

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: P332644-840

Luminaire Tested: **SA4XXDIP-C1020D810U840-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332644-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-C1020D810U840-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

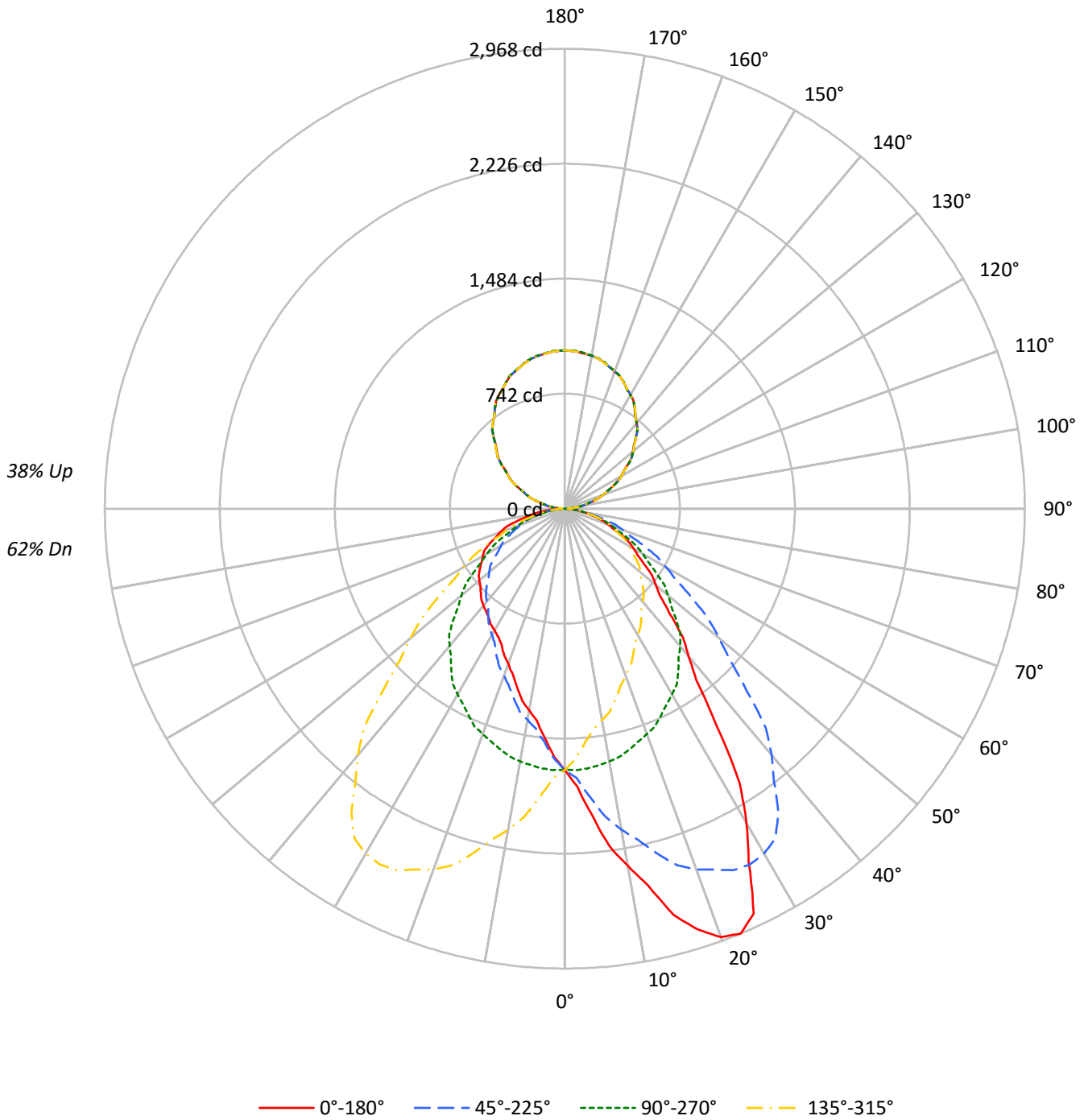
Lumens per Lamp: N/A
Luminaire Lumens: 7485.0 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	101	96	93	89	94	91	87	84	79	77	75	69	67	66	60	59	57	53
2	92	85	78	73	86	80	74	70	70	66	62	61	58	55	53	51	49	45
3	84	75	67	61	79	70	64	58	62	57	53	54	50	47	47	44	42	38
4	77	66	58	52	72	62	55	50	55	50	45	49	44	41	42	39	36	33
5	71	59	51	45	66	56	49	43	50	44	39	44	39	35	38	35	32	29
6	66	53	45	39	61	50	43	38	45	39	34	40	35	31	35	31	28	25
7	61	48	40	35	57	46	38	33	41	35	30	36	31	28	32	28	25	23
8	56	44	36	31	53	42	35	30	37	31	27	33	28	25	29	25	23	20
9	53	40	33	28	49	38	31	27	34	29	24	31	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13605	13605	13605	13605
5°	16022	13639	12039	13639
10°	19184	13581	10839	13581
15°	22697	13443	9954	13443
20°	25274	13302	9164	13302
25°	25683	13097	8620	13097
30°	21853	12899	8447	12899
35°	16802	12577	8449	12577
40°	13095	12198	8608	12198
45°	10919	11628	8752	11628
50°	9610	10934	9048	10934
55°	8804	10101	9413	10101
60°	8251	9357	9852	9357
65°	7681	8521	10214	8521
70°	7020	7695	10447	7695
75°	6273	6772	10321	6772
80°	5258	5551	9995	5551
85°	3881	4011	9568	4011



