

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: P332478-930

Luminaire Tested: **S123RDIW-S1165D1030U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332478-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDIW-S1165D1030U930-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING
UPLIGHT 1030 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7091.4 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

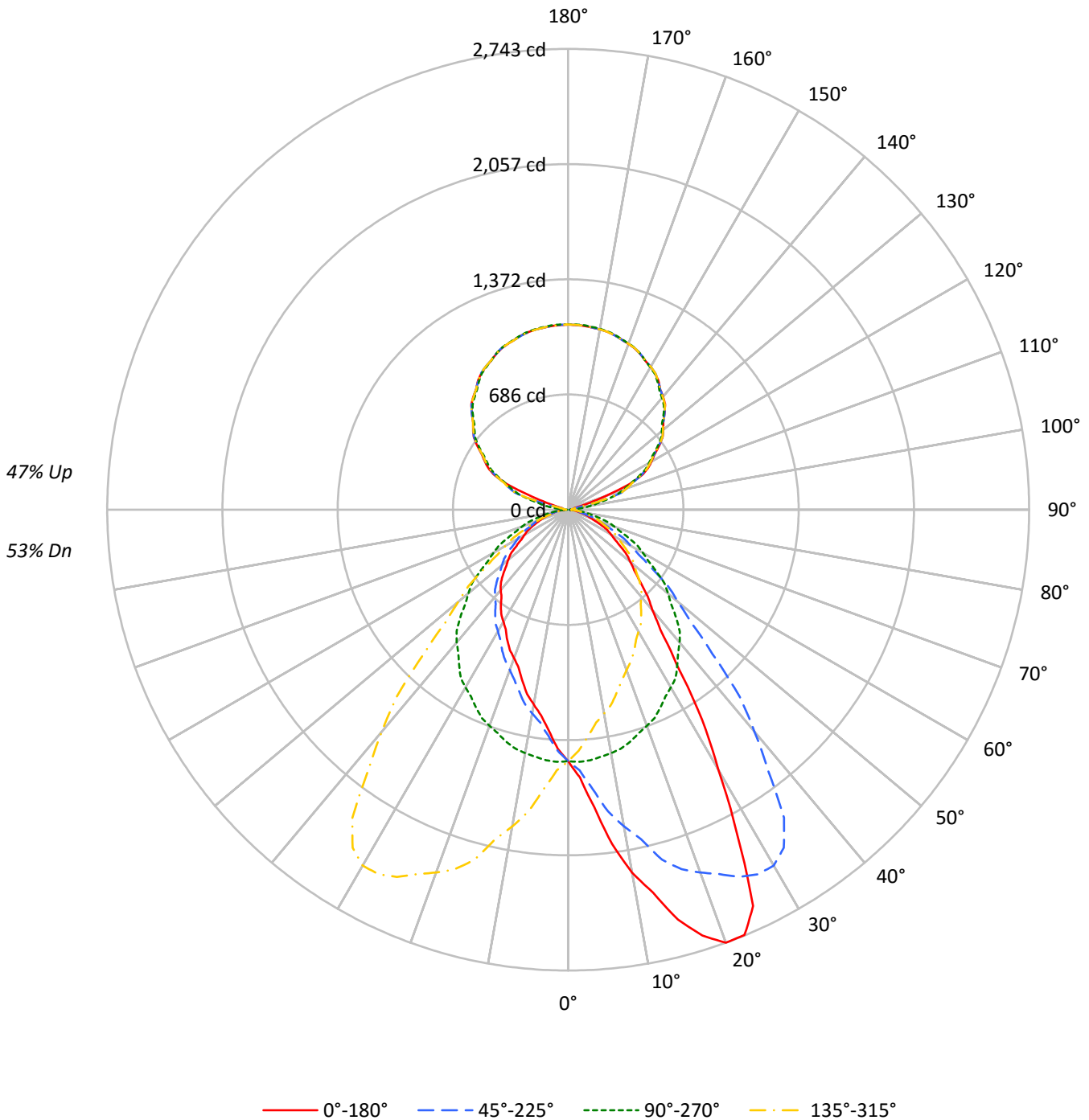
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	99	95	91	88	92	88	85	82	75	73	71	63	62	60	53	52	51	46
2	91	84	78	73	84	78	73	68	67	63	60	57	54	51	47	45	44	39
3	83	74	67	61	77	69	63	58	59	55	51	50	47	44	42	40	38	34
4	76	66	58	52	70	61	55	50	53	48	44	45	42	38	38	35	33	30
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	32	28	26	23
7	60	48	40	35	56	45	38	33	39	34	30	34	30	27	29	26	23	21
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	27	23	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17
10	49	37	30	25	45	35	28	24	31	25	22	27	23	20	23	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16113	16113	16113	16113
5°	19207	16181	14249	16181
10°	23981	16088	12873	16088
15°	28149	15924	11739	15924
20°	31416	15678	10775	15678
25°	30914	15419	10183	15419
30°	22222	15181	9573	15181
35°	14837	14870	9179	14870
40°	10932	14497	8769	14497
45°	9168	13842	8369	13842
50°	8090	12983	7812	12983
55°	7096	12001	7047	12001
60°	6318	11063	6456	11063
65°	5547	10055	6006	10055
70°	4356	9155	5485	9155
75°	3839	7993	5011	7993
80°	3335	6794	4928	6794
85°	2692	5459	5224	5459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.2	2.1
10°-20°	459.9	6.5
20°-30°	722.5	10.2
30°-40°	753.8	10.6
40°-50°	645.1	9.1
50°-60°	491.7	6.9
60°-70°	315.1	4.4
70°-80°	151.6	2.1
80°-90°	43.2	0.6
90°-100°	40.1	0.6
100°-110°	191.0	2.7
110°-120°	458.8	6.5
120°-130°	584.2	8.2
130°-140°	624.2	8.8
140°-150°	583.7	8.2
150°-160°	470.8	6.6
160°-170°	303.9	4.3
170°-180°	104.7	1.5
0°-30°	1329.6	18.7
0°-40°	2083.4	29.4
0°-60°	3220.2	45.4
0°-90°	3730.1	52.6
90°-120°	689.8	9.7
90°-150°	2481.9	35.0
90°-180°	3361.0	47.4
0°-180°	7091.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1497	1497	1497	1497	1497	
5°	1778	1498	1319	1498	1778	184
15°	2526	1429	1053	1429	2526	716
25°	2603	1298	857	1298	2603	1119
35°	1129	1132	698	1132	1129	740
45°	602	909	550	909	602	474
55°	378	640	376	640	378	342
65°	218	395	236	395	218	214
75°	92	192	120	192	92	99
85°	22	44	42	44	22	26
90°	24	1	24	1	24	12
95°	31	50	31	50	31	26
105°	36	244	36	244	36	82
115°	482	458	482	458	482	445
125°	658	645	658	645	658	588
135°	812	803	812	803	812	626
145°	936	927	936	927	936	584
