

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: P332859-840

Luminaire Tested: **S124DIW-S1195D1560U840-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332859-840  
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: S124DIW-S1195D1560U840-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1195 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11674.4 lumens  
Efficiency: N/A  
Efficacy: 140.8 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

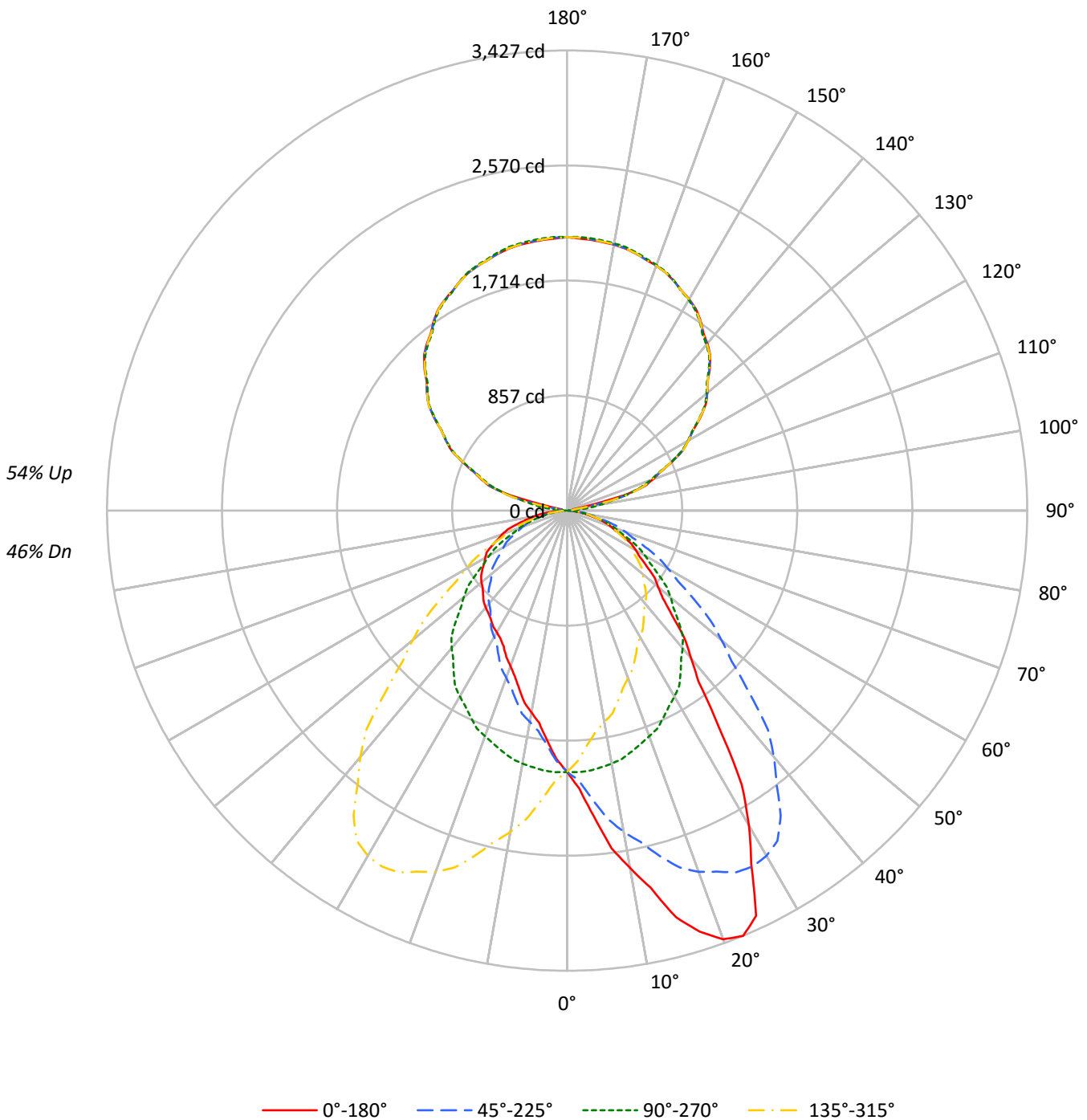
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	59	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	35	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	17	14	12

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

	0°	90°	180°	270°
0°	15713	15713	15713	15713
5°	18504	15754	13904	15754
10°	22155	15684	12518	15684
15°	26213	15525	11496	15525
20°	29190	15364	10584	15364
25°	29661	15126	9954	15126
30°	25239	14897	9755	14897
35°	19404	14526	9758	14526
40°	15125	14089	9941	14089
45°	12611	13431	10107	13431
50°	11099	12627	10451	12627
55°	10169	11667	10871	11667
60°	9529	10805	11378	10805
65°	8871	9841	11798	9841
70°	8108	8889	12066	8889
75°	7243	7820	11918	7820
80°	6072	6406	11544	6406
85°	4483	4631	11060	4631



