1896.9
170°	1911.3	1910.9	1910.6	1911.3	1912.9	1914.6	1916.3	1918.0	1916.3	1914.6	1912.9
172.5°	1923.9	1923.8	1923.7	1924.4	1925.8	1927.2	1928.6	1930.0	1928.6	1927.2	1925.8
175°	1938.2	1938.6	1938.9	1939.9	1941.6	1943.3	1944.9	1946.6	1944.9	1943.3	1941.6
177.5°	1946.0	1946.0	1946.0	1946.7	1948.0	1949.4	1950.7	1952.0	1950.7	1949.4	1948.0
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



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CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1636.7	1631.8	1624.6	1614.6	1606.3	1597.5	1595.3	1591.9	1598.6	1593.0	1591.4
5°	1583.1	1568.6	1549.9	1528.5	1516.0	1498.1	1494.6	1487.7	1480.8	1480.1	1473.2
7.5°	1526.3	1505.0	1480.5	1458.7	1438.5	1418.8	1406.0	1403.2	1393.0	1387.0	1380.1
10°	1489.8	1463.5	1435.2	1414.4	1390.9	1370.2	1355.7	1347.4	1340.4	1332.8	1325.9
12.5°	1446.6	1418.7	1395.3	1372.9	1345.0	1329.2	1305.3	1290.9	1289.6	1289.7	1271.7
15°	1396.4	1368.8	1332.8	1301.0	1285.8	1255.4	1242.3	1225.7	1215.3	1204.9	1196.7
17.5°	1339.1	1304.6	1276.6	1240.1	1211.0	1186.8	1169.6	1159.6	1144.0	1129.3	1118.7
20°	1303.1	1266.5	1236.7	1198.0	1166.2	1136.5	1122.0	1108.2	1096.4	1084.0	1072.2
22.5°	1266.6	1228.3	1191.9	1154.3	1124.8	1093.4	1079.4	1060.6	1049.4	1042.5	1030.7
25°	1209.1	1167.6	1126.1	1090.2	1059.8	1032.1	1013.5	998.9	986.5	981.0	973.4
27.5°	1146.6	1105.4	1065.3	1024.5	990.0	969.9	955.0	944.0	936.9	929.5	926.1
30°	1106.8	1063.9	1021.1	983.0	951.2	931.2	917.4	909.8	904.2	900.8	897.3
32.5°	1066.4	1024.1	979.0	944.3	915.8	898.0	887.5	879.9	877.1	875.9	874.6
35°	1001.7	958.8	917.4	886.3	859.3	852.4	843.4	839.2	837.9	842.7	844.8
37.5°	939.1	899.3	861.1	830.9	813.3	803.2	800.1	800.3	805.2	809.5	814.5
40°	898.7	860.0	824.0	797.8	781.2	775.0	773.6	777.0	782.6	787.4	792.9
42.5°	859.4	821.3	788.6	764.0	752.4	746.7	747.6	751.0	758.8	764.7	773.0
45°	798.5	766.7	734.9	714.8	705.1	706.5	706.5	712.7	720.3	729.3	738.3
47.5°	741.1	709.0	682.9	666.0	661.0	659.8	663.7	671.8	682.7	693.8	706.4
50°	702.4	671.9	649.1	633.9	628.4	630.5	636.0	643.6	656.7	670.6	683.7
52.5°	663.1	635.4	614.3	600.2	596.3	600.1	605.6	617.6	629.1	644.0	659.9
55°	602.1	578.6	562.0	551.7	550.3	552.4	558.6	571.7	588.3	607.0	622.2
57.5°	541.4	521.8	506.6	499.4	500.1	502.0	512.3	527.9	545.6	565.5	585.1
60°	500.5	482.5	470.1	464.6	465.2	469.4	481.8	496.4	518.5	537.8	558.6
62.5°	461.8	446.0	434.1	429.2	428.2	437.3	449.2	464.3	486.4	508.0	530.4
65°	399.6	387.1	377.5	374.7	376.8	383.7	398.9	418.9	437.6	460.4	483.9
67.5°	338.7	328.5	321.9	323.1	325.6	335.8	348.6	365.8	387.0	410.6	433.9
70°	300.0	290.3	284.8	285.5	289.7	302.1	313.2	330.4	353.3	377.5	396.8
72.5°	260.2	253.8	248.9	251.8	255.9	264.5	278.3	295.6	315.7	338.2	358.6
75°	199.8	199.8	197.0	199.1	205.3	213.6	224.0	242.0	262.0	280.0	296.6
77.5°	148.2	146.7	148.5	151.0	154.6	164.4	176.3	189.1	204.2	222.2	235.9
80°	113.4	114.1	117.5	121.7	123.1	130.7	143.1	154.9	166.6	181.8	194.9
82.5°	85.2	85.9	87.7	92.9	94.3	102.5	110.5	122.2	132.9	143.1	154.0
85°	46.3	46.3	49.8	51.8	55.3	60.8	65.7	72.6	82.3	89.2	99.5
87.5°	21.6	22.2	24.9	26.6	28.8	32.1	33.6	40.1	42.7	45.8	51.1
90°	19.3	22.5	25.1	27.8	30.5	33.2	35.2	37.2	39.2	41.2	42.6
92.5°	49.2	52.2	54.1	56.0	57.8	59.7	60.9	62.1	63.3	64.5	65.3
95°	102.5	105.2	107.6	109.9	112.3	114.6	115.6	116.6	117.6	118.6	119.1
97.5°	167.7	170.3	173.0	175.7	178.5	181.2	182.4	183.7	184.9	186.1	186.7