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.2	2.2
10°-20°	506.1	6.8
20°-30°	802.5	10.7
30°-40°	893.1	11.9
40°-50°	812.9	10.9
50°-60°	664.3	8.9
60°-70°	474.2	6.3
70°-80°	261.1	3.5
80°-90°	74.3	1.0
90°-100°	67.3	0.9
100°-110°	199.5	2.7
110°-120°	338.5	4.5
120°-130°	446.4	6.0
130°-140°	501.3	6.7
140°-150°	492.6	6.6
150°-160°	414.3	5.5
160°-170°	275.7	3.7
170°-180°	96.5	1.3
0°-30°	1472.7	19.7
0°-40°	2365.8	31.6
0°-60°	3843.0	51.3
0°-90°	4652.8	62.2
90°-120°	605.4	8.1
90°-150°	2045.7	27.3
90°-180°	2832.0	37.8
0°-180°	7485.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1685	1685	1685	1685	1685	
5°	1977	1683	1486	1683	1977	201
15°	2716	1608	1191	1608	2716	767
25°	2883	1470	968	1470	2883	1271
35°	1705	1276	857	1276	1705	1082
45°	956	1018	767	1018	956	753
55°	626	718	669	718	626	565
65°	402	446	535	446	402	398
75°	201	217	331	217	201	214
85°	42	43	103	43	42	52
90°	24	2	24	2	24	14
95°	62	47	62	47	62	65
105°	193	184	193	184	193	203
115°	341	344	341	344	341	337
125°	497	501	497	501	497	444
135°	647	647	647	647	647	500
145°	786	786	786	786	786	492
155°	899	900	899	900	899	414
165°	977	980	977	980	977	275
175°	1014	1019	1014	1019	1014	96
180°	1021	1021	1021	1021	1021	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1793.6	1793.1	1787.5	1786.4	1782.4	1777.5	1776.4	1767.4	1749.5	1741.1	1738.9
5°	1977.1	1991.0	1972.9	1969.4	1967.3	1944.3	1932.4	1918.4	1886.3	1867.4	1852.8
7.5°	2196.1	2197.7	2189.8	2183.3	2165.6	2145.5	2115.4	2083.3	2045.0	2005.2	1975.1
10°	2340.2	2345.7	2336.6	2335.2	2299.7	2277.2	2232.6	2194.9	2151.6	2103.4	2059.5
12.5°	2492.0	2484.2	2479.6	2449.7	2443.2	2402.4	2350.5	2311.7	2244.9	2189.5	2130.9
15°	2715.7	2700.4	2690.6	2649.4	2629.2	2572.6	2517.4	2474.9	2387.6	2304.5	2241.7
17.5°	2846.9	2862.4	2839.7	2822.8	2770.5	2730.8	2674.4	2585.1	2516.8	2413.6	2334.3
20°	2941.9	2943.3	2930.7	2913.3	2872.1	2821.9	2760.4	2662.6	2581.0	2478.3	2369.4
22.5°	2967.6	2967.9	2962.5	2946.2	2915.1	2874.3	2812.4	2730.8	2631.8	2520.2	2411.4
25°	2883.3	2880.4	2886.8	2904.9	2893.1	2880.4	2844.9	2784.1	2692.0	2573.9	2456.7
27.5°	2569.9	2589.2	2624.6	2669.4	2712.4	2745.2	2754.4	2742.0	2684.8	2587.8	2465.0
30°	2344.3	2368.0	2394.6	2439.2	2525.8	2575.4	2629.9	2671.0	2648.0	2570.5	2456.0
32.5°	2096.4	2102.2	2141.6	2192.4	2271.7	2367.0	2453.4	2537.0	2564.8	2524.2	2428.6
35°	1704.9	1714.5	1757.2	1807.5	1904.5	2021.0	2150.9	2266.8	2362.5	2400.9	2352.0
37.5°	1391.2	1419.3	1449.4	1503.4	1588.8	1693.7	1828.7	1978.6	2121.2	2216.7	2232.9
40°	1242.6	1260.1	1281.7	1322.9	1395.5	1498.8	1614.8	1786.6	1938.0	2074.9	2119.5
42.5°	1125.4	1135.6	1148.8	1186.1	1241.4	1344.1	1450.0	1601.0	1753.1	1916.7	1991.7
45°	956.4	966.9	989.3	1010.9	1052.8	1124.0	1222.4	1346.7	1499.5	1657.4	1795.5
47.5°	834.4	841.1	854.3	877.6	913.1	960.1	1040.2	1144.0	1285.7	1438.9	1586.1
50°	765.2	770.7	781.2	802.1	829.4	871.2	936.9	1033.9	1144.9	1299.2	1443.7
52.5°	710.4	712.7	720.3	734.6	756.2	791.4	845.3	925.5	1028.7	1166.3	1310.2
55°	625.5	628.3	635.3	645.8	664.6	686.9	728.1	788.2	878.3	997.6	1122.6
57.5°	555.7	557.6	563.5	567.5	583.1	601.3	632.9	675.8	744.1	845.3	956.8
60°	511.0	509.7	516.6	520.1	530.6	545.9	570.4	611.6	670.9	752.6	855.2
62.5°	467.5	465.5	471.4	475.9	482.0	495.1	515.0	547.3	595.5	669.3	758.0
65°	402.1	399.3	402.8	408.4	413.9	421.0	435.7	464.2	502.6	555.7	623.4
67.5°	336.5	339.4	340.0	342.7	346.0	355.5	365.6	385.8	412.8	455.3	512.7
70°	297.4	298.1	300.9	300.9	303.0	311.3	319.7	331.6	358.1	397.3	444.0
72.5°	258.3	261.3	260.1	262.4	263.9	269.4	275.6	286.9	309.5	338.6	378.1
75°	201.1	203.2	203.2	203.9	205.9	208.0	212.9	221.3	237.3	259.0	286.2
77.5°	146.6	146.9	147.8	150.4	150.4	153.7	157.3	164.1	172.0	186.8	203.4
80°	113.1	114.5	113.8	115.2	115.2	118.0	119.4	127.7	131.3	141.0	154.3
82.5°	82.9	84.3	84.2	86.1	87.3	87.9	89.8	93.1	96.6	105.2	110.7
85°	41.9	43.3	41.9	43.3	45.3	46.0	48.2	48.9	51.7	53.7	58.7
87.5°	17.1	18.6	18.6	19.1	20.1	20.5	20.9	20.1	22.1	22.4	24.4
90°	23.7	23.3	23.0	22.6	22.3	21.6	20.5	19.5	18.4	17.4	16.0
92.5°	35.0	34.8	34.6	34.4	34.2	33.8	33.1	32.5	31.9	31.3	30.3
95°	62.4	62.4	62.4	62.4	62.4	62.1	61.6	61.1	60.5	60.0	58.8
97.5°	97.8	97.8	97.8	97.8	97.8	97.5	96.7	96.1	95.5	94.9	93.4
100°	122.4	122.4	122.4	122.4	122.4	122.2	121.9	121.5	121.2	120.8	119.2
102.5°	150.2	150.1	149.9	149.8	149.6	149.3	148.8	148.3	147.8	147.3	145.9
105°	192.7	192.1	191.6	191.1	190.6	190.0	189.5	188.9	188.4	187.9	187.2
107.5°	234.0	234.1	234.1	234.1	234.2	233.9	233.4	233.0	232.5	232.0	231.9
110°	263.7	263.2	262.7	262.2	261.6	261.5	261.9	262.2	262.6	262.9	263.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	294.0	293.9	293.8	293.7	293.6	293.6	293.7	293.7	293.8	293.9	294.2
115°	341.0	341.2	341.4	341.6	341.7	341.9	342.1	342.2	342.4	342.6	343.0
117.5°	385.9	386.3	386.6	387.0	387.3	387.8	388.4	389.0	389.6	390.2	390.4
120°	420.0	419.7	419.3	419.0	418.6	418.9	419.7	420.6	421.5	422.4	422.9
122.5°	448.5	449.1	449.7	450.3	451.0	451.6	452.2	452.7	453.3	453.9	454.2
125°	497.4	497.8	498.1	498.5	498.8	499.2	499.5	499.9	500.2	500.6	500.7
127.5°	542.7	543.0	543.3	543.5	543.8	544.1	544.5	544.8	545.2	545.5	545.8
130°	572.4	573.1	573.8	574.5	575.2	575.7	576.0	576.4	576.7	577.1	577.1
132.5°	604.0	604.2	604.5	604.8	605.1	605.4	605.7	606.1	606.4	606.8	606.9
135°	647.4	647.9	648.4	648.9	649.4	649.9	650.3	650.7	651.0	651.4	651.4
137.5°	693.1	692.9	692.8	692.7	692.6	692.8	693.3	693.7	694.2	694.6	694.3
140°	720.8	720.9	721.1	721.3	721.5	721.6	721.9	722.1	722.3	722.4	722.4
142.5°	748.6	748.6	748.7	748.7	748.7	748.8	748.8	748.8	748.9	748.9	749.0
145°	786.4	786.9	787.4	787.9	788.4	788.8	789.0	789.1	789.3	789.5	789.3
147.5°	824.6	824.8	824.9	825.1	825.3	825.4	825.6	825.7	825.9	826.0	826.1
150°	847.9	848.1	848.3	848.5	848.6	848.7	848.7	848.7	848.7	848.7	848.7
152.5°	869.4	869.9	870.3	870.8	871.2	871.2	870.8	870.4	870.0	869.6	869.4
155°	899.3	899.9	900.6	901.3	902.0	902.0	901.3	900.6	899.9	899.3	899.4
157.5°	925.9	926.6	927.2	927.8	928.3	928.4	927.9	927.3	926.8	926.2	926.2
160°	941.1	942.0	942.8	943.7	944.6	944.7	944.2	943.7	943.2	942.7	942.8