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.6	1.6
10°-20°	584.5	5.0
20°-30°	926.8	7.9
30°-40°	1031.4	8.8
40°-50°	938.9	8.0
50°-60°	767.2	6.6
60°-70°	547.7	4.7
70°-80°	301.6	2.6
80°-90°	88.2	0.8
90°-100°	69.6	0.6
100°-110°	444.0	3.8
110°-120°	849.4	7.3
120°-130°	1078.3	9.2
130°-140°	1153.7	9.9
140°-150°	1078.8	9.2
150°-160°	870.0	7.5
160°-170°	561.1	4.8
170°-180°	193.4	1.7
0°-30°	1700.9	14.6
0°-40°	2732.3	23.4
0°-60°	4438.4	38.0
0°-90°	5376.0	46.0
90°-120°	1363.1	11.7
90°-150°	4673.9	40.0
90°-180°	6298.0	53.9
0°-180°	11674.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1946	1946	1946	1946	1946	
5°	2283	1944	1716	1944	2283	232
15°	3136	1858	1376	1858	3136	886
25°	3330	1698	1118	1698	3330	1468
35°	1969	1474	990	1474	1969	1250
45°	1105	1176	885	1176	1105	870
55°	722	829	772	829	722	653
65°	464	515	618	515	464	460
75°	232	251	382	251	232	247
85°	48	50	119	50	48	60
90°	46	4	46	4	46	21
95°	44	84	44	84	44	35
105°	434	458	434	458	434	379
115°	862	856	862	856	862	853
125°	1212	1203	1212	1203	1212	1080
135°	1503	1492	1503	1492	1503	1157
145°	1730	1721	1730	1721	1730	1081
155°	1885	1887	1885	1887	1885	869
165°	1981	1990	1981	1990	1981	560
175°	2024	2036	2024	2036	2024	193
180°	2036	2036	2036	2036	2036	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2071.5	2070.8	2064.5	2063.2	2058.6	2052.9	2051.5	2041.2	2020.5	2010.8	2008.3
5°	2283.4	2299.6	2278.6	2274.5	2272.1	2245.5	2231.8	2215.6	2178.6	2156.9	2139.9
7.5°	2536.3	2538.2	2529.0	2521.6	2501.1	2477.9	2443.1	2406.0	2361.8	2315.8	2281.2
10°	2702.7	2709.2	2698.7	2697.0	2655.9	2630.1	2578.5	2535.0	2485.0	2429.3	2378.5
12.5°	2878.1	2869.1	2863.8	2829.2	2821.7	2774.6	2714.6	2669.8	2592.7	2528.7	2461.1
15°	3136.4	3118.8	3107.5	3059.9	3036.5	2971.1	2907.5	2858.3	2757.5	2661.6	2589.0
17.5°	3288.0	3305.8	3279.6	3260.1	3199.7	3153.9	3088.8	2985.6	2906.7	2787.5	2695.9
20°	3397.7	3399.3	3384.8	3364.7	3317.1	3259.0	3188.0	3075.1	2980.8	2862.4	2736.5
22.5°	3427.4	3427.7	3421.5	3402.7	3366.7	3319.6	3248.0	3153.9	3039.6	2910.7	2784.9
25°	3329.9	3326.7	3334.0	3355.0	3341.2	3326.7	3285.6	3215.5	3109.1	2972.7	2837.3
27.5°	2968.1	2990.3	3031.3	3082.9	3132.6	3170.5	3181.2	3166.7	3100.8	2988.8	2846.8
30°	2707.5	2734.9	2765.6	2817.1	2917.2	2974.4	3037.3	3084.8	3058.3	2968.8	2836.5
32.5°	2421.2	2427.9	2473.4	2532.0	2623.6	2733.8	2833.5	2930.0	2962.1	2915.2	2804.9
35°	1968.9	1980.2	2029.4	2087.5	2199.6	2334.2	2484.2	2618.0	2728.5	2772.8	2716.3
37.5°	1606.8	1639.2	1673.9	1736.3	1834.9	1956.2	2112.0	2285.2	2449.8	2560.1	2578.8
40°	1435.2	1455.3	1480.4	1527.9	1611.7	1731.1	1864.9	2063.3	2238.3	2396.3	2447.9
42.5°	1299.7	1311.5	1326.9	1369.9	1433.7	1552.5	1674.7	1849.2	2024.8	2213.7	2300.2
45°	1104.6	1116.7	1142.5	1167.5	1215.9	1298.1	1411.8	1555.3	1731.9	1914.1	2073.8
47.5°	963.7	971.4	986.7	1013.5	1054.6	1108.8	1201.3	1321.2	1484.9	1661.7	1831.9
50°	883.7	890.1	902.2	926.5	957.9	1006.2	1082.1	1194.1	1322.3	1500.5	1667.4
52.5°	820.5	823.0	831.9	848.4	873.3	914.0	976.2	1068.9	1188.1	1347.0	1513.3
55°	722.5	725.7	733.8	745.8	767.6	793.3	840.9	910.3	1014.3	1152.2	1296.5
57.5°	641.8	644.1	650.9	655.5	673.4	694.4	730.9	780.5	859.3	976.2	1105.1
60°	590.2	588.5	596.6	600.7	612.8	630.6	658.7	706.3	774.9	869.2	987.7
62.5°	539.9	537.7	544.4	549.8	556.6	571.8	594.9	632.2	687.7	773.1	875.5
65°	464.4	461.2	465.2	471.7	478.2	486.1	503.1	536.1	580.6	641.8	720.0
67.5°	388.6	392.0	392.6	395.9	399.6	410.6	422.1	445.6	476.9	525.8	592.2
70°	343.5	344.3	347.5	347.5	349.9	359.6	369.3	382.9	413.6	458.8	512.8
72.5°	298.3	301.7	300.4	303.0	304.8	311.2	318.3	331.3	357.5	391.0	436.7
75°	232.2	234.6	234.6	235.4	237.8	240.2	245.9	255.6	274.2	299.1	330.5
77.5°	169.4	169.7	170.8	173.7	173.7	177.5	181.8	189.5	198.6	215.8	235.0
80°	130.6	132.2	131.4	133.0	133.0	136.2	137.8	147.5	151.6	162.9	178.1
82.5°	95.8	97.4	97.3	99.5	100.8	101.4	103.7	107.6	111.6	121.6	127.8
85°	48.4	50.0	48.4	50.0	52.4	53.2	55.6	56.5	59.7	62.1	67.8
87.5°	23.3	25.1	24.9	25.5	26.7	27.1	27.3	26.3	28.4	28.7	30.7
90°	45.6	45.0	44.3	43.6	43.0	41.6	39.6	37.6	35.5	33.5	30.8
92.5°	42.0	41.9	41.8	41.6	41.5	40.4	38.4	36.4	34.3	32.3	29.6
95°	44.1	43.8	43.5	43.1	42.8	41.6	39.6	37.6	35.5	33.5	33.1
97.5°	42.6	42.3	42.0	41.6	41.3	41.0	40.8	40.6	40.4	40.2	78.0
100°	42.6	42.3	42.0	41.6	41.3	44.0	49.8	55.5	61.3	67.1	113.7
102.5°	43.8	43.8	43.7	43.6	43.6	74.6	136.6	198.7	260.7	322.9	328.9
105°	434.0	446.3	458.4	470.6	482.7	487.4	484.3	481.2	478.2	475.1	473.4
107.5°	604.9	603.6	602.3	601.1	599.8	598.3	596.9	595.4	593.9	592.4	590.1
110°	679.2	678.2	677.2	676.2	675.2	674.3	673.7	673.0	672.3	671.6	669.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	753.6	752.2	750.9	749.7	748.4	747.8	747.9	748.1	748.2	748.4	747.4
115°	862.0	862.0	862.0	862.0	862.0	861.6	860.9	860.3	859.6	858.9	859.3
117.5°	972.2	972.4	972.5	972.6	972.8	972.9	973.0	973.2	973.3	973.4	972.7
120°	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4	1043.7	1043.0	1042.4	1041.7	1042.0
122.5°	1109.9	1110.5	1111.3	1112.0	1112.6	1112.8	1112.4	1112.0	1111.6	1111.2	1110.6
125°	1212.2	1211.9	1211.5	1211.2	1210.9	1210.2	1209.2	1208.2	1207.2	1206.2	1206.8