100°	216.5	218.6	221.7	224.7	227.7	230.7	231.4	232.0	232.7	233.4	233.7
102.5°	268.7	270.4	273.1	275.9	278.6	281.4	282.3	283.2	284.2	285.1	285.7
105°	352.7	353.5	354.8	356.2	357.5	358.9	359.9	360.9	361.9	362.9	363.9
107.5°	441.9	442.2	442.4	442.6	442.8	443.0	443.9	444.9	445.8	446.8	447.2
110°	503.3	503.5	503.1	502.8	502.4	502.1	501.4	500.8	500.1	499.4	499.6



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CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	563.9	563.6	563.0	562.4	561.8	561.2	561.1	560.9	560.8	560.7	560.7
115°	657.4	657.1	656.4	655.7	655.1	654.4	654.1	653.7	653.4	653.1	652.7
117.5°	747.2	747.1	746.6	746.1	745.6	745.2	744.0	742.9	741.8	740.6	739.7
120°	810.5	810.7	809.7	808.7	807.7	806.7	805.0	803.3	801.7	800.0	799.5
122.5°	868.8	868.9	868.4	867.9	867.5	867.0	865.9	864.7	863.6	862.5	861.3
125°	957.5	957.3	957.0	956.6	956.3	956.0	955.3	954.6	954.0	953.3	952.6
127.5°	1043.8	1044.1	1043.5	1043.0	1042.5	1041.9	1041.2	1040.6	1039.9	1039.2	1038.6
130°	1101.7	1102.2	1102.2	1102.2	1102.2	1102.2	1101.6	1100.9	1100.2	1099.5	1098.5
132.5°	1159.8	1160.0	1159.7	1159.5	1159.2	1158.9	1158.3	1157.6	1156.9	1156.2	1155.6
135°	1243.0	1244.0	1244.0	1244.0	1244.0	1244.0	1243.3	1242.6	1242.0	1241.3	1240.4
137.5°	1323.7	1324.5	1325.0	1325.5	1326.1	1326.6	1325.7	1324.9	1324.0	1323.1	1322.8
140°	1379.3	1379.7	1379.7	1379.7	1379.7	1379.7	1379.3	1379.0	1378.7	1378.3	1378.0
142.5°	1431.2	1431.4	1431.1	1430.9	1430.6	1430.3	1430.3	1430.2	1430.1	1430.1	1430.0
145°	1505.7	1506.5	1506.8	1507.2	1507.5	1507.8	1507.5	1507.2	1506.8	1506.5	1505.8
147.5°	1577.9	1578.6	1578.3	1578.0	1577.8	1577.5	1577.2	1577.0	1576.7	1576.4	1576.1
150°	1620.3	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.8
152.5°	1659.1	1659.7	1659.9	1660.2	1660.5	1660.7	1661.5	1662.3	1663.1	1663.9	1663.9
155°	1718.9	1718.8	1718.4	1718.1	1717.8	1717.4	1718.8	1720.1	1721.4	1722.8	1722.8
157.5°	1769.6	1769.3	1769.2	1769.1	1769.1	1769.0	1770.0	1771.0	1772.0	1773.0	1772.9
160°	1802.0	1801.7	1801.4	1801.0	1800.7	1800.4	1801.4	1802.4	1803.4	1804.4	1804.0
162.5°	1828.8	1828.2	1827.9	1827.6	1827.2	1826.9	1828.7	1830.5	1832.3	1834.1	1834.2
165°	1867.2	1866.4	1865.7	1865.0	1864.4	1863.7	1865.7	1867.7	1869.7	1871.7	1872.1
167.5°	1895.5	1894.8	1894.9	1894.9	1895.0	1895.1	1897.1	1899.1	1901.1	1903.1	1903.1
170°	1911.3	1910.6	1910.9	1911.3	1911.6	1911.9	1913.9	1916.0	1918.0	1920.0	1919.8
172.5°	1924.4	1923.7	1923.8	1923.9	1923.9	1924.0	1926.3	1928.6	1930.8	1933.1	1933.1
175°	1939.9	1938.9	1938.6	1938.2	1937.9	1937.6	1939.9	1942.3	1944.6	1947.0	1947.0
177.5°	1946.7	1946.0	1946.0	1946.0	1946.0	1946.0	1947.9	1949.8	1951.6	1953.5	1953.4
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1590.3	1589.2	1585.3	1584.8	1585.3	1589.2	1590.3	1591.4	1593.0	1598.6	1591.9
5°	1469.0	1465.6	1463.5	1471.1	1463.5	1465.6	1469.0	1473.2	1480.1	1480.8	1487.7
7.5°	1377.6	1374.9	1368.8	1366.9	1368.8	1374.9	1377.6	1380.1	1387.0	1393.0	1403.2
10°	1319.0	1316.2	1310.7	1309.3	1310.7	1316.2	1319.0	1325.9	1332.8	1340.4	1347.4
12.5°	1262.6	1257.1	1256.0	1257.3	1256.0	1257.1	1262.6	1271.7	1289.7	1289.6	1290.9
15°	1187.7	1184.9	1177.3	1179.4	1177.3	1184.9	1187.7	1196.7	1204.9	1215.3	1225.7
17.5°	1113.8	1110.5	1101.3	1109.4	1101.3	1110.5	1113.8	1118.7	1129.3	1144.0	1159.6