162.5°	956.8	957.8	958.7	959.5	960.4	960.4	959.4	958.5	957.6	956.5	956.7
165°	977.4	978.1	978.8	979.5	980.2	980.1	979.0	978.0	976.8	975.8	976.1
167.5°	992.1	993.2	994.2	995.3	996.4	996.4	995.4	994.3	993.3	992.2	992.2
170°	1000.3	1001.5	1002.8	1004.0	1005.2	1005.3	1004.2	1003.2	1002.1	1001.1	1000.9
172.5°	1007.2	1008.5	1009.7	1011.0	1012.2	1012.2	1011.0	1009.8	1008.6	1007.4	1007.3
175°	1014.5	1015.7	1016.9	1018.1	1019.5	1019.5	1018.1	1016.9	1015.7	1014.5	1014.7
177.5°	1018.2	1019.5	1020.6	1021.7	1022.8	1022.9	1021.9	1020.9	1019.9	1019.0	1019.0
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1739.5	1731.6	1726.1	1721.6	1709.3	1702.0	1696.5	1688.6	1679.7	1670.2	1658.5
5°	1838.2	1814.4	1797.0	1770.5	1745.3	1724.3	1702.7	1683.1	1659.4	1633.7	1614.8
7.5°	1941.9	1906.6	1861.4	1822.1	1778.0	1739.6	1705.3	1670.0	1633.5	1598.0	1565.5
10°	2007.8	1962.5	1912.2	1852.8	1797.0	1747.4	1701.3	1656.7	1613.4	1570.0	1533.1
12.5°	2078.7	2022.2	1947.9	1878.6	1815.9	1749.7	1694.0	1639.3	1587.1	1541.6	1498.4
15°	2173.9	2092.2	2006.4	1913.6	1831.2	1753.7	1677.6	1608.5	1549.8	1489.8	1447.9
17.5°	2232.5	2131.4	2033.3	1936.2	1836.4	1738.8	1656.7	1576.9	1503.5	1443.9	1391.1
20°	2271.0	2170.5	2048.3	1951.3	1832.6	1732.0	1637.1	1548.4	1471.7	1408.2	1353.6
22.5°	2304.5	2188.4	2066.2	1938.4	1820.3	1713.6	1609.7	1520.6	1442.1	1375.1	1322.9
25°	2322.7	2189.3	2056.7	1929.7	1795.5	1669.2	1575.0	1470.3	1386.4	1316.0	1260.1
27.5°	2324.6	2182.0	2031.9	1890.8	1752.4	1634.8	1515.8	1422.2	1335.2	1260.7	1207.1
30°	2318.4	2169.8	2008.5	1855.6	1716.7	1588.9	1485.6	1383.7	1295.1	1221.0	1165.2
32.5°	2299.0	2144.0	1978.3	1816.5	1672.5	1547.6	1441.0	1344.0	1257.6	1184.7	1126.1
35°	2242.4	2089.5	1912.9	1744.6	1597.3	1471.0	1374.6	1276.2	1189.6	1120.4	1064.0
37.5°	2154.0	2015.8	1836.2	1662.1	1517.4	1390.5	1295.1	1206.1	1128.0	1057.8	999.9
40°	2076.9	1955.4	1775.3	1605.7	1449.4	1328.6	1239.2	1157.5	1080.1	1013.7	958.6
42.5°	1988.1	1882.3	1716.2	1536.4	1385.6	1264.4	1177.2	1103.9	1030.9	969.6	914.4
45°	1829.8	1760.0	1603.6	1437.4	1280.4	1165.9	1082.8	1018.5	957.2	897.1	851.0
47.5°	1647.7	1613.1	1481.5	1323.6	1174.6	1061.7	989.7	930.3	876.5	825.6	785.0
50°	1525.4	1508.6	1394.8	1242.6	1100.2	994.1	921.5	870.6	824.5	779.8	741.4
52.5°	1404.7	1404.2	1301.6	1162.3	1030.5	928.3	856.2	808.6	768.6	732.4	697.8
55°	1220.3	1239.9	1159.6	1035.3	917.4	825.2	760.2	717.7	689.7	659.7	633.9
57.5°	1051.0	1083.4	1017.1	907.7	809.3	724.4	667.8	635.8	606.1	587.9	569.2
60°	940.4	971.1	919.5	827.3	734.5	661.9	608.0	579.5	553.6	541.1	527.8
62.5°	842.1	869.5	831.2	745.8	665.2	595.3	550.0	522.5	505.0	491.3	482.5
65°	701.7	724.7	691.9	629.8	560.6	504.7	467.8	446.1	429.4	423.7	413.9
67.5°	567.1	588.1	570.4	517.6	462.1	419.9	390.9	370.1	360.2	355.4	348.4
70°	487.3	508.3	489.4	443.3	400.7	365.2	337.9	326.0	315.6	313.5	303.7
72.5°	419.7	433.9	415.2	379.1	342.6	312.7	291.5	279.1	273.7	269.9	264.6
75°	314.9	327.4	314.9	286.9	261.1	240.1	222.0	217.1	210.9	208.7	205.2
77.5°	222.9	233.7	224.1	206.6	187.3	171.2	161.4	155.1	153.7	150.1	151.8
80°	170.4	177.3	168.2	156.4	141.0	129.9	122.9	119.4	115.2	113.8	116.5
82.5°	122.3	125.4	120.8	112.8	101.4	94.1	89.4	85.3	84.4	84.7	84.7
85°	63.5	62.8	62.1	55.1	51.7	46.8	44.0	43.3	42.6	44.0	45.3
87.5°	24.1	24.4	23.5	21.0	19.0	16.9	16.0	14.9	16.0	16.9	17.9
90°	14.5	13.1	11.7	10.1	8.2	6.3	4.3	2.3	4.3	6.3	8.2
92.5°	29.3	28.3	27.4	25.8	23.5	21.3	19.1	16.9	19.1	21.3	23.5
95°	57.6	56.4	55.1	53.7	52.1	50.5	49.0	47.4	49.0	50.5	52.1
97.5°	92.0	90.6	89.2	87.8	86.5	85.2	84.0	82.7	84.0	85.2	86.5
100°	117.6	116.0	114.5	113.3	112.6	111.9	111.2	110.6	111.2	111.9	112.6
102.5°	144.4	143.0	141.6	140.7	140.5	140.2	139.9	139.6	139.9	140.2	140.5
105°	186.5	185.8	185.1	184.7	184.5	184.3	184.1	184.0	184.1	184.3	184.5
107.5°	231.8	231.7	231.6	231.4	231.2	231.0	230.8	230.6	230.8	231.0	231.2
110°	263.3	263.5	263.6	263.5	263.2	262.8	262.5	262.2	262.5	262.8	263.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	294.5	294.8	295.1	295.3	295.2	295.1	295.0	295.0	295.0	295.1	295.2
115°	343.4	343.7	344.1	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3
117.5°	390.6	390.9	391.1	391.2	391.0	390.9	390.8	390.6	390.8	390.9	391.0
120°	423.4	423.9	424.4	424.4	423.7	423.0	422.3	421.6	422.3	423.0	423.7
122.5°	454.4	454.7	454.9	454.9	454.6	454.3	454.0	453.8	454.0	454.3	454.6
125°	500.9	501.1	501.2	501.3	501.3	501.3	501.3	501.3	501.3	501.3	501.3
127.5°	546.1	546.3	546.6	546.5	546.0	545.5	544.9	544.4	544.9	545.5	546.0
130°	577.1	577.1	577.1	576.8	576.3	575.8	575.3	574.7	575.3	575.8	576.3
132.5°	607.1	607.2	607.3	607.2	606.8	606.5	606.1	605.7	606.1	606.5	606.8
135°	651.4	651.4	651.4	650.9	649.7	648.7	647.6	646.6	647.6	648.7	649.7
137.5°	694.1	693.8	693.5	693.1	692.6	692.1	691.7	691.2	691.7	692.1	692.6
140°	722.4	722.4	722.4	722.3	721.9	721.5	721.1	720.8	721.1	721.5	721.9
142.5°	749.2	749.3	749.5	749.4	749.0	748.7	748.3	748.0	748.3	748.7	749.0
145°	789.1	789.0	788.8	788.4	787.7	787.0	786.3	785.6	786.3	787.0	787.7
147.5°	826.3	826.4	826.6	826.2	825.4	824.5	823.6	822.8	823.6	824.5	825.4
150°	848.7	848.7	848.7	848.4	847.7	847.0	846.3	845.6	846.3	847.0	847.7
152.5°	869.3	869.1	869.0	868.7	868.3	867.9	867.5	867.1	867.5	867.9	868.3
155°	899.6	899.8	899.9	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0
157.5°	926.3	926.3	926.3	926.6	926.9	927.2	927.5	927.9	927.5	927.2	926.9
160°	943.0	943.2	943.3	943.5	943.7	943.9	944.0	944.2	944.0	943.9	943.7
162.5°	956.9	957.0	957.3	957.6	958.1	958.5	959.0	959.4	959.0	958.5	958.1
165°	976.5	976.8	977.2	977.7	978.2	978.8	979.3	979.8	979.3	978.8	978.2
167.5°	992.2	992.1	992.1	992.5	993.2	993.9	994.6	995.4	994.6	993.9	993.2
170°	1000.8	1000.6	1000.4	1000.8	1001.6	1002.5	1003.4	1004.2	1003.4	1002.5	1001.6
172.5°	1007.3	1007.3	1007.2	1007.6	1008.4	1009.1	1009.9	1010.6	1009.9	1009.1	1008.4
175°	1014.8	1015.0	1015.2	1015.7	1016.6	1017.4	1018.3	1019.3	1018.3	1017.4	1016.6
177.5°	1019.0	1019.0	1019.0	1019.3	1020.0	1020.7	1021.4	1022.1	1021.4	1020.7	1020.0
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