127.5°	1302.1	1302.3	1302.6	1302.9	1303.1	1303.4	1303.6	1303.8	1304.0	1304.2	1302.6
130°	1363.0	1363.0	1363.0	1363.0	1363.0	1362.8	1362.5	1362.2	1361.8	1361.5	1360.5
132.5°	1419.1	1419.4	1419.6	1419.9	1420.2	1420.1	1419.8	1419.5	1419.1	1418.8	1417.4
135°	1503.1	1502.5	1501.8	1501.1	1500.5	1499.8	1499.0	1498.3	1497.7	1497.0	1495.7
137.5°	1575.0	1575.2	1575.4	1575.6	1575.8	1575.6	1574.8	1574.1	1573.3	1572.6	1571.0
140°	1625.0	1624.6	1624.3	1624.0	1623.6	1623.0	1621.9	1620.9	1619.9	1618.8	1618.2
142.5°	1666.4	1666.3	1666.3	1666.2	1666.1	1665.7	1665.0	1664.3	1663.4	1662.7	1662.3
145°	1730.0	1729.4	1728.7	1728.0	1727.4	1726.8	1726.5	1726.2	1725.8	1725.5	1725.5
147.5°	1782.7	1782.4	1782.0	1781.7	1781.4	1781.1	1780.8	1780.5	1780.3	1780.0	1780.3
150°	1816.8	1816.5	1816.1	1815.8	1815.5	1815.3	1815.3	1815.3	1815.3	1815.3	1815.6
152.5°	1846.0	1846.2	1846.4	1846.6	1846.8	1846.7	1846.1	1845.6	1845.1	1844.5	1845.1
155°	1885.4	1886.4	1887.4	1888.4	1889.5	1889.3	1887.9	1886.5	1885.2	1883.8	1884.9
157.5°	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3	1923.6	1921.8	1920.1	1918.2	1919.5
160°	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3	1946.3	1944.3	1942.3	1940.2	1940.6
162.5°	1957.2	1959.5	1961.9	1964.2	1966.4	1966.6	1964.6	1962.6	1960.5	1958.4	1958.8
165°	1981.4	1984.4	1987.4	1990.4	1993.5	1993.7	1990.9	1988.2	1985.5	1982.9	1982.9
167.5°	1999.3	2002.7	2006.1	2009.4	2012.9	2013.1	2010.0	2007.1	2004.1	2001.1	2001.4
170°	2010.2	2013.7	2017.0	2020.4	2023.8	2024.2	2021.4	2018.7	2016.0	2013.3	2013.0
172.5°	2016.3	2020.0	2023.7	2027.3	2030.9	2031.4	2028.7	2026.0	2023.3	2020.6	2020.2
175°	2024.0	2028.0	2032.1	2036.1	2040.2	2040.7	2037.7	2034.6	2031.5	2028.5	2028.2
177.5°	2028.8	2032.1	2035.3	2038.6	2041.8	2042.4	2040.2	2038.0	2035.9	2033.7	2033.2
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2008.9	1999.9	1993.5	1988.3	1974.1	1965.7	1959.2	1950.3	1940.0	1928.9	1915.4
5°	2122.9	2095.6	2075.4	2044.8	2015.7	1991.6	1966.5	1944.0	1916.5	1886.7	1864.9
7.5°	2242.8	2202.0	2149.7	2104.5	2053.5	2009.1	1969.4	1928.8	1886.5	1845.6	1808.1
10°	2318.9	2266.4	2208.4	2139.9	2075.4	2018.1	1964.9	1913.3	1863.3	1813.3	1770.6
12.5°	2400.9	2335.5	2249.7	2169.6	2097.3	2020.7	1956.5	1893.3	1833.0	1780.5	1730.6
15°	2510.8	2416.4	2317.2	2210.0	2114.9	2025.4	1937.5	1857.6	1790.0	1720.6	1672.2
17.5°	2578.4	2461.6	2348.2	2236.1	2121.0	2008.1	1913.3	1821.3	1736.5	1667.6	1606.6
20°	2622.8	2506.8	2365.6	2253.6	2116.5	2000.4	1890.8	1788.4	1699.7	1626.3	1563.4
22.5°	2661.6	2527.4	2386.3	2238.8	2102.3	1979.1	1859.2	1756.1	1665.5	1588.2	1527.9
25°	2682.5	2528.5	2375.3	2228.6	2073.8	1927.8	1819.0	1698.1	1601.2	1519.8	1455.3
27.5°	2684.8	2520.1	2346.8	2183.7	2024.0	1888.0	1750.6	1642.5	1542.1	1456.0	1394.1
30°	2677.7	2506.0	2319.7	2143.1	1982.7	1835.1	1715.8	1598.1	1495.7	1410.2	1345.6
32.5°	2655.1	2476.3	2284.8	2098.0	1931.7	1787.4	1664.2	1552.3	1452.5	1368.3	1300.5
35°	2589.8	2413.2	2209.2	2014.9	1844.8	1698.9	1587.6	1473.9	1373.9	1294.1	1228.8
37.5°	2487.7	2328.0	2120.7	1919.7	1752.5	1606.0	1495.7	1392.9	1302.8	1221.7	1154.8
40°	2398.7	2258.5	2050.4	1854.4	1673.9	1534.4	1431.2	1336.9	1247.3	1170.7	1107.0
42.5°	2296.1	2173.9	1982.1	1774.4	1600.3	1460.2	1359.6	1274.9	1190.5	1119.7	1056.1
45°	2113.2	2032.7	1852.1	1660.1	1478.7	1346.5	1250.5	1176.4	1105.4	1036.1	982.9
47.5°	1903.0	1863.0	1710.9	1528.7	1356.5	1226.2	1143.0	1074.5	1012.2	953.5	906.6
50°	1761.7	1742.4	1610.9	1435.2	1270.7	1148.1	1064.3	1005.4	952.2	900.6	856.3
52.5°	1622.4	1621.7	1503.3	1342.3	1190.1	1072.1	988.9	933.8	887.8	845.8	806.0
55°	1409.4	1432.0	1339.3	1195.7	1059.4	953.0	878.1	828.9	796.6	761.9	732.2
57.5°	1213.8	1251.2	1174.8	1048.3	934.6	836.6	771.3	734.4	700.0	679.0	657.3
60°	1086.1	1121.6	1061.9	955.4	848.2	764.4	702.3	669.2	639.3	624.9	609.6
62.5°	972.5	1004.1	960.0	861.3	768.2	687.6	635.2	603.4	583.3	567.4	557.3
65°	810.3	837.0	799.0	727.3	647.4	583.0	540.2	515.2	495.8	489.4	478.2
67.5°	655.0	679.2	658.7	597.7	533.7	484.9	451.5	427.5	416.1	410.4	402.3
70°	562.8	586.9	565.2	512.0	462.8	421.7	390.2	376.6	364.5	362.0	350.7
72.5°	484.7	501.2	479.4	437.8	395.8	361.0	336.7	322.3	316.1	311.7	305.6
75°	363.7	378.2	363.7	331.3	301.5	277.4	256.4	250.7	243.5	241.1	237.0
77.5°	257.4	269.9	258.8	238.6	216.4	197.7	186.4	179.2	177.5	173.4	175.3
80°	196.7	204.8	194.3	180.6	162.9	150.0	141.9	137.8	133.0	131.4	134.6
82.5°	141.3	144.8	139.5	130.3	117.0	108.7	103.2	98.6	97.6	97.9	97.9
85°	73.4	72.6	71.8	63.7	59.7	54.0	50.8	50.0	49.2	50.8	52.4
87.5°	30.1	30.2	29.1	25.9	23.1	20.5	19.1	17.7	19.1	20.5	21.8
90°	28.1	25.3	22.7	19.5	15.8	12.0	8.3	4.5	8.3	12.0	15.8
92.5°	26.9	24.1	21.4	20.0	19.8	19.6	19.4	19.2	19.4	19.6	19.8
95°	32.8	32.5	32.1	37.8	49.3	60.8	72.2	83.7	72.2	60.8	49.3
97.5°	115.7	153.5	191.3	206.6	199.4	192.2	185.0	177.8	185.0	192.2	199.4
100°	160.4	207.1	253.8	274.1	268.0	262.0	255.9	249.7	255.9	262.0	268.0
102.5°	335.1	341.1	347.2	348.0	343.6	339.1	334.7	330.1	334.7	339.1	343.6
105°	471.8	470.1	468.4	466.6	464.5	462.4	460.4	458.4	460.4	462.4	464.5
107.5°	587.8	585.5	583.2	581.6	580.6	579.6	578.6	577.4	578.6	579.6	580.6
110°	667.5	665.5	663.5	662.0	661.0	659.9	658.9	657.9	658.9	659.9	661.0





