

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: P332235-840

Luminaire Tested: **S123DIW-S1165D1535U840-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332235-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S1165D1535U840-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1535 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10321.0 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

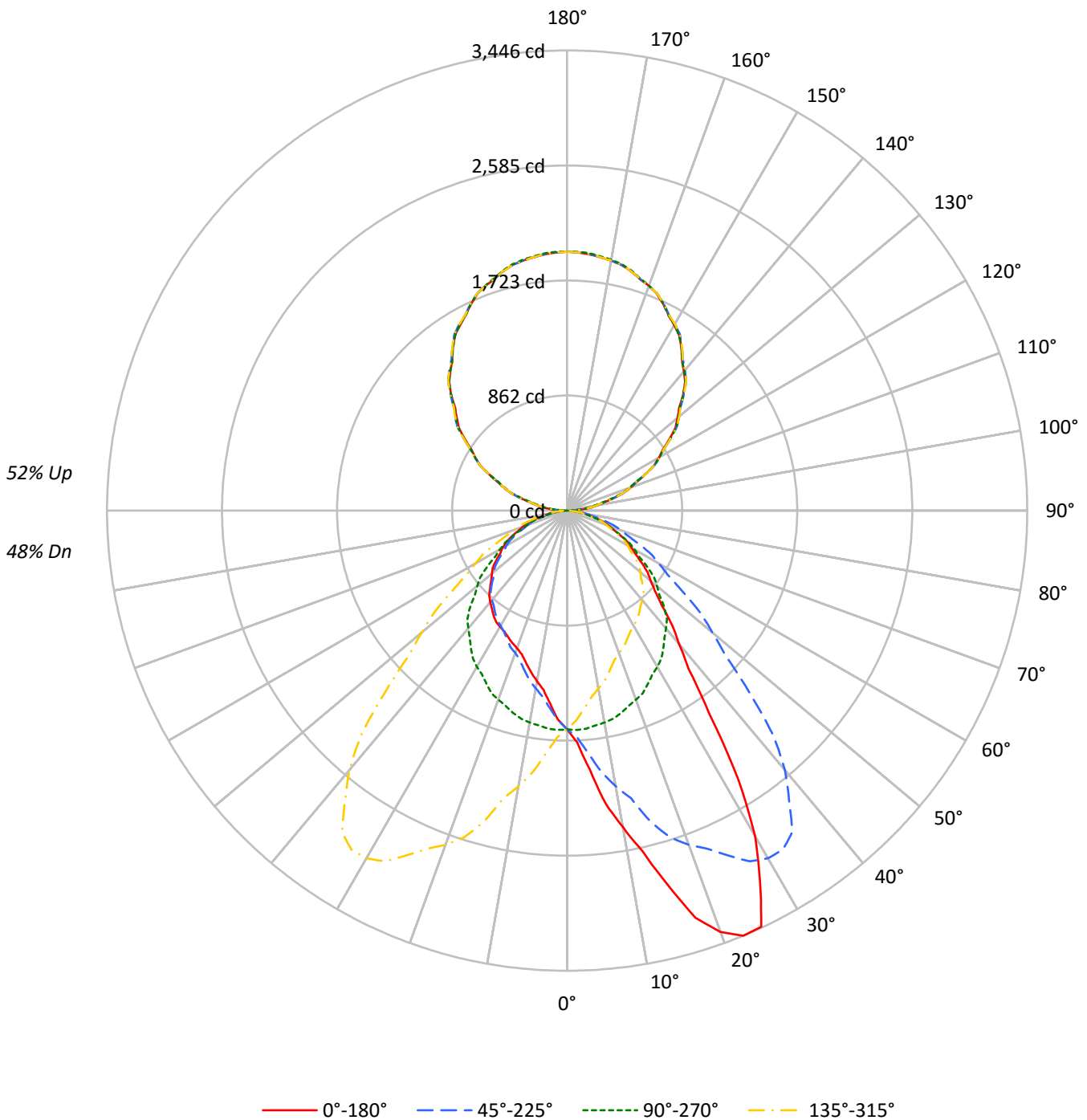
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	48	48	48		
1	98	93	90	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41	41	41	41	41	41	41		
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	39	35	35	35	35	35	35	35		
3	81	72	65	59	75	67	60	55	56	52	48	47	44	41	38	36	34	30	30	30	30	30	30	30		
4	75	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	26	26	26	26	26	26	26		
5	68	57	49	43	63	53	46	41	45	40	35	38	34	30	31	28	26	22	22	22	22	22	22	22		
6	63	51	43	37	58	48	40	35	41	35	31	34	30	27	28	25	23	20	20	20	20	20	20	20		
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	22	20	17	17	17	17	17	17	17		
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18	16	16	16	16	16	16	16		
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16	14	14	14	14	14	14	14		
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13	13	13	13	13	13	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	17632	17632	17632	17632
5°	21028	17708	15693	17708
10°	26319	17618	14175	17618
15°	32282	17477	13196	17477
20°	38456	17255	12564	17255
25°	40834	16986	12423	16986
30°	34999	16789	12489	16789
35°	24341	16509	12620	16509
40°	18334	16183	12579	16183
45°	15224	15694	12420	15694
50°	13638	14699	12308	14699
55°	12748	13628	12153	13628
60°	11959	12508	12030	12508
65°	11240	11403	11645	11403
70°	10543	10140	11087	10140
75°	9441	8879	10168	8879
80°	8263	7277	8759	7277
85°	6472	5286	5891	5286