TEST NUMBER: P332644-840

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1652.8	1647.9	1640.6	1630.5	1622.1	1613.3	1611.0	1607.6	1614.4	1608.7	1607.1
5°	1598.7	1584.1	1565.2	1543.6	1531.0	1512.9	1509.3	1502.4	1495.4	1494.7	1487.7
7.5°	1541.4	1519.8	1495.1	1473.1	1452.7	1432.8	1419.9	1417.0	1406.7	1400.7	1393.7
10°	1504.5	1477.9	1449.4	1428.4	1404.6	1383.7	1369.1	1360.7	1353.6	1345.9	1339.0
12.5°	1460.9	1432.7	1409.1	1386.4	1358.3	1342.3	1318.2	1303.6	1302.3	1302.4	1284.2
15°	1410.2	1382.3	1345.9	1313.8	1298.5	1267.8	1254.6	1237.8	1227.3	1216.8	1208.5
17.5°	1352.3	1317.5	1289.2	1252.3	1222.9	1198.5	1181.1	1171.0	1155.3	1140.4	1129.7
20°	1316.0	1279.0	1248.9	1209.8	1177.7	1147.7	1133.1	1119.1	1107.2	1094.7	1082.8
22.5°	1279.1	1240.4	1203.7	1165.7	1135.9	1104.2	1090.0	1071.1	1059.8	1052.8	1040.9
25°	1221.0	1179.1	1137.2	1101.0	1070.3	1042.3	1023.5	1008.8	996.2	990.7	983.0
27.5°	1157.9	1116.3	1075.8	1034.6	999.8	979.5	964.4	953.3	946.1	938.7	935.2
30°	1117.7	1074.4	1031.2	992.7	960.6	940.4	926.5	918.8	913.1	909.7	906.2
32.5°	1076.9	1034.2	988.7	953.6	924.8	906.9	896.3	888.6	885.8	884.5	883.2
35°	1011.6	968.3	926.5	895.0	867.8	860.8	851.7	847.5	846.2	851.0	853.1
37.5°	948.4	908.2	869.6	839.1	821.3	811.1	808.0	808.2	813.1	817.5	822.5
40°	907.6	868.5	832.1	805.7	788.9	782.6	781.2	784.7	790.3	795.2	800.7
42.5°	867.9	829.4	796.4	771.5	759.8	754.1	755.0	758.4	766.3	772.2	780.6
45°	806.4	774.3	742.1	721.9	712.1	713.5	713.5	719.7	727.4	736.5	745.6
47.5°	748.4	716.0	689.6	672.6	667.5	666.3	670.2	678.4	689.4	700.6	713.4
50°	709.3	678.5	655.5	640.2	634.6	636.7	642.3	649.9	663.2	677.2	690.4
52.5°	669.6	641.7	620.4	606.1	602.2	606.0	611.6	623.7	635.3	650.4	666.4
55°	608.0	584.3	567.5	557.1	555.7	557.8	564.1	577.3	594.1	613.0	628.3
57.5°	546.7	526.9	511.6	504.3	505.0	507.0	517.4	533.1	551.0	571.1	590.9
60°	505.4	487.3	474.7	469.2	469.8	474.0	486.6	501.3	523.6	543.1	564.1
62.5°	466.4	450.4	438.4	433.4	432.4	441.6	453.6	468.9	491.2	513.0	535.6
65°	403.5	390.9	381.2	378.4	380.5	387.5	402.8	423.0	441.9	464.9	488.7
67.5°	342.0	331.7	325.1	326.3	328.8	339.1	352.0	369.4	390.8	414.7	438.2
70°	303.0	293.2	287.6	288.3	292.6	305.1	316.3	333.7	356.8	381.2	400.7
72.5°	262.8	256.3	251.4	254.3	258.4	267.1	281.0	298.5	318.8	341.5	362.1
75°	201.8	201.8	198.9	201.1	207.3	215.7	226.2	244.4	264.6	282.8	299.5
77.5°	149.7	148.1	150.0	152.5	156.1	166.0	178.0	191.0	206.2	224.4	238.2
80°	114.5	115.2	118.7	122.9	124.3	132.0	144.5	156.4	168.2	183.6	196.8
82.5°	86.0	86.7	88.6	93.8	95.2	103.5	111.6	123.4	134.2	144.5	155.5
85°	46.8	46.8	50.3	52.3	55.8	61.4	66.3	73.3	83.1	90.1	100.5
87.5°	19.9	20.2	22.7	24.1	26.1	29.2	30.5	36.9	39.3	42.3	47.5
90°	10.1	11.7	13.1	14.5	16.0	17.4	18.4	19.5	20.5	21.6	22.3
92.5°	25.8	27.4	28.3	29.3	30.3	31.3	31.9	32.5	33.1	33.8	34.2
95°	53.7	55.1	56.4	57.6	58.8	60.0	60.5	61.1	61.6	62.1	62.4
97.5°	87.8	89.2	90.6	92.0	93.4	94.9	95.5	96.1	96.7	97.5	97.8
100°	113.3	114.5	116.0	117.6	119.2	120.8	121.2	121.5	121.9	122.2	122.4
102.5°	140.7	141.6	143.0	144.4	145.9	147.3	147.8	148.3	148.8	149.3	149.6
105°	184.7	185.1	185.8	186.5	187.2	187.9	188.4	188.9	189.5	190.0	190.6
107.5°	231.4	231.6	231.7	231.8	231.9	232.0	232.5	233.0	233.4	233.9	234.2
110°	263.5	263.6	263.5	263.3	263.1	262.9	262.6	262.2	261.9	261.5	261.6



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	295.3	295.1	294.8	294.5	294.2	293.9	293.8	293.7	293.7	293.6	293.6
115°	344.3	344.1	343.7	343.4	343.0	342.6	342.4	342.2	342.1	341.9	341.7
117.5°	391.2	391.1	390.9	390.6	390.4	390.2	389.6	389.0	388.4	387.8	387.3
120°	424.4	424.4	423.9	423.4	422.9	422.4	421.5	420.6	419.7	418.9	418.6
122.5°	454.9	454.9	454.7	454.4	454.2	453.9	453.3	452.7	452.2	451.6	451.0
125°	501.3	501.2	501.1	500.9	500.7	500.6	500.2	499.9	499.5	499.2	498.8
127.5°	546.5	546.6	546.3	546.1	545.8	545.5	545.2	544.8	544.5	544.1	543.8
130°	576.8	577.1	577.1	577.1	577.1	577.1	576.7	576.4	576.0	575.7	575.2
132.5°	607.2	607.3	607.2	607.1	606.9	606.8	606.4	606.1	605.7	605.4	605.1
135°	650.9	651.4	651.4	651.4	651.4	651.4	651.0	650.7	650.3	649.9	649.4
137.5°	693.1	693.5	693.8	694.1	694.3	694.6	694.2	693.7	693.3	692.8	692.6
140°	722.3	722.4	722.4	722.4	722.4	722.4	722.3	722.1	721.9	721.6	721.5
142.5°	749.4	749.5	749.3	749.2	749.0	748.9	748.9	748.8	748.8	748.8	748.7
145°	788.4	788.8	789.0	789.1	789.3	789.5	789.3	789.1	789.0	788.8	788.4
147.5°	826.2	826.6	826.4	826.3	826.1	826.0	825.9	825.7	825.6	825.4	825.3
150°	848.4	848.7	848.7	848.7	848.7	848.7	848.7	848.7	848.7	848.7	848.6
152.5°	868.7	869.0	869.1	869.3	869.4	869.6	870.0	870.4	870.8	871.2	871.2
155°	900.0	899.9	899.8	899.6	899.4	899.3	899.9	900.6	901.3	902.0	902.0
157.5°	926.6	926.3	926.3	926.3	926.2	926.2	926.8	927.3	927.9	928.4	928.3
160°	943.5	943.3	943.2	943.0	942.8	942.7	943.2	943.7	944.2	944.7	944.6
162.5°	957.6	957.3	957.0	956.9	956.7	956.5	957.6	958.5	959.4	960.4	960.4
165°	977.7	977.2	976.8	976.5	976.1	975.8	976.8	978.0	979.0	980.1	980.2
167.5°	992.5	992.1	992.1	992.2	992.2	992.2	993.3	994.3	995.4	996.4	996.4
170°	1000.8	1000.4	1000.6	1000.8	1000.9	1001.1	1002.1	1003.2	1004.2	1005.3	1005.2
172.5°	1007.6	1007.2	1007.3	1007.3	1007.3	1007.4	1008.6	1009.8	1011.0	1012.2	1012.2
175°	1015.7	1015.2	1015.0	1014.8	1014.7	1014.5	1015.7	1016.9	1018.1	1019.5	1019.5
177.5°	1019.3	1019.0	1019.0	1019.0	1019.0	1019.0	1019.9	1020.9	1021.9	1022.9	1022.8
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