20°	1067.4	1061.8	1057.0	1056.3	1057.0	1061.8	1067.4	1072.2	1084.0	1096.4	1108.2
22.5°	1023.1	1018.2	1017.7	1013.2	1017.7	1018.2	1023.1	1030.7	1042.5	1049.4	1060.6
25°	967.8	963.0	961.6	958.2	961.6	963.0	967.8	973.4	981.0	986.5	998.9
27.5°	925.4	923.0	920.5	921.6	920.5	923.0	925.4	926.1	929.5	936.9	944.0
30°	899.4	898.7	897.3	897.3	897.3	898.7	899.4	897.3	900.8	904.2	909.8
32.5°	877.8	877.7	878.5	878.5	878.5	877.7	877.8	874.6	875.9	877.1	879.9
35°	847.5	849.6	851.0	848.9	851.0	849.6	847.5	844.8	842.7	837.9	839.2
37.5°	820.2	822.2	824.2	826.5	824.2	822.2	820.2	814.5	809.5	805.2	800.3
40°	799.1	804.0	805.4	808.8	805.4	804.0	799.1	792.9	787.4	782.6	777.0
42.5°	779.2	784.6	788.2	788.9	788.2	784.6	779.2	773.0	764.7	758.8	751.0
45°	748.7	754.2	759.1	759.1	759.1	754.2	748.7	738.3	729.3	720.3	712.7
47.5°	717.0	725.0	729.9	731.1	729.9	725.0	717.0	706.4	693.8	682.7	671.8
50°	695.5	705.1	710.0	713.4	710.0	705.1	695.5	683.7	670.6	656.7	643.6
52.5°	674.4	684.1	690.6	692.4	690.6	684.1	674.4	659.9	644.0	629.1	617.6
55°	638.1	651.9	659.5	662.3	659.5	651.9	638.1	622.2	607.0	588.3	571.7
57.5°	603.8	616.5	625.4	627.4	625.4	616.5	603.8	585.1	565.5	545.6	527.9
60°	577.2	591.1	602.1	604.2	602.1	591.1	577.2	558.6	537.8	518.5	496.4
62.5°	550.1	564.5	574.5	579.9	574.5	564.5	550.1	530.4	508.0	486.4	464.3
65°	503.3	517.8	527.5	529.5	527.5	517.8	503.3	483.9	460.4	437.6	418.9
67.5°	452.1	466.6	473.0	477.0	473.0	466.6	452.1	433.9	410.6	387.0	365.8
70°	416.2	427.9	434.8	438.3	434.8	427.9	416.2	396.8	377.5	353.3	330.4
72.5°	375.2	387.5	395.6	396.3	395.6	387.5	375.2	358.6	338.2	315.7	295.6
75°	312.5	323.5	327.7	327.7	327.7	323.5	312.5	296.6	280.0	262.0	242.0
77.5°	247.3	253.0	258.3	259.4	258.3	253.0	247.3	235.9	222.2	204.2	189.1
80°	205.3	208.8	212.9	212.9	212.9	208.8	205.3	194.9	181.8	166.6	154.9
82.5°	162.2	165.1	169.2	168.7	169.2	165.1	162.2	154.0	143.1	132.9	122.2
85°	98.2	104.4	103.7	102.3	103.7	104.4	98.2	99.5	89.2	82.3	72.6
87.5°	52.9	53.6	55.4	56.6	55.4	53.6	52.9	51.1	45.8	42.7	40.1
90°	43.2	43.9	44.6	45.2	44.6	43.9	43.2	42.6	41.2	39.2	37.2
92.5°	65.7	66.1	66.5	66.9	66.5	66.1	65.7	65.3	64.5	63.3	62.1
95°	119.1	119.1	119.1	119.1	119.1	119.1	119.1	119.1	118.6	117.6	116.6
97.5°	186.7	186.7	186.7	186.7	186.7	186.7	186.7	186.7	186.1	184.9	183.7
100°	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.7	233.4	232.7	232.0
102.5°	286.0	286.3	286.5	286.8	286.5	286.3	286.0	285.7	285.1	284.2	283.2
105°	364.9	365.9	366.9	367.9	366.9	365.9	364.9	363.9	362.9	361.9	360.9
107.5°	447.1	447.1	447.0	446.9	447.0	447.1	447.1	447.2	446.8	445.8	444.9
110°	500.6	501.6	502.6	503.6	502.6	501.6	500.6	499.6	499.4	500.1	500.8



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	560.9	561.1	561.3	561.5	561.3	561.1	560.9	560.7	560.7	560.8	560.9
115°	652.4	652.1	651.7	651.4	651.7	652.1	652.4	652.7	653.1	653.4	653.7
117.5°	739.0	738.4	737.7	737.0	737.7	738.4	739.0	739.7	740.6	741.8	742.9
120°	800.2	800.8	801.5	802.2	801.5	800.8	800.2	799.5	800.0	801.7	803.3
122.5°	860.1	858.9	857.7	856.5	857.7	858.9	860.1	861.3	862.5	863.6	864.7
125°	951.9	951.3	950.6	949.9	950.6	951.3	951.9	952.6	953.3	954.0	954.6
127.5°	1038.1	1037.6	1037.0	1036.5	1037.0	1037.6	1038.1	1038.6	1039.2	1039.9	1040.6
130°	1097.2	1095.9	1094.5	1093.2	1094.5	1095.9	1097.2	1098.5	1099.5	1100.2	1100.9
132.5°	1155.1	1154.6	1154.0	1153.5	1154.0	1154.6	1155.1	1155.6	1156.2	1156.9	1157.6