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.4	1.6
10°-20°	517.4	5.0
20°-30°	868.4	8.4
30°-40°	983.3	9.5
40°-50°	881.8	8.5
50°-60°	711.6	6.9
60°-70°	495.9	4.8
70°-80°	260.6	2.5
80°-90°	69.5	0.7
90°-100°	126.3	1.2
100°-110°	378.0	3.7
110°-120°	642.9	6.2
120°-130°	845.6	8.2
130°-140°	950.5	9.2
140°-150°	934.3	9.1
150°-160°	786.5	7.6
160°-170°	523.6	5.1
170°-180°	183.3	1.8
0°-30°	1547.2	15.0
0°-40°	2530.6	24.5
0°-60°	4124.0	40.0
0°-90°	4950.0	48.0
90°-120°	1147.2	11.1
90°-150°	3877.6	37.6
90°-180°	5371.0	52.0
0°-180°	10321.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1638	1638	1638	1638	1638	
5°	1946	1639	1452	1639	1946	202
15°	2897	1568	1184	1568	2897	836
25°	3438	1430	1046	1430	3438	1508
35°	1852	1256	960	1256	1852	1204
45°	1000	1031	816	1031	1000	791
55°	679	726	648	726	679	610
65°	441	448	457	448	441	439
75°	227	214	244	214	227	243
85°	52	43	48	43	52	63
90°	46	2	46	2	46	25
95°	119	90	119	90	119	122
105°	362	343	362	343	362	385
115°	649	647	649	647	649	642
125°	936	947	936	947	936	837
135°	1227	1229	1227	1229	1227	944
145°	1491	1491	1491	1491	1491	931
155°	1704	1707	1704	1707	1704	785
165°	1853	1859	1853	1859	1853	523
175°	1926	1934	1926	1934	1926	183
180°	1938	1938	1938	1938	1938	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1738.5	1737.2	1734.0	1736.6	1731.5	1724.4	1723.8	1717.5	1699.1	1697.8	1692.7
5°	1946.1	1939.7	1938.9	1938.1	1927.0	1912.0	1883.4	1881.0	1842.9	1823.8	1800.9
7.5°	2214.9	2218.3	2206.8	2196.6	2162.6	2140.2	2109.6	2070.4	2023.6	1976.1	1944.5
10°	2408.0	2434.2	2401.7	2379.4	2358.8	2319.9	2274.7	2218.3	2161.9	2096.1	2046.1
12.5°	2615.0	2627.9	2621.3	2600.4	2568.3	2509.1	2428.9	2366.9	2315.0	2205.3	2161.0
15°	2896.9	2945.4	2914.4	2843.0	2844.5	2788.1	2683.4	2568.3	2507.2	2411.2	2280.3
17.5°	3197.2	3203.3	3190.1	3130.6	3090.9	3013.4	2916.8	2806.4	2682.6	2566.5	2427.5
20°	3357.2	3352.4	3324.7	3293.8	3225.5	3165.2	3059.6	2936.6	2777.8	2663.6	2511.9
22.5°	3446.2	3438.2	3425.1	3399.1	3342.4	3277.5	3182.8	3048.4	2897.2	2739.8	2564.7
25°	3438.2	3448.5	3450.1	3442.9	3423.1	3384.3	3309.6	3202.5	3051.7	2849.3	2666.8
27.5°	3127.0	3141.7	3184.1	3221.7	3263.8	3306.6	3300.8	3247.7	3136.1	2961.3	2738.1
30°	2815.9	2784.2	2862.8	2962.0	3029.5	3148.5	3215.2	3219.1	3156.4	3006.5	2788.9
32.5°	2384.2	2419.1	2453.9	2576.0	2723.4	2857.1	2989.8	3096.7	3108.9	3009.0	2818.8
35°	1852.4	1896.1	1959.5	2023.1	2181.8	2318.3	2551.6	2754.8	2916.8	2938.2	2821.5
37.5°	1492.8	1514.3	1554.5	1618.1	1721.9	1883.9	2064.4	2321.2	2555.8	2730.3	2737.8
40°	1304.8	1311.1	1356.3	1404.8	1488.9	1622.2	1784.9	2012.0	2292.9	2536.6	2638.2
42.5°	1163.9	1177.8	1197.0	1243.5	1310.5	1410.9	1562.2	1749.7	2007.2	2287.6	2486.4
45°	1000.1	1015.9	1027.8	1058.7	1106.4	1173.9	1279.4	1450.9	1646.9	1936.5	2204.0
47.5°	891.8	893.0	901.9	925.2	957.7	1008.2	1082.9	1193.1	1373.0	1608.0	1882.6
50°	814.4	827.0	830.2	848.4	873.8	911.1	973.0	1066.7	1214.4	1420.7	1673.0
52.5°	759.7	763.6	772.4	785.6	807.8	836.9	890.5	963.8	1079.7	1255.6	1487.6
55°	679.3	679.3	688.1	698.4	711.1	737.3	773.1	827.0	915.1	1051.6	1243.6
57.5°	605.1	609.0	615.2	618.4	629.2	646.5	676.4	717.3	783.0	888.1	1040.9
60°	555.5	562.7	561.9	568.3	577.8	591.3	616.7	650.1	708.7	792.8	921.5
62.5°	512.4	511.9	511.8	519.4	528.9	541.8	558.3	587.1	637.0	711.7	821.1
65°	441.3	439.7	445.2	450.0	453.2	462.7	475.4	500.8	534.1	589.7	674.6
67.5°	378.1	373.5	376.5	378.1	383.5	390.9	402.8	418.6	445.0	489.7	553.7
70°	335.0	330.9	330.1	331.7	336.5	342.0	350.8	365.9	390.5	426.2	473.0
72.5°	290.4	287.8	287.6	291.1	293.4	297.0	303.2	317.0	336.5	363.3	407.0
75°	227.0	227.0	227.0	227.8	230.1	233.4	238.1	245.2	260.3	279.3	308.7
77.5°	170.2	170.0	169.1	168.8	172.4	173.8	174.9	181.6	190.0	202.9	224.3
80°	133.3	129.4	131.0	133.3	134.9	135.7	138.1	139.7	146.8	154.0	169.1
82.5°	99.1	95.7	96.0	99.7	100.0	100.8	103.2	105.4	108.1	114.6	122.7
85°	52.4	52.4	53.2	53.2	53.9	53.2	55.5	56.4	56.4	60.3	65.0
87.5°	28.2	26.8	27.3	27.8	27.0	27.5	27.8	28.2	28.6	28.9	28.7
90°	45.6	45.0	44.3	43.6	43.0	42.0	40.6	39.3	37.9	36.6	32.1
92.5°	61.5	61.9	62.3	62.7	63.1	62.8	61.7	60.6	59.6	58.5	55.9
95°	118.8	118.8	118.8	118.8	118.8	118.1	116.7	115.4	114.0	112.7	110.0
97.5°	182.8	182.9	183.0	183.2	183.3	182.6	181.0	179.5	177.9	176.3	174.4
100°	231.5	230.8	230.1	229.4	228.7	227.9	226.9	225.9	224.9	223.9	222.2
102.5°	281.4	281.6	281.7	281.9	282.0	281.6	280.5	279.5	278.5	277.4	275.2
105°	362.4	361.7	361.1	360.4	359.7	359.4	359.4	359.4	359.4	359.4	356.4
107.5°	446.8	447.2	447.6	448.0	448.4	448.1	447.0	446.0	444.8	443.7	442.5
110°	504.0	504.7	505.4	506.0	506.8	506.4	505.0	503.7	502.4	501.0	500.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	564.9	565.1	565.2	565.4	565.5	564.7	563.1	561.5	559.9	558.3	558.2
115°	648.7	649.0	649.4	649.7	650.1	650.1	649.7	649.4	649.0	648.7	649.4
117.5°	733.7	734.7	735.6	736.5	737.5	738.0	738.1	738.1	738.2	738.3	739.1
120°	793.3	794.1	794.8	795.5	796.1	796.6	797.0	797.3	797.6	798.0	799.6
122.5°	850.6	851.6	852.5	853.5	854.4	855.4	856.3	857.1	858.0	858.9	859.8
125°	936.5	937.9	939.3	940.6	941.9	943.3	944.6	946.0	947.4	948.8	949.4
127.5°	1022.1	1023.7	1025.2	1026.8	1028.3	1030.1	1032.0	1033.9	1035.7	1037.6	1038.4
130°	1078.1	1080.6	1082.9	1085.3	1087.6	1089.5	1090.9	1092.2	1093.6	1094.9	1095.9
132.5°	1136.6	1138.4	1140.3	1142.2	1144.0	1145.7	1147.3	1148.9	1150.5	1152.2	1152.9
135°	1227.4	1228.1	1228.7	1229.4	1230.1	1231.1	1232.4	1233.9	1235.2	1236.6	1236.9
137.5°	1307.5	1308.8	1310.1	1311.3	1312.6	1314.0	1315.5	1316.9	1318.3	1319.7	1318.8
140°	1359.9	1362.2	1364.6	1367.0	1369.4	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7
142.5°	1413.5	1415.3	1417.1	1419.0	1420.8	1421.9	1422.2	1422.6	1422.9	1423.2	1422.6
145°	1490.9	1492.2	1493.6	1494.9	1496.2	1497.1	1497.4	1497.7	1498.1	1498.4	1497.4
147.5°	1559.6	1561.7	1563.8	1565.8	1567.8	1568.8	1568.8	1568.8	1568.8	1568.8	1567.8
150°	1603.6	1605.6	1607.6	1609.6	1611.6	1612.7	1612.7	1612.7	1612.7	1612.7	1611.9
152.5°	1646.2	1647.9	1649.7	1651.4	1653.3	1653.9	1653.3	1652.7	1652.2	1651.6	1651.2
155°	1704.0	1706.4	1708.8	1711.1	1713.5	1714.0	1712.6	1711.3	1710.0	1708.6	1708.3
157.5°	1756.8	1758.6	1760.5	1762.4	1764.3	1764.5	1763.1	1761.7	1760.3	1758.9	1758.6
160°	1790.8	1792.2	1793.5	1794.9	1796.2	1796.0	1794.4	1792.7	1791.0	1789.3	1789.3
162.5°	1816.4	1818.6	1820.8	1822.9	1825.1	1825.3	1823.6	1821.9	1820.3	1818.6	1818.3
165°	1853.3	1855.6	1858.1	1860.4	1862.8	1862.9	1860.9	1858.9	1856.8	1854.8	1854.8
167.5°	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0	1891.0	1888.9	1886.7	1884.6	1884.4
170°	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0	1907.6	1905.2	1902.9	1900.5	1900.5
172.5°	1912.7	1915.0	1917.4	1919.8	1922.2	1922.3	1920.2	1918.0	1916.0	1913.9	1913.9
175°	1926.4	1928.7	1931.1	1933.5	1935.8	1936.0	1934.0	1932.0	1930.0	1927.9	1927.9
177.5°	1933.7	1935.6	1937.4	1939.3	1941.3	1941.4	1939.7	1938.1	1936.5	1934.9	1934.9
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1688.9	1683.8	1678.8	1669.9	1662.2	1651.4	1648.3	1644.5	1633.1	1623.0	1615.3
5°	1792.1	1773.0	1745.2	1719.9	1699.3	1671.5	1655.6	1638.9	1615.1	1593.7	1576.2
7.5°	1900.1	1862.6	1819.4	1772.7	1729.3	1687.4	1653.6	1623.4	1590.0	1558.4	1533.9
10°	1985.8	1931.8	1871.5	1806.4	1750.8	1696.9	1651.6	1611.9	1569.1	1531.8	1500.9
12.5°	2083.6	2003.6	1920.4	1841.3	1775.6	1700.7	1645.9	1595.5	1546.9	1502.0	1467.2
15°	2199.3	2097.7	1999.2	1890.6	1790.5	1696.9	1631.8	1568.3	1512.0	1465.9	1421.5
17.5°	2304.7	2189.6	2059.9	1927.6	1807.1	1696.0	1604.8	1533.1	1462.6	1406.2	1361.9
20°	2364.4	2233.4	2086.6	1949.2	1815.9	1692.1	1592.2	1506.4	1430.2	1370.7	1320.7
22.5°	2415.8	2262.6	2110.7	1963.9	1815.3	1681.9	1568.6	1480.4	1397.9	1339.6	1286.4
25°	2469.1	2285.8	2133.4	1961.2	1795.3	1657.2	1530.2	1430.2	1347.7	1279.4	1224.7
27.5°	2514.9	2284.2	2103.3	1918.1	1763.8	1625.5	1489.9	1382.6	1294.9	1220.8	1165.3
30°	2545.3	2287.3	2072.2	1889.0	1733.4	1590.5	1458.8	1350.8	1258.8	1183.4	1130.9
32.5°	2564.4	2285.4	2043.7	1848.4	1685.2	1558.7	1425.1	1313.3	1218.8	1144.7	1094.2
35°	2575.5	2271.5	1994.5	1764.3	1607.2	1484.2	1372.3	1256.4	1157.2	1088.1	1031.0
37.5°	2553.2	2242.1	1937.3	1683.3	1511.4	1390.2	1296.1	1197.3	1102.4	1026.4	977.1
40°	2518.3	2223.1	1892.9	1626.3	1445.3	1328.6	1248.5	1151.7	1057.9	985.7	939.7
42.5°	2451.6	2184.3	1844.0	1562.8	1376.7	1260.0	1186.2	1105.3	1016.7	948.9	902.9
45°	2289.0	2100.0	1770.7	1467.5	1275.5	1154.8	1089.7	1031.0	950.8	884.9	845.3
47.5°	2063.3	1973.3	1664.7	1367.1	1169.7	1053.7	986.0	938.8	880.2	827.0	788.9
50°	1906.4	1869.1	1592.9	1298.5	1099.2	985.7	920.7	877.8	835.8	782.5	747.6
52.5°	1725.5	1748.5	1509.1	1227.3	1027.5	915.9	854.6	820.6	782.4	738.7	708.3
55°	1470.7	1554.0	1364.3	1107.9	920.7	814.4	756.4	726.2	704.0	671.5	645.3
57.5°	1232.1	1338.2	1207.8	984.9	815.8	724.0	668.4	635.6	621.3	604.3	583.7
60°	1090.6	1195.3	1096.1	902.4	745.3	657.9	608.7	581.0	566.6	554.8	537.3
62.5°	964.1	1070.2	986.8	818.6	676.0	595.1	552.2	525.1	514.0	507.8	492.9
65°	790.5	881.8	826.2	688.1	577.0	505.5	466.7	447.7	437.3	434.9	425.5
67.5°	643.4	712.9	672.4	570.8	483.3	421.6	388.6	372.4	364.5	363.7	356.5
70°	546.8	611.9	581.0	488.9	413.5	365.1	336.5	322.2	317.5	316.7	312.8
72.5°	471.9	517.4	492.7	415.9	357.6	313.7	292.7	277.8	272.4	273.5	270.8
75°	349.2	383.3	369.1	315.9	269.0	240.4	223.0	213.5	208.7	211.2	207.9
77.5°	251.3	272.9	260.0	223.2	194.3	173.7	160.8	154.9	150.7	150.5	149.1
80°	189.7	202.4	195.2	173.0	149.3	131.8	121.4	117.4	115.1	114.3	113.5
82.5°	135.1	145.9	137.4	122.2	106.0	95.5	89.7	84.4	82.7	83.2	82.4
85°	68.3	72.2	69.1	59.5	53.2	48.4	45.2	42.8	41.3	42.1	40.5
87.5°	29.1	28.8	26.1	22.7	20.7	18.2	17.5	15.6	14.9	15.7	15.7
90°	27.8	23.3	19.0	15.0	11.7	8.3	4.9	1.5	4.9	8.3	11.7
92.5°	53.4	51.0	48.5	46.0	43.7	41.4	39.2	36.9	39.2	41.4	43.7
95°	107.2	104.5	101.9	99.4	96.9	94.6	92.2	89.9	92.2	94.6	96.9
97.5°	172.4	170.5	168.4	166.6	164.9	163.1	161.4	159.6	161.4	163.1	164.9
100°	220.5	218.7	217.1	215.2	213.2	211.2	209.1	207.1	209.1	211.2	213.2
102.5°	273.0	270.7	268.5	266.8	265.6	264.4	263.2	262.0	263.2	264.4	265.6
105°	353.3	350.2	347.2	345.4	344.7	344.0	343.4	342.6	343.4	344.0	344.7
107.5°	441.3	440.1	438.9	438.1	437.7	437.3	436.9	436.5	436.9	437.3	437.7
110°	499.7	499.0	498.3	497.7	497.0	496.2	495.6	494.9	495.6	496.2	497.0