TEST NUMBER: P332859-840

CATALOG NUMBER: S124DIW-S1195D1560U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	746.5	745.5	744.6	743.2	741.3	739.5	737.7	735.9	737.7	739.5	741.3
115°	859.6	859.9	860.3	859.9	858.9	857.9	856.9	855.9	856.9	857.9	858.9
117.5°	972.0	971.2	970.5	969.5	968.1	966.7	965.3	964.0	965.3	966.7	968.1
120°	1042.4	1042.7	1043.0	1042.5	1041.2	1039.9	1038.4	1037.1	1038.4	1039.9	1041.2
122.5°	1110.1	1109.7	1109.2	1108.6	1107.7	1106.9	1106.1	1105.3	1106.1	1106.9	1107.7
125°	1207.5	1208.2	1208.8	1208.5	1207.2	1205.8	1204.5	1203.2	1204.5	1205.8	1207.2
127.5°	1301.1	1299.6	1298.0	1297.1	1296.7	1296.4	1296.1	1295.7	1296.1	1296.4	1296.7
130°	1359.5	1358.5	1357.5	1356.8	1356.5	1356.0	1355.7	1355.4	1355.7	1356.0	1356.5
132.5°	1416.1	1414.9	1413.6	1412.7	1412.1	1411.5	1410.8	1410.2	1410.8	1411.5	1412.1
135°	1494.3	1493.0	1491.6	1491.1	1491.5	1491.8	1492.1	1492.5	1492.1	1491.8	1491.5
137.5°	1569.6	1568.1	1566.6	1565.8	1565.7	1565.5	1565.4	1565.3	1565.4	1565.5	1565.7
140°	1617.5	1616.8	1616.2	1615.5	1614.8	1614.2	1613.5	1612.8	1613.5	1614.2	1614.8
142.5°	1661.9	1661.5	1661.1	1660.3	1659.1	1657.9	1656.6	1655.4	1656.6	1657.9	1659.1
145°	1725.5	1725.5	1725.5	1725.0	1723.9	1722.9	1721.9	1720.9	1721.9	1722.9	1723.9
147.5°	1780.7	1781.0	1781.3	1780.6	1778.7	1776.8	1774.8	1773.0	1774.8	1776.8	1778.7
150°	1816.0	1816.3	1816.6	1816.1	1814.8	1813.4	1812.1	1810.8	1812.1	1813.4	1814.8
152.5°	1845.7	1846.3	1847.0	1846.7	1845.6	1844.6	1843.5	1842.4	1843.5	1844.6	1845.6
155°	1885.9	1886.9	1887.9	1888.2	1887.9	1887.5	1887.2	1886.9	1887.2	1887.5	1887.9
157.5°	1920.6	1921.7	1922.9	1923.6	1923.8	1924.0	1924.2	1924.4	1924.2	1924.0	1923.8
160°	1940.9	1941.2	1941.6	1942.3	1943.3	1944.3	1945.3	1946.3	1945.3	1944.3	1943.3
162.5°	1959.1	1959.4	1959.8	1960.7	1962.0	1963.2	1964.5	1965.8	1964.5	1963.2	1962.0
165°	1982.9	1982.9	1982.9	1983.7	1985.4	1987.1	1988.7	1990.4	1988.7	1987.1	1985.4
167.5°	2001.6	2001.8	2002.0	2002.9	2004.7	2006.4	2008.2	2009.9	2008.2	2006.4	2004.7
170°	2012.7	2012.3	2012.0	2012.8	2014.8	2016.8	2018.9	2020.9	2018.9	2016.8	2014.8
172.5°	2019.9	2019.6	2019.2	2020.1	2022.2	2024.2	2026.2	2028.2	2026.2	2024.2	2022.2
175°	2027.8	2027.5	2027.2	2028.0	2030.0	2032.1	2034.1	2036.1	2034.1	2032.1	2030.0
177.5°	2032.7	2032.1	2031.5	2032.3	2034.1	2036.0	2037.9	2039.8	2037.9	2036.0	2034.1
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1908.9	1903.2	1894.8	1883.2	1873.5	1863.2	1860.6	1856.7	1864.4	1858.1	1856.0
5°	1846.4	1829.5	1807.7	1782.7	1768.2	1747.3	1743.2	1735.2	1727.1	1726.3	1718.2
7.5°	1780.1	1755.2	1726.8	1701.2	1677.7	1654.9	1639.8	1636.6	1624.7	1617.7	1609.6
10°	1737.6	1706.9	1673.9	1649.7	1622.2	1598.1	1581.1	1571.5	1563.4	1554.5	1546.5
12.5°	1687.3	1654.7	1627.4	1601.2	1568.7	1550.3	1522.5	1505.7	1504.1	1504.2	1483.3
15°	1628.7	1596.5	1554.5	1517.4	1499.6	1464.2	1448.9	1429.6	1417.4	1405.3	1395.7
17.5°	1561.8	1521.7	1488.8	1446.3	1412.5	1384.2	1364.1	1352.5	1334.2	1317.2	1304.7
20°	1519.8	1477.1	1442.5	1397.2	1360.2	1325.5	1308.6	1292.5	1278.8	1264.3	1250.5
22.5°	1477.2	1432.6	1390.2	1346.4	1311.8	1275.3	1258.9	1237.0	1224.0	1215.9	1202.1
25°	1410.2	1361.8	1313.4	1271.5	1236.1	1203.8	1182.0	1165.1	1150.5	1144.1	1135.3
27.5°	1337.3	1289.3	1242.5	1194.9	1154.6	1131.3	1113.8	1101.1	1092.7	1084.1	1080.2
30°	1290.9	1240.9	1190.9	1146.5	1109.4	1086.1	1070.0	1061.1	1054.6	1050.6	1046.5
32.5°	1243.7	1194.5	1141.9	1101.4	1068.1	1047.3	1035.1	1026.2	1023.0	1021.6	1020.2
35°	1168.3	1118.3	1070.0	1033.7	1002.2	994.1	983.7	978.9	977.2	982.9	985.3
37.5°	1095.3	1048.8	1004.3	969.2	948.6	936.8	933.2	933.3	939.2	944.1	950.0
40°	1048.1	1003.0	961.1	930.5	911.1	903.8	902.2	906.3	912.7	918.4	924.8
42.5°	1002.4	957.9	919.8	891.1	877.6	870.9	871.9	876.0	884.9	891.9	901.6
45°	931.3	894.1	857.1	833.7	822.4	824.0	824.0	831.3	840.1	850.6	861.1
47.5°	864.3	827.0	796.5	776.8	770.9	769.5	774.1	783.6	796.3	809.2	823.8
50°	819.2	783.8	757.1	739.3	733.0	735.4	741.7	750.6	766.0	782.1	797.4
52.5°	773.4	741.1	716.5	700.0	695.5	699.8	706.3	720.3	733.8	751.1	769.7
55°	702.3	674.9	655.5	643.4	641.8	644.2	651.5	666.8	686.1	707.9	725.7
57.5°	631.5	608.5	590.9	582.5	583.3	585.5	597.4	615.7	636.3	659.5	682.5
60°	583.7	562.8	548.3	541.8	542.6	547.4	562.0	579.0	604.7	627.3	651.5
62.5°	538.6	520.2	506.3	500.6	499.4	510.1	523.9	541.5	567.3	592.5	618.5
65°	466.1	451.5	440.2	437.0	439.4	447.5	465.2	488.6	510.4	536.9	564.4
67.5°	395.1	383.1	375.4	376.9	379.8	391.7	406.6	426.7	451.4	479.0	506.0
70°	349.9	338.6	332.1	333.0	337.8	352.3	365.3	385.4	412.0	440.2	462.8
72.5°	303.5	296.1	290.2	293.7	298.5	308.5	324.6	344.8	368.2	394.5	418.3
75°	233.0	233.0	229.7	232.2	239.4	249.1	261.3	282.2	305.6	326.6	345.9
77.5°	172.9	171.1	173.2	176.1	180.3	191.8	205.6	220.6	238.2	259.1	275.1
80°	132.2	133.0	137.0	141.9	143.5	152.4	166.9	180.6	194.3	212.1	227.4
82.5°	99.4	100.2	102.2	108.4	110.0	119.5	128.9	142.6	155.0	166.9	179.7
85°	54.0	54.0	58.1	60.5	64.5	71.0	76.5	84.6	95.9	104.0	116.1
87.5°	24.5	25.1	28.3	30.1	32.6	36.4	38.1	45.5	48.6	52.2	58.3
90°	19.5	22.7	25.3	28.1	30.8	33.5	35.5	37.6	39.6	41.6	43.0
92.5°	20.0	21.4	24.1	26.9	29.6	32.3	34.3	36.4	38.4	40.4	41.5
95°	37.8	32.1	32.5	32.8	33.1	33.5	35.5	37.6	39.6	41.6	42.8
97.5°	206.6	191.3	153.5	115.7	78.0	40.2	40.4	40.6	40.8	41.0	41.3
100°	274.1	253.8	207.1	160.4	113.7	67.1	61.3	55.5	49.8	44.0	41.3
102.5°	348.0	347.2	341.1	335.1	328.9	322.9	260.7	198.7	136.6	74.6	43.6
105°	466.6	468.4	470.1	471.8	473.4	475.1	478.2	481.2	484.3	487.4	482.7
107.5°	581.6	583.2	585.5	587.8	590.1	592.4	593.9	595.4	596.9	598.3	599.8
110°	662.0	663.5	665.5	667.5	669.5	671.6	672.3	673.0	673.7	674.3	675.2



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	743.2	744.6	745.5	746.5	747.4	748.4	748.2	748.1	747.9	747.8	748.4
115°	859.9	860.3	859.9	859.6	859.3	858.9	859.6	860.3	860.9	861.6	862.0
117.5°	969.5	970.5	971.2	972.0	972.7	973.4	973.3	973.2	973.0	972.9	972.8
120°	1042.5	1043.0	1042.7	1042.4	1042.0	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4
122.5°	1108.6	1109.2	1109.7	1110.1	1110.6	1111.2	1111.6	1112.0	1112.4	1112.8	1112.6
125°	1208.5	1208.8	1208.2	1207.5	1206.8	1206.2	1207.2	1208.2	1209.2	1210.2	1210.9
127.5°	1297.1	1298.0	1299.6	1301.1	1302.6	1304.2	1304.0	1303.8	1303.6	1303.4	1303.1
130°	1356.8	1357.5	1358.5	1359.5	1360.5	1361.5	1361.8	1362.2	1362.5	1362.8	1363.0
132.5°	1412.7	1413.6	1414.9	1416.1	1417.4	1418.8	1419.1	1419.5	1419.8	1420.1	1420.2
135°	1491.1	1491.6	1493.0	1494.3	1495.7	1497.0	1497.7	1498.3	1499.0	1499.8	1500.5
137.5°	1565.8	1566.6	1568.1	1569.6	1571.0	1572.6	1573.3	1574.1	1574.8	1575.6	1575.8
140°	1615.5	1616.2	1616.8	1617.5	1618.2	1618.8	1619.9	1620.9	1621.9	1623.0	1623.6
142.5°	1660.3	1661.1	1661.5	1661.9	1662.3	1662.7	1663.4	1664.3	1665.0	1665.7	1666.1
145°	1725.0	1725.5	1725.5	1725.5	1725.5	1725.5	1725.8	1726.2	1726.5	1726.8	1727.4
147.5°	1780.6	1781.3	1781.0	1780.7	1780.3	1780.0	1780.3	1780.5	1780.8	1781.1	1781.4
150°	1816.1	1816.6	1816.3	1816.0	1815.6	1815.3	1815.3	1815.3	1815.3	1815.3	1815.5
152.5°	1846.7	1847.0	1846.3	1845.7	1845.1	1844.5	1845.1	1845.6	1846.1	1846.7	1846.8
155°	1888.2	1887.9	1886.9	1885.9	1884.9	1883.8	1885.2	1886.5	1887.9	1889.3	1889.5
157.5°	1923.6	1922.9	1921.7	1920.6	1919.5	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3
160°	1942.3	1941.6	1941.2	1940.9	1940.6	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3
162.5°	1960.7	1959.8	1959.4	1959.1	1958.8	1958.4	1960.5	1962.6	1964.6	1966.6	1966.4
165°	1983.7	1982.9	1982.9	1982.9	1982.9	1982.9	1985.5	1988.2	1990.9	1993.7	1993.5
167.5°	2002.9	2002.0	2001.8	2001.6	2001.4	2001.1	2004.1	2007.1	2010.0	2013.1	2012.9
170°	2012.8	2012.0	2012.3	2012.7	2013.0	2013.3	2016.0	2018.7	2021.4	2024.2	2023.8
172.5°	2020.1	2019.2	2019.6	2019.9	2020.2	2020.6	2023.3	2026.0	2028.7	2031.4	2030.9
175°	2028.0	2027.2	2027.5	2027.8	2028.2	2028.5	2031.5	2034.6	2037.7	2040.7	2040.2
177.5°	2032.3	2031.5	2032.1	2032.7	2033.2	2033.7	2035.9	2038.0	2040.2	2042.4	2041.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



