

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: P333091-830

Luminaire Tested: **S124RDIW-S1020D1560U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333091-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124RDIW-S1020D1560U830-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9972.0 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.23 / 1.39  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: General Diffuse

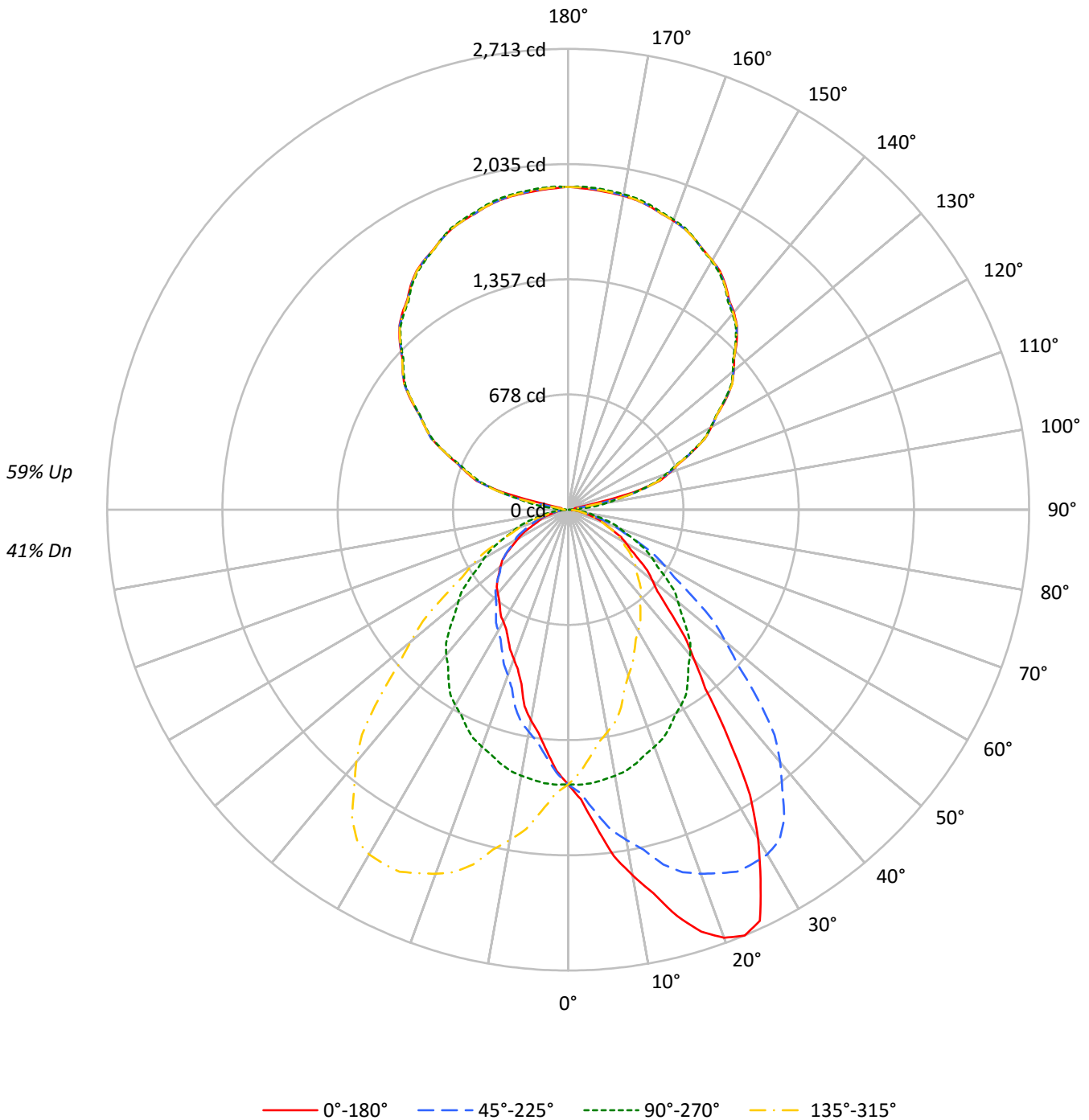
Input Watts (W): 76.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0	
RCR																						
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41				
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	35				
2	88	81	75	70	80	74	69	65	61	57	54	49	47	45	38	37	35	30				
3	80	71	64	59	73	65	59	54	54	50	46	44	41	38	34	32	30	26				
4	74	63	56	50	67	58	51	46	48	43	40	39	36	33	31	28	26	23				
5	68	56	49	43	62	52	45	40	43	38	34	35	32	29	28	25	23	20				
6	62	51	43	37	57	47	40	35	39	34	30	32	28	25	25	23	21	18				
7	58	46	38	33	53	42	35	31	35	30	26	29	25	22	23	20	18	16				
8	53	42	34	29	49	38	32	27	32	27	24	27	23	20	21	19	16	14				
9	50	38	31	26	45	35	29	24	30	25	21	25	21	18	20	17	15	13				
10	46	35	28	23	42	32	26	22	27	22	19	23	19	16	18	16	14	12				

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

	0°	90°	180°	270°
0°	13056	13056	13056	13056
5°	15144	13095	11574	13095
10°	17915	13038	10330	13038
15°	20695	12918	8877	12918
20°	23040	12752	8027	12752
25°	23785	12588	7452	12588
30°	20821	12392	7106	12392
35°	16208	12098	6897	12098
40°	12154	11763	6785	11763
45°	9597	11226	6725	11226
50°	8102	10605	6531	10605
55°	7061	9923	6180	9923
60°	6353	9216	5470	9216
65°	5601	8451	4705	8451
70°	5044	7659	4244	7659
75°	4226	6787	3618	6787
80°	3575	5783	3394	5783
85°	3020	4520	3020	4520