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CATALOG NUMBER: S123DIW-S1165D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	558.0	557.8	557.7	557.4	557.0	556.6	556.2	555.8	556.2	556.6	557.0
115°	650.1	650.8	651.5	651.3	650.3	649.2	648.2	647.2	648.2	649.2	650.3
117.5°	740.0	740.9	741.7	741.8	741.2	740.5	739.8	739.2	739.8	740.5	741.2
120°	801.3	803.0	804.8	804.6	802.5	800.5	798.5	796.5	798.5	800.5	802.5
122.5°	860.6	861.5	862.4	862.1	860.6	859.1	857.6	856.2	857.6	859.1	860.6
125°	950.1	950.8	951.4	951.3	950.3	949.3	948.2	947.2	948.2	949.3	950.3
127.5°	1039.2	1039.9	1040.7	1040.0	1037.7	1035.6	1033.4	1031.3	1033.4	1035.6	1037.7
130°	1096.9	1097.9	1098.9	1098.1	1095.4	1092.7	1090.0	1087.3	1090.0	1092.7	1095.4
132.5°	1153.7	1154.4	1155.2	1154.2	1151.4	1148.7	1146.0	1143.4	1146.0	1148.7	1151.4
135°	1237.2	1237.6	1237.9	1237.1	1235.0	1232.9	1230.9	1228.9	1230.9	1232.9	1235.0
137.5°	1317.9	1317.1	1316.2	1314.8	1313.2	1311.5	1309.8	1308.1	1309.8	1311.5	1313.2
140°	1371.4	1371.1	1370.7	1369.7	1368.0	1366.3	1364.6	1362.9	1364.6	1366.3	1368.0
142.5°	1422.0	1421.4	1420.8	1419.7	1418.0	1416.2	1414.5	1412.9	1414.5	1416.2	1418.0
145°	1496.4	1495.4	1494.4	1493.6	1492.9	1492.2	1491.6	1490.9	1491.6	1492.2	1492.9
147.5°	1566.9	1566.0	1565.0	1564.0	1562.8	1561.5	1560.2	1559.0	1560.2	1561.5	1562.8
150°	1611.3	1610.6	1609.9	1609.3	1608.6	1607.9	1607.3	1606.6	1607.3	1607.9	1608.6
152.5°	1650.8	1650.4	1650.0	1649.3	1648.4	1647.5	1646.5	1645.6	1646.5	1647.5	1648.4
155°	1707.9	1707.6	1707.3	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1	1707.1
157.5°	1758.3	1758.1	1757.8	1757.9	1758.3	1758.7	1759.1	1759.5	1759.1	1758.7	1758.3
160°	1789.3	1789.3	1789.3	1789.7	1790.3	1791.0	1791.7	1792.4	1791.7	1791.0	1790.3
162.5°	1818.1	1817.8	1817.5	1817.9	1818.8	1819.7	1820.7	1821.6	1820.7	1819.7	1818.8
165°	1854.8	1854.8	1854.8	1855.3	1856.3	1857.3	1858.4	1859.4	1858.4	1857.3	1856.3
167.5°	1884.1	1883.8	1883.6	1884.1	1885.4	1886.8	1888.1	1889.6	1888.1	1886.8	1885.4
170°	1900.5	1900.5	1900.5	1901.2	1902.5	1903.9	1905.2	1906.5	1905.2	1903.9	1902.5
172.5°	1913.9	1913.9	1913.9	1914.6	1915.9	1917.2	1918.6	1920.0	1918.6	1917.2	1915.9
175°	1927.9	1927.9	1927.9	1928.5	1930.0	1931.3	1932.7	1934.0	1932.7	1931.3	1930.0
177.5°	1934.9	1934.9	1934.9	1935.4	1936.5	1937.6	1938.7	1939.7	1938.7	1937.6	1936.5
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1610.8	1606.4	1600.0	1590.5	1582.9	1570.8	1570.8	1572.8	1572.8	1572.2	1570.8
5°	1562.0	1550.0	1535.8	1519.1	1501.7	1484.2	1481.0	1474.6	1469.9	1466.7	1462.8
7.5°	1510.4	1489.2	1468.4	1445.1	1423.8	1406.2	1394.0	1383.8	1377.4	1370.4	1365.2
10°	1475.4	1449.3	1424.6	1400.1	1373.0	1351.6	1338.2	1328.6	1321.5	1315.1	1311.9
12.5°	1434.2	1404.2	1377.1	1353.7	1324.1	1302.1	1289.3	1284.8	1276.4	1263.0	1256.1
15°	1373.8	1346.0	1313.5	1277.8	1263.5	1236.6	1221.4	1214.4	1209.5	1199.2	1196.1
17.5°	1322.2	1285.9	1249.4	1222.7	1196.2	1174.3	1165.9	1157.0	1150.6	1142.3	1139.7
20°	1281.0	1248.5	1215.1	1186.6	1158.7	1135.0	1127.8	1121.5	1115.1	1111.2	1107.9
22.5°	1239.1	1206.6	1178.9	1152.3	1122.6	1107.0	1099.2	1092.3	1087.8	1085.1	1082.0
25°	1180.2	1151.7	1120.6	1096.8	1073.1	1062.7	1057.9	1054.0	1050.9	1046.8	1046.0
27.5°	1127.5	1096.4	1071.3	1049.0	1032.0	1023.4	1018.8	1016.8	1017.5	1019.0	1019.9
30°	1088.1	1059.6	1038.9	1019.9	1004.0	996.0	995.2	995.2	998.5	999.3	1000.8
32.5°	1052.0	1028.4	1007.8	989.4	977.3	971.9	974.9	974.9	977.4	979.6	982.4
35°	999.3	978.6	962.7	946.8	936.5	938.9	940.5	942.1	946.0	950.8	954.0
37.5°	948.9	931.0	914.4	902.1	897.4	901.6	905.4	908.8	913.3	917.1	920.2
40°	912.7	899.2	883.3	872.2	873.8	876.3	879.4	883.3	887.4	889.7	892.9
42.5°	879.1	864.9	852.9	843.6	845.9	848.9	850.8	852.9	857.5	861.8	863.6
45°	827.8	816.7	805.6	800.0	801.6	803.2	804.8	807.2	811.1	814.4	815.1
47.5°	770.2	762.4	755.0	749.5	752.0	751.4	753.6	758.6	759.8	761.7	766.2
50°	733.4	726.2	717.5	715.9	715.9	715.9	716.7	723.1	723.1	726.2	729.4
52.5°	692.8	688.1	682.6	679.7	678.4	678.4	681.8	685.0	686.2	690.6	693.9
55°	632.6	627.8	623.0	620.7	619.0	620.7	627.0	628.5	632.6	634.9	637.3
57.5°	569.9	566.2	562.4	561.1	560.8	562.9	566.3	571.1	572.1	579.4	583.0
60°	528.6	523.0	519.9	519.9	518.3	525.4	523.8	531.8	533.3	538.2	543.7
62.5°	486.0	478.6	477.4	477.4	479.6	481.6	483.8	487.4	491.4	497.5	501.8
65°	417.5	413.5	419.1	418.3	416.7	421.4	421.4	425.5	430.2	435.8	444.4
67.5°	352.5	350.5	350.9	350.9	353.4	356.1	358.3	361.7	367.5	373.3	379.1
70°	308.7	311.1	307.2	310.3	312.8	313.5	315.1	319.8	326.2	330.1	336.5
72.5°	266.2	266.0	266.5	267.8	270.1	271.6	273.2	278.6	285.6	288.9	294.0
75°	204.8	204.0	206.3	206.3	210.4	211.9	213.5	215.9	222.3	227.0	231.0
77.5°	149.6	150.5	150.0	152.7	151.6	151.9	156.8	159.3	159.9	169.3	171.3
80°	112.7	114.3	115.1	115.8	116.6	115.1	120.7	123.0	123.0	128.6	132.5
82.5°	81.0	81.9	84.0	84.7	84.9	86.5	86.9	88.8	90.7	93.0	98.3
85°	40.5	42.8	43.6	42.8	43.6	42.1	44.4	45.2	46.0	46.0	46.0
87.5°	15.8	17.2	17.4	18.9	19.1	20.6	20.9	19.9	20.2	22.3	20.0
90°	15.0	19.0	23.3	27.8	32.1	36.6	37.9	39.3	40.6	42.0	43.0
92.5°	46.0	48.5	51.0	53.4	55.9	58.5	59.6	60.6	61.7	62.8	63.1
95°	99.4	101.9	104.5	107.2	110.0	112.7	114.0	115.4	116.7	118.1	118.8
97.5°	166.6	168.4	170.5	172.4	174.4	176.3	177.9	179.5	181.0	182.6	183.3
100°	215.2	217.1	218.7	220.5	222.2	223.9	224.9	225.9	226.9	227.9	228.7
102.5°	266.8	268.5	270.7	273.0	275.2	277.4	278.5	279.5	280.5	281.6	282.0
105°	345.4	347.2	350.2	353.3	356.4	359.4	359.4	359.4	359.4	359.4	359.7
107.5°	438.1	438.9	440.1	441.3	442.5	443.7	444.8	446.0	447.0	448.1	448.4
110°	497.7	498.3	499.0	499.7	500.3	501.0	502.4	503.7	505.0	506.4	506.8