135°	1239.4	1238.4	1237.4	1236.4	1237.4	1238.4	1239.4	1240.4	1241.3	1242.0	1242.6
137.5°	1323.0	1323.2	1323.4	1323.6	1323.4	1323.2	1323.0	1322.8	1323.1	1324.0	1324.9
140°	1377.7	1377.3	1377.0	1376.7	1377.0	1377.3	1377.7	1378.0	1378.3	1378.7	1379.0
142.5°	1429.9	1429.9	1429.8	1429.7	1429.8	1429.9	1429.9	1430.0	1430.1	1430.1	1430.2
145°	1504.8	1503.8	1502.8	1501.8	1502.8	1503.8	1504.8	1505.8	1506.5	1506.8	1507.2
147.5°	1575.8	1575.5	1575.1	1574.8	1575.1	1575.5	1575.8	1576.1	1576.4	1576.7	1577.0
150°	1620.4	1620.1	1619.8	1619.4	1619.8	1620.1	1620.4	1620.8	1620.9	1620.9	1620.9
152.5°	1663.0	1662.2	1661.3	1660.4	1661.3	1662.2	1663.0	1663.9	1663.9	1663.1	1662.3
155°	1721.4	1720.1	1718.8	1717.4	1718.8	1720.1	1721.4	1722.8	1722.8	1721.4	1720.1
157.5°	1771.8	1770.7	1769.5	1768.4	1769.5	1770.7	1771.8	1772.9	1773.0	1772.0	1771.0
160°	1802.4	1800.7	1799.0	1797.3	1799.0	1800.7	1802.4	1804.0	1804.4	1803.4	1802.4
162.5°	1832.5	1830.9	1829.2	1827.5	1829.2	1830.9	1832.5	1834.2	1834.1	1832.3	1830.5
165°	1870.7	1869.4	1868.0	1866.7	1868.0	1869.4	1870.7	1872.1	1871.7	1869.7	1867.7
167.5°	1901.0	1898.9	1896.8	1894.7	1896.8	1898.9	1901.0	1903.1	1903.1	1901.1	1899.1
170°	1917.5	1915.1	1912.8	1910.4	1912.8	1915.1	1917.5	1919.8	1920.0	1918.0	1916.0
172.5°	1930.7	1928.4	1926.0	1923.7	1926.0	1928.4	1930.7	1933.1	1933.1	1930.8	1928.6
175°	1944.6	1942.3	1939.9	1937.6	1939.9	1942.3	1944.6	1947.0	1947.0	1944.6	1942.3
177.5°	1951.2	1949.1	1947.0	1944.8	1947.0	1949.1	1951.2	1953.4	1953.5	1951.6	1949.8
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1595.3	1597.5	1606.3	1614.6	1624.6	1631.8	1636.7	1642.3	1653.9	1663.3	1672.1
5°	1494.6	1498.1	1516.0	1528.5	1549.9	1568.6	1583.1	1599.0	1617.7	1643.2	1666.7
7.5°	1406.0	1418.8	1438.5	1458.7	1480.5	1505.0	1526.3	1550.2	1582.4	1617.5	1653.7
10°	1355.7	1370.2	1390.9	1414.4	1435.2	1463.5	1489.8	1518.1	1554.7	1597.6	1640.5
12.5°	1305.3	1329.2	1345.0	1372.9	1395.3	1418.7	1446.6	1483.8	1526.5	1571.6	1623.3
15°	1242.3	1255.4	1285.8	1301.0	1332.8	1368.8	1396.4	1433.8	1475.2	1534.7	1592.8
17.5°	1169.6	1186.8	1211.0	1240.1	1276.6	1304.6	1339.1	1377.5	1429.8	1488.8	1561.5
20°	1122.0	1136.5	1166.2	1198.0	1236.7	1266.5	1303.1	1340.4	1394.4	1457.3	1533.3
22.5°	1079.4	1093.4	1124.8	1154.3	1191.9	1228.3	1266.6	1310.0	1361.7	1428.0	1505.7
25°	1013.5	1032.1	1059.8	1090.2	1126.1	1167.6	1209.1	1247.8	1303.1	1372.9	1455.9
27.5°	955.0	969.9	990.0	1024.5	1065.3	1105.4	1146.6	1195.3	1248.4	1322.2	1408.3
30°	917.4	931.2	951.2	983.0	1021.1	1063.9	1106.8	1153.8	1209.1	1282.4	1370.2
32.5°	887.5	898.0	915.8	944.3	979.0	1024.1	1066.4	1115.1	1173.1	1245.3	1330.9
35°	843.4	852.4	859.3	886.3	917.4	958.8	1001.7	1053.6	1109.5	1178.0	1263.7
37.5°	800.1	803.2	813.3	830.9	861.1	899.3	939.1	990.1	1047.5	1117.0	1194.3
40°	773.6	775.0	781.2	797.8	824.0	860.0	898.7	949.2	1003.8	1069.5	1146.2
42.5°	747.6	746.7	752.4	764.0	788.6	821.3	859.4	905.5	960.1	1020.8	1093.1
45°	706.5	706.5	705.1	714.8	734.9	766.7	798.5	842.7	888.3	947.8	1008.6
47.5°	663.7	659.8	661.0	666.0	682.9	709.0	741.1	777.3	817.5	867.9	921.2
50°	636.0	630.5	628.4	633.9	649.1	671.9	702.4	734.2	772.2	816.4	862.1
52.5°	605.6	600.1	596.3	600.2	614.3	635.4	663.1	691.0	725.2	761.1	800.7
55°	558.6	552.4	550.3	551.7	562.0	578.6	602.1	627.7	653.3	683.0	710.7