TEST NUMBER: P332859-840

CATALOG NUMBER: S124DIW-S1195D1560U840-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1854.8	1853.5	1849.0	1848.4	1849.0	1853.5	1854.8	1856.0	1858.1	1864.4	1856.7
5°	1713.3	1709.3	1706.9	1715.8	1706.9	1709.3	1713.3	1718.2	1726.3	1727.1	1735.2
7.5°	1606.8	1603.6	1596.5	1594.2	1596.5	1603.6	1606.8	1609.6	1617.7	1624.7	1636.6
10°	1538.4	1535.2	1528.7	1527.1	1528.7	1535.2	1538.4	1546.5	1554.5	1563.4	1571.5
12.5°	1472.6	1466.1	1464.9	1466.5	1464.9	1466.1	1472.6	1483.3	1504.2	1504.1	1505.7
15°	1385.2	1382.0	1373.1	1375.5	1373.1	1382.0	1385.2	1395.7	1405.3	1417.4	1429.6
17.5°	1299.1	1295.3	1284.4	1293.9	1284.4	1295.3	1299.1	1304.7	1317.2	1334.2	1352.5
20°	1244.9	1238.5	1232.8	1232.0	1232.8	1238.5	1244.9	1250.5	1264.3	1278.8	1292.5
22.5°	1193.3	1187.5	1187.0	1181.7	1187.0	1187.5	1193.3	1202.1	1215.9	1224.0	1237.0
25°	1128.8	1123.2	1121.6	1117.5	1121.6	1123.2	1128.8	1135.3	1144.1	1150.5	1165.1
27.5°	1079.3	1076.5	1073.7	1074.9	1073.7	1076.5	1079.3	1080.2	1084.1	1092.7	1101.1
30°	1048.9	1048.1	1046.5	1046.5	1046.5	1048.1	1048.9	1046.5	1050.6	1054.6	1061.1
32.5°	1023.8	1023.7	1024.6	1024.6	1024.6	1023.7	1023.8	1020.2	1021.6	1023.0	1026.2
35°	988.6	990.9	992.5	990.1	992.5	990.9	988.6	985.3	982.9	977.2	978.9
37.5°	956.5	959.0	961.3	964.0	961.3	959.0	956.5	950.0	944.1	939.2	933.3
40°	932.1	937.8	939.3	943.3	939.3	937.8	932.1	924.8	918.4	912.7	906.3
42.5°	908.9	915.1	919.3	920.1	919.3	915.1	908.9	901.6	891.9	884.9	876.0
45°	873.2	879.7	885.3	885.3	885.3	879.7	873.2	861.1	850.6	840.1	831.3
47.5°	836.3	845.7	851.3	852.7	851.3	845.7	836.3	823.8	809.2	796.3	783.6
50°	811.1	822.4	828.1	832.1	828.1	822.4	811.1	797.4	782.1	766.0	750.6
52.5°	786.6	797.9	805.5	807.6	805.5	797.9	786.6	769.7	751.1	733.8	720.3
55°	744.2	760.3	769.2	772.4	769.2	760.3	744.2	725.7	707.9	686.1	666.8
57.5°	704.2	719.0	729.3	731.7	729.3	719.0	704.2	682.5	659.5	636.3	615.7
60°	673.3	689.3	702.3	704.7	702.3	689.3	673.3	651.5	627.3	604.7	579.0
62.5°	641.7	658.4	670.0	676.3	670.0	658.4	641.7	618.5	592.5	567.3	541.5
65°	586.9	603.9	615.2	617.6	615.2	603.9	586.9	564.4	536.9	510.4	488.6
67.5°	527.4	544.2	551.7	556.3	551.7	544.2	527.4	506.0	479.0	451.4	426.7
70°	485.3	499.1	507.2	511.2	507.2	499.1	485.3	462.8	440.2	412.0	385.4
72.5°	437.7	452.0	461.4	462.1	461.4	452.0	437.7	418.3	394.5	368.2	344.8
75°	364.5	377.4	382.1	382.1	382.1	377.4	364.5	345.9	326.6	305.6	282.2
77.5°	288.5	295.1	301.2	302.6	301.2	295.1	288.5	275.1	259.1	238.2	220.6
80°	239.4	243.5	248.3	248.3	248.3	243.5	239.4	227.4	212.1	194.3	180.6
82.5°	189.1	192.6	197.4	196.7	197.4	192.6	189.1	179.7	166.9	155.0	142.6
85°	114.5	121.8	121.0	119.4	121.0	121.8	114.5	116.1	104.0	95.9	84.6
87.5°	60.3	61.1	63.2	64.6	63.2	61.1	60.3	58.3	52.2	48.6	45.5
90°	43.6	44.3	45.0	45.6	45.0	44.3	43.6	43.0	41.6	39.6	37.6
92.5°	41.6	41.8	41.9	42.0	41.9	41.8	41.6	41.5	40.4	38.4	36.4
95°	43.1	43.5	43.8	44.1	43.8	43.5	43.1	42.8	41.6	39.6	37.6
97.5°	41.6	42.0	42.3	42.6	42.3	42.0	41.6	41.3	41.0	40.8	40.6
100°	41.6	42.0	42.3	42.6	42.3	42.0	41.6	41.3	44.0	49.8	55.5
102.5°	43.6	43.7	43.8	43.8	43.8	43.7	43.6	43.6	74.6	136.6	198.7
105°	470.6	458.4	446.3	434.0	446.3	458.4	470.6	482.7	487.4	484.3	481.2
107.5°	601.1	602.3	603.6	604.9	603.6	602.3	601.1	599.8	598.3	596.9	595.4
110°	676.2	677.2	678.2	679.2	678.2	677.2	676.2	675.2	674.3	673.7	673.0