TEST NUMBER: P332235-840

CATALOG NUMBER: S123DIW-S1165D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	557.4	557.7	557.8	558.0	558.2	558.3	559.9	561.5	563.1	564.7	565.5
115°	651.3	651.5	650.8	650.1	649.4	648.7	649.0	649.4	649.7	650.1	650.1
117.5°	741.8	741.7	740.9	740.0	739.1	738.3	738.2	738.1	738.1	738.0	737.5
120°	804.6	804.8	803.0	801.3	799.6	798.0	797.6	797.3	797.0	796.6	796.1
122.5°	862.1	862.4	861.5	860.6	859.8	858.9	858.0	857.1	856.3	855.4	854.4
125°	951.3	951.4	950.8	950.1	949.4	948.8	947.4	946.0	944.6	943.3	941.9
127.5°	1040.0	1040.7	1039.9	1039.2	1038.4	1037.6	1035.7	1033.9	1032.0	1030.1	1028.3
130°	1098.1	1098.9	1097.9	1096.9	1095.9	1094.9	1093.6	1092.2	1090.9	1089.5	1087.6
132.5°	1154.2	1155.2	1154.4	1153.7	1152.9	1152.2	1150.5	1148.9	1147.3	1145.7	1144.0
135°	1237.1	1237.9	1237.6	1237.2	1236.9	1236.6	1235.2	1233.9	1232.4	1231.1	1230.1
137.5°	1314.8	1316.2	1317.1	1317.9	1318.8	1319.7	1318.3	1316.9	1315.5	1314.0	1312.6
140°	1369.7	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7	1371.4	1371.1	1370.7	1369.4
142.5°	1419.7	1420.8	1421.4	1422.0	1422.6	1423.2	1422.9	1422.6	1422.2	1421.9	1420.8
145°	1493.6	1494.4	1495.4	1496.4	1497.4	1498.4	1498.1	1497.7	1497.4	1497.1	1496.2
147.5°	1564.0	1565.0	1566.0	1566.9	1567.8	1568.8	1568.8	1568.8	1568.8	1568.8	1567.8
150°	1609.3	1609.9	1610.6	1611.3	1611.9	1612.7	1612.7	1612.7	1612.7	1612.7	1611.6
152.5°	1649.3	1650.0	1650.4	1650.8	1651.2	1651.6	1652.2	1652.7	1653.3	1653.9	1653.3
155°	1707.1	1707.3	1707.6	1707.9	1708.3	1708.6	1710.0	1711.3	1712.6	1714.0	1713.5
157.5°	1757.9	1757.8	1758.1	1758.3	1758.6	1758.9	1760.3	1761.7	1763.1	1764.5	1764.3
160°	1789.7	1789.3	1789.3	1789.3	1789.3	1789.3	1791.0	1792.7	1794.4	1796.0	1796.2
162.5°	1817.9	1817.5	1817.8	1818.1	1818.3	1818.6	1820.3	1821.9	1823.6	1825.3	1825.1
165°	1855.3	1854.8	1854.8	1854.8	1854.8	1854.8	1856.8	1858.9	1860.9	1862.9	1862.8
167.5°	1884.1	1883.6	1883.8	1884.1	1884.4	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0
170°	1901.2	1900.5	1900.5	1900.5	1900.5	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0
172.5°	1914.6	1913.9	1913.9	1913.9	1913.9	1913.9	1916.0	1918.0	1920.2	1922.3	1922.2
175°	1928.5	1927.9	1927.9	1927.9	1927.9	1927.9	1930.0	1932.0	1934.0	1936.0	1935.8
177.5°	1935.4	1934.9	1934.9	1934.9	1934.9	1934.9	1936.5	1938.1	1939.7	1941.4	1941.3
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