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.7	1.6
10°-20°	472.7	4.7
20°-30°	739.3	7.4
30°-40°	821.9	8.2
40°-50°	729.2	7.3
50°-60°	568.2	5.7
60°-70°	372.0	3.7
70°-80°	182.9	1.8
80°-90°	50.6	0.5
90°-100°	65.0	0.7
100°-110°	414.4	4.2
110°-120°	792.8	8.0
120°-130°	1006.4	10.1
130°-140°	1076.8	10.8
140°-150°	1006.9	10.1
150°-160°	812.0	8.1
160°-170°	523.7	5.3
170°-180°	180.5	1.8
0°-30°	1368.7	13.7
0°-40°	2190.5	22.0
0°-60°	3487.9	35.0
0°-90°	4093.5	41.0
90°-120°	1272.2	12.8
90°-150°	4362.3	43.7
90°-180°	5879.0	59.0
0°-180°	9972.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1617	1617	1617	1617	1617	
5°	1869	1616	1428	1616	1869	189
15°	2476	1546	1062	1546	2476	704
25°	2670	1413	837	1413	2670	1185
35°	1645	1228	700	1228	1645	1031
45°	841	983	589	983	841	666
55°	502	705	439	705	502	456
65°	293	442	246	442	293	295
75°	136	218	116	218	136	149
85°	33	49	33	49	33	38
90°	43	4	43	4	43	20
95°	41	78	41	78	41	33
105°	405	428	405	428	405	353
115°	805	799	805	799	805	796
125°	1131	1123	1131	1123	1131	1008
135°	1403	1393	1403	1393	1403	1080
145°	1615	1606	1615	1606	1615	1009
155°	1760	1761	1760	1761	1760	811
165°	1849	1858	1849	1858	1849	522
175°	1889	1900	1889	1900	1889	180
180°	1900	1900	1900	1900	1900	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1705.8	1710.5	1705.8	1705.3	1700.2	1698.6	1696.5	1689.7	1677.2	1669.9	1671.4
5°	1868.8	1885.0	1875.9	1874.6	1860.3	1846.0	1836.8	1816.0	1793.8	1778.9	1766.4
7.5°	2057.2	2066.5	2060.9	2051.7	2028.5	2015.3	1994.2	1966.7	1927.0	1896.6	1868.9
10°	2185.4	2193.2	2190.7	2173.7	2156.7	2122.2	2102.6	2064.3	2014.0	1974.3	1937.1
12.5°	2311.6	2319.9	2297.0	2297.7	2265.7	2238.4	2207.4	2159.1	2101.1	2049.8	2003.4
15°	2476.1	2465.6	2465.6	2452.6	2416.7	2379.0	2347.0	2296.2	2223.2	2161.9	2097.4
17.5°	2604.8	2608.4	2603.1	2572.3	2544.2	2505.1	2446.6	2387.3	2319.5	2237.3	2171.3
20°	2681.9	2681.9	2676.1	2655.2	2618.8	2577.0	2513.9	2449.3	2363.3	2280.6	2206.3
22.5°	2713.2	2715.3	2708.4	2691.1	2658.3	2617.6	2563.8	2498.3	2409.7	2316.5	2224.5
25°	2670.2	2682.6	2683.9	2679.3	2669.6	2644.8	2598.5	2531.4	2451.9	2350.9	2251.8
27.5°	2451.6	2467.2	2480.9	2503.4	2533.4	2549.0	2551.1	2517.0	2447.6	2350.4	2250.7
30°	2233.6	2246.6	2289.1	2344.4	2387.4	2426.5	2460.4	2469.5	2430.4	2343.1	2238.2
32.5°	1991.8	2009.5	2051.8	2111.4	2183.0	2249.3	2325.3	2364.2	2363.1	2310.7	2213.7
35°	1644.6	1657.6	1696.8	1759.3	1845.3	1943.7	2064.3	2158.0	2221.9	2217.3	2158.0
37.5°	1326.3	1341.0	1380.5	1432.5	1515.9	1637.7	1754.4	1883.6	2001.7	2068.0	2048.1
40°	1153.3	1154.0	1192.4	1245.9	1324.0	1430.2	1557.3	1700.6	1832.2	1939.8	1960.6
42.5°	1016.7	1016.8	1042.3	1099.9	1156.2	1256.1	1377.4	1519.8	1673.8	1798.0	1853.2
45°	840.6	846.4	867.2	901.8	946.1	1030.8	1127.8	1260.2	1432.9	1580.1	1672.0
47.5°	711.8	720.4	733.7	761.9	797.1	853.6	933.9	1052.7	1193.2	1355.2	1485.9
50°	645.1	646.4	663.3	678.9	709.5	754.5	824.9	924.0	1052.9	1208.7	1354.0
52.5°	587.8	587.5	597.7	617.5	642.3	677.4	734.2	824.3	938.8	1078.4	1228.3
55°	501.7	505.0	512.8	528.4	547.3	572.1	617.1	684.9	774.8	894.0	1030.2
57.5°	436.3	438.0	444.1	450.7	468.1	486.1	519.8	566.8	642.7	740.4	867.2
60°	393.5	394.2	396.2	406.0	419.6	436.6	459.4	499.1	563.0	652.2	752.6
62.5°	351.9	353.0	356.0	363.2	373.7	385.5	409.3	441.3	494.2	570.4	660.8
65°	293.2	293.9	298.4	301.0	309.5	319.9	337.5	359.0	395.5	459.4	527.8
67.5°	245.0	245.0	245.2	248.7	254.7	261.6	272.1	289.3	316.8	356.0	416.3
70°	213.7	213.7	215.0	217.0	220.3	226.1	232.0	245.0	265.2	297.1	343.4
72.5°	184.5	185.0	186.3	186.7	188.4	193.2	197.6	205.9	220.9	245.0	282.4
75°	135.5	137.5	140.7	143.4	146.6	146.0	150.5	155.7	160.3	174.7	196.1
77.5°	100.9	99.8	100.2	102.5	102.8	103.5	106.7	110.7	114.1	120.9	128.7
80°	76.9	76.9	78.8	79.5	78.8	79.5	82.8	84.7	86.1	88.6	95.8
82.5°	58.2	59.2	58.5	59.2	59.6	60.2	63.0	63.3	64.7	65.7	68.7
85°	32.6	33.3	33.8	32.6	32.6	32.6	33.8	34.5	35.8	35.2	36.5
87.5°	20.0	19.3	19.7	19.6	20.0	19.2	19.4	20.1	18.7	18.8	18.3
90°	42.6	42.0	41.4	40.7	40.2	38.8	36.9	35.1	33.2	31.3	28.7
92.5°	39.2	39.1	39.0	38.8	38.7	37.7	35.8	33.9	32.0	30.2	27.6
95°	41.2	40.9	40.6	40.2	40.0	38.8	36.9	35.1	33.2	31.3	30.9
97.5°	39.8	39.5	39.2	38.8	38.5	38.3	38.1	37.9	37.7	37.5	72.8
100°	39.8	39.5	39.2	38.8	38.5	41.1	46.5	51.8	57.2	62.6	106.1
102.5°	40.9	40.9	40.8	40.7	40.7	69.7	127.5	185.5	243.4	301.3	307.0
105°	405.1	416.5	427.8	439.2	450.5	454.9	452.0	449.1	446.3	443.5	441.9
107.5°	564.6	563.4	562.1	561.0	559.8	558.5	557.1	555.7	554.3	552.9	550.7
110°	634.0	633.0	632.1	631.1	630.2	629.3	628.8	628.1	627.5	626.8	624.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	703.3	702.1	700.9	699.7	698.5	698.0	698.0	698.2	698.3	698.5	697.6
115°	804.6	804.6	804.6	804.6	804.6	804.2	803.5	803.0	802.3	801.6	802.0
117.5°	907.4	907.6	907.7	907.8	908.0	908.0	908.1	908.3	908.4	908.5	907.9
120°	972.2	972.9	973.5	974.1	974.8	974.8	974.1	973.5	972.9	972.2	972.5
122.5°	1035.9	1036.5	1037.2	1037.8	1038.4	1038.6	1038.2	1037.8	1037.5	1037.1	1036.6
125°	1131.4	1131.1	1130.8	1130.5	1130.2	1129.5	1128.6	1127.7	1126.7	1125.8	1126.3