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	749.7	750.9	752.2	753.6	752.2	750.9	749.7	748.4	747.8	747.9	748.1
115°	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	861.6	860.9	860.3
117.5°	972.6	972.5	972.4	972.2	972.4	972.5	972.6	972.8	972.9	973.0	973.2
120°	1043.7	1043.0	1042.4	1041.7	1042.4	1043.0	1043.7	1044.4	1044.4	1043.7	1043.0
122.5°	1112.0	1111.3	1110.5	1109.9	1110.5	1111.3	1112.0	1112.6	1112.8	1112.4	1112.0
125°	1211.2	1211.5	1211.9	1212.2	1211.9	1211.5	1211.2	1210.9	1210.2	1209.2	1208.2
127.5°	1302.9	1302.6	1302.3	1302.1	1302.3	1302.6	1302.9	1303.1	1303.4	1303.6	1303.8
130°	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1363.0	1362.8	1362.5	1362.2
132.5°	1419.9	1419.6	1419.4	1419.1	1419.4	1419.6	1419.9	1420.2	1420.1	1419.8	1419.5
135°	1501.1	1501.8	1502.5	1503.1	1502.5	1501.8	1501.1	1500.5	1499.8	1499.0	1498.3
137.5°	1575.6	1575.4	1575.2	1575.0	1575.2	1575.4	1575.6	1575.8	1575.6	1574.8	1574.1
140°	1624.0	1624.3	1624.6	1625.0	1624.6	1624.3	1624.0	1623.6	1623.0	1621.9	1620.9
142.5°	1666.2	1666.3	1666.3	1666.4	1666.3	1666.3	1666.2	1666.1	1665.7	1665.0	1664.3
145°	1728.0	1728.7	1729.4	1730.0	1729.4	1728.7	1728.0	1727.4	1726.8	1726.5	1726.2
147.5°	1781.7	1782.0	1782.4	1782.7	1782.4	1782.0	1781.7	1781.4	1781.1	1780.8	1780.5
150°	1815.8	1816.1	1816.5	1816.8	1816.5	1816.1	1815.8	1815.5	1815.3	1815.3	1815.3
152.5°	1846.6	1846.4	1846.2	1846.0	1846.2	1846.4	1846.6	1846.8	1846.7	1846.1	1845.6
155°	1888.4	1887.4	1886.4	1885.4	1886.4	1887.4	1888.4	1889.5	1889.3	1887.9	1886.5
157.5°	1923.6	1921.8	1920.1	1918.2	1920.1	1921.8	1923.6	1925.3	1925.3	1923.6	1921.8
160°	1946.3	1944.3	1942.3	1940.2	1942.3	1944.3	1946.3	1948.3	1948.3	1946.3	1944.3
162.5°	1964.2	1961.9	1959.5	1957.2	1959.5	1961.9	1964.2	1966.4	1966.6	1964.6	1962.6
165°	1990.4	1987.4	1984.4	1981.4	1984.4	1987.4	1990.4	1993.5	1993.7	1990.9	1988.2
167.5°	2009.4	2006.1	2002.7	1999.3	2002.7	2006.1	2009.4	2012.9	2013.1	2010.0	2007.1
170°	2020.4	2017.0	2013.7	2010.2	2013.7	2017.0	2020.4	2023.8	2024.2	2021.4	2018.7
172.5°	2027.3	2023.7	2020.0	2016.3	2020.0	2023.7	2027.3	2030.9	2031.4	2028.7	2026.0
175°	2036.1	2032.1	2028.0	2024.0	2028.0	2032.1	2036.1	2040.2	2040.7	2037.7	2034.6
177.5°	2038.6	2035.3	2032.1	2028.8	2032.1	2035.3	2038.6	2041.8	2042.4	2040.2	2038.0
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1860.6	1863.2	1873.5	1883.2	1894.8	1903.2	1908.9	1915.4	1928.9	1940.0	1950.3
5°	1743.2	1747.3	1768.2	1782.7	1807.7	1829.5	1846.4	1864.9	1886.7	1916.5	1944.0
7.5°	1639.8	1654.9	1677.7	1701.2	1726.8	1755.2	1780.1	1808.1	1845.6	1886.5	1928.8
10°	1581.1	1598.1	1622.2	1649.7	1673.9	1706.9	1737.6	1770.6	1813.3	1863.3	1913.3
12.5°	1522.5	1550.3	1568.7	1601.2	1627.4	1654.7	1687.3	1730.6	1780.5	1833.0	1893.3
15°	1448.9	1464.2	1499.6	1517.4	1554.5	1596.5	1628.7	1672.2	1720.6	1790.0	1857.6
17.5°	1364.1	1384.2	1412.5	1446.3	1488.8	1521.7	1561.8	1606.6	1667.6	1736.5	1821.3
20°	1308.6	1325.5	1360.2	1397.2	1442.5	1477.1	1519.8	1563.4	1626.3	1699.7	1788.4
22.5°	1258.9	1275.3	1311.8	1346.4	1390.2	1432.6	1477.2	1527.9	1588.2	1665.5	1756.1
25°	1182.0	1203.8	1236.1	1271.5	1313.4	1361.8	1410.2	1455.3	1519.8	1601.2	1698.1
27.5°	1113.8	1131.3	1154.6	1194.9	1242.5	1289.3	1337.3	1394.1	1456.0	1542.1	1642.5
30°	1070.0	1086.1	1109.4	1146.5	1190.9	1240.9	1290.9	1345.6	1410.2	1495.7	1598.1
32.5°	1035.1	1047.3	1068.1	1101.4	1141.9	1194.5	1243.7	1300.5	1368.3	1452.5	1552.3
35°	983.7	994.1	1002.2	1033.7	1070.0	1118.3	1168.3	1228.8	1294.1	1373.9	1473.9
37.5°	933.2	936.8	948.6	969.2	1004.3	1048.8	1095.3	1154.8	1221.7	1302.8	1392.9
40°	902.2	903.8	911.1	930.5	961.1	1003.0	1048.1	1107.0	1170.7	1247.3	1336.9
42.5°	871.9	870.9	877.6	891.1	919.8	957.9	1002.4	1056.1	1119.7	1190.5	1274.9
45°	824.0	824.0	822.4	833.7	857.1	894.1	931.3	982.9	1036.1	1105.4	1176.4
47.5°	774.1	769.5	770.9	776.8	796.5	827.0	864.3	906.6	953.5	1012.2	1074.5
50°	741.7	735.4	733.0	739.3	757.1	783.8	819.2	856.3	900.6	952.2	1005.4
52.5°	706.3	699.8	695.5	700.0	716.5	741.1	773.4	806.0	845.8	887.8	933.8
55°	651.5	644.2	641.8	643.4	655.5	674.9	702.3	732.2	761.9	796.6	828.9
57.5°	597.4	585.5	583.3	582.5	590.9	608.5	631.5	657.3	679.0	700.0	734.4
60°	562.0	547.4	542.6	541.8	548.3	562.8	583.7	609.6	624.9	639.3	669.2
62.5°	523.9	510.1	499.4	500.6	506.3	520.2	538.6	557.3	567.4	583.3	603.4
65°	465.2	447.5	439.4	437.0	440.2	451.5	466.1	478.2	489.4	495.8	515.2
67.5°	406.6	391.7	379.8	376.9	375.4	383.1	395.1	402.3	410.4	416.1	427.5
70°	365.3	352.3	337.8	333.0	332.1	338.6	349.9	350.7	362.0	364.5	376.6
72.5°	324.6	308.5	298.5	293.7	290.2	296.1	303.5	305.6	311.7	316.1	322.3
75°	261.3	249.1	239.4	232.2	229.7	233.0	233.0	237.0	241.1	243.5	250.7
77.5°	205.6	191.8	180.3	176.1	173.2	171.1	172.9	175.3	173.4	177.5	179.2
80°	166.9	152.4	143.5	141.9	137.0	133.0	132.2	134.6	131.4	133.0	137.8
82.5°	128.9	119.5	110.0	108.4	102.2	100.2	99.4	97.9	97.9	97.6	98.6
85°	76.5	71.0	64.5	60.5	58.1	54.0	54.0	52.4	50.8	49.2	50.0
87.5°	38.1	36.4	32.6	30.1	28.3	25.1	24.5	21.8	20.5	19.1	17.7
90°	35.5	33.5	30.8	28.1	25.3	22.7	19.5	15.8	12.0	8.3	4.5
92.5°	34.3	32.3	29.6	26.9	24.1	21.4	20.0	19.8	19.6	19.4	19.2
95°	35.5	33.5	33.1	32.8	32.5	32.1	37.8	49.3	60.8	72.2	83.7
97.5°	40.4	40.2	78.0	115.7	153.5	191.3	206.6	199.4	192.2	185.0	177.8
100°	61.3	67.1	113.7	160.4	207.1	253.8	274.1	268.0	262.0	255.9	249.7
102.5°	260.7	322.9	328.9	335.1	341.1	347.2	348.0	343.6	339.1	334.7	330.1
105°	478.2	475.1	473.4	471.8	470.1	468.4	466.6	464.5	462.4	460.4	458.4
107.5°	593.9	592.4	590.1	587.8	585.5	583.2	581.6	580.6	579.6	578.6	577.4
110°	672.3	671.6	669.5	667.5	665.5	663.5	662.0	661.0	659.9	658.9	657.9