57.5°	512.3	502.0	500.1	499.4	506.6	521.8	541.4	563.6	582.2	600.2	629.6
60°	481.8	469.4	465.2	464.6	470.1	482.5	500.5	522.6	535.8	548.2	573.8
62.5°	449.2	437.3	428.2	429.2	434.1	446.0	461.8	477.8	486.5	500.1	517.4
65°	398.9	383.7	376.8	374.7	377.5	387.1	399.6	409.9	419.6	425.2	441.7
67.5°	348.6	335.8	325.6	323.1	321.9	328.5	338.7	345.0	351.9	356.7	366.5
70°	313.2	302.1	289.7	285.5	284.8	290.3	300.0	300.7	310.4	312.5	322.8
72.5°	278.3	264.5	255.9	251.8	248.9	253.8	260.2	262.0	267.3	271.0	276.4
75°	224.0	213.6	205.3	199.1	197.0	199.8	199.8	203.2	206.7	208.8	215.0
77.5°	176.3	164.4	154.6	151.0	148.5	146.7	148.2	150.3	148.6	152.2	153.6
80°	143.1	130.7	123.1	121.7	117.5	114.1	113.4	115.4	112.7	114.1	118.2
82.5°	110.5	102.5	94.3	92.9	87.7	85.9	85.2	83.9	83.9	83.6	84.5
85°	65.7	60.8	55.3	51.8	49.8	46.3	46.3	44.9	43.6	42.2	42.9
87.5°	33.6	32.1	28.8	26.6	24.9	22.2	21.6	19.2	17.9	16.6	15.3
90°	35.2	33.2	30.5	27.8	25.1	22.5	19.3	15.6	11.9	8.2	4.5
92.5°	60.9	59.7	57.8	56.0	54.1	52.2	49.2	44.9	40.7	36.5	32.3
95°	115.6	114.6	112.3	109.9	107.6	105.2	102.5	99.5	96.5	93.5	90.5
97.5°	182.4	181.2	178.5	175.7	173.0	170.3	167.7	165.3	162.8	160.4	158.0
100°	231.4	230.7	227.7	224.7	221.7	218.6	216.5	215.1	213.8	212.4	211.1
102.5°	282.3	281.4	278.6	275.9	273.1	270.4	268.7	268.2	267.7	267.1	266.6
105°	359.9	358.9	357.5	356.2	354.8	353.5	352.7	352.3	352.0	351.7	351.3
107.5°	443.9	443.0	442.8	442.6	442.4	442.2	441.9	441.5	441.1	440.7	440.3
110°	501.4	502.1	502.4	502.8	503.1	503.5	503.3	502.6	501.9	501.3	500.6



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	561.1	561.2	561.8	562.4	563.0	563.6	563.9	563.7	563.6	563.5	563.3
115°	654.1	654.4	655.1	655.7	656.4	657.1	657.4	657.4	657.4	657.4	657.4
117.5°	744.0	745.2	745.6	746.1	746.6	747.1	747.2	746.9	746.6	746.3	746.1
120°	805.0	806.7	807.7	808.7	809.7	810.7	810.5	809.2	807.9	806.5	805.2
122.5°	865.9	867.0	867.5	867.9	868.4	868.9	868.8	868.3	867.8	867.2	866.7
125°	955.3	956.0	956.3	956.6	957.0	957.3	957.5	957.5	957.5	957.5	957.5
127.5°	1041.2	1041.9	1042.5	1043.0	1043.5	1044.1	1043.8	1042.8	1041.8	1040.8	1039.8
130°	1101.6	1102.2	1102.2	1102.2	1102.2	1102.2	1101.7	1100.7	1099.7	1098.7	1097.7
132.5°	1158.3	1158.9	1159.2	1159.5	1159.7	1160.0	1159.8	1159.0	1158.3	1157.6	1156.8
135°	1243.3	1244.0	1244.0	1244.0	1244.0	1244.0	1243.0	1241.0	1238.9	1236.9	1234.9
137.5°	1325.7	1326.6	1326.1	1325.5	1325.0	1324.5	1323.7	1322.8	1321.8	1320.9	1320.0
140°	1379.3	1379.7	1379.7	1379.7	1379.7	1379.7	1379.3	1378.7	1378.0	1377.3	1376.7
142.5°	1430.3	1430.3	1430.6	1430.9	1431.1	1431.4	1431.2	1430.5	1429.9	1429.2	1428.5
145°	1507.5	1507.8	1507.5	1507.2	1506.8	1506.5	1505.7	1504.3	1503.0	1501.6	1500.3
147.5°	1577.2	1577.5	1577.8	1578.0	1578.3	1578.6	1577.9	1576.3	1574.7	1573.1	1571.5
150°	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.3	1618.9	1617.6	1616.2	1614.9
152.5°	1661.5	1660.7	1660.5	1660.2	1659.9	1659.7	1659.1	1658.3	1657.5	1656.7	1655.9
155°	1718.8	1717.4	1717.8	1718.1	1718.4	1718.8	1718.9	1718.9	1718.9	1718.9	1718.9
157.5°	1770.0	1769.0	1769.1	1769.1	1769.2	1769.3	1769.6	1770.2	1770.8	1771.4	1772.0
160°	1801.4	1800.4	1800.7	1801.0	1801.4	1801.7	1802.0	1802.4	1802.7	1803.0	1803.4
162.5°	1828.7	1826.9	1827.2	1827.6	1827.9	1828.2	1828.8	1829.7	1830.6	1831.5	1832.3
165°	1865.7	1863.7	1864.4	1865.0	1865.7	1866.4	1867.2	1868.2	1869.2	1870.2	1871.2