TEST NUMBER: P332644-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1606.0	1604.9	1600.9	1600.4	1600.9	1604.9	1606.0	1607.1	1608.7	1614.4	1607.6
5°	1483.5	1480.1	1477.9	1485.6	1477.9	1480.1	1483.5	1487.7	1494.7	1495.4	1502.4
7.5°	1391.2	1388.5	1382.3	1380.4	1382.3	1388.5	1391.2	1393.7	1400.7	1406.7	1417.0
10°	1332.0	1329.2	1323.6	1322.2	1323.6	1329.2	1332.0	1339.0	1345.9	1353.6	1360.7
12.5°	1275.1	1269.5	1268.4	1269.7	1268.4	1269.5	1275.1	1284.2	1302.4	1302.3	1303.6
15°	1199.4	1196.6	1188.9	1191.0	1188.9	1196.6	1199.4	1208.5	1216.8	1227.3	1237.8
17.5°	1124.8	1121.5	1112.2	1120.3	1112.2	1121.5	1124.8	1129.7	1140.4	1155.3	1171.0
20°	1077.9	1072.3	1067.4	1066.7	1067.4	1072.3	1077.9	1082.8	1094.7	1107.2	1119.1
22.5°	1033.2	1028.2	1027.7	1023.2	1027.7	1028.2	1033.2	1040.9	1052.8	1059.8	1071.1
25°	977.3	972.5	971.1	967.7	971.1	972.5	977.3	983.0	990.7	996.2	1008.8
27.5°	934.5	932.1	929.6	930.7	929.6	932.1	934.5	935.2	938.7	946.1	953.3
30°	908.3	907.6	906.2	906.2	906.2	907.6	908.3	906.2	909.7	913.1	918.8
32.5°	886.5	886.4	887.2	887.2	887.2	886.4	886.5	883.2	884.5	885.8	888.6
35°	855.9	858.0	859.4	857.3	859.4	858.0	855.9	853.1	851.0	846.2	847.5
37.5°	828.3	830.3	832.3	834.7	832.3	830.3	828.3	822.5	817.5	813.1	808.2
40°	807.0	811.9	813.3	816.8	813.3	811.9	807.0	800.7	795.2	790.3	784.7
42.5°	786.9	792.3	796.0	796.7	796.0	792.3	786.9	780.6	772.2	766.3	758.4
45°	756.1	761.6	766.6	766.6	766.6	761.6	756.1	745.6	736.5	727.4	719.7
47.5°	724.1	732.2	737.1	738.3	737.1	732.2	724.1	713.4	700.6	689.4	678.4
50°	702.4	712.1	717.0	720.4	717.0	712.1	702.4	690.4	677.2	663.2	649.9
52.5°	681.1	690.8	697.4	699.2	697.4	690.8	681.1	666.4	650.4	635.3	623.7
55°	644.4	658.3	666.0	668.8	666.0	658.3	644.4	628.3	613.0	594.1	577.3
57.5°	609.8	622.6	631.6	633.6	631.6	622.6	609.8	590.9	571.1	551.0	533.1
60°	582.9	596.9	608.0	610.2	608.0	596.9	582.9	564.1	543.1	523.6	501.3
62.5°	555.5	570.1	580.2	585.6	580.2	570.1	555.5	535.6	513.0	491.2	468.9
65°	508.3	522.9	532.7	534.7	532.7	522.9	508.3	488.7	464.9	441.9	423.0
67.5°	456.6	471.2	477.7	481.7	477.7	471.2	456.6	438.2	414.7	390.8	369.4
70°	420.3	432.1	439.1	442.6	439.1	432.1	420.3	400.7	381.2	356.8	333.7
72.5°	378.9	391.3	399.5	400.2	399.5	391.3	378.9	362.1	341.5	318.8	298.5
75°	315.6	326.7	330.9	330.9	330.9	326.7	315.6	299.5	282.8	264.6	244.4
77.5°	249.7	255.5	260.8	262.0	260.8	255.5	249.7	238.2	224.4	206.2	191.0
80°	207.3	210.9	215.0	215.0	215.0	210.9	207.3	196.8	183.6	168.2	156.4
82.5°	163.8	166.7	170.9	170.4	170.9	166.7	163.8	155.5	144.5	134.2	123.4
85°	99.2	105.4	104.7	103.3	104.7	105.4	99.2	100.5	90.1	83.1	73.3
87.5°	49.2	49.8	51.6	52.8	51.6	49.8	49.2	47.5	42.3	39.3	36.9
90°	22.6	23.0	23.3	23.7	23.3	23.0	22.6	22.3	21.6	20.5	19.5
92.5°	34.4	34.6	34.8	35.0	34.8	34.6	34.4	34.2	33.8	33.1	32.5
95°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.1	61.6	61.1
97.5°	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.5	96.7	96.1
100°	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.2	121.9	121.5
102.5°	149.8	149.9	150.1	150.2	150.1	149.9	149.8	149.6	149.3	148.8	148.3
105°	191.1	191.6	192.1	192.7	192.1	191.6	191.1	190.6	190.0	189.5	188.9
107.5°	234.1	234.1	234.1	234.0	234.1	234.1	234.1	234.2	233.9	233.4	233.0
110°	262.2	262.7	263.2	263.7	263.2	262.7	262.2	261.6	261.5	261.9	262.2



TEST NUMBER: P332644-840

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	293.7	293.8	293.9	294.0	293.9	293.8	293.7	293.6	293.6	293.7	293.7
115°	341.6	341.4	341.2	341.0	341.2	341.4	341.6	341.7	341.9	342.1	342.2
117.5°	387.0	386.6	386.3	385.9	386.3	386.6	387.0	387.3	387.8	388.4	389.0
120°	419.0	419.3	419.7	420.0	419.7	419.3	419.0	418.6	418.9	419.7	420.6
122.5°	450.3	449.7	449.1	448.5	449.1	449.7	450.3	451.0	451.6	452.2	452.7
125°	498.5	498.1	497.8	497.4	497.8	498.1	498.5	498.8	499.2	499.5	499.9
127.5°	543.5	543.3	543.0	542.7	543.0	543.3	543.5	543.8	544.1	544.5	544.8
130°	574.5	573.8	573.1	572.4	573.1	573.8	574.5	575.2	575.7	576.0	576.4
132.5°	604.8	604.5	604.2	604.0	604.2	604.5	604.8	605.1	605.4	605.7	606.1
135°	648.9	648.4	647.9	647.4	647.9	648.4	648.9	649.4	649.9	650.3	650.7
137.5°	692.7	692.8	692.9	693.1	692.9	692.8	692.7	692.6	692.8	693.3	693.7
140°	721.3	721.1	720.9	720.8	720.9	721.1	721.3	721.5	721.6	721.9	722.1
142.5°	748.7	748.7	748.6	748.6	748.6	748.7	748.7	748.7	748.8	748.8	748.8
145°	787.9	787.4	786.9	786.4	786.9	787.4	787.9	788.4	788.8	789.0	789.1
147.5°	825.1	824.9	824.8	824.6	824.8	824.9	825.1	825.3	825.4	825.6	825.7
150°	848.5	848.3	848.1	847.9	848.1	848.3	848.5	848.6	848.7	848.7	848.7
152.5°	870.8	870.3	869.9	869.4	869.9	870.3	870.8	871.2	871.2	870.8	870.4
155°	901.3	900.6	899.9	899.3	899.9	900.6	901.3	902.0	902.0	901.3	900.6
157.5°	927.8	927.2	926.6	925.9	926.6	927.2	927.8	928.3	928.4	927.9	927.3
160°	943.7	942.8	942.0	941.1	942.0	942.8	943.7	944.6	944.7	944.2	943.7
162.5°	959.5	958.7	957.8	956.8	957.8	958.7	959.5	960.4	960.4	959.4	958.5
165°	979.5	978.8	978.1	977.4	978.1	978.8	979.5	980.2	980.1	979.0	978.0
167.5°	995.3	994.2	993.2	992.1	993.2	994.2	995.3	996.4	996.4	995.4	994.3
170°	1004.0	1002.8	1001.5	1000.3	1001.5	1002.8	1004.0	1005.2	1005.3	1004.2	1003.2
172.5°	1011.0	1009.7	1008.5	1007.2	1008.5	1009.7	1011.0	1012.2	1012.2	1011.0	1009.8
175°	1018.1	1016.9	1015.7	1014.5	1015.7	1016.9	1018.1	1019.5	1019.5	1018.1	1016.9
177.5°	1021.7	1020.6	1019.5	1018.2	1019.5	1020.6	1021.7	1022.8	1022.9	1021.9	1020.9
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