TEST NUMBER: P332235-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1566.4	1565.8	1570.2	1567.0	1570.2	1565.8	1566.4	1570.8	1572.2	1572.8	1572.8
5°	1457.9	1460.4	1452.4	1452.4	1452.4	1460.4	1457.9	1462.8	1466.7	1469.9	1474.6
7.5°	1361.5	1358.0	1358.3	1354.0	1358.3	1358.0	1361.5	1365.2	1370.4	1377.4	1383.8
10°	1302.4	1297.7	1296.1	1296.9	1296.1	1297.7	1302.4	1311.9	1315.1	1321.5	1328.6
12.5°	1253.5	1252.5	1242.1	1242.2	1242.1	1252.5	1253.5	1256.1	1263.0	1276.4	1284.8
15°	1196.1	1181.0	1179.4	1184.2	1179.4	1181.0	1196.1	1196.1	1199.2	1209.5	1214.4
17.5°	1138.4	1130.5	1130.9	1128.6	1130.9	1130.5	1138.4	1139.7	1142.3	1150.6	1157.0
20°	1107.9	1103.2	1102.4	1096.8	1102.4	1103.2	1107.9	1107.9	1111.2	1115.1	1121.5
22.5°	1080.1	1078.4	1078.9	1072.8	1078.9	1078.4	1080.1	1082.0	1085.1	1087.8	1092.3
25°	1045.3	1049.2	1046.0	1046.0	1046.0	1049.2	1045.3	1046.0	1046.8	1050.9	1054.0
27.5°	1021.8	1021.6	1020.1	1020.1	1020.1	1021.6	1021.8	1019.9	1019.0	1017.5	1016.8
30°	1004.0	1003.2	1004.8	1004.8	1004.8	1003.2	1004.0	1000.8	999.3	998.5	995.2
32.5°	986.2	987.3	987.6	988.3	987.6	987.3	986.2	982.4	979.6	977.4	974.9
35°	958.8	959.6	961.9	960.4	961.9	959.6	958.8	954.0	950.8	946.0	942.1
37.5°	921.6	925.2	924.4	925.7	924.4	925.2	921.6	920.2	917.1	913.3	908.8
40°	893.6	896.1	895.2	895.2	895.2	896.1	893.6	892.9	889.7	887.4	883.3
42.5°	865.2	866.9	864.7	863.5	864.7	866.9	865.2	863.6	861.8	857.5	852.9
45°	818.3	816.7	819.1	815.9	819.1	816.7	818.3	815.1	814.4	811.1	807.2
47.5°	765.9	767.5	768.1	770.5	768.1	767.5	765.9	766.2	761.7	759.8	758.6
50°	730.9	735.7	735.7	735.0	735.7	735.7	730.9	729.4	726.2	723.1	723.1
52.5°	696.7	698.9	702.1	702.0	702.1	698.9	696.7	693.9	690.6	686.2	685.0
55°	643.7	645.3	646.8	647.6	646.8	645.3	643.7	637.3	634.9	632.6	628.5
57.5°	588.8	588.1	591.9	593.0	591.9	588.1	588.8	583.0	579.4	572.1	571.1
60°	550.0	550.0	556.3	558.8	556.3	550.0	550.0	543.7	538.2	533.3	531.8
62.5°	508.8	511.3	517.7	514.3	517.7	511.3	508.8	501.8	497.5	491.4	487.4
65°	448.4	454.7	453.9	457.2	453.9	454.7	448.4	444.4	435.8	430.2	425.5
67.5°	385.4	389.4	395.1	395.6	395.1	389.4	385.4	379.1	373.3	367.5	361.7
70°	342.8	346.8	350.0	352.3	350.0	346.8	342.8	336.5	330.1	326.2	319.8
72.5°	301.6	303.7	311.2	307.9	311.2	303.7	301.6	294.0	288.9	285.6	278.6
75°	236.5	242.1	246.8	244.5	246.8	242.1	236.5	231.0	227.0	222.3	215.9
77.5°	174.9	180.5	182.7	180.7	182.7	180.5	174.9	171.3	169.3	159.9	159.3
80°	138.1	137.3	142.1	141.3	142.1	137.3	138.1	132.5	128.6	123.0	123.0
82.5°	101.3	100.5	102.7	103.2	102.7	100.5	101.3	98.3	93.0	90.7	88.8
85°	49.2	51.6	48.4	47.7	48.4	51.6	49.2	46.0	46.0	46.0	45.2
87.5°	20.2	20.3	19.8	19.3	19.8	20.3	20.2	20.0	22.3	20.2	19.9
90°	43.6	44.3	45.0	45.6	45.0	44.3	43.6	43.0	42.0	40.6	39.3
92.5°	62.7	62.3	61.9	61.5	61.9	62.3	62.7	63.1	62.8	61.7	60.6
95°	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.1	116.7	115.4
97.5°	183.2	183.0	182.9	182.8	182.9	183.0	183.2	183.3	182.6	181.0	179.5
100°	229.4	230.1	230.8	231.5	230.8	230.1	229.4	228.7	227.9	226.9	225.9
102.5°	281.9	281.7	281.6	281.4	281.6	281.7	281.9	282.0	281.6	280.5	279.5
105°	360.4	361.1	361.7	362.4	361.7	361.1	360.4	359.7	359.4	359.4	359.4
107.5°	448.0	447.6	447.2	446.8	447.2	447.6	448.0	448.4	448.1	447.0	446.0
110°	506.0	505.4	504.7	504.0	504.7	505.4	506.0	506.8	506.4	505.0	503.7



TEST NUMBER: P332235-840

CATALOG NUMBER: S123DIW-S1165D1535U840-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	565.4	565.2	565.1	564.9	565.1	565.2	565.4	565.5	564.7	563.1	561.5
115°	649.7	649.4	649.0	648.7	649.0	649.4	649.7	650.1	650.1	649.7	649.4
117.5°	736.5	735.6	734.7	733.7	734.7	735.6	736.5	737.5	738.0	738.1	738.1
120°	795.5	794.8	794.1	793.3	794.1	794.8	795.5	796.1	796.6	797.0	797.3
122.5°	853.5	852.5	851.6	850.6	851.6	852.5	853.5	854.4	855.4	856.3	857.1
125°	940.6	939.3	937.9	936.5	937.9	939.3	940.6	941.9	943.3	944.6	946.0
127.5°	1026.8	1025.2	1023.7	1022.1	1023.7	1025.2	1026.8	1028.3	1030.1	1032.0	1033.9
130°	1085.3	1082.9	1080.6	1078.1	1080.6	1082.9	1085.3	1087.6	1089.5	1090.9	1092.2
132.5°	1142.2	1140.3	1138.4	1136.6	1138.4	1140.3	1142.2	1144.0	1145.7	1147.3	1148.9
135°	1229.4	1228.7	1228.1	1227.4	1228.1	1228.7	1229.4	1230.1	1231.1	1232.4	1233.9
137.5°	1311.3	1310.1	1308.8	1307.5	1308.8	1310.1	1311.3	1312.6	1314.0	1315.5	1316.9
140°	1367.0	1364.6	1362.2	1359.9	1362.2	1364.6	1367.0	1369.4	1370.7	1371.1	1371.4
142.5°	1419.0	1417.1	1415.3	1413.5	1415.3	1417.1	1419.0	1420.8	1421.9	1422.2	1422.6
145°	1494.9	1493.6	1492.2	1490.9	1492.2	1493.6	1494.9	1496.2	1497.1	1497.4	1497.7
147.5°	1565.8	1563.8	1561.7	1559.6	1561.7	1563.8	1565.8	1567.8	1568.8	1568.8	1568.8
150°	1609.6	1607.6	1605.6	1603.6	1605.6	1607.6	1609.6	1611.6	1612.7	1612.7	1612.7
152.5°	1651.4	1649.7	1647.9	1646.2	1647.9	1649.7	1651.4	1653.3	1653.9	1653.3	1652.7
155°	1711.1	1708.8	1706.4	1704.0	1706.4	1708.8	1711.1	1713.5	1714.0	1712.6	1711.3
157.5°	1762.4	1760.5	1758.6	1756.8	1758.6	1760.5	1762.4	1764.3	1764.5	1763.1	1761.7
160°	1794.9	1793.5	1792.2	1790.8	1792.2	1793.5	1794.9	1796.2	1796.0	1794.4	1792.7
162.5°	1822.9	1820.8	1818.6	1816.4	1818.6	1820.8	1822.9	1825.1	1825.3	1823.6	1821.9
165°	1860.4	1858.1	1855.6	1853.3	1855.6	1858.1	1860.4	1862.8	1862.9	1860.9	1858.9
167.5°	1891.0	1888.9	1886.7	1884.6	1886.7	1888.9	1891.0	1893.0	1893.0	1891.0	1888.9
170°	1907.6	1905.2	1902.9	1900.5	1902.9	1905.2	1907.6	1910.0	1910.0	1907.6	1905.2
172.5°	1919.8	1917.4	1915.0	1912.7	1915.0	1917.4	1919.8	1922.2	1922.3	1920.2	1918.0
175°	1933.5	1931.1	1928.7	1926.4	1928.7	1931.1	1933.5	1935.8	1936.0	1934.0	1932.0
177.5°	1939.3	1937.4	1935.6	1933.7	1935.6	1937.4	1939.3	1941.3	1941.4	1939.7	1938.1
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