167.5°	1897.1	1895.1	1895.0	1894.9	1894.9	1894.8	1895.5	1896.9	1898.3	1899.7	1901.1
170°	1913.9	1911.9	1911.6	1911.3	1910.9	1910.6	1911.3	1912.9	1914.6	1916.3	1918.0
172.5°	1926.3	1924.0	1923.9	1923.9	1923.8	1923.7	1924.4	1925.8	1927.2	1928.6	1930.0
175°	1939.9	1937.6	1937.9	1938.2	1938.6	1938.9	1939.9	1941.6	1943.3	1944.9	1946.6
177.5°	1947.9	1946.0	1946.0	1946.0	1946.0	1946.0	1946.7	1948.0	1949.4	1950.7	1952.0
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



TEST NUMBER: P332830

CATALOG NUMBER: S124DIW-S1020D1560U835-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1679.9	1685.4	1692.6	1704.8	1709.2	1714.7	1722.5	1721.9	1724.1	1732.4	1750.1
5°	1686.1	1707.5	1728.3	1753.2	1779.4	1796.7	1820.2	1834.7	1849.2	1867.9	1899.7
7.5°	1688.6	1722.6	1760.6	1804.3	1843.2	1888.0	1922.9	1955.8	1985.6	2025.0	2062.9
10°	1684.7	1730.3	1779.4	1834.7	1893.5	1943.3	1988.2	2039.4	2082.9	2130.6	2173.5
12.5°	1677.5	1732.6	1798.2	1860.2	1928.9	2002.4	2058.4	2110.1	2168.1	2223.0	2289.1
15°	1661.2	1736.6	1813.3	1894.9	1986.8	2071.8	2152.7	2219.8	2282.0	2364.3	2450.7
17.5°	1640.5	1721.8	1818.5	1917.3	2013.4	2110.6	2210.7	2311.5	2390.0	2492.2	2559.8
20°	1621.1	1715.1	1814.7	1932.2	2028.3	2149.3	2248.8	2346.3	2454.1	2555.8	2636.6
22.5°	1594.0	1696.9	1802.5	1919.5	2046.0	2167.0	2282.0	2387.8	2495.6	2606.1	2704.1
25°	1559.6	1652.9	1778.0	1910.8	2036.6	2167.9	2300.0	2432.7	2548.8	2665.7	2756.9
27.5°	1501.0	1618.8	1735.3	1872.3	2012.1	2160.7	2301.9	2440.9	2562.5	2658.6	2715.2
30°	1471.1	1573.4	1699.9	1837.5	1988.9	2148.6	2295.8	2432.0	2545.4	2622.1	2644.9
32.5°	1426.9	1532.5	1656.2	1798.8	1959.0	2123.1	2276.5	2404.9	2499.5	2539.7	2512.2
35°	1361.2	1456.6	1581.7	1727.6	1894.2	2069.1	2220.5	2329.0	2377.4	2339.4	2244.7
37.5°	1282.4	1376.9	1502.6	1645.9	1818.3	1996.1	2133.0	2211.1	2195.0	2100.5	1959.3
40°	1227.1	1315.6	1435.2	1590.0	1758.0	1936.3	2056.6	2098.8	2054.6	1919.1	1769.1
42.5°	1165.7	1252.0	1372.1	1521.4	1699.4	1863.9	1968.7	1972.2	1898.0	1736.0	1585.4
45°	1072.2	1154.5	1267.9	1423.4	1587.9	1742.8	1811.9	1778.0	1641.2	1484.9	1333.5
47.5°	980.0	1051.3	1163.1	1310.7	1467.0	1597.3	1631.6	1570.6	1424.8	1273.1	1132.8
50°	912.5	984.4	1089.5	1230.5	1381.2	1493.9	1510.5	1429.6	1286.5	1133.7	1023.8
52.5°	847.8	919.2	1020.4	1150.9	1288.9	1390.5	1391.0	1297.4	1154.9	1018.7	916.5
55°	752.8	817.1	908.4	1025.2	1148.3	1227.8	1208.4	1111.6	987.9	869.7	780.5
57.5°	661.3	717.3	801.4	898.8	1007.2	1072.8	1040.7	947.5	837.0	736.8	669.2
60°	602.1	655.4	727.3	819.2	910.5	961.6	931.2	846.8	745.2	664.3	605.6
62.5°	544.6	589.5	658.7	738.5	823.1	861.0	833.9	750.6	662.8	589.7	542.0
65°	463.2	499.8	555.1	623.6	685.1	717.6	694.8	617.3	550.3	497.7	459.7
67.5°	387.1	415.8	457.6	512.5	564.8	582.4	561.6	507.7	450.9	408.8	382.0
70°	334.6	361.6	396.8	439.0	484.6	503.3	482.5	439.7	393.4	354.6	328.4
72.5°	288.7	309.6	339.3	375.4	411.1	429.7	415.6	374.4	335.3	306.5	284.1
75°	219.8	237.8	258.5	284.1	311.8	324.2	311.8	283.4	256.5	235.0	219.1
77.5°	159.8	169.5	185.5	204.6	221.9	231.4	220.7	201.4	185.0	170.3	162.5
80°	121.7	128.6	139.6	154.9	166.6	175.6	168.7	152.8	139.6	130.0	126.5
82.5°	88.5	93.2	100.4	111.7	119.6	124.2	121.1	109.6	104.2	95.7	92.2
85°	43.6	46.3	51.2	54.6	61.5	62.2	62.9	58.1	53.2	51.2	48.4
87.5°	16.6	17.9	20.3	22.7	25.5	26.6	26.6	27.1	25.4	25.3	23.5
90°	8.2	11.9	15.6	19.3	22.5	25.1	27.8	30.5	33.2	35.2	37.2