TEST NUMBER: P332644-840
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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1611.0	1613.3	1622.1	1630.5	1640.6	1647.9	1652.8	1658.5	1670.2	1679.7	1688.6
5°	1509.3	1512.9	1531.0	1543.6	1565.2	1584.1	1598.7	1614.8	1633.7	1659.4	1683.1
7.5°	1419.9	1432.8	1452.7	1473.1	1495.1	1519.8	1541.4	1565.5	1598.0	1633.5	1670.0
10°	1369.1	1383.7	1404.6	1428.4	1449.4	1477.9	1504.5	1533.1	1570.0	1613.4	1656.7
12.5°	1318.2	1342.3	1358.3	1386.4	1409.1	1432.7	1460.9	1498.4	1541.6	1587.1	1639.3
15°	1254.6	1267.8	1298.5	1313.8	1345.9	1382.3	1410.2	1447.9	1489.8	1549.8	1608.5
17.5°	1181.1	1198.5	1222.9	1252.3	1289.2	1317.5	1352.3	1391.1	1443.9	1503.5	1576.9
20°	1133.1	1147.7	1177.7	1209.8	1248.9	1279.0	1316.0	1353.6	1408.2	1471.7	1548.4
22.5°	1090.0	1104.2	1135.9	1165.7	1203.7	1240.4	1279.1	1322.9	1375.1	1442.1	1520.6
25°	1023.5	1042.3	1070.3	1101.0	1137.2	1179.1	1221.0	1260.1	1316.0	1386.4	1470.3
27.5°	964.4	979.5	999.8	1034.6	1075.8	1116.3	1157.9	1207.1	1260.7	1335.2	1422.2
30°	926.5	940.4	960.6	992.7	1031.2	1074.4	1117.7	1165.2	1221.0	1295.1	1383.7
32.5°	896.3	906.9	924.8	953.6	988.7	1034.2	1076.9	1126.1	1184.7	1257.6	1344.0
35°	851.7	860.8	867.8	895.0	926.5	968.3	1011.6	1064.0	1120.4	1189.6	1276.2
37.5°	808.0	811.1	821.3	839.1	869.6	908.2	948.4	999.9	1057.8	1128.0	1206.1
40°	781.2	782.6	788.9	805.7	832.1	868.5	907.6	958.6	1013.7	1080.1	1157.5
42.5°	755.0	754.1	759.8	771.5	796.4	829.4	867.9	914.4	969.6	1030.9	1103.9
45°	713.5	713.5	712.1	721.9	742.1	774.3	806.4	851.0	897.1	957.2	1018.5
47.5°	670.2	666.3	667.5	672.6	689.6	716.0	748.4	785.0	825.6	876.5	930.3
50°	642.3	636.7	634.6	640.2	655.5	678.5	709.3	741.4	779.8	824.5	870.6
52.5°	611.6	606.0	602.2	606.1	620.4	641.7	669.6	697.8	732.4	768.6	808.6
55°	564.1	557.8	555.7	557.1	567.5	584.3	608.0	633.9	659.7	689.7	717.7
57.5°	517.4	507.0	505.0	504.3	511.6	526.9	546.7	569.2	587.9	606.1	635.8
60°	486.6	474.0	469.8	469.2	474.7	487.3	505.4	527.8	541.1	553.6	579.5
62.5°	453.6	441.6	432.4	433.4	438.4	450.4	466.4	482.5	491.3	505.0	522.5
65°	402.8	387.5	380.5	378.4	381.2	390.9	403.5	413.9	423.7	429.4	446.1
67.5°	352.0	339.1	328.8	326.3	325.1	331.7	342.0	348.4	355.4	360.2	370.1
70°	316.3	305.1	292.6	288.3	287.6	293.2	303.0	303.7	313.5	315.6	326.0
72.5°	281.0	267.1	258.4	254.3	251.4	256.3	262.8	264.6	269.9	273.7	279.1
75°	226.2	215.7	207.3	201.1	198.9	201.8	201.8	205.2	208.7	210.9	217.1
77.5°	178.0	166.0	156.1	152.5	150.0	148.1	149.7	151.8	150.1	153.7	155.1
80°	144.5	132.0	124.3	122.9	118.7	115.2	114.5	116.5	113.8	115.2	119.4
82.5°	111.6	103.5	95.2	93.8	88.6	86.7	86.0	84.7	84.7	84.4	85.3
85°	66.3	61.4	55.8	52.3	50.3	46.8	46.8	45.3	44.0	42.6	43.3
87.5°	30.5	29.2	26.1	24.1	22.7	20.2	19.9	17.9	16.9	16.0	14.9
90°	18.4	17.4	16.0	14.5	13.1	11.7	10.1	8.2	6.3	4.3	2.3
92.5°	31.9	31.3	30.3	29.3	28.3	27.4	25.8	23.5	21.3	19.1	16.9
95°	60.5	60.0	58.8	57.6	56.4	55.1	53.7	52.1	50.5	49.0	47.4
97.5°	95.5	94.9	93.4	92.0	90.6	89.2	87.8	86.5	85.2	84.0	82.7
100°	121.2	120.8	119.2	117.6	116.0	114.5	113.3	112.6	111.9	111.2	110.6
102.5°	147.8	147.3	145.9	144.4	143.0	141.6	140.7	140.5	140.2	139.9	139.6
105°	188.4	187.9	187.2	186.5	185.8	185.1	184.7	184.5	184.3	184.1	184.0
107.5°	232.5	232.0	231.9	231.8	231.7	231.6	231.4	231.2	231.0	230.8	230.6
110°	262.6	262.9	263.1	263.3	263.5	263.6	263.5	263.2	262.8	262.5	262.2



TEST NUMBER: P332644-840

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	293.8	293.9	294.2	294.5	294.8	295.1	295.3	295.2	295.1	295.0	295.0
115°	342.4	342.6	343.0	343.4	343.7	344.1	344.3	344.3	344.3	344.3	344.3
117.5°	389.6	390.2	390.4	390.6	390.9	391.1	391.2	391.0	390.9	390.8	390.6
120°	421.5	422.4	422.9	423.4	423.9	424.4	424.4	423.7	423.0	422.3	421.6
122.5°	453.3	453.9	454.2	454.4	454.7	454.9	454.9	454.6	454.3	454.0	453.8
125°	500.2	500.6	500.7	500.9	501.1	501.2	501.3	501.3	501.3	501.3	501.3
127.5°	545.2	545.5	545.8	546.1	546.3	546.6	546.5	546.0	545.5	544.9	544.4
130°	576.7	577.1	577.1	577.1	577.1	577.1	576.8	576.3	575.8	575.3	574.7
132.5°	606.4	606.8	606.9	607.1	607.2	607.3	607.2	606.8	606.5	606.1	605.7
135°	651.0	651.4	651.4	651.4	651.4	651.4	650.9	649.7	648.7	647.6	646.6
137.5°	694.2	694.6	694.3	694.1	693.8	693.5	693.1	692.6	692.1	691.7	691.2
140°	722.3	722.4	722.4	722.4	722.4	722.4	722.3	721.9	721.5	721.1	720.8
142.5°	748.9	748.9	749.0	749.2	749.3	749.5	749.4	749.0	748.7	748.3	748.0
145°	789.3	789.5	789.3	789.1	789.0	788.8	788.4	787.7	787.0	786.3	785.6
147.5°	825.9	826.0	826.1	826.3	826.4	826.6	826.2	825.4	824.5	823.6	822.8
150°	848.7	848.7	848.7	848.7	848.7	848.7	848.4	847.7	847.0	846.3	845.6
152.5°	870.0	869.6	869.4	869.3	869.1	869.0	868.7	868.3	867.9	867.5	867.1
155°	899.9	899.3	899.4	899.6	899.8	899.9	900.0	900.0	900.0	900.0	900.0
157.5°	926.8	926.2	926.2	926.3	926.3	926.3	926.6	926.9	927.2	927.5	927.9
160°	943.2	942.7	942.8	943.0	943.2	943.3	943.5	943.7	943.9	944.0	944.2
162.5°	957.6	956.5	956.7	956.9	957.0	957.3	957.6	958.1	958.5	959.0	959.4
165°	976.8	975.8	976.1	976.5	976.8	977.2	977.7	978.2	978.8	979.3	979.8
167.5°	993.3	992.2	992.2	992.2	992.1	992.1	992.5	993.2	993.9	994.6	995.4
170°	1002.1	1001.1	1000.9	1000.8	1000.6	1000.4	1000.8	1001.6	1002.5	1003.4	1004.2
172.5°	1008.6	1007.4	1007.3	1007.3	1007.3	1007.2	1007.6	1008.4	1009.1	1009.9	1010.6
175°	1015.7	1014.5	1014.7	1014.8	1015.0	1015.2	1015.7	1016.6	1017.4	1018.3	1019.3
177.5°	1019.9	1019.0	1019.0	1019.0	1019.0	1019.0	1019.3	1020.0	1020.7	1021.4	1022.1
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