TEST NUMBER: P332235-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1570.8	1570.8	1582.9	1590.5	1600.0	1606.4	1610.8	1615.3	1623.0	1633.1	1644.5
5°	1481.0	1484.2	1501.7	1519.1	1535.8	1550.0	1562.0	1576.2	1593.7	1615.1	1638.9
7.5°	1394.0	1406.2	1423.8	1445.1	1468.4	1489.2	1510.4	1533.9	1558.4	1590.0	1623.4
10°	1338.2	1351.6	1373.0	1400.1	1424.6	1449.3	1475.4	1500.9	1531.8	1569.1	1611.9
12.5°	1289.3	1302.1	1324.1	1353.7	1377.1	1404.2	1434.2	1467.2	1502.0	1546.9	1595.5
15°	1221.4	1236.6	1263.5	1277.8	1313.5	1346.0	1373.8	1421.5	1465.9	1512.0	1568.3
17.5°	1165.9	1174.3	1196.2	1222.7	1249.4	1285.9	1322.2	1361.9	1406.2	1462.6	1533.1
20°	1127.8	1135.0	1158.7	1186.6	1215.1	1248.5	1281.0	1320.7	1370.7	1430.2	1506.4
22.5°	1099.2	1107.0	1122.6	1152.3	1178.9	1206.6	1239.1	1286.4	1339.6	1397.9	1480.4
25°	1057.9	1062.7	1073.1	1096.8	1120.6	1151.7	1180.2	1224.7	1279.4	1347.7	1430.2
27.5°	1018.8	1023.4	1032.0	1049.0	1071.3	1096.4	1127.5	1165.3	1220.8	1294.9	1382.6
30°	995.2	996.0	1004.0	1019.9	1038.9	1059.6	1088.1	1130.9	1183.4	1258.8	1350.8
32.5°	974.9	971.9	977.3	989.4	1007.8	1028.4	1052.0	1094.2	1144.7	1218.8	1313.3
35°	940.5	938.9	936.5	946.8	962.7	978.6	999.3	1031.0	1088.1	1157.2	1256.4
37.5°	905.4	901.6	897.4	902.1	914.4	931.0	948.9	977.1	1026.4	1102.4	1197.3
40°	879.4	876.3	873.8	872.2	883.3	899.2	912.7	939.7	985.7	1057.9	1151.7
42.5°	850.8	848.9	845.9	843.6	852.9	864.9	879.1	902.9	948.9	1016.7	1105.3
45°	804.8	803.2	801.6	800.0	805.6	816.7	827.8	845.3	884.9	950.8	1031.0
47.5°	753.6	751.4	752.0	749.5	755.0	762.4	770.2	788.9	827.0	880.2	938.8
50°	716.7	715.9	715.9	715.9	717.5	726.2	733.4	747.6	782.5	835.8	877.8
52.5°	681.8	678.4	678.4	679.7	682.6	688.1	692.8	708.3	738.7	782.4	820.6
55°	627.0	620.7	619.0	620.7	623.0	627.8	632.6	645.3	671.5	704.0	726.2
57.5°	566.3	562.9	560.8	561.1	562.4	566.2	569.9	583.7	604.3	621.3	635.6
60°	523.8	525.4	518.3	519.9	519.9	523.0	528.6	537.3	554.8	566.6	581.0
62.5°	483.8	481.6	479.6	477.4	477.4	478.6	486.0	492.9	507.8	514.0	525.1
65°	421.4	421.4	416.7	418.3	419.1	413.5	417.5	425.5	434.9	437.3	447.7
67.5°	358.3	356.1	353.4	350.9	350.9	350.5	352.5	356.5	363.7	364.5	372.4
70°	315.1	313.5	312.8	310.3	307.2	311.1	308.7	312.8	316.7	317.5	322.2
72.5°	273.2	271.6	270.1	267.8	266.5	266.0	266.2	270.8	273.5	272.4	277.8
75°	213.5	211.9	210.4	206.3	206.3	204.0	204.8	207.9	211.2	208.7	213.5
77.5°	156.8	151.9	151.6	152.7	150.0	150.5	149.6	149.1	150.5	150.7	154.9
80°	120.7	115.1	116.6	115.8	115.1	114.3	112.7	113.5	114.3	115.1	117.4
82.5°	86.9	86.5	84.9	84.7	84.0	81.9	81.0	82.4	83.2	82.7	84.4
85°	44.4	42.1	43.6	42.8	43.6	42.8	40.5	40.5	42.1	41.3	42.8
87.5°	20.9	20.6	19.1	18.9	17.4	17.2	15.8	15.7	15.7	14.9	15.6
90°	37.9	36.6	32.1	27.8	23.3	19.0	15.0	11.7	8.3	4.9	1.5
92.5°	59.6	58.5	55.9	53.4	51.0	48.5	46.0	43.7	41.4	39.2	36.9
95°	114.0	112.7	110.0	107.2	104.5	101.9	99.4	96.9	94.6	92.2	89.9
97.5°	177.9	176.3	174.4	172.4	170.5	168.4	166.6	164.9	163.1	161.4	159.6
100°	224.9	223.9	222.2	220.5	218.7	217.1	215.2	213.2	211.2	209.1	207.1
102.5°	278.5	277.4	275.2	273.0	270.7	268.5	266.8	265.6	264.4	263.2	262.0
105°	359.4	359.4	356.4	353.3	350.2	347.2	345.4	344.7	344.0	343.4	342.6
107.5°	444.8	443.7	442.5	441.3	440.1	438.9	438.1	437.7	437.3	436.9	436.5
110°	502.4	501.0	500.3	499.7	499.0	498.3	497.7	497.0	496.2	495.6	494.9



TEST NUMBER: P332235-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	559.9	558.3	558.2	558.0	557.8	557.7	557.4	557.0	556.6	556.2	555.8
115°	649.0	648.7	649.4	650.1	650.8	651.5	651.3	650.3	649.2	648.2	647.2
117.5°	738.2	738.3	739.1	740.0	740.9	741.7	741.8	741.2	740.5	739.8	739.2
120°	797.6	798.0	799.6	801.3	803.0	804.8	804.6	802.5	800.5	798.5	796.5
122.5°	858.0	858.9	859.8	860.6	861.5	862.4	862.1	860.6	859.1	857.6	856.2
125°	947.4	948.8	949.4	950.1	950.8	951.4	951.3	950.3	949.3	948.2	947.2
127.5°	1035.7	1037.6	1038.4	1039.2	1039.9	1040.7	1040.0	1037.7	1035.6	1033.4	1031.3
130°	1093.6	1094.9	1095.9	1096.9	1097.9	1098.9	1098.1	1095.4	1092.7	1090.0	1087.3
132.5°	1150.5	1152.2	1152.9	1153.7	1154.4	1155.2	1154.2	1151.4	1148.7	1146.0	1143.4
135°	1235.2	1236.6	1236.9	1237.2	1237.6	1237.9	1237.1	1235.0	1232.9	1230.9	1228.9
137.5°	1318.3	1319.7	1318.8	1317.9	1317.1	1316.2	1314.8	1313.2	1311.5	1309.8	1308.1
140°	1371.7	1372.1	1371.7	1371.4	1371.1	1370.7	1369.7	1368.0	1366.3	1364.6	1362.9
142.5°	1422.9	1423.2	1422.6	1422.0	1421.4	1420.8	1419.7	1418.0	1416.2	1414.5	1412.9
145°	1498.1	1498.4	1497.4	1496.4	1495.4	1494.4	1493.6	1492.9	1492.2	1491.6	1490.9
147.5°	1568.8	1568.8	1567.8	1566.9	1566.0	1565.0	1564.0	1562.8	1561.5	1560.2	1559.0
150°	1612.7	1612.7	1611.9	1611.3	1610.6	1609.9	1609.3	1608.6	1607.9	1607.3	1606.6
152.5°	1652.2	1651.6	1651.2	1650.8	1650.4	1650.0	1649.3	1648.4	1647.5	1646.5	1645.6
155°	1710.0	1708.6	1708.3	1707.9	1707.6	1707.3	1707.1	1707.1	1707.1	1707.1	1707.1
157.5°	1760.3	1758.9	1758.6	1758.3	1758.1	1757.8	1757.9	1758.3	1758.7	1759.1	1759.5
160°	1791.0	1789.3	1789.3	1789.3	1789.3	1789.3	1789.7	1790.3	1791.0	1791.7	1792.4
162.5°	1820.3	1818.6	1818.3	1818.1	1817.8	1817.5	1817.9	1818.8	1819.7	1820.7	1821.6
165°	1856.8	1854.8	1854.8	1854.8	1854.8	1854.8	1855.3	1856.3	1857.3	1858.4	1859.4
167.5°	1886.7	1884.6	1884.4	1884.1	1883.8	1883.6	1884.1	1885.4	1886.8	1888.1	1889.6
170°	1902.9	1900.5	1900.5	1900.5	1900.5	1900.5	1901.2	1902.5	1903.9	1905.2	1906.5
172.5°	1916.0	1913.9	1913.9	1913.9	1913.9	1913.9	1914.6	1915.9	1917.2	1918.6	1920.0
175°	1930.0	1927.9	1927.9	1927.9	1927.9	1927.9	1928.5	1930.0	1931.3	1932.7	1934.0
177.5°	1936.5	1934.9	1934.9	1934.9	1934.9	1934.9	1935.4	1936.5	1937.6	1938.7	1939.7
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