92.5°	36.5	40.7	44.9	49.2	52.2	54.1	56.0	57.8	59.7	60.9	62.1
95°	93.5	96.5	99.5	102.5	105.2	107.6	109.9	112.3	114.6	115.6	116.6
97.5°	160.4	162.8	165.3	167.7	170.3	173.0	175.7	178.5	181.2	182.4	183.7
100°	212.4	213.8	215.1	216.5	218.6	221.7	224.7	227.7	230.7	231.4	232.0
102.5°	267.1	267.7	268.2	268.7	270.4	273.1	275.9	278.6	281.4	282.3	283.2
105°	351.7	352.0	352.3	352.7	353.5	354.8	356.2	357.5	358.9	359.9	360.9
107.5°	440.7	441.1	441.5	441.9	442.2	442.4	442.6	442.8	443.0	443.9	444.9
110°	501.3	501.9	502.6	503.3	503.5	503.1	502.8	502.4	502.1	501.4	500.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	563.5	563.6	563.7	563.9	563.6	563.0	562.4	561.8	561.2	561.1	560.9
115°	657.4	657.4	657.4	657.4	657.1	656.4	655.7	655.1	654.4	654.1	653.7
117.5°	746.3	746.6	746.9	747.2	747.1	746.6	746.1	745.6	745.2	744.0	742.9
120°	806.5	807.9	809.2	810.5	810.7	809.7	808.7	807.7	806.7	805.0	803.3
122.5°	867.2	867.8	868.3	868.8	868.9	868.4	867.9	867.5	867.0	865.9	864.7
125°	957.5	957.5	957.5	957.5	957.3	957.0	956.6	956.3	956.0	955.3	954.6
127.5°	1040.8	1041.8	1042.8	1043.8	1044.1	1043.5	1043.0	1042.5	1041.9	1041.2	1040.6
130°	1098.7	1099.7	1100.7	1101.7	1102.2	1102.2	1102.2	1102.2	1102.2	1101.6	1100.9
132.5°	1157.6	1158.3	1159.0	1159.8	1160.0	1159.7	1159.5	1159.2	1158.9	1158.3	1157.6
135°	1236.9	1238.9	1241.0	1243.0	1244.0	1244.0	1244.0	1244.0	1244.0	1243.3	1242.6
137.5°	1320.9	1321.8	1322.8	1323.7	1324.5	1325.0	1325.5	1326.1	1326.6	1325.7	1324.9
140°	1377.3	1378.0	1378.7	1379.3	1379.7	1379.7	1379.7	1379.7	1379.7	1379.3	1379.0
142.5°	1429.2	1429.9	1430.5	1431.2	1431.4	1431.1	1430.9	1430.6	1430.3	1430.3	1430.2
145°	1501.6	1503.0	1504.3	1505.7	1506.5	1506.8	1507.2	1507.5	1507.8	1507.5	1507.2
147.5°	1573.1	1574.7	1576.3	1577.9	1578.6	1578.3	1578.0	1577.8	1577.5	1577.2	1577.0
150°	1616.2	1617.6	1618.9	1620.3	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9	1620.9
152.5°	1656.7	1657.5	1658.3	1659.1	1659.7	1659.9	1660.2	1660.5	1660.7	1661.5	1662.3
155°	1718.9	1718.9	1718.9	1718.9	1718.8	1718.4	1718.1	1717.8	1717.4	1718.8	1720.1
157.5°	1771.4	1770.8	1770.2	1769.6	1769.3	1769.2	1769.1	1769.1	1769.0	1770.0	1771.0
160°	1803.0	1802.7	1802.4	1802.0	1801.7	1801.4	1801.0	1800.7	1800.4	1801.4	1802.4
162.5°	1831.5	1830.6	1829.7	1828.8	1828.2	1827.9	1827.6	1827.2	1826.9	1828.7	1830.5
165°	1870.2	1869.2	1868.2	1867.2	1866.4	1865.7	1865.0	1864.4	1863.7	1865.7	1867.7
167.5°	1899.7	1898.3	1896.9	1895.5	1894.8	1894.9	1894.9	1895.0	1895.1	1897.1	1899.1
170°	1916.3	1914.6	1912.9	1911.3	1910.6	1910.9	1911.3	1911.6	1911.9	1913.9	1916.0
172.5°	1928.6	1927.2	1925.8	1924.4	1923.7	1923.8	1923.9	1923.9	1924.0	1926.3	1928.6
175°	1944.9	1943.3	1941.6	1939.9	1938.9	1938.6	1938.2	1937.9	1937.6	1939.9	1942.3
177.5°	1950.7	1949.4	1948.0	1946.7	1946.0	1946.0	1946.0	1946.0	1946.0	1947.9	1949.8
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8	1668.8
2.5°	1759.0	1760.1	1765.0	1768.9	1770.0	1775.6	1776.1
5°	1913.5	1925.3	1948.1	1950.2	1953.6	1971.6	1957.8
7.5°	2094.7	2124.5	2144.4	2162.0	2168.4	2176.2	2174.6
10°	2210.8	2255.0	2277.2	2312.4	2313.8	2322.8	2317.3
12.5°	2327.5	2378.9	2419.3	2425.8	2455.4	2459.9	2467.7
15°	2492.8	2547.5	2603.5	2623.5	2664.3	2674.0	2689.2
17.5°	2648.3	2704.1	2743.4	2795.2	2812.0	2834.4	2819.1
20°	2733.4	2794.3	2844.0	2884.8	2902.1	2914.5	2913.2