TEST NUMBER: P332644-840
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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1696.5	1702.0	1709.3	1721.6	1726.1	1731.6	1739.5	1738.9	1741.1	1749.5	1767.4
5°	1702.7	1724.3	1745.3	1770.5	1797.0	1814.4	1838.2	1852.8	1867.4	1886.3	1918.4
7.5°	1705.3	1739.6	1778.0	1822.1	1861.4	1906.6	1941.9	1975.1	2005.2	2045.0	2083.3
10°	1701.3	1747.4	1797.0	1852.8	1912.2	1962.5	2007.8	2059.5	2103.4	2151.6	2194.9
12.5°	1694.0	1749.7	1815.9	1878.6	1947.9	2022.2	2078.7	2130.9	2189.5	2244.9	2311.7
15°	1677.6	1753.7	1831.2	1913.6	2006.4	2092.2	2173.9	2241.7	2304.5	2387.6	2474.9
17.5°	1656.7	1738.8	1836.4	1936.2	2033.3	2131.4	2232.5	2334.3	2413.6	2516.8	2585.1
20°	1637.1	1732.0	1832.6	1951.3	2048.3	2170.5	2271.0	2369.4	2478.3	2581.0	2662.6
22.5°	1609.7	1713.6	1820.3	1938.4	2066.2	2188.4	2304.5	2411.4	2520.2	2631.8	2730.8
25°	1575.0	1669.2	1795.5	1929.7	2056.7	2189.3	2322.7	2456.7	2573.9	2692.0	2784.1
27.5°	1515.8	1634.8	1752.4	1890.8	2031.9	2182.0	2324.6	2465.0	2587.8	2684.8	2742.0
30°	1485.6	1588.9	1716.7	1855.6	2008.5	2169.8	2318.4	2456.0	2570.5	2648.0	2671.0
32.5°	1441.0	1547.6	1672.5	1816.5	1978.3	2144.0	2299.0	2428.6	2524.2	2564.8	2537.0
35°	1374.6	1471.0	1597.3	1744.6	1912.9	2089.5	2242.4	2352.0	2400.9	2362.5	2266.8
37.5°	1295.1	1390.5	1517.4	1662.1	1836.2	2015.8	2154.0	2232.9	2216.7	2121.2	1978.6
40°	1239.2	1328.6	1449.4	1605.7	1775.3	1955.4	2076.9	2119.5	2074.9	1938.0	1786.6
42.5°	1177.2	1264.4	1385.6	1536.4	1716.2	1882.3	1988.1	1991.7	1916.7	1753.1	1601.0
45°	1082.8	1165.9	1280.4	1437.4	1603.6	1760.0	1829.8	1795.5	1657.4	1499.5	1346.7
47.5°	989.7	1061.7	1174.6	1323.6	1481.5	1613.1	1647.7	1586.1	1438.9	1285.7	1144.0
50°	921.5	994.1	1100.2	1242.6	1394.8	1508.6	1525.4	1443.7	1299.2	1144.9	1033.9
52.5°	856.2	928.3	1030.5	1162.3	1301.6	1404.2	1404.7	1310.2	1166.3	1028.7	925.5
55°	760.2	825.2	917.4	1035.3	1159.6	1239.9	1220.3	1122.6	997.6	878.3	788.2
57.5°	667.8	724.4	809.3	907.7	1017.1	1083.4	1051.0	956.8	845.3	744.1	675.8
60°	608.0	661.9	734.5	827.3	919.5	971.1	940.4	855.2	752.6	670.9	611.6
62.5°	550.0	595.3	665.2	745.8	831.2	869.5	842.1	758.0	669.3	595.5	547.3
65°	467.8	504.7	560.6	629.8	691.9	724.7	701.7	623.4	555.7	502.6	464.2
67.5°	390.9	419.9	462.1	517.6	570.4	588.1	567.1	512.7	455.3	412.8	385.8
70°	337.9	365.2	400.7	443.3	489.4	508.3	487.3	444.0	397.3	358.1	331.6
72.5°	291.5	312.7	342.6	379.1	415.2	433.9	419.7	378.1	338.6	309.5	286.9
75°	222.0	240.1	261.1	286.9	314.9	327.4	314.9	286.2	259.0	237.3	221.3
77.5°	161.4	171.2	187.3	206.6	224.1	233.7	222.9	203.4	186.8	172.0	164.1
80°	122.9	129.9	141.0	156.4	168.2	177.3	170.4	154.3	141.0	131.3	127.7
82.5°	89.4	94.1	101.4	112.8	120.8	125.4	122.3	110.7	105.2	96.6	93.1
85°	44.0	46.8	51.7	55.1	62.1	62.8	63.5	58.7	53.7	51.7	48.9
87.5°	16.0	16.9	19.0	21.0	23.5	24.4	24.1	24.4	22.4	22.1	20.1
90°	4.3	6.3	8.2	10.1	11.7	13.1	14.5	16.0	17.4	18.4	19.5
92.5°	19.1	21.3	23.5	25.8	27.4	28.3	29.3	30.3	31.3	31.9	32.5
95°	49.0	50.5	52.1	53.7	55.1	56.4	57.6	58.8	60.0	60.5	61.1
97.5°	84.0	85.2	86.5	87.8	89.2	90.6	92.0	93.4	94.9	95.5	96.1
100°	111.2	111.9	112.6	113.3	114.5	116.0	117.6	119.2	120.8	121.2	121.5
102.5°	139.9	140.2	140.5	140.7	141.6	143.0	144.4	145.9	147.3	147.8	148.3
105°	184.1	184.3	184.5	184.7	185.1	185.8	186.5	187.2	187.9	188.4	188.9
107.5°	230.8	231.0	231.2	231.4	231.6	231.7	231.8	231.9	232.0	232.5	233.0
110°	262.5	262.8	263.2	263.5	263.6	263.5	263.3	263.1	262.9	262.6	262.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	295.0	295.1	295.2	295.3	295.1	294.8	294.5	294.2	293.9	293.8	293.7
115°	344.3	344.3	344.3	344.3	344.1	343.7	343.4	343.0	342.6	342.4	342.2
117.5°	390.8	390.9	391.0	391.2	391.1	390.9	390.6	390.4	390.2	389.6	389.0
120°	422.3	423.0	423.7	424.4	424.4	423.9	423.4	422.9	422.4	421.5	420.6
122.5°	454.0	454.3	454.6	454.9	454.9	454.7	454.4	454.2	453.9	453.3	452.7
125°	501.3	501.3	501.3	501.3	501.2	501.1	500.9	500.7	500.6	500.2	499.9
127.5°	544.9	545.5	546.0	546.5	546.6	546.3	546.1	545.8	545.5	545.2	544.8
130°	575.3	575.8	576.3	576.8	577.1	577.1	577.1	577.1	577.1	576.7	576.4
132.5°	606.1	606.5	606.8	607.2	607.3	607.2	607.1	606.9	606.8	606.4	606.1
135°	647.6	648.7	649.7	650.9	651.4	651.4	651.4	651.4	651.4	651.0	650.7
137.5°	691.7	692.1	692.6	693.1	693.5	693.8	694.1	694.3	694.6	694.2	693.7
140°	721.1	721.5	721.9	722.3	722.4	722.4	722.4	722.4	722.4	722.3	722.1
142.5°	748.3	748.7	749.0	749.4	749.5	749.3	749.2	749.0	748.9	748.9	748.8
145°	786.3	787.0	787.7	788.4	788.8	789.0	789.1	789.3	789.5	789.3	789.1
147.5°	823.6	824.5	825.4	826.2	826.6	826.4	826.3	826.1	826.0	825.9	825.7
150°	846.3	847.0	847.7	848.4	848.7	848.7	848.7	848.7	848.7	848.7	848.7
152.5°	867.5	867.9	868.3	868.7	869.0	869.1	869.3	869.4	869.6	870.0	870.4
155°	900.0	900.0	900.0	900.0	899.9	899.8	899.6	899.4	899.3	899.9	900.6
157.5°	927.5	927.2	926.9	926.6	926.3	926.3	926.3	926.2	926.2	926.8	927.3
160°	944.0	943.9	943.7	943.5	943.3	943.2	943.0	942.8	942.7	943.2	943.7
162.5°	959.0	958.5	958.1	957.6	957.3	957.0	956.9	956.7	956.5	957.6	958.5
165°	979.3	978.8	978.2	977.7	977.2	976.8	976.5	976.1	975.8	976.8	978.0
167.5°	994.6	993.9	993.2	992.5	992.1	992.1	992.2	992.2	992.2	993.3	994.3
170°	1003.4	1002.5	1001.6	1000.8	1000.4	1000.6	1000.8	1000.9	1001.1	1002.1	1003.2
172.5°	1009.9	1009.1	1008.4	1007.6	1007.2	1007.3	1007.3	1007.3	1007.4	1008.6	1009.8
175°	1018.3	1017.4	1016.6	1015.7	1015.2	1015.0	1014.8	1014.7	1014.5	1015.7	1016.9
177.5°	1021.4	1020.7	1020.0	1019.3	1019.0	1019.0	1019.0	1019.0	1019.0	1019.9	1020.9
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3	1685.3
2.5°	1776.4	1777.5	1782.4	1786.4	1787.5	1793.1	1793.6
5°	1932.4	1944.3	1967.3	1969.4	1972.9	1991.0	1977.1
7.5°	2115.4	2145.5	2165.6	2183.3	2189.8	2197.7	2196.1
10°	2232.6	2277.2	2299.7	2335.2	2336.6	2345.7	2340.2
12.5°	2350.5	2402.4	2443.2	2449.7	2479.6	2484.2	2492.0
15°	2517.4	2572.6	2629.2	2649.4	2690.6	2700.4	2715.7
17.5°	2674.4	2730.8	2770.5	2822.8	2839.7	2862.4	2846.9
20°	2760.4	2821.9	2872.1	2913.3	2930.7	2943.3	2941.9
22.5°	2812.4	2874.3	2915.1	2946.2	2962.5	2967.9	2967.6
25°	2844.9	2880.4	2893.1	2904.9	2886.8	2880.4	2883.3
27.5°	2754.4	2745.2	2712.4	2669.4	2624.6	2589.2	2569.9
30°	2629.9	2575.4	2525.8	2439.2	2394.6	2368.0	2344.3
32.5°	2453.4	2367.0	2271.7	2192.4	2141.6	2102.2	2096.4
35°	2150.9	2021.0	1904.5	1807.5	1757.2	1714.5	1704.9
37.5°	1828.7	1693.7	1588.8	1503.4	1449.4	1419.3	1391.2
40°	1614.8	1498.8	1395.5	1322.9	1281.7	1260.1	1242.6
42.5°	1450.0	1344.1	1241.4	1186.1	1148.8	1135.6	1125.4
45°	1222.4	1124.0	1052.8	1010.9	989.3	966.9	956.4
47.5°	1040.2	960.1	913.1	877.6	854.3	841.1	834.4
50°	936.9	871.2	829.4	802.1	781.2	770.7	765.2
52.5°	845.3	791.4	756.2	734.6	720.3	712.7	710.4
55°	728.1	686.9	664.6	645.8	635.3	628.3	625.5
57.5°	632.9	601.3	583.1	567.5	563.5	557.6	555.7
60°	570.4	545.9	530.6	520.1	516.6	509.7	511.0
62.5°	515.0	495.1	482.0	475.9	471.4	465.5	467.5
65°	435.7	421.0	413.9	408.4	402.8	399.3	402.1
67.5°	365.6	355.5	346.0	342.7	340.0	339.4	336.5
70°	319.7	311.3	303.0	300.9	300.9	298.1	297.4
72.5°	275.6	269.4	263.9	262.4	260.1	261.3	258.3
75°	212.9	208.0	205.9	203.9	203.2	203.2	201.1
77.5°	157.3	153.7	150.4	150.4	147.8	146.9	146.6
80°	119.4	118.0	115.2	115.2	113.8	114.5	113.1
82.5°	89.8	87.9	87.3	86.1	84.2	84.3	82.9
85°	48.2	46.0	45.3	43.3	41.9	43.3	41.9
87.5°	20.9	20.5	20.1	19.1	18.6	18.6	17.1
90°	20.5	21.6	22.3	22.6	23.0	23.3	23.7
92.5°	33.1	33.8	34.2	34.4	34.6	34.8	35.0
95°	61.6	62.1	62.4	62.4	62.4	62.4	62.4
97.5°	96.7	97.5	97.8	97.8	97.8	97.8	97.8
100°	121.9	122.2	122.4	122.4	122.4	122.4	122.4
102.5°	148.8	149.3	149.6	149.8	149.9	150.1	150.2
105°	189.5	190.0	190.6	191.1	191.6	192.1	192.7
107.5°	233.4	233.9	234.2	234.1	234.1	234.1	234.0
110°	261.9	261.5	261.6	262.2	262.7	263.2	263.7