127.5°	1215.3	1215.5	1215.8	1216.1	1216.3	1216.5	1216.7	1216.9	1217.1	1217.3	1215.8
130°	1272.1	1272.1	1272.1	1272.1	1272.1	1272.0	1271.7	1271.4	1271.0	1270.7	1269.8
132.5°	1324.5	1324.7	1324.9	1325.2	1325.5	1325.4	1325.1	1324.8	1324.5	1324.2	1323.0
135°	1402.9	1402.3	1401.7	1401.0	1400.4	1399.8	1399.1	1398.5	1397.9	1397.2	1396.0
137.5°	1470.0	1470.2	1470.4	1470.6	1470.7	1470.6	1469.8	1469.1	1468.4	1467.7	1466.3
140°	1516.6	1516.3	1516.0	1515.7	1515.3	1514.8	1513.8	1512.9	1511.9	1510.9	1510.3
142.5°	1555.3	1555.2	1555.2	1555.1	1555.0	1554.6	1554.0	1553.3	1552.6	1551.9	1551.5
145°	1614.7	1614.1	1613.4	1612.8	1612.2	1611.7	1611.4	1611.1	1610.7	1610.4	1610.4
147.5°	1663.9	1663.6	1663.2	1662.9	1662.6	1662.4	1662.1	1661.8	1661.6	1661.3	1661.6
150°	1695.7	1695.4	1695.1	1694.8	1694.5	1694.3	1694.3	1694.3	1694.3	1694.3	1694.6
152.5°	1723.0	1723.2	1723.3	1723.5	1723.7	1723.6	1723.1	1722.6	1722.1	1721.6	1722.1
155°	1759.7	1760.7	1761.6	1762.6	1763.5	1763.3	1762.1	1760.8	1759.5	1758.2	1759.3
157.5°	1790.4	1792.1	1793.7	1795.4	1797.0	1797.0	1795.4	1793.7	1792.1	1790.4	1791.5
160°	1810.8	1812.8	1814.7	1816.6	1818.4	1818.4	1816.6	1814.7	1812.8	1810.8	1811.2
162.5°	1826.7	1828.9	1831.1	1833.2	1835.3	1835.5	1833.6	1831.7	1829.8	1827.9	1828.2
165°	1849.3	1852.1	1854.9	1857.8	1860.6	1860.8	1858.2	1855.7	1853.1	1850.7	1850.7
167.5°	1866.0	1869.2	1872.4	1875.5	1878.7	1878.9	1876.0	1873.3	1870.5	1867.7	1867.9
170°	1876.2	1879.4	1882.5	1885.7	1888.9	1889.2	1886.7	1884.1	1881.6	1879.1	1878.8
172.5°	1881.9	1885.4	1888.8	1892.2	1895.5	1896.0	1893.5	1890.9	1888.4	1885.9	1885.6
175°	1889.0	1892.8	1896.6	1900.4	1904.2	1904.7	1901.9	1898.9	1896.1	1893.3	1893.0
177.5°	1893.6	1896.6	1899.6	1902.7	1905.7	1906.2	1904.2	1902.1	1900.2	1898.1	1897.6
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1666.2	1659.0	1655.3	1646.9	1637.0	1631.8	1627.1	1620.3	1611.5	1602.1	1595.3
5°	1750.8	1735.1	1715.6	1692.1	1671.3	1651.1	1633.5	1615.9	1595.7	1574.9	1554.1
7.5°	1837.6	1806.9	1773.6	1735.1	1697.8	1663.8	1632.5	1602.5	1568.6	1538.2	1510.6
10°	1898.1	1856.3	1810.1	1761.2	1712.3	1670.0	1628.3	1590.5	1548.8	1511.6	1480.4
12.5°	1947.1	1898.1	1842.4	1781.6	1722.8	1671.6	1623.6	1574.3	1526.9	1486.7	1444.9
15°	2028.4	1961.2	1886.3	1813.4	1737.1	1667.4	1602.9	1545.6	1491.5	1434.8	1395.1
17.5°	2084.2	2004.7	1913.5	1825.9	1735.8	1653.6	1579.1	1510.9	1448.5	1390.6	1343.3
20°	2117.6	2029.7	1928.7	1829.0	1728.0	1640.0	1559.9	1484.3	1419.8	1357.3	1308.3
22.5°	2136.4	2039.1	1928.7	1824.3	1719.7	1624.4	1536.4	1457.7	1387.5	1324.9	1270.8
25°	2142.4	2038.2	1925.4	1805.5	1690.8	1589.9	1498.6	1413.2	1335.1	1272.5	1215.2
27.5°	2134.1	2011.3	1895.8	1772.8	1654.5	1548.0	1452.3	1362.6	1284.3	1217.2	1158.4
30°	2121.6	1989.9	1866.1	1738.4	1618.5	1516.3	1415.2	1329.3	1247.7	1178.1	1118.8
32.5°	2094.4	1963.9	1830.7	1699.9	1578.4	1473.0	1377.1	1290.6	1210.8	1139.5	1076.6
35°	2040.8	1908.5	1763.9	1629.7	1510.3	1400.9	1311.0	1227.6	1151.3	1075.2	1008.6
37.5°	1970.0	1834.8	1691.0	1544.0	1424.7	1321.3	1238.8	1160.5	1086.1	1016.4	942.8
40°	1903.3	1780.1	1631.5	1485.6	1363.1	1263.4	1187.2	1116.2	1041.2	972.1	898.5
42.5°	1822.5	1717.6	1567.4	1421.0	1300.0	1204.0	1132.9	1063.5	995.3	928.4	851.6
45°	1687.6	1608.1	1467.4	1326.6	1204.8	1109.7	1044.5	983.3	923.3	859.4	787.1
47.5°	1533.0	1479.2	1357.7	1213.6	1100.9	1015.3	952.3	902.3	851.6	787.8	724.3
50°	1425.7	1391.1	1273.8	1142.3	1034.7	955.8	891.4	844.4	802.1	740.8	684.2
52.5°	1311.0	1292.6	1193.5	1067.7	963.8	886.6	831.4	789.2	746.3	695.5	642.4
55°	1136.3	1146.1	1062.1	953.3	855.5	790.4	740.2	705.0	668.5	625.6	584.5
57.5°	957.8	993.5	937.1	841.6	750.0	689.8	652.0	622.4	591.7	556.1	521.0
60°	850.9	880.9	849.0	765.0	684.9	628.8	593.6	570.8	540.2	507.6	480.9
62.5°	746.7	778.7	759.9	692.0	617.6	569.4	538.4	517.1	494.3	465.9	438.1
65°	615.8	636.6	627.5	580.6	527.8	486.7	458.1	442.4	421.6	400.8	376.0
67.5°	471.6	511.9	506.5	481.6	436.0	404.0	385.2	371.4	352.4	336.9	320.1
70°	387.7	424.8	424.1	404.0	379.2	349.2	336.2	324.5	307.6	292.6	278.9
72.5°	317.4	351.4	356.4	340.9	324.0	301.3	288.8	280.7	264.3	254.0	242.9
75°	222.2	246.9	253.4	253.4	245.6	233.9	222.8	217.6	205.9	196.8	190.3
77.5°	145.7	161.4	171.5	173.8	175.0	171.1	162.0	158.3	149.3	146.1	139.9
80°	102.9	113.4	125.1	129.0	132.2	131.0	127.1	124.4	116.0	112.7	110.1
82.5°	71.2	76.9	86.5	95.1	94.3	97.6	94.3	92.2	85.8	84.5	82.0
85°	37.1	37.8	39.1	45.0	48.3	49.5	50.1	48.8	46.9	46.9	42.3
87.5°	17.7	16.7	17.2	16.7	16.5	17.9	18.8	18.6	17.7	16.9	15.9
90°	26.2	23.7	21.2	18.2	14.7	11.2	7.7	4.2	7.7	11.2	14.7
92.5°	25.1	22.5	20.0	18.7	18.5	18.3	18.1	17.9	18.1	18.3	18.5
95°	30.6	30.3	30.0	35.3	46.0	56.7	67.4	78.1	67.4	56.7	46.0
97.5°	108.0	143.3	178.5	192.8	186.2	179.4	172.7	166.0	172.7	179.4	186.2
100°	149.7	193.3	236.9	255.8	250.2	244.5	238.8	233.1	238.8	244.5	250.2
102.5°	312.7	318.4	324.0	324.8	320.7	316.5	312.4	308.1	312.4	316.5	320.7
105°	440.4	438.8	437.2	435.5	433.6	431.6	429.7	427.8	429.7	431.6	433.6
107.5°	548.7	546.5	544.3	542.8	541.9	540.9	540.0	538.9	540.0	540.9	541.9
110°	623.0	621.1	619.3	617.8	616.9	616.0	615.0	614.1	615.0	616.0	616.9





TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	696.7	695.8	694.9	693.6	691.9	690.2	688.5	686.8	688.5	690.2	691.9
115°	802.3	802.6	803.0	802.6	801.6	800.7	799.7	798.8	799.7	800.7	801.6
117.5°	907.2	906.4	905.8	904.8	903.5	902.3	901.0	899.8	901.0	902.3	903.5
120°	972.9	973.2	973.5	973.0	971.8	970.5	969.2	968.0	969.2	970.5	971.8
122.5°	1036.1	1035.8	1035.3	1034.7	1033.9	1033.1	1032.4	1031.6	1032.4	1033.1	1033.9
125°	1127.0	1127.7	1128.2	1127.9	1126.7	1125.4	1124.2	1122.9	1124.2	1125.4	1126.7
127.5°	1214.4	1213.0	1211.4	1210.6	1210.2	1209.9	1209.7	1209.3	1209.7	1209.9	1210.2
130°	1268.9	1267.9	1267.0	1266.3	1266.0	1265.6	1265.4	1265.1	1265.4	1265.6	1266.0
132.5°	1321.7	1320.6	1319.4	1318.5	1318.0	1317.4	1316.7	1316.2	1316.7	1317.4	1318.0
135°	1394.7	1393.5	1392.1	1391.7	1392.0	1392.3	1392.6	1393.0	1392.6	1392.3	1392.0
137.5°	1465.0	1463.6	1462.2	1461.4	1461.3	1461.1	1461.0	1460.9	1461.0	1461.1	1461.3
140°	1509.7	1509.0	1508.4	1507.8	1507.1	1506.6	1505.9	1505.2	1505.9	1506.6	1507.1
142.5°	1551.1	1550.8	1550.4	1549.6	1548.5	1547.4	1546.1	1545.0	1546.1	1547.4	1548.5
145°	1610.4	1610.4	1610.4	1610.0	1609.0	1608.1	1607.1	1606.2	1607.1	1608.1	1609.0
147.5°	1662.0	1662.3	1662.6	1661.9	1660.1	1658.3	1656.5	1654.8	1656.5	1658.3	1660.1
150°	1695.0	1695.3	1695.5	1695.1	1693.8	1692.5	1691.3	1690.1	1691.3	1692.5	1693.8
152.5°	1722.7	1723.3	1723.9	1723.6	1722.6	1721.6	1720.6	1719.6	1720.6	1721.6	1722.6
155°	1760.2	1761.1	1762.1	1762.4	1762.1	1761.7	1761.4	1761.1	1761.4	1761.7	1762.1
157.5°	1792.5	1793.6	1794.7	1795.4	1795.5	1795.7	1795.9	1796.1	1795.9	1795.7	1795.5
160°	1811.5	1811.8	1812.1	1812.8	1813.7	1814.7	1815.6	1816.6	1815.6	1814.7	1813.7
162.5°	1828.5	1828.8	1829.2	1829.9	1831.2	1832.3	1833.5	1834.8	1833.5	1832.3	1831.2
165°	1850.7	1850.7	1850.7	1851.4	1853.0	1854.6	1856.1	1857.8	1856.1	1854.6	1853.0
167.5°	1868.1	1868.3	1868.5	1869.3	1871.0	1872.6	1874.3	1875.9	1874.3	1872.6	1871.0
170°	1878.5	1878.1	1877.8	1878.6	1880.5	1882.4	1884.3	1886.2	1884.3	1882.4	1880.5
172.5°	1885.3	1885.0	1884.6	1885.5	1887.3	1889.2	1891.1	1893.0	1891.1	1889.2	1887.3
175°	1892.6	1892.3	1892.1	1892.8	1894.7	1896.6	1898.5	1900.4	1898.5	1896.6	1894.7
177.5°	1897.1	1896.6	1896.1	1896.8	1898.5	1900.3	1902.1	1903.8	1902.1	1900.3	1898.5
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1588.0	1582.8	1576.0	1568.2	1558.9	1550.5	1546.9	1550.0	1551.5	1547.4	1546.9
5°	1539.7	1523.4	1510.3	1490.8	1475.2	1462.2	1453.0	1449.2	1450.4	1440.0	1437.4
7.5°	1485.4	1466.0	1444.7	1421.4	1399.9	1380.7	1370.6	1365.2	1354.2	1349.4	1341.5
10°	1450.4	1424.4	1403.5	1376.1	1351.4	1328.6	1317.5	1308.3	1297.3	1292.1	1281.0
12.5°	1414.5	1384.2	1361.3	1332.8	1307.6	1280.1	1269.5	1252.6	1235.3	1224.4	1210.1
15°	1363.8	1327.3	1299.3	1265.4	1235.4	1204.1	1176.1	1144.8	1133.1	1108.3	1094.0
17.5°	1304.5	1267.4	1232.8	1187.3	1141.0	1102.2	1072.3	1042.4	1024.4	1008.6	1001.4
20°	1265.4	1231.5	1183.3	1130.5	1079.0	1036.0	1011.9	992.4	972.8	961.8	953.9
22.5°	1228.3	1185.1	1129.1	1072.1	1020.7	987.0	966.6	946.5	930.6	920.0	909.6
25°	1166.3	1109.7	1050.4	985.2	950.0	920.7	898.5	882.2	872.5	858.8	853.6
27.5°	1102.6	1034.0	968.6	924.7	888.1	861.3	842.0	829.7	817.4	808.6	801.8
30°	1053.6	983.9	925.3	883.5	846.4	824.3	808.6	794.3	784.5	777.3	772.1
32.5°	1005.1	935.4	886.2	841.3	812.0	790.4	773.7	763.0	755.4	746.0	742.9
35°	935.0	873.1	830.1	789.8	759.8	740.2	727.2	716.0	709.5	707.0	705.0
37.5°	867.6	817.0	770.7	737.6	710.9	695.5	680.1	674.7	670.2	665.5	667.6
40°	824.9	777.3	736.3	701.1	679.6	662.7	653.6	647.1	643.1	643.1	643.1
42.5°	787.9	741.4	701.3	669.9	648.3	634.0	623.9	618.3	617.1	616.5	619.6
45°	730.5	687.4	647.1	620.9	602.8	588.3	582.5	578.0	578.0	580.6	581.2
47.5°	673.4	633.2	600.8	571.6	554.9	545.9	540.8	538.5	538.8	541.3	544.3
50°	638.6	598.8	566.8	540.8	525.2	516.7	512.2	510.9	512.2	512.2	516.7
52.5°	600.5	565.0	533.5	511.6	493.9	486.0	483.4	481.6	482.4	484.6	486.4
55°	544.7	512.8	482.9	461.9	448.9	443.7	437.9	438.5	437.2	438.5	438.5
57.5°	488.8	460.1	432.3	415.8	404.3	396.7	390.3	392.1	390.2	389.9	388.9
60°	452.9	421.6	399.4	384.5	371.4	364.9	359.0	360.3	358.4	357.0	354.5
62.5°	413.8	387.7	366.6	352.1	341.7	334.1	328.3	327.0	322.4	318.0	312.3
65°	357.0	335.5	316.7	303.0	293.2	287.4	282.8	278.9	269.1	258.6	253.4
67.5°	302.0	286.4	268.8	257.2	249.3	241.6	232.9	226.2	217.1	211.4	208.1
70°	266.5	251.5	236.5	225.5	217.0	209.8	200.0	195.5	189.0	186.3	183.1
72.5°	232.6	218.7	204.7	194.7	185.7	180.1	172.4	167.9	164.9	163.9	160.7
75°	181.2	170.0	159.7	150.5	143.4	139.4	136.2	132.9	131.6	125.7	122.5
77.5°	132.1	124.9	118.3	111.8	106.7	104.2	97.8	94.1	91.9	89.2	88.5
80°	102.9	97.7	91.2	87.3	80.1	77.6	74.9	74.3	73.6	73.0	72.3
82.5°	77.4	72.2	65.7	63.3	61.4	59.9	58.2	57.6	56.9	57.3	57.2
85°	39.1	36.5	36.5	35.8	35.2	34.5	33.8	33.8	33.3	33.8	33.3
87.5°	16.7	16.8	17.2	16.7	17.7	18.3	18.1	18.5	19.4	18.8	18.9
90°	18.2	21.2	23.7	26.2	28.7	31.3	33.2	35.1	36.9	38.8	40.2
92.5°	18.7	20.0	22.5	25.1	27.6	30.2	32.0	33.9	35.8	37.7	38.7
95°	35.3	30.0	30.3	30.6	30.9	31.3	33.2	35.1	36.9	38.8	40.0
97.5°	192.8	178.5	143.3	108.0	72.8	37.5	37.7	37.9	38.1	38.3	38.5
100°	255.8	236.9	193.3	149.7	106.1	62.6	57.2	51.8	46.5	41.1	38.5
102.5°	324.8	324.0	318.4	312.7	307.0	301.3	243.4	185.5	127.5	69.7	40.7
105°	435.5	437.2	438.8	440.4	441.9	443.5	446.3	449.1	452.0	454.9	450.5
107.5°	542.8	544.3	546.5	548.7	550.7	552.9	554.3	555.7	557.1	558.5	559.8
110°	617.8	619.3	621.1	623.0	624.9	626.8	627.5	628.1	628.8	629.3	630.2



TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	693.6	694.9	695.8	696.7	697.6	698.5	698.3	698.2	698.0	698.0	698.5
115°	802.6	803.0	802.6	802.3	802.0	801.6	802.3	803.0	803.5	804.2	804.6
117.5°	904.8	905.8	906.4	907.2	907.9	908.5	908.4	908.3	908.1	908.0	908.0
120°	973.0	973.5	973.2	972.9	972.5	972.2	972.9	973.5	974.1	974.8	974.8
122.5°	1034.7	1035.3	1035.8	1036.1	1036.6	1037.1	1037.5	1037.8	1038.2	1038.6	1038.4
125°	1127.9	1128.2	1127.7	1127.0	1126.3	1125.8	1126.7	1127.7	1128.6	1129.5	1130.2
127.5°	1210.6	1211.4	1213.0	1214.4	1215.8	1217.3	1217.1	1216.9	1216.7	1216.5	1216.3
130°	1266.3	1267.0	1267.9	1268.9	1269.8	1270.7	1271.0	1271.4	1271.7	1272.0	1272.1
132.5°	1318.5	1319.4	1320.6	1321.7	1323.0	1324.2	1324.5	1324.8	1325.1	1325.4	1325.5
135°	1391.7	1392.1	1393.5	1394.7	1396.0	1397.2	1397.9	1398.5	1399.1	1399.8	1400.4
137.5°	1461.4	1462.2	1463.6	1465.0	1466.3	1467.7	1468.4	1469.1	1469.8	1470.6	1470.7
140°	1507.8	1508.4	1509.0	1509.7	1510.3	1510.9	1511.9	1512.9	1513.8	1514.8	1515.3
142.5°	1549.6	1550.4	1550.8	1551.1	1551.5	1551.9	1552.6	1553.3	1554.0	1554.6	1555.0
145°	1610.0	1610.4	1610.4	1610.4	1610.4	1610.4	1610.7	1611.1	1611.4	1611.7	1612.2
147.5°	1661.9	1662.6	1662.3	1662.0	1661.6	1661.3	1661.6	1661.8	1662.1	1662.4	1662.6
150°	1695.1	1695.5	1695.3	1695.0	1694.6	1694.3	1694.3	1694.3	1694.3	1694.3	1694.5
152.5°	1723.6	1723.9	1723.3	1722.7	1722.1	1721.6	1722.1	1722.6	1723.1	1723.6	1723.7
155°	1762.4	1762.1	1761.1	1760.2	1759.3	1758.2	1759.5	1760.8	1762.1	1763.3	1763.5
157.5°	1795.4	1794.7	1793.6	1792.5	1791.5	1790.4	1792.1	1793.7	1795.4	1797.0	1797.0
160°	1812.8	1812.1	1811.8	1811.5	1811.2	1810.8	1812.8	1814.7	1816.6	1818.4	1818.4
162.5°	1829.9	1829.2	1828.8	1828.5	1828.2	1827.9	1829.8	1831.7	1833.6	1835.5	1835.3
165°	1851.4	1850.7	1850.7	1850.7	1850.7	1850.7	1853.1	1855.7	1858.2	1860.8	1860.6
167.5°	1869.3	1868.5	1868.3	1868.1	1867.9	1867.7	1870.5	1873.3	1876.0	1878.9	1878.7
170°	1878.6	1877.8	1878.1	1878.5	1878.8	1879.1	1881.6	1884.1	1886.7	1889.2	1888.9
172.5°	1885.5	1884.6	1885.0	1885.3	1885.6	1885.9	1888.4	1890.9	1893.5	1896.0	1895.5
175°	1892.8	1892.1	1892.3	1892.6	1893.0	1893.3	1896.1	1898.9	1901.9	1904.7	1904.2
177.5°	1896.8	1896.1	1896.6	1897.1	1897.6	1898.1	1900.2	1902.1	1904.2	1906.2	1905.7
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1543.7	1544.7	1541.2	1540.1	1541.2	1544.7	1543.7	1546.9	1547.4	1551.5	1550.0
5°	1432.2	1430.9	1427.6	1428.2	1427.6	1430.9	1432.2	1437.4	1440.0	1450.4	1449.2
7.5°	1336.8	1331.7	1333.1	1327.9	1333.1	1331.7	1336.8	1341.5	1349.4	1354.2	1365.2
10°	1278.4	1271.2	1265.4	1260.2	1265.4	1271.2	1278.4	1281.0	1292.1	1297.3	1308.3
12.5°	1198.6	1192.5	1184.6	1186.2	1184.6	1192.5	1198.6	1210.1	1224.4	1235.3	1252.6
15°	1085.5	1075.7	1060.2	1062.1	1060.2	1075.7	1085.5	1094.0	1108.3	1133.1	1144.8
17.5°	989.8	989.9	982.7	984.4	982.7	989.9	989.8	1001.4	1008.6	1024.4	1042.4
20°	940.3	935.7	936.3	934.3	936.3	935.7	940.3	953.9	961.8	972.8	992.4
22.5°	905.9	900.2	895.7	891.6	895.7	900.2	905.9	909.6	920.0	930.6	946.5
25°	847.7	843.8	837.9	836.6	837.9	843.8	847.7	853.6	858.8	872.5	882.2
27.5°	796.6	795.9	793.5	790.5	793.5	795.9	796.6	801.8	808.6	817.4	829.7
30°	766.9	765.6	764.3	762.3	764.3	765.6	766.9	772.1	777.3	784.5	794.3
32.5°	740.4	739.5	738.2	738.4	738.2	739.5	740.4	742.9	746.0	755.4	763.0
35°	702.4	701.7	700.5	699.8	700.5	701.7	702.4	705.0	707.0	709.5	716.0
37.5°	666.9	668.6	667.9	667.7	667.9	668.6	666.9	667.6	665.5	670.2	674.7
40°	642.4	643.1	644.4	643.8	644.4	643.1	642.4	643.1	643.1	643.1	647.1
42.5°	622.2	622.3	624.1	621.9	624.1	622.3	622.2	619.6	616.5	617.1	618.3
45°	585.8	589.7	589.0	589.0	589.0	589.7	585.8	581.2	580.6	578.0	578.0
47.5°	546.0	549.4	550.4	550.2	550.4	549.4	546.0	544.3	541.3	538.8	538.5
50°	520.0	518.7	520.7	520.0	520.7	518.7	520.0	516.7	512.2	512.2	510.9
52.5°	488.1	488.4	488.3	487.7	488.3	488.4	488.1	486.4	484.6	482.4	481.6
55°	439.1	439.8	438.5	439.1	438.5	439.8	439.1	438.5	438.5	437.2	438.5
57.5°	386.0	382.9	384.2	382.6	384.2	382.9	386.0	388.9	389.9	390.2	392.1
60°	348.0	342.7	341.4	338.8	341.4	342.7	348.0	354.5	357.0	358.4	360.3
62.5°	305.2	301.5	297.1	299.2	297.1	301.5	305.2	312.3	318.0	322.4	327.0
65°	248.3	245.6	243.6	246.3	243.6	245.6	248.3	253.4	258.6	269.1	278.9
67.5°	205.5	204.1	204.1	202.7	204.1	204.1	205.5	208.1	211.4	217.1	226.2
70°	183.1	181.2	181.2	179.8	181.2	181.2	183.1	183.1	186.3	189.0	195.5
72.5°	160.1	158.2	158.7	158.0	158.7	158.2	160.1	160.7	163.9	164.9	167.9
75°	118.6	115.4	115.4	116.0	115.4	115.4	118.6	122.5	125.7	131.6	132.9
77.5°	88.5	87.8	88.8	87.6	88.8	87.8	88.5	88.5	89.2	91.9	94.1
80°	72.3	71.6	71.1	73.0	71.1	71.6	72.3	72.3	73.0	73.6	74.3
82.5°	56.2	56.1	55.9	58.3	55.9	56.1	56.2	57.2	57.3	56.9	57.6
85°	33.8	32.6	33.8	32.6	33.8	32.6	33.8	33.3	33.8	33.3	33.8
87.5°	20.2	19.7	19.3	20.0	19.3	19.7	20.2	18.9	18.8	19.4	18.5
90°	40.7	41.4	42.0	42.6	42.0	41.4	40.7	40.2	38.8	36.9	35.1
92.5°	38.8	39.0	39.1	39.2	39.1	39.0	38.8	38.7	37.7	35.8	33.9
95°	40.2	40.6	40.9	41.2	40.9	40.6	40.2	40.0	38.8	36.9	35.1
97.5°	38.8	39.2	39.5	39.8	39.5	39.2	38.8	38.5	38.3	38.1	37.9
100°	38.8	39.2	39.5	39.8	39.5	39.2	38.8	38.5	41.1	46.5	51.8
102.5°	40.7	40.8	40.9	40.9	40.9	40.8	40.7	40.7	69.7	127.5	185.5
105°	439.2	427.8	416.5	405.1	416.5	427.8	439.2	450.5	454.9	452.0	449.1
107.5°	561.0	562.1	563.4	564.6	563.4	562.1	561.0	559.8	558.5	557.1	555.7
110°	631.1	632.1	633.0	634.0	633.0	632.1	631.1	630.2	629.3	628.8	628.1