22.5°	2784.9	2846.2	2886.6	2917.4	2933.6	2938.9	2938.6
25°	2817.1	2852.3	2864.8	2876.5	2858.6	2852.3	2855.1
27.5°	2727.5	2718.4	2685.9	2643.3	2599.0	2563.9	2544.8
30°	2604.2	2550.2	2501.1	2415.4	2371.2	2344.9	2321.4
32.5°	2429.4	2343.9	2249.5	2171.0	2120.7	2081.7	2075.9
35°	2129.9	2001.3	1885.9	1789.8	1740.0	1697.8	1688.2
37.5°	1810.8	1677.2	1573.3	1488.7	1435.2	1405.4	1377.6
40°	1599.0	1484.2	1381.9	1310.0	1269.2	1247.8	1230.5
42.5°	1435.8	1331.0	1229.3	1174.5	1137.6	1124.5	1114.4
45°	1210.5	1113.0	1042.5	1001.0	979.6	957.5	947.1
47.5°	1030.0	950.7	904.2	869.0	846.0	832.9	826.2
50°	927.7	862.7	821.3	794.3	773.6	763.2	757.7
52.5°	837.0	783.7	748.8	727.4	713.3	705.7	703.5
55°	721.0	680.2	658.1	639.5	629.1	622.2	619.4
57.5°	626.7	595.4	577.4	562.0	558.0	552.2	550.3
60°	564.8	540.6	525.4	515.0	511.6	504.7	506.0
62.5°	510.0	490.3	477.3	471.3	466.8	461.0	462.9
65°	431.4	416.9	409.9	404.4	398.9	395.4	398.2
67.5°	362.0	352.0	342.6	339.4	336.7	336.1	333.2
70°	316.6	308.3	300.0	298.0	298.0	295.2	294.5
72.5°	272.9	266.8	261.3	259.8	257.6	258.7	255.8
75°	210.8	206.0	203.9	201.9	201.2	201.2	199.1
77.5°	155.8	152.2	148.9	148.9	146.4	145.5	145.2
80°	118.2	116.8	114.1	114.1	112.7	113.4	112.0
82.5°	88.9	87.0	86.4	85.3	83.4	83.5	82.1
85°	47.7	45.6	44.9	42.9	41.5	42.9	41.5
87.5°	24.4	24.3	24.0	23.0	22.6	22.7	21.2
90°	39.2	41.2	42.6	43.2	43.9	44.6	45.2
92.5°	63.3	64.5	65.3	65.7	66.1	66.5	66.9
95°	117.6	118.6	119.1	119.1	119.1	119.1	119.1
97.5°	184.9	186.1	186.7	186.7	186.7	186.7	186.7
100°	232.7	233.4	233.7	233.7	233.7	233.7	233.7
102.5°	284.2	285.1	285.7	286.0	286.3	286.5	286.8
105°	361.9	362.9	363.9	364.9	365.9	366.9	367.9
107.5°	445.8	446.8	447.2	447.1	447.1	447.0	446.9
110°	500.1	499.4	499.6	500.6	501.6	502.6	503.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	560.8	560.7	560.7	560.9	561.1	561.3	561.5
115°	653.4	653.1	652.7	652.4	652.1	651.7	651.4
117.5°	741.8	740.6	739.7	739.0	738.4	737.7	737.0
120°	801.7	800.0	799.5	800.2	800.8	801.5	802.2
122.5°	863.6	862.5	861.3	860.1	858.9	857.7	856.5
125°	954.0	953.3	952.6	951.9	951.3	950.6	949.9
127.5°	1039.9	1039.2	1038.6	1038.1	1037.6	1037.0	1036.5
130°	1100.2	1099.5	1098.5	1097.2	1095.9	1094.5	1093.2
132.5°	1156.9	1156.2	1155.6	1155.1	1154.6	1154.0	1153.5
135°	1242.0	1241.3	1240.4	1239.4	1238.4	1237.4	1236.4
137.5°	1324.0	1323.1	1322.8	1323.0	1323.2	1323.4	1323.6
140°	1378.7	1378.3	1378.0	1377.7	1377.3	1377.0	1376.7
142.5°	1430.1	1430.1	1430.0	1429.9	1429.9	1429.8	1429.7
145°	1506.8	1506.5	1505.8	1504.8	1503.8	1502.8	1501.8
147.5°	1576.7	1576.4	1576.1	1575.8	1575.5	1575.1	1574.8
150°	1620.9	1620.9	1620.8	1620.4	1620.1	1619.8	1619.4
152.5°	1663.1	1663.9	1663.9	1663.0	1662.2	1661.3	1660.4
155°	1721.4	1722.8	1722.8	1721.4	1720.1	1718.8	1717.4
157.5°	1772.0	1773.0	1772.9	1771.8	1770.7	1769.5	1768.4
160°	1803.4	1804.4	1804.0	1802.4	1800.7	1799.0	1797.3
162.5°	1832.3	1834.1	1834.2	1832.5	1830.9	1829.2	1827.5
165°	1869.7	1871.7	1872.1	1870.7	1869.4	1868.0	1866.7
167.5°	1901.1	1903.1	1903.1	1901.0	1898.9	1896.8	1894.7
170°	1918.0	1920.0	1919.8	1917.5	1915.1	1912.8	1910.4
172.5°	1930.8	1933.1	1933.1	1930.7	1928.4	1926.0	1923.7
175°	1944.6	1947.0	1947.0	1944.6	1942.3	1939.9	1937.6
177.5°	1951.6	1953.5	1953.4	1951.2	1949.1	1947.0	1944.8
180°	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6	1949.6

(END OF REPORT)