TEST NUMBER: P332235-840

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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1648.3	1651.4	1662.2	1669.9	1678.8	1683.8	1688.9	1692.7	1697.8	1699.1	1717.5
5°	1655.6	1671.5	1699.3	1719.9	1745.2	1773.0	1792.1	1800.9	1823.8	1842.9	1881.0
7.5°	1653.6	1687.4	1729.3	1772.7	1819.4	1862.6	1900.1	1944.5	1976.1	2023.6	2070.4
10°	1651.6	1696.9	1750.8	1806.4	1871.5	1931.8	1985.8	2046.1	2096.1	2161.9	2218.3
12.5°	1645.9	1700.7	1775.6	1841.3	1920.4	2003.6	2083.6	2161.0	2205.3	2315.0	2366.9
15°	1631.8	1696.9	1790.5	1890.6	1999.2	2097.7	2199.3	2280.3	2411.2	2507.2	2568.3
17.5°	1604.8	1696.0	1807.1	1927.6	2059.9	2189.6	2304.7	2427.5	2566.5	2682.6	2806.4
20°	1592.2	1692.1	1815.9	1949.2	2086.6	2233.4	2364.4	2511.9	2663.6	2777.8	2936.6
22.5°	1568.6	1681.9	1815.3	1963.9	2110.7	2262.6	2415.8	2564.7	2739.8	2897.2	3048.4
25°	1530.2	1657.2	1795.3	1961.2	2133.4	2285.8	2469.1	2666.8	2849.3	3051.7	3202.5
27.5°	1489.9	1625.5	1763.8	1918.1	2103.3	2284.2	2514.9	2738.1	2961.3	3136.1	3247.7
30°	1458.8	1590.5	1733.4	1889.0	2072.2	2287.3	2545.3	2788.9	3006.5	3156.4	3219.1
32.5°	1425.1	1558.7	1685.2	1848.4	2043.7	2285.4	2564.4	2818.8	3009.0	3108.9	3096.7
35°	1372.3	1484.2	1607.2	1764.3	1994.5	2271.5	2575.5	2821.5	2938.2	2916.8	2754.8
37.5°	1296.1	1390.2	1511.4	1683.3	1937.3	2242.1	2553.2	2737.8	2730.3	2555.8	2321.2
40°	1248.5	1328.6	1445.3	1626.3	1892.9	2223.1	2518.3	2638.2	2536.6	2292.9	2012.0
42.5°	1186.2	1260.0	1376.7	1562.8	1844.0	2184.3	2451.6	2486.4	2287.6	2007.2	1749.7
45°	1089.7	1154.8	1275.5	1467.5	1770.7	2100.0	2289.0	2204.0	1936.5	1646.9	1450.9
47.5°	986.0	1053.7	1169.7	1367.1	1664.7	1973.3	2063.3	1882.6	1608.0	1373.0	1193.1
50°	920.7	985.7	1099.2	1298.5	1592.9	1869.1	1906.4	1673.0	1420.7	1214.4	1066.7
52.5°	854.6	915.9	1027.5	1227.3	1509.1	1748.5	1725.5	1487.6	1255.6	1079.7	963.8
55°	756.4	814.4	920.7	1107.9	1364.3	1554.0	1470.7	1243.6	1051.6	915.1	827.0
57.5°	668.4	724.0	815.8	984.9	1207.8	1338.2	1232.1	1040.9	888.1	783.0	717.3
60°	608.7	657.9	745.3	902.4	1096.1	1195.3	1090.6	921.5	792.8	708.7	650.1
62.5°	552.2	595.1	676.0	818.6	986.8	1070.2	964.1	821.1	711.7	637.0	587.1
65°	466.7	505.5	577.0	688.1	826.2	881.8	790.5	674.6	589.7	534.1	500.8
67.5°	388.6	421.6	483.3	570.8	672.4	712.9	643.4	553.7	489.7	445.0	418.6
70°	336.5	365.1	413.5	488.9	581.0	611.9	546.8	473.0	426.2	390.5	365.9
72.5°	292.7	313.7	357.6	415.9	492.7	517.4	471.9	407.0	363.3	336.5	317.0
75°	223.0	240.4	269.0	315.9	369.1	383.3	349.2	308.7	279.3	260.3	245.2
77.5°	160.8	173.7	194.3	223.2	260.0	272.9	251.3	224.3	202.9	190.0	181.6
80°	121.4	131.8	149.3	173.0	195.2	202.4	189.7	169.1	154.0	146.8	139.7
82.5°	89.7	95.5	106.0	122.2	137.4	145.9	135.1	122.7	114.6	108.1	105.4
85°	45.2	48.4	53.2	59.5	69.1	72.2	68.3	65.0	60.3	56.4	56.4
87.5°	17.5	18.2	20.7	22.7	26.1	28.8	29.1	28.7	28.9	28.6	28.2
90°	4.9	8.3	11.7	15.0	19.0	23.3	27.8	32.1	36.6	37.9	39.3
92.5°	39.2	41.4	43.7	46.0	48.5	51.0	53.4	55.9	58.5	59.6	60.6
95°	92.2	94.6	96.9	99.4	101.9	104.5	107.2	110.0	112.7	114.0	115.4
97.5°	161.4	163.1	164.9	166.6	168.4	170.5	172.4	174.4	176.3	177.9	179.5
100°	209.1	211.2	213.2	215.2	217.1	218.7	220.5	222.2	223.9	224.9	225.9
102.5°	263.2	264.4	265.6	266.8	268.5	270.7	273.0	275.2	277.4	278.5	279.5
105°	343.4	344.0	344.7	345.4	347.2	350.2	353.3	356.4	359.4	359.4	359.4
107.5°	436.9	437.3	437.7	438.1	438.9	440.1	441.3	442.5	443.7	444.8	446.0
110°	495.6	496.2	497.0	497.7	498.3	499.0	499.7	500.3	501.0	502.4	503.7