TEST NUMBER: P333091-830

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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	699.7	700.9	702.1	703.3	702.1	700.9	699.7	698.5	698.0	698.0	698.2
115°	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.6	804.2	803.5	803.0
117.5°	907.8	907.7	907.6	907.4	907.6	907.7	907.8	908.0	908.0	908.1	908.3
120°	974.1	973.5	972.9	972.2	972.9	973.5	974.1	974.8	974.8	974.1	973.5
122.5°	1037.8	1037.2	1036.5	1035.9	1036.5	1037.2	1037.8	1038.4	1038.6	1038.2	1037.8
125°	1130.5	1130.8	1131.1	1131.4	1131.1	1130.8	1130.5	1130.2	1129.5	1128.6	1127.7
127.5°	1216.1	1215.8	1215.5	1215.3	1215.5	1215.8	1216.1	1216.3	1216.5	1216.7	1216.9
130°	1272.1	1272.1	1272.1	1272.1	1272.1	1272.1	1272.1	1272.1	1272.0	1271.7	1271.4
132.5°	1325.2	1324.9	1324.7	1324.5	1324.7	1324.9	1325.2	1325.5	1325.4	1325.1	1324.8
135°	1401.0	1401.7	1402.3	1402.9	1402.3	1401.7	1401.0	1400.4	1399.8	1399.1	1398.5
137.5°	1470.6	1470.4	1470.2	1470.0	1470.2	1470.4	1470.6	1470.7	1470.6	1469.8	1469.1
140°	1515.7	1516.0	1516.3	1516.6	1516.3	1516.0	1515.7	1515.3	1514.8	1513.8	1512.9
142.5°	1555.1	1555.2	1555.2	1555.3	1555.2	1555.2	1555.1	1555.0	1554.6	1554.0	1553.3
145°	1612.8	1613.4	1614.1	1614.7	1614.1	1613.4	1612.8	1612.2	1611.7	1611.4	1611.1
147.5°	1662.9	1663.2	1663.6	1663.9	1663.6	1663.2	1662.9	1662.6	1662.4	1662.1	1661.8
150°	1694.8	1695.1	1695.4	1695.7	1695.4	1695.1	1694.8	1694.5	1694.3	1694.3	1694.3
152.5°	1723.5	1723.3	1723.2	1723.0	1723.2	1723.3	1723.5	1723.7	1723.6	1723.1	1722.6
155°	1762.6	1761.6	1760.7	1759.7	1760.7	1761.6	1762.6	1763.5	1763.3	1762.1	1760.8
157.5°	1795.4	1793.7	1792.1	1790.4	1792.1	1793.7	1795.4	1797.0	1797.0	1795.4	1793.7
160°	1816.6	1814.7	1812.8	1810.8	1812.8	1814.7	1816.6	1818.4	1818.4	1816.6	1814.7
162.5°	1833.2	1831.1	1828.9	1826.7	1828.9	1831.1	1833.2	1835.3	1835.5	1833.6	1831.7
165°	1857.8	1854.9	1852.1	1849.3	1852.1	1854.9	1857.8	1860.6	1860.8	1858.2	1855.7
167.5°	1875.5	1872.4	1869.2	1866.0	1869.2	1872.4	1875.5	1878.7	1878.9	1876.0	1873.3
170°	1885.7	1882.5	1879.4	1876.2	1879.4	1882.5	1885.7	1888.9	1889.2	1886.7	1884.1
172.5°	1892.2	1888.8	1885.4	1881.9	1885.4	1888.8	1892.2	1895.5	1896.0	1893.5	1890.9
175°	1900.4	1896.6	1892.8	1889.0	1892.8	1896.6	1900.4	1904.2	1904.7	1901.9	1898.9
177.5°	1902.7	1899.6	1896.6	1893.6	1896.6	1899.6	1902.7	1905.7	1906.2	1904.2	1902.1
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1546.9	1550.5	1558.9	1568.2	1576.0	1582.8	1588.0	1595.3	1602.1	1611.5	1620.3
5°	1453.0	1462.2	1475.2	1490.8	1510.3	1523.4	1539.7	1554.1	1574.9	1595.7	1615.9
7.5°	1370.6	1380.7	1399.9	1421.4	1444.7	1466.0	1485.4	1510.6	1538.2	1568.6	1602.5
10°	1317.5	1328.6	1351.4	1376.1	1403.5	1424.4	1450.4	1480.4	1511.6	1548.8	1590.5
12.5°	1269.5	1280.1	1307.6	1332.8	1361.3	1384.2	1414.5	1444.9	1486.7	1526.9	1574.3
15°	1176.1	1204.1	1235.4	1265.4	1299.3	1327.3	1363.8	1395.1	1434.8	1491.5	1545.6
17.5°	1072.3	1102.2	1141.0	1187.3	1232.8	1267.4	1304.5	1343.3	1390.6	1448.5	1510.9
20°	1011.9	1036.0	1079.0	1130.5	1183.3	1231.5	1265.4	1308.3	1357.3	1419.8	1484.3
22.5°	966.6	987.0	1020.7	1072.1	1129.1	1185.1	1228.3	1270.8	1324.9	1387.5	1457.7
25°	898.5	920.7	950.0	985.2	1050.4	1109.7	1166.3	1215.2	1272.5	1335.1	1413.2
27.5°	842.0	861.3	888.1	924.7	968.6	1034.0	1102.6	1158.4	1217.2	1284.3	1362.6
30°	808.6	824.3	846.4	883.5	925.3	983.9	1053.6	1118.8	1178.1	1247.7	1329.3
32.5°	773.7	790.4	812.0	841.3	886.2	935.4	1005.1	1076.6	1139.5	1210.8	1290.6
35°	727.2	740.2	759.8	789.8	830.1	873.1	935.0	1008.6	1075.2	1151.3	1227.6
37.5°	680.1	695.5	710.9	737.6	770.7	817.0	867.6	942.8	1016.4	1086.1	1160.5
40°	653.6	662.7	679.6	701.1	736.3	777.3	824.9	898.5	972.1	1041.2	1116.2
42.5°	623.9	634.0	648.3	669.9	701.3	741.4	787.9	851.6	928.4	995.3	1063.5
45°	582.5	588.3	602.8	620.9	647.1	687.4	730.5	787.1	859.4	923.3	983.3
47.5°	540.8	545.9	554.9	571.6	600.8	633.2	673.4	724.3	787.8	851.6	902.3
50°	512.2	516.7	525.2	540.8	566.8	598.8	638.6	684.2	740.8	802.1	844.4
52.5°	483.4	486.0	493.9	511.6	533.5	565.0	600.5	642.4	695.5	746.3	789.2
55°	437.9	443.7	448.9	461.9	482.9	512.8	544.7	584.5	625.6	668.5	705.0
57.5°	390.3	396.7	404.3	415.8	432.3	460.1	488.8	521.0	556.1	591.7	622.4
60°	359.0	364.9	371.4	384.5	399.4	421.6	452.9	480.9	507.6	540.2	570.8
62.5°	328.3	334.1	341.7	352.1	366.6	387.7	413.8	438.1	465.9	494.3	517.1
65°	282.8	287.4	293.2	303.0	316.7	335.5	357.0	376.0	400.8	421.6	442.4
67.5°	232.9	241.6	249.3	257.2	268.8	286.4	302.0	320.1	336.9	352.4	371.4
70°	200.0	209.8	217.0	225.5	236.5	251.5	266.5	278.9	292.6	307.6	324.5
72.5°	172.4	180.1	185.7	194.7	204.7	218.7	232.6	242.9	254.0	264.3	280.7
75°	136.2	139.4	143.4	150.5	159.7	170.0	181.2	190.3	196.8	205.9	217.6
77.5°	97.8	104.2	106.7	111.8	118.3	124.9	132.1	139.9	146.1	149.3	158.3
80°	74.9	77.6	80.1	87.3	91.2	97.7	102.9	110.1	112.7	116.0	124.4
82.5°	58.2	59.9	61.4	63.3	65.7	72.2	77.4	82.0	84.5	85.8	92.2
85°	33.8	34.5	35.2	35.8	36.5	36.5	39.1	42.3	46.9	46.9	48.8
87.5°	18.1	18.3	17.7	16.7	17.2	16.8	16.7	15.9	16.9	17.7	18.6
90°	33.2	31.3	28.7	26.2	23.7	21.2	18.2	14.7	11.2	7.7	4.2
92.5°	32.0	30.2	27.6	25.1	22.5	20.0	18.7	18.5	18.3	18.1	17.9
95°	33.2	31.3	30.9	30.6	30.3	30.0	35.3	46.0	56.7	67.4	78.1
97.5°	37.7	37.5	72.8	108.0	143.3	178.5	192.8	186.2	179.4	172.7	166.0
100°	57.2	62.6	106.1	149.7	193.3	236.9	255.8	250.2	244.5	238.8	233.1
102.5°	243.4	301.3	307.0	312.7	318.4	324.0	324.8	320.7	316.5	312.4	308.1
105°	446.3	443.5	441.9	440.4	438.8	437.2	435.5	433.6	431.6	429.7	427.8
107.5°	554.3	552.9	550.7	548.7	546.5	544.3	542.8	541.9	540.9	540.0	538.9
110°	627.5	626.8	624.9	623.0	621.1	619.3	617.8	616.9	616.0	615.0	614.1



TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	698.3	698.5	697.6	696.7	695.8	694.9	693.6	691.9	690.2	688.5	686.8
115°	802.3	801.6	802.0	802.3	802.6	803.0	802.6	801.6	800.7	799.7	798.8
117.5°	908.4	908.5	907.9	907.2	906.4	905.8	904.8	903.5	902.3	901.0	899.8
120°	972.9	972.2	972.5	972.9	973.2	973.5	973.0	971.8	970.5	969.2	968.0
122.5°	1037.5	1037.1	1036.6	1036.1	1035.8	1035.3	1034.7	1033.9	1033.1	1032.4	1031.6
125°	1126.7	1125.8	1126.3	1127.0	1127.7	1128.2	1127.9	1126.7	1125.4	1124.2	1122.9
127.5°	1217.1	1217.3	1215.8	1214.4	1213.0	1211.4	1210.6	1210.2	1209.9	1209.7	1209.3
130°	1271.0	1270.7	1269.8	1268.9	1267.9	1267.0	1266.3	1266.0	1265.6	1265.4	1265.1
132.5°	1324.5	1324.2	1323.0	1321.7	1320.6	1319.4	1318.5	1318.0	1317.4	1316.7	1316.2
135°	1397.9	1397.2	1396.0	1394.7	1393.5	1392.1	1391.7	1392.0	1392.3	1392.6	1393.0
137.5°	1468.4	1467.7	1466.3	1465.0	1463.6	1462.2	1461.4	1461.3	1461.1	1461.0	1460.9
140°	1511.9	1510.9	1510.3	1509.7	1509.0	1508.4	1507.8	1507.1	1506.6	1505.9	1505.2
142.5°	1552.6	1551.9	1551.5	1551.1	1550.8	1550.4	1549.6	1548.5	1547.4	1546.1	1545.0
145°	1610.7	1610.4	1610.4	1610.4	1610.4	1610.4	1610.0	1609.0	1608.1	1607.1	1606.2
147.5°	1661.6	1661.3	1661.6	1662.0	1662.3	1662.6	1661.9	1660.1	1658.3	1656.5	1654.8
150°	1694.3	1694.3	1694.6	1695.0	1695.3	1695.5	1695.1	1693.8	1692.5	1691.3	1690.1
152.5°	1722.1	1721.6	1722.1	1722.7	1723.3	1723.9	1723.6	1722.6	1721.6	1720.6	1719.6
155°	1759.5	1758.2	1759.3	1760.2	1761.1	1762.1	1762.4	1762.1	1761.7	1761.4	1761.1
157.5°	1792.1	1790.4	1791.5	1792.5	1793.6	1794.7	1795.4	1795.5	1795.7	1795.9	1796.1
160°	1812.8	1810.8	1811.2	1811.5	1811.8	1812.1	1812.8	1813.7	1814.7	1815.6	1816.6
162.5°	1829.8	1827.9	1828.2	1828.5	1828.8	1829.2	1829.9	1831.2	1832.3	1833.5	1834.8
165°	1853.1	1850.7	1850.7	1850.7	1850.7	1850.7	1851.4	1853.0	1854.6	1856.1	1857.8
167.5°	1870.5	1867.7	1867.9	1868.1	1868.3	1868.5	1869.3	1871.0	1872.6	1874.3	1875.9
170°	1881.6	1879.1	1878.8	1878.5	1878.1	1877.8	1878.6	1880.5	1882.4	1884.3	1886.2
172.5°	1888.4	1885.9	1885.6	1885.3	1885.0	1884.6	1885.5	1887.3	1889.2	1891.1	1893.0
175°	1896.1	1893.3	1893.0	1892.6	1892.3	1892.1	1892.8	1894.7	1896.6	1898.5	1900.4
177.5°	1900.2	1898.1	1897.6	1897.1	1896.6	1896.1	1896.8	1898.5	1900.3	1902.1	1903.8
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