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**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	748.2	748.4	747.4	746.5	745.5	744.6	743.2	741.3	739.5	737.7	735.9
115°	859.6	858.9	859.3	859.6	859.9	860.3	859.9	858.9	857.9	856.9	855.9
117.5°	973.3	973.4	972.7	972.0	971.2	970.5	969.5	968.1	966.7	965.3	964.0
120°	1042.4	1041.7	1042.0	1042.4	1042.7	1043.0	1042.5	1041.2	1039.9	1038.4	1037.1
122.5°	1111.6	1111.2	1110.6	1110.1	1109.7	1109.2	1108.6	1107.7	1106.9	1106.1	1105.3
125°	1207.2	1206.2	1206.8	1207.5	1208.2	1208.8	1208.5	1207.2	1205.8	1204.5	1203.2
127.5°	1304.0	1304.2	1302.6	1301.1	1299.6	1298.0	1297.1	1296.7	1296.4	1296.1	1295.7
130°	1361.8	1361.5	1360.5	1359.5	1358.5	1357.5	1356.8	1356.5	1356.0	1355.7	1355.4
132.5°	1419.1	1418.8	1417.4	1416.1	1414.9	1413.6	1412.7	1412.1	1411.5	1410.8	1410.2
135°	1497.7	1497.0	1495.7	1494.3	1493.0	1491.6	1491.1	1491.5	1491.8	1492.1	1492.5
137.5°	1573.3	1572.6	1571.0	1569.6	1568.1	1566.6	1565.8	1565.7	1565.5	1565.4	1565.3
140°	1619.9	1618.8	1618.2	1617.5	1616.8	1616.2	1615.5	1614.8	1614.2	1613.5	1612.8
142.5°	1663.4	1662.7	1662.3	1661.9	1661.5	1661.1	1660.3	1659.1	1657.9	1656.6	1655.4
145°	1725.8	1725.5	1725.5	1725.5	1725.5	1725.5	1725.0	1723.9	1722.9	1721.9	1720.9
147.5°	1780.3	1780.0	1780.3	1780.7	1781.0	1781.3	1780.6	1778.7	1776.8	1774.8	1773.0
150°	1815.3	1815.3	1815.6	1816.0	1816.3	1816.6	1816.1	1814.8	1813.4	1812.1	1810.8
152.5°	1845.1	1844.5	1845.1	1845.7	1846.3	1847.0	1846.7	1845.6	1844.6	1843.5	1842.4
155°	1885.2	1883.8	1884.9	1885.9	1886.9	1887.9	1888.2	1887.9	1887.5	1887.2	1886.9
157.5°	1920.1	1918.2	1919.5	1920.6	1921.7	1922.9	1923.6	1923.8	1924.0	1924.2	1924.4
160°	1942.3	1940.2	1940.6	1940.9	1941.2	1941.6	1942.3	1943.3	1944.3	1945.3	1946.3
162.5°	1960.5	1958.4	1958.8	1959.1	1959.4	1959.8	1960.7	1962.0	1963.2	1964.5	1965.8
165°	1985.5	1982.9	1982.9	1982.9	1982.9	1982.9	1983.7	1985.4	1987.1	1988.7	1990.4
167.5°	2004.1	2001.1	2001.4	2001.6	2001.8	2002.0	2002.9	2004.7	2006.4	2008.2	2009.9
170°	2016.0	2013.3	2013.0	2012.7	2012.3	2012.0	2012.8	2014.8	2016.8	2018.9	2020.9
172.5°	2023.3	2020.6	2020.2	2019.9	2019.6	2019.2	2020.1	2022.2	2024.2	2026.2	2028.2
175°	2031.5	2028.5	2028.2	2027.8	2027.5	2027.2	2028.0	2030.0	2032.1	2034.1	2036.1
177.5°	2035.9	2033.7	2033.2	2032.7	2032.1	2031.5	2032.3	2034.1	2036.0	2037.9	2039.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	1959.2	1965.7	1974.1	1988.3	1993.5	1999.9	2008.9	2008.3	2010.8	2020.5	2041.2
5°	1966.5	1991.6	2015.7	2044.8	2075.4	2095.6	2122.9	2139.9	2156.9	2178.6	2215.6
7.5°	1969.4	2009.1	2053.5	2104.5	2149.7	2202.0	2242.8	2281.2	2315.8	2361.8	2406.0
10°	1964.9	2018.1	2075.4	2139.9	2208.4	2266.4	2318.9	2378.5	2429.3	2485.0	2535.0
12.5°	1956.5	2020.7	2097.3	2169.6	2249.7	2335.5	2400.9	2461.1	2528.7	2592.7	2669.8
15°	1937.5	2025.4	2114.9	2210.0	2317.2	2416.4	2510.8	2589.0	2661.6	2757.5	2858.3
17.5°	1913.3	2008.1	2121.0	2236.1	2348.2	2461.6	2578.4	2695.9	2787.5	2906.7	2985.6
20°	1890.8	2000.4	2116.5	2253.6	2365.6	2506.8	2622.8	2736.5	2862.4	2980.8	3075.1
22.5°	1859.2	1979.1	2102.3	2238.8	2386.3	2527.4	2661.6	2784.9	2910.7	3039.6	3153.9
25°	1819.0	1927.8	2073.8	2228.6	2375.3	2528.5	2682.5	2837.3	2972.7	3109.1	3215.5
27.5°	1750.6	1888.0	2024.0	2183.7	2346.8	2520.1	2684.8	2846.8	2988.8	3100.8	3166.7
30°	1715.8	1835.1	1982.7	2143.1	2319.7	2506.0	2677.7	2836.5	2968.8	3058.3	3084.8
32.5°	1664.2	1787.4	1931.7	2098.0	2284.8	2476.3	2655.1	2804.9	2915.2	2962.1	2930.0
35°	1587.6	1698.9	1844.8	2014.9	2209.2	2413.2	2589.8	2716.3	2772.8	2728.5	2618.0
37.5°	1495.7	1606.0	1752.5	1919.7	2120.7	2328.0	2487.7	2578.8	2560.1	2449.8	2285.2
40°	1431.2	1534.4	1673.9	1854.4	2050.4	2258.5	2398.7	2447.9	2396.3	2238.3	2063.3
42.5°	1359.6	1460.2	1600.3	1774.4	1982.1	2173.9	2296.1	2300.2	2213.7	2024.8	1849.2
45°	1250.5	1346.5	1478.7	1660.1	1852.1	2032.7	2113.2	2073.8	1914.1	1731.9	1555.3
47.5°	1143.0	1226.2	1356.5	1528.7	1710.9	1863.0	1903.0	1831.9	1661.7	1484.9	1321.2
50°	1064.3	1148.1	1270.7	1435.2	1610.9	1742.4	1761.7	1667.4	1500.5	1322.3	1194.1
52.5°	988.9	1072.1	1190.1	1342.3	1503.3	1621.7	1622.4	1513.3	1347.0	1188.1	1068.9
55°	878.1	953.0	1059.4	1195.7	1339.3	1432.0	1409.4	1296.5	1152.2	1014.3	910.3
57.5°	771.3	836.6	934.6	1048.3	1174.8	1251.2	1213.8	1105.1	976.2	859.3	780.5
60°	702.3	764.4	848.2	955.4	1061.9	1121.6	1086.1	987.7	869.2	774.9	706.3
62.5°	635.2	687.6	768.2	861.3	960.0	1004.1	972.5	875.5	773.1	687.7	632.2
65°	540.2	583.0	647.4	727.3	799.0	837.0	810.3	720.0	641.8	580.6	536.1
67.5°	451.5	484.9	533.7	597.7	658.7	679.2	655.0	592.2	525.8	476.9	445.6
70°	390.2	421.7	462.8	512.0	565.2	586.9	562.8	512.8	458.8	413.6	382.9
72.5°	336.7	361.0	395.8	437.8	479.4	501.2	484.7	436.7	391.0	357.5	331.3
75°	256.4	277.4	301.5	331.3	363.7	378.2	363.7	330.5	299.1	274.2	255.6
77.5°	186.4	197.7	216.4	238.6	258.8	269.9	257.4	235.0	215.8	198.6	189.5
80°	141.9	150.0	162.9	180.6	194.3	204.8	196.7	178.1	162.9	151.6	147.5
82.5°	103.2	108.7	117.0	130.3	139.5	144.8	141.3	127.8	121.6	111.6	107.6
85°	50.8	54.0	59.7	63.7	71.8	72.6	73.4	67.8	62.1	59.7	56.5
87.5°	19.1	20.5	23.1	25.9	29.1	30.2	30.1	30.7	28.7	28.4	26.3
90°	8.3	12.0	15.8	19.5	22.7	25.3	28.1	30.8	33.5	35.5	37.6
92.5°	19.4	19.6	19.8	20.0	21.4	24.1	26.9	29.6	32.3	34.3	36.4
95°	72.2	60.8	49.3	37.8	32.1	32.5	32.8	33.1	33.5	35.5	37.6
97.5°	185.0	192.2	199.4	206.6	191.3	153.5	115.7	78.0	40.2	40.4	40.6
100°	255.9	262.0	268.0	274.1	253.8	207.1	160.4	113.7	67.1	61.3	55.5
102.5°	334.7	339.1	343.6	348.0	347.2	341.1	335.1	328.9	322.9	260.7	198.7
105°	460.4	462.4	464.5	466.6	468.4	470.1	471.8	473.4	475.1	478.2	481.2
107.5°	578.6	579.6	580.6	581.6	583.2	585.5	587.8	590.1	592.4	593.9	595.4
110°	658.9	659.9	661.0	662.0	663.5	665.5	667.5	669.5	671.6	672.3	673.0