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	293.7	293.6	293.6	293.7	293.8	293.9	294.0
115°	342.1	341.9	341.7	341.6	341.4	341.2	341.0
117.5°	388.4	387.8	387.3	387.0	386.6	386.3	385.9
120°	419.7	418.9	418.6	419.0	419.3	419.7	420.0
122.5°	452.2	451.6	451.0	450.3	449.7	449.1	448.5
125°	499.5	499.2	498.8	498.5	498.1	497.8	497.4
127.5°	544.5	544.1	543.8	543.5	543.3	543.0	542.7
130°	576.0	575.7	575.2	574.5	573.8	573.1	572.4
132.5°	605.7	605.4	605.1	604.8	604.5	604.2	604.0
135°	650.3	649.9	649.4	648.9	648.4	647.9	647.4
137.5°	693.3	692.8	692.6	692.7	692.8	692.9	693.1
140°	721.9	721.6	721.5	721.3	721.1	720.9	720.8
142.5°	748.8	748.8	748.7	748.7	748.7	748.6	748.6
145°	789.0	788.8	788.4	787.9	787.4	786.9	786.4
147.5°	825.6	825.4	825.3	825.1	824.9	824.8	824.6
150°	848.7	848.7	848.6	848.5	848.3	848.1	847.9
152.5°	870.8	871.2	871.2	870.8	870.3	869.9	869.4
155°	901.3	902.0	902.0	901.3	900.6	899.9	899.3
157.5°	927.9	928.4	928.3	927.8	927.2	926.6	925.9
160°	944.2	944.7	944.6	943.7	942.8	942.0	941.1
162.5°	959.4	960.4	960.4	959.5	958.7	957.8	956.8
165°	979.0	980.1	980.2	979.5	978.8	978.1	977.4
167.5°	995.4	996.4	996.4	995.3	994.2	993.2	992.1
170°	1004.2	1005.3	1005.2	1004.0	1002.8	1001.5	1000.3
172.5°	1011.0	1012.2	1012.2	1011.0	1009.7	1008.5	1007.2
175°	1018.1	1019.5	1019.5	1018.1	1016.9	1015.7	1014.5
177.5°	1021.9	1022.9	1022.8	1021.7	1020.6	1019.5	1018.2
180°	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8	1020.8

(END OF REPORT)