TEST NUMBER: P333091-830

CATALOG NUMBER: S124RDIW-S1020D1560U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1627.1	1631.8	1637.0	1646.9	1655.3	1659.0	1666.2	1671.4	1669.9	1677.2	1689.7
5°	1633.5	1651.1	1671.3	1692.1	1715.6	1735.1	1750.8	1766.4	1778.9	1793.8	1816.0
7.5°	1632.5	1663.8	1697.8	1735.1	1773.6	1806.9	1837.6	1868.9	1896.6	1927.0	1966.7
10°	1628.3	1670.0	1712.3	1761.2	1810.1	1856.3	1898.1	1937.1	1974.3	2014.0	2064.3
12.5°	1623.6	1671.6	1722.8	1781.6	1842.4	1898.1	1947.1	2003.4	2049.8	2101.1	2159.1
15°	1602.9	1667.4	1737.1	1813.4	1886.3	1961.2	2028.4	2097.4	2161.9	2223.2	2296.2
17.5°	1579.1	1653.6	1735.8	1825.9	1913.5	2004.7	2084.2	2171.3	2237.3	2319.5	2387.3
20°	1559.9	1640.0	1728.0	1829.0	1928.7	2029.7	2117.6	2206.3	2280.6	2363.3	2449.3
22.5°	1536.4	1624.4	1719.7	1824.3	1928.7	2039.1	2136.4	2224.5	2316.5	2409.7	2498.3
25°	1498.6	1589.9	1690.8	1805.5	1925.4	2038.2	2142.4	2251.8	2350.9	2451.9	2531.4
27.5°	1452.3	1548.0	1654.5	1772.8	1895.8	2011.3	2134.1	2250.7	2350.4	2447.6	2517.0
30°	1415.2	1516.3	1618.5	1738.4	1866.1	1989.9	2121.6	2238.2	2343.1	2430.4	2469.5
32.5°	1377.1	1473.0	1578.4	1699.9	1830.7	1963.9	2094.4	2213.7	2310.7	2363.1	2364.2
35°	1311.0	1400.9	1510.3	1629.7	1763.9	1908.5	2040.8	2158.0	2217.3	2221.9	2158.0
37.5°	1238.8	1321.3	1424.7	1544.0	1691.0	1834.8	1970.0	2048.1	2068.0	2001.7	1883.6
40°	1187.2	1263.4	1363.1	1485.6	1631.5	1780.1	1903.3	1960.6	1939.8	1832.2	1700.6
42.5°	1132.9	1204.0	1300.0	1421.0	1567.4	1717.6	1822.5	1853.2	1798.0	1673.8	1519.8
45°	1044.5	1109.7	1204.8	1326.6	1467.4	1608.1	1687.6	1672.0	1580.1	1432.9	1260.2
47.5°	952.3	1015.3	1100.9	1213.6	1357.7	1479.2	1533.0	1485.9	1355.2	1193.2	1052.7
50°	891.4	955.8	1034.7	1142.3	1273.8	1391.1	1425.7	1354.0	1208.7	1052.9	924.0
52.5°	831.4	886.6	963.8	1067.7	1193.5	1292.6	1311.0	1228.3	1078.4	938.8	824.3
55°	740.2	790.4	855.5	953.3	1062.1	1146.1	1136.3	1030.2	894.0	774.8	684.9
57.5°	652.0	689.8	750.0	841.6	937.1	993.5	957.8	867.2	740.4	642.7	566.8
60°	593.6	628.8	684.9	765.0	849.0	880.9	850.9	752.6	652.2	563.0	499.1
62.5°	538.4	569.4	617.6	692.0	759.9	778.7	746.7	660.8	570.4	494.2	441.3
65°	458.1	486.7	527.8	580.6	627.5	636.6	615.8	527.8	459.4	395.5	359.0
67.5°	385.2	404.0	436.0	481.6	506.5	511.9	471.6	416.3	356.0	316.8	289.3
70°	336.2	349.2	379.2	404.0	424.1	424.8	387.7	343.4	297.1	265.2	245.0
72.5°	288.8	301.3	324.0	340.9	356.4	351.4	317.4	282.4	245.0	220.9	205.9
75°	222.8	233.9	245.6	253.4	253.4	246.9	222.2	196.1	174.7	160.3	155.7
77.5°	162.0	171.1	175.0	173.8	171.5	161.4	145.7	128.7	120.9	114.1	110.7
80°	127.1	131.0	132.2	129.0	125.1	113.4	102.9	95.8	88.6	86.1	84.7
82.5°	94.3	97.6	94.3	95.1	86.5	76.9	71.2	68.7	65.7	64.7	63.3
85°	50.1	49.5	48.3	45.0	39.1	37.8	37.1	36.5	35.2	35.8	34.5
87.5°	18.8	17.9	16.5	16.7	17.2	16.7	17.7	18.3	18.8	18.7	20.1
90°	7.7	11.2	14.7	18.2	21.2	23.7	26.2	28.7	31.3	33.2	35.1
92.5°	18.1	18.3	18.5	18.7	20.0	22.5	25.1	27.6	30.2	32.0	33.9
95°	67.4	56.7	46.0	35.3	30.0	30.3	30.6	30.9	31.3	33.2	35.1
97.5°	172.7	179.4	186.2	192.8	178.5	143.3	108.0	72.8	37.5	37.7	37.9
100°	238.8	244.5	250.2	255.8	236.9	193.3	149.7	106.1	62.6	57.2	51.8
102.5°	312.4	316.5	320.7	324.8	324.0	318.4	312.7	307.0	301.3	243.4	185.5
105°	429.7	431.6	433.6	435.5	437.2	438.8	440.4	441.9	443.5	446.3	449.1
107.5°	540.0	540.9	541.9	542.8	544.3	546.5	548.7	550.7	552.9	554.3	555.7
110°	615.0	616.0	616.9	617.8	619.3	621.1	623.0	624.9	626.8	627.5	628.1