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	737.7	739.5	741.3	743.2	744.6	745.5	746.5	747.4	748.4	748.2	748.1
115°	856.9	857.9	858.9	859.9	860.3	859.9	859.6	859.3	858.9	859.6	860.3
117.5°	965.3	966.7	968.1	969.5	970.5	971.2	972.0	972.7	973.4	973.3	973.2
120°	1038.4	1039.9	1041.2	1042.5	1043.0	1042.7	1042.4	1042.0	1041.7	1042.4	1043.0
122.5°	1106.1	1106.9	1107.7	1108.6	1109.2	1109.7	1110.1	1110.6	1111.2	1111.6	1112.0
125°	1204.5	1205.8	1207.2	1208.5	1208.8	1208.2	1207.5	1206.8	1206.2	1207.2	1208.2
127.5°	1296.1	1296.4	1296.7	1297.1	1298.0	1299.6	1301.1	1302.6	1304.2	1304.0	1303.8
130°	1355.7	1356.0	1356.5	1356.8	1357.5	1358.5	1359.5	1360.5	1361.5	1361.8	1362.2
132.5°	1410.8	1411.5	1412.1	1412.7	1413.6	1414.9	1416.1	1417.4	1418.8	1419.1	1419.5
135°	1492.1	1491.8	1491.5	1491.1	1491.6	1493.0	1494.3	1495.7	1497.0	1497.7	1498.3
137.5°	1565.4	1565.5	1565.7	1565.8	1566.6	1568.1	1569.6	1571.0	1572.6	1573.3	1574.1
140°	1613.5	1614.2	1614.8	1615.5	1616.2	1616.8	1617.5	1618.2	1618.8	1619.9	1620.9
142.5°	1656.6	1657.9	1659.1	1660.3	1661.1	1661.5	1661.9	1662.3	1662.7	1663.4	1664.3
145°	1721.9	1722.9	1723.9	1725.0	1725.5	1725.5	1725.5	1725.5	1725.5	1725.8	1726.2
147.5°	1774.8	1776.8	1778.7	1780.6	1781.3	1781.0	1780.7	1780.3	1780.0	1780.3	1780.5
150°	1812.1	1813.4	1814.8	1816.1	1816.6	1816.3	1816.0	1815.6	1815.3	1815.3	1815.3
152.5°	1843.5	1844.6	1845.6	1846.7	1847.0	1846.3	1845.7	1845.1	1844.5	1845.1	1845.6
155°	1887.2	1887.5	1887.9	1888.2	1887.9	1886.9	1885.9	1884.9	1883.8	1885.2	1886.5
157.5°	1924.2	1924.0	1923.8	1923.6	1922.9	1921.7	1920.6	1919.5	1918.2	1920.1	1921.8
160°	1945.3	1944.3	1943.3	1942.3	1941.6	1941.2	1940.9	1940.6	1940.2	1942.3	1944.3
162.5°	1964.5	1963.2	1962.0	1960.7	1959.8	1959.4	1959.1	1958.8	1958.4	1960.5	1962.6
165°	1988.7	1987.1	1985.4	1983.7	1982.9	1982.9	1982.9	1982.9	1982.9	1985.5	1988.2
167.5°	2008.2	2006.4	2004.7	2002.9	2002.0	2001.8	2001.6	2001.4	2001.1	2004.1	2007.1
170°	2018.9	2016.8	2014.8	2012.8	2012.0	2012.3	2012.7	2013.0	2013.3	2016.0	2018.7
172.5°	2026.2	2024.2	2022.2	2020.1	2019.2	2019.6	2019.9	2020.2	2020.6	2023.3	2026.0
175°	2034.1	2032.1	2030.0	2028.0	2027.2	2027.5	2027.8	2028.2	2028.5	2031.5	2034.6
177.5°	2037.9	2036.0	2034.1	2032.3	2031.5	2032.1	2032.7	2033.2	2033.7	2035.9	2038.0
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4	1946.4
2.5°	2051.5	2052.9	2058.6	2063.2	2064.5	2070.8	2071.5
5°	2231.8	2245.5	2272.1	2274.5	2278.6	2299.6	2283.4
7.5°	2443.1	2477.9	2501.1	2521.6	2529.0	2538.2	2536.3
10°	2578.5	2630.1	2655.9	2697.0	2698.7	2709.2	2702.7
12.5°	2714.6	2774.6	2821.7	2829.2	2863.8	2869.1	2878.1
15°	2907.5	2971.1	3036.5	3059.9	3107.5	3118.8	3136.4
17.5°	3088.8	3153.9	3199.7	3260.1	3279.6	3305.8	3288.0
20°	3188.0	3259.0	3317.1	3364.7	3384.8	3399.3	3397.7
22.5°	3248.0	3319.6	3366.7	3402.7	3421.5	3427.7	3427.4
25°	3285.6	3326.7	3341.2	3355.0	3334.0	3326.7	3329.9
27.5°	3181.2	3170.5	3132.6	3082.9	3031.3	2990.3	2968.1
30°	3037.3	2974.4	2917.2	2817.1	2765.6	2734.9	2707.5
32.5°	2833.5	2733.8	2623.6	2532.0	2473.4	2427.9	2421.2
35°	2484.2	2334.2	2199.6	2087.5	2029.4	1980.2	1968.9
37.5°	2112.0	1956.2	1834.9	1736.3	1673.9	1639.2	1606.8
40°	1864.9	1731.1	1611.7	1527.9	1480.4	1455.3	1435.2
42.5°	1674.7	1552.5	1433.7	1369.9	1326.9	1311.5	1299.7
45°	1411.8	1298.1	1215.9	1167.5	1142.5	1116.7	1104.6
47.5°	1201.3	1108.8	1054.6	1013.5	986.7	971.4	963.7
50°	1082.1	1006.2	957.9	926.5	902.2	890.1	883.7
52.5°	976.2	914.0	873.3	848.4	831.9	823.0	820.5
55°	840.9	793.3	767.6	745.8	733.8	725.7	722.5
57.5°	730.9	694.4	673.4	655.5	650.9	644.1	641.8
60°	658.7	630.6	612.8	600.7	596.6	588.5	590.2
62.5°	594.9	571.8	556.6	549.8	544.4	537.7	539.9
65°	503.1	486.1	478.2	471.7	465.2	461.2	464.4
67.5°	422.1	410.6	399.6	395.9	392.6	392.0	388.6
70°	369.3	359.6	349.9	347.5	347.5	344.3	343.5
72.5°	318.3	311.2	304.8	303.0	300.4	301.7	298.3
75°	245.9	240.2	237.8	235.4	234.6	234.6	232.2
77.5°	181.8	177.5	173.7	173.7	170.8	169.7	169.4
80°	137.8	136.2	133.0	133.0	131.4	132.2	130.6
82.5°	103.7	101.4	100.8	99.5	97.3	97.4	95.8
85°	55.6	53.2	52.4	50.0	48.4	50.0	48.4
87.5°	27.3	27.1	26.7	25.5	24.9	25.1	23.3
90°	39.6	41.6	43.0	43.6	44.3	45.0	45.6
92.5°	38.4	40.4	41.5	41.6	41.8	41.9	42.0
95°	39.6	41.6	42.8	43.1	43.5	43.8	44.1
97.5°	40.8	41.0	41.3	41.6	42.0	42.3	42.6
100°	49.8	44.0	41.3	41.6	42.0	42.3	42.6
102.5°	136.6	74.6	43.6	43.6	43.7	43.8	43.8
105°	484.3	487.4	482.7	470.6	458.4	446.3	434.0
107.5°	596.9	598.3	599.8	601.1	602.3	603.6	604.9
110°	673.7	674.3	675.2	676.2	677.2	678.2	679.2



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	747.9	747.8	748.4	749.7	750.9	752.2	753.6
115°	860.9	861.6	862.0	862.0	862.0	862.0	862.0
117.5°	973.0	972.9	972.8	972.6	972.5	972.4	972.2
120°	1043.7	1044.4	1044.4	1043.7	1043.0	1042.4	1041.7
122.5°	1112.4	1112.8	1112.6	1112.0	1111.3	1110.5	1109.9
125°	1209.2	1210.2	1210.9	1211.2	1211.5	1211.9	1212.2
127.5°	1303.6	1303.4	1303.1	1302.9	1302.6	1302.3	1302.1
130°	1362.5	1362.8	1363.0	1363.0	1363.0	1363.0	1363.0
132.5°	1419.8	1420.1	1420.2	1419.9	1419.6	1419.4	1419.1
135°	1499.0	1499.8	1500.5	1501.1	1501.8	1502.5	1503.1
137.5°	1574.8	1575.6	1575.8	1575.6	1575.4	1575.2	1575.0
140°	1621.9	1623.0	1623.6	1624.0	1624.3	1624.6	1625.0
142.5°	1665.0	1665.7	1666.1	1666.2	1666.3	1666.3	1666.4
145°	1726.5	1726.8	1727.4	1728.0	1728.7	1729.4	1730.0
147.5°	1780.8	1781.1	1781.4	1781.7	1782.0	1782.4	1782.7
150°	1815.3	1815.3	1815.5	1815.8	1816.1	1816.5	1816.8
152.5°	1846.1	1846.7	1846.8	1846.6	1846.4	1846.2	1846.0
155°	1887.9	1889.3	1889.5	1888.4	1887.4	1886.4	1885.4
157.5°	1923.6	1925.3	1925.3	1923.6	1921.8	1920.1	1918.2
160°	1946.3	1948.3	1948.3	1946.3	1944.3	1942.3	1940.2
162.5°	1964.6	1966.6	1966.4	1964.2	1961.9	1959.5	1957.2
165°	1990.9	1993.7	1993.5	1990.4	1987.4	1984.4	1981.4
167.5°	2010.0	2013.1	2012.9	2009.4	2006.1	2002.7	1999.3
170°	2021.4	2024.2	2023.8	2020.4	2017.0	2013.7	2010.2
172.5°	2028.7	2031.4	2030.9	2027.3	2023.7	2020.0	2016.3
175°	2037.7	2040.7	2040.2	2036.1	2032.1	2028.0	2024.0
177.5°	2040.2	2042.4	2041.8	2038.6	2035.3	2032.1	2028.8
180°	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1	2036.1

(END OF REPORT)