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	556.2	556.6	557.0	557.4	557.7	557.8	558.0	558.2	558.3	559.9	561.5
115°	648.2	649.2	650.3	651.3	651.5	650.8	650.1	649.4	648.7	649.0	649.4
117.5°	739.8	740.5	741.2	741.8	741.7	740.9	740.0	739.1	738.3	738.2	738.1
120°	798.5	800.5	802.5	804.6	804.8	803.0	801.3	799.6	798.0	797.6	797.3
122.5°	857.6	859.1	860.6	862.1	862.4	861.5	860.6	859.8	858.9	858.0	857.1
125°	948.2	949.3	950.3	951.3	951.4	950.8	950.1	949.4	948.8	947.4	946.0
127.5°	1033.4	1035.6	1037.7	1040.0	1040.7	1039.9	1039.2	1038.4	1037.6	1035.7	1033.9
130°	1090.0	1092.7	1095.4	1098.1	1098.9	1097.9	1096.9	1095.9	1094.9	1093.6	1092.2
132.5°	1146.0	1148.7	1151.4	1154.2	1155.2	1154.4	1153.7	1152.9	1152.2	1150.5	1148.9
135°	1230.9	1232.9	1235.0	1237.1	1237.9	1237.6	1237.2	1236.9	1236.6	1235.2	1233.9
137.5°	1309.8	1311.5	1313.2	1314.8	1316.2	1317.1	1317.9	1318.8	1319.7	1318.3	1316.9
140°	1364.6	1366.3	1368.0	1369.7	1370.7	1371.1	1371.4	1371.7	1372.1	1371.7	1371.4
142.5°	1414.5	1416.2	1418.0	1419.7	1420.8	1421.4	1422.0	1422.6	1423.2	1422.9	1422.6
145°	1491.6	1492.2	1492.9	1493.6	1494.4	1495.4	1496.4	1497.4	1498.4	1498.1	1497.7
147.5°	1560.2	1561.5	1562.8	1564.0	1565.0	1566.0	1566.9	1567.8	1568.8	1568.8	1568.8
150°	1607.3	1607.9	1608.6	1609.3	1609.9	1610.6	1611.3	1611.9	1612.7	1612.7	1612.7
152.5°	1646.5	1647.5	1648.4	1649.3	1650.0	1650.4	1650.8	1651.2	1651.6	1652.2	1652.7
155°	1707.1	1707.1	1707.1	1707.1	1707.3	1707.6	1707.9	1708.3	1708.6	1710.0	1711.3
157.5°	1759.1	1758.7	1758.3	1757.9	1757.8	1758.1	1758.3	1758.6	1758.9	1760.3	1761.7
160°	1791.7	1791.0	1790.3	1789.7	1789.3	1789.3	1789.3	1789.3	1789.3	1791.0	1792.7
162.5°	1820.7	1819.7	1818.8	1817.9	1817.5	1817.8	1818.1	1818.3	1818.6	1820.3	1821.9
165°	1858.4	1857.3	1856.3	1855.3	1854.8	1854.8	1854.8	1854.8	1854.8	1856.8	1858.9
167.5°	1888.1	1886.8	1885.4	1884.1	1883.6	1883.8	1884.1	1884.4	1884.6	1886.7	1888.9
170°	1905.2	1903.9	1902.5	1901.2	1900.5	1900.5	1900.5	1900.5	1900.5	1902.9	1905.2
172.5°	1918.6	1917.2	1915.9	1914.6	1913.9	1913.9	1913.9	1913.9	1913.9	1916.0	1918.0
175°	1932.7	1931.3	1930.0	1928.5	1927.9	1927.9	1927.9	1927.9	1927.9	1930.0	1932.0
177.5°	1938.7	1937.6	1936.5	1935.4	1934.9	1934.9	1934.9	1934.9	1934.9	1936.5	1938.1
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1723.8	1724.4	1731.5	1736.6	1734.0	1737.2	1738.5
5°	1883.4	1912.0	1927.0	1938.1	1938.9	1939.7	1946.1
7.5°	2109.6	2140.2	2162.6	2196.6	2206.8	2218.3	2214.9
10°	2274.7	2319.9	2358.8	2379.4	2401.7	2434.2	2408.0
12.5°	2428.9	2509.1	2568.3	2600.4	2621.3	2627.9	2615.0
15°	2683.4	2788.1	2844.5	2843.0	2914.4	2945.4	2896.9
17.5°	2916.8	3013.4	3090.9	3130.6	3190.1	3203.3	3197.2
20°	3059.6	3165.2	3225.5	3293.8	3324.7	3352.4	3357.2
22.5°	3182.8	3277.5	3342.4	3399.1	3425.1	3438.2	3446.2
25°	3309.6	3384.3	3423.1	3442.9	3450.1	3448.5	3438.2
27.5°	3300.8	3306.6	3263.8	3221.7	3184.1	3141.7	3127.0
30°	3215.2	3148.5	3029.5	2962.0	2862.8	2784.2	2815.9
32.5°	2989.8	2857.1	2723.4	2576.0	2453.9	2419.1	2384.2
35°	2551.6	2318.3	2181.8	2023.1	1959.5	1896.1	1852.4
37.5°	2064.4	1883.9	1721.9	1618.1	1554.5	1514.3	1492.8
40°	1784.9	1622.2	1488.9	1404.8	1356.3	1311.1	1304.8
42.5°	1562.2	1410.9	1310.5	1243.5	1197.0	1177.8	1163.9
45°	1279.4	1173.9	1106.4	1058.7	1027.8	1015.9	1000.1
47.5°	1082.9	1008.2	957.7	925.2	901.9	893.0	891.8
50°	973.0	911.1	873.8	848.4	830.2	827.0	814.4
52.5°	890.5	836.9	807.8	785.6	772.4	763.6	759.7
55°	773.1	737.3	711.1	698.4	688.1	679.3	679.3
57.5°	676.4	646.5	629.2	618.4	615.2	609.0	605.1
60°	616.7	591.3	577.8	568.3	561.9	562.7	555.5
62.5°	558.3	541.8	528.9	519.4	511.8	511.9	512.4
65°	475.4	462.7	453.2	450.0	445.2	439.7	441.3
67.5°	402.8	390.9	383.5	378.1	376.5	373.5	378.1
70°	350.8	342.0	336.5	331.7	330.1	330.9	335.0
72.5°	303.2	297.0	293.4	291.1	287.6	287.8	290.4
75°	238.1	233.4	230.1	227.8	227.0	227.0	227.0
77.5°	174.9	173.8	172.4	168.8	169.1	170.0	170.2
80°	138.1	135.7	134.9	133.3	131.0	129.4	133.3
82.5°	103.2	100.8	100.0	99.7	96.0	95.7	99.1
85°	55.5	53.2	53.9	53.2	53.2	52.4	52.4
87.5°	27.8	27.5	27.0	27.8	27.3	26.8	28.2
90°	40.6	42.0	43.0	43.6	44.3	45.0	45.6
92.5°	61.7	62.8	63.1	62.7	62.3	61.9	61.5
95°	116.7	118.1	118.8	118.8	118.8	118.8	118.8
97.5°	181.0	182.6	183.3	183.2	183.0	182.9	182.8
100°	226.9	227.9	228.7	229.4	230.1	230.8	231.5
102.5°	280.5	281.6	282.0	281.9	281.7	281.6	281.4
105°	359.4	359.4	359.7	360.4	361.1	361.7	362.4
107.5°	447.0	448.1	448.4	448.0	447.6	447.2	446.8
110°	505.0	506.4	506.8	506.0	505.4	504.7	504.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	563.1	564.7	565.5	565.4	565.2	565.1	564.9
115°	649.7	650.1	650.1	649.7	649.4	649.0	648.7
117.5°	738.1	738.0	737.5	736.5	735.6	734.7	733.7
120°	797.0	796.6	796.1	795.5	794.8	794.1	793.3
122.5°	856.3	855.4	854.4	853.5	852.5	851.6	850.6
125°	944.6	943.3	941.9	940.6	939.3	937.9	936.5
127.5°	1032.0	1030.1	1028.3	1026.8	1025.2	1023.7	1022.1
130°	1090.9	1089.5	1087.6	1085.3	1082.9	1080.6	1078.1
132.5°	1147.3	1145.7	1144.0	1142.2	1140.3	1138.4	1136.6
135°	1232.4	1231.1	1230.1	1229.4	1228.7	1228.1	1227.4
137.5°	1315.5	1314.0	1312.6	1311.3	1310.1	1308.8	1307.5
140°	1371.1	1370.7	1369.4	1367.0	1364.6	1362.2	1359.9
142.5°	1422.2	1421.9	1420.8	1419.0	1417.1	1415.3	1413.5
145°	1497.4	1497.1	1496.2	1494.9	1493.6	1492.2	1490.9
147.5°	1568.8	1568.8	1567.8	1565.8	1563.8	1561.7	1559.6
150°	1612.7	1612.7	1611.6	1609.6	1607.6	1605.6	1603.6
152.5°	1653.3	1653.9	1653.3	1651.4	1649.7	1647.9	1646.2
155°	1712.6	1714.0	1713.5	1711.1	1708.8	1706.4	1704.0
157.5°	1763.1	1764.5	1764.3	1762.4	1760.5	1758.6	1756.8
160°	1794.4	1796.0	1796.2	1794.9	1793.5	1792.2	1790.8
162.5°	1823.6	1825.3	1825.1	1822.9	1820.8	1818.6	1816.4
165°	1860.9	1862.9	1862.8	1860.4	1858.1	1855.6	1853.3
167.5°	1891.0	1893.0	1893.0	1891.0	1888.9	1886.7	1884.6
170°	1907.6	1910.0	1910.0	1907.6	1905.2	1902.9	1900.5
172.5°	1920.2	1922.3	1922.2	1919.8	1917.4	1915.0	1912.7
175°	1934.0	1936.0	1935.8	1933.5	1931.1	1928.7	1926.4
177.5°	1939.7	1941.4	1941.3	1939.3	1937.4	1935.6	1933.7
180°	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5	1938.5

(END OF REPORT)