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	688.5	690.2	691.9	693.6	694.9	695.8	696.7	697.6	698.5	698.3	698.2
115°	799.7	800.7	801.6	802.6	803.0	802.6	802.3	802.0	801.6	802.3	803.0
117.5°	901.0	902.3	903.5	904.8	905.8	906.4	907.2	907.9	908.5	908.4	908.3
120°	969.2	970.5	971.8	973.0	973.5	973.2	972.9	972.5	972.2	972.9	973.5
122.5°	1032.4	1033.1	1033.9	1034.7	1035.3	1035.8	1036.1	1036.6	1037.1	1037.5	1037.8
125°	1124.2	1125.4	1126.7	1127.9	1128.2	1127.7	1127.0	1126.3	1125.8	1126.7	1127.7
127.5°	1209.7	1209.9	1210.2	1210.6	1211.4	1213.0	1214.4	1215.8	1217.3	1217.1	1216.9
130°	1265.4	1265.6	1266.0	1266.3	1267.0	1267.9	1268.9	1269.8	1270.7	1271.0	1271.4
132.5°	1316.7	1317.4	1318.0	1318.5	1319.4	1320.6	1321.7	1323.0	1324.2	1324.5	1324.8
135°	1392.6	1392.3	1392.0	1391.7	1392.1	1393.5	1394.7	1396.0	1397.2	1397.9	1398.5
137.5°	1461.0	1461.1	1461.3	1461.4	1462.2	1463.6	1465.0	1466.3	1467.7	1468.4	1469.1
140°	1505.9	1506.6	1507.1	1507.8	1508.4	1509.0	1509.7	1510.3	1510.9	1511.9	1512.9
142.5°	1546.1	1547.4	1548.5	1549.6	1550.4	1550.8	1551.1	1551.5	1551.9	1552.6	1553.3
145°	1607.1	1608.1	1609.0	1610.0	1610.4	1610.4	1610.4	1610.4	1610.4	1610.7	1611.1
147.5°	1656.5	1658.3	1660.1	1661.9	1662.6	1662.3	1662.0	1661.6	1661.3	1661.6	1661.8
150°	1691.3	1692.5	1693.8	1695.1	1695.5	1695.3	1695.0	1694.6	1694.3	1694.3	1694.3
152.5°	1720.6	1721.6	1722.6	1723.6	1723.9	1723.3	1722.7	1722.1	1721.6	1722.1	1722.6
155°	1761.4	1761.7	1762.1	1762.4	1762.1	1761.1	1760.2	1759.3	1758.2	1759.5	1760.8
157.5°	1795.9	1795.7	1795.5	1795.4	1794.7	1793.6	1792.5	1791.5	1790.4	1792.1	1793.7
160°	1815.6	1814.7	1813.7	1812.8	1812.1	1811.8	1811.5	1811.2	1810.8	1812.8	1814.7
162.5°	1833.5	1832.3	1831.2	1829.9	1829.2	1828.8	1828.5	1828.2	1827.9	1829.8	1831.7
165°	1856.1	1854.6	1853.0	1851.4	1850.7	1850.7	1850.7	1850.7	1850.7	1853.1	1855.7
167.5°	1874.3	1872.6	1871.0	1869.3	1868.5	1868.3	1868.1	1867.9	1867.7	1870.5	1873.3
170°	1884.3	1882.4	1880.5	1878.6	1877.8	1878.1	1878.5	1878.8	1879.1	1881.6	1884.1
172.5°	1891.1	1889.2	1887.3	1885.5	1884.6	1885.0	1885.3	1885.6	1885.9	1888.4	1890.9
175°	1898.5	1896.6	1894.7	1892.8	1892.1	1892.3	1892.6	1893.0	1893.3	1896.1	1898.9
177.5°	1902.1	1900.3	1898.5	1896.8	1896.1	1896.6	1897.1	1897.6	1898.1	1900.2	1902.1
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2	1617.2
2.5°	1696.5	1698.6	1700.2	1705.3	1705.8	1710.5	1705.8
5°	1836.8	1846.0	1860.3	1874.6	1875.9	1885.0	1868.8
7.5°	1994.2	2015.3	2028.5	2051.7	2060.9	2066.5	2057.2
10°	2102.6	2122.2	2156.7	2173.7	2190.7	2193.2	2185.4
12.5°	2207.4	2238.4	2265.7	2297.7	2297.0	2319.9	2311.6
15°	2347.0	2379.0	2416.7	2452.6	2465.6	2465.6	2476.1
17.5°	2446.6	2505.1	2544.2	2572.3	2603.1	2608.4	2604.8
20°	2513.9	2577.0	2618.8	2655.2	2676.1	2681.9	2681.9
22.5°	2563.8	2617.6	2658.3	2691.1	2708.4	2715.3	2713.2
25°	2598.5	2644.8	2669.6	2679.3	2683.9	2682.6	2670.2
27.5°	2551.1	2549.0	2533.4	2503.4	2480.9	2467.2	2451.6
30°	2460.4	2426.5	2387.4	2344.4	2289.1	2246.6	2233.6
32.5°	2325.3	2249.3	2183.0	2111.4	2051.8	2009.5	1991.8
35°	2064.3	1943.7	1845.3	1759.3	1696.8	1657.6	1644.6
37.5°	1754.4	1637.7	1515.9	1432.5	1380.5	1341.0	1326.3
40°	1557.3	1430.2	1324.0	1245.9	1192.4	1154.0	1153.3
42.5°	1377.4	1256.1	1156.2	1099.9	1042.3	1016.8	1016.7
45°	1127.8	1030.8	946.1	901.8	867.2	846.4	840.6
47.5°	933.9	853.6	797.1	761.9	733.7	720.4	711.8
50°	824.9	754.5	709.5	678.9	663.3	646.4	645.1
52.5°	734.2	677.4	642.3	617.5	597.7	587.5	587.8
55°	617.1	572.1	547.3	528.4	512.8	505.0	501.7
57.5°	519.8	486.1	468.1	450.7	444.1	438.0	436.3
60°	459.4	436.6	419.6	406.0	396.2	394.2	393.5
62.5°	409.3	385.5	373.7	363.2	356.0	353.0	351.9
65°	337.5	319.9	309.5	301.0	298.4	293.9	293.2
67.5°	272.1	261.6	254.7	248.7	245.2	245.0	245.0
70°	232.0	226.1	220.3	217.0	215.0	213.7	213.7
72.5°	197.6	193.2	188.4	186.7	186.3	185.0	184.5
75°	150.5	146.0	146.6	143.4	140.7	137.5	135.5
77.5°	106.7	103.5	102.8	102.5	100.2	99.8	100.9
80°	82.8	79.5	78.8	79.5	78.8	76.9	76.9
82.5°	63.0	60.2	59.6	59.2	58.5	59.2	58.2
85°	33.8	32.6	32.6	32.6	33.8	33.3	32.6
87.5°	19.4	19.2	20.0	19.6	19.7	19.3	20.0
90°	36.9	38.8	40.2	40.7	41.4	42.0	42.6
92.5°	35.8	37.7	38.7	38.8	39.0	39.1	39.2
95°	36.9	38.8	40.0	40.2	40.6	40.9	41.2
97.5°	38.1	38.3	38.5	38.8	39.2	39.5	39.8
100°	46.5	41.1	38.5	38.8	39.2	39.5	39.8
102.5°	127.5	69.7	40.7	40.7	40.8	40.9	40.9
105°	452.0	454.9	450.5	439.2	427.8	416.5	405.1
107.5°	557.1	558.5	559.8	561.0	562.1	563.4	564.6
110°	628.8	629.3	630.2	631.1	632.1	633.0	634.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	698.0	698.0	698.5	699.7	700.9	702.1	703.3
115°	803.5	804.2	804.6	804.6	804.6	804.6	804.6
117.5°	908.1	908.0	908.0	907.8	907.7	907.6	907.4
120°	974.1	974.8	974.8	974.1	973.5	972.9	972.2
122.5°	1038.2	1038.6	1038.4	1037.8	1037.2	1036.5	1035.9
125°	1128.6	1129.5	1130.2	1130.5	1130.8	1131.1	1131.4
127.5°	1216.7	1216.5	1216.3	1216.1	1215.8	1215.5	1215.3
130°	1271.7	1272.0	1272.1	1272.1	1272.1	1272.1	1272.1
132.5°	1325.1	1325.4	1325.5	1325.2	1324.9	1324.7	1324.5
135°	1399.1	1399.8	1400.4	1401.0	1401.7	1402.3	1402.9
137.5°	1469.8	1470.6	1470.7	1470.6	1470.4	1470.2	1470.0
140°	1513.8	1514.8	1515.3	1515.7	1516.0	1516.3	1516.6
142.5°	1554.0	1554.6	1555.0	1555.1	1555.2	1555.2	1555.3
145°	1611.4	1611.7	1612.2	1612.8	1613.4	1614.1	1614.7
147.5°	1662.1	1662.4	1662.6	1662.9	1663.2	1663.6	1663.9
150°	1694.3	1694.3	1694.5	1694.8	1695.1	1695.4	1695.7
152.5°	1723.1	1723.6	1723.7	1723.5	1723.3	1723.2	1723.0
155°	1762.1	1763.3	1763.5	1762.6	1761.6	1760.7	1759.7
157.5°	1795.4	1797.0	1797.0	1795.4	1793.7	1792.1	1790.4
160°	1816.6	1818.4	1818.4	1816.6	1814.7	1812.8	1810.8
162.5°	1833.6	1835.5	1835.3	1833.2	1831.1	1828.9	1826.7
165°	1858.2	1860.8	1860.6	1857.8	1854.9	1852.1	1849.3
167.5°	1876.0	1878.9	1878.7	1875.5	1872.4	1869.2	1866.0
170°	1886.7	1889.2	1888.9	1885.7	1882.5	1879.4	1876.2
172.5°	1893.5	1896.0	1895.5	1892.2	1888.8	1885.4	1881.9
175°	1901.9	1904.7	1904.2	1900.4	1896.6	1892.8	1889.0
177.5°	1904.2	1906.2	1905.7	1902.7	1899.6	1896.6	1893.6
180°	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4	1900.4

(END OF REPORT)