155°	1020	1021	1020	1021	1020	470
165°	1074	1077	1074	1077	1074	303
175°	1098	1102	1098	1102	1098	105
180°	1102	1102	1102	1102	1102	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1594.3	1596.4	1589.7	1588.7	1580.9	1578.9	1578.9	1568.1	1561.5	1552.8	1547.7
5°	1777.6	1787.9	1782.7	1771.2	1751.9	1747.4	1735.3	1716.0	1694.3	1667.4	1654.6
7.5°	2006.5	2020.5	2015.1	1997.2	1977.1	1960.9	1926.5	1894.6	1849.8	1810.6	1777.0
10°	2194.1	2179.4	2167.8	2150.5	2131.9	2101.8	2066.0	2016.6	1959.6	1914.7	1864.8
12.5°	2334.5	2332.2	2317.5	2299.7	2273.5	2244.8	2200.7	2140.6	2074.4	2009.5	1952.4
15°	2526.0	2529.9	2520.3	2501.7	2464.5	2413.9	2347.2	2322.3	2227.4	2157.0	2086.4
17.5°	2658.5	2657.8	2656.5	2630.7	2592.8	2556.8	2495.0	2429.3	2343.4	2244.1	2149.1
20°	2742.6	2736.2	2737.5	2708.7	2680.5	2638.8	2578.5	2483.1	2412.6	2297.9	2199.8
22.5°	2740.5	2739.3	2744.1	2734.3	2713.8	2681.8	2634.5	2553.8	2463.9	2348.1	2237.8
25°	2602.9	2597.8	2628.0	2636.3	2669.0	2674.7	2660.6	2616.4	2531.2	2412.0	2275.5
27.5°	2178.5	2175.6	2231.6	2301.5	2390.2	2459.1	2525.8	2557.9	2531.2	2445.8	2309.1
30°	1787.9	1848.0	1876.2	1977.5	2090.3	2224.9	2342.8	2454.9	2482.4	2445.3	2333.1
32.5°	1484.3	1536.9	1560.5	1647.4	1752.5	1910.1	2086.9	2245.7	2357.9	2386.3	2318.8
35°	1129.1	1129.8	1183.6	1222.0	1319.4	1481.6	1653.3	1866.0	2077.5	2237.7	2254.3
37.5°	901.0	904.2	936.7	975.0	1048.1	1133.8	1285.1	1461.9	1706.2	1952.2	2096.3
40°	778.0	783.7	808.0	845.9	898.4	963.1	1081.0	1247.7	1451.4	1725.0	1948.6
42.5°	699.0	708.3	720.9	750.0	782.5	843.2	938.5	1067.2	1252.5	1511.2	1769.3
45°	602.3	607.5	617.1	630.6	660.0	702.3	766.4	852.9	1006.7	1215.0	1473.2
47.5°	531.3	528.6	538.7	549.7	569.3	598.1	641.1	711.7	821.4	988.5	1207.5
50°	483.1	482.5	489.6	497.9	516.5	537.6	572.9	626.1	713.2	851.7	1052.2
52.5°	438.1	440.5	445.5	455.8	469.3	486.4	518.0	556.4	631.2	750.6	917.9
55°	378.1	380.0	387.0	392.8	402.4	419.7	439.6	471.7	522.9	606.2	744.0
57.5°	327.3	326.4	333.2	334.6	345.5	359.6	375.0	399.8	437.0	499.0	591.7
60°	293.5	291.6	297.3	301.8	307.6	319.1	331.9	356.3	385.8	431.3	510.7
62.5°	262.7	261.8	266.0	270.5	275.3	285.8	296.5	315.3	338.6	376.9	439.9
65°	217.8	219.8	221.7	223.6	226.2	232.6	242.9	255.7	271.7	298.6	344.1
67.5°	171.2	173.2	173.8	177.7	183.3	187.3	193.6	205.0	216.1	238.8	264.6
70°	138.4	137.8	138.4	140.3	147.4	154.4	162.7	171.1	178.1	194.1	216.0
72.5°	119.0	117.8	119.4	119.8	123.3	125.2	130.4	138.3	147.4	158.2	173.9
75°	92.3	92.3	92.3	92.3	94.8	96.1	98.1	100.0	103.1	108.3	119.8
77.5°	68.2	68.3	69.2	69.9	70.4	71.1	72.3	74.2	75.3	78.0	83.1
80°	53.8	54.5	53.8	54.5	54.5	55.8	56.4	58.3	58.9	62.1	64.1
82.5°	40.5	40.1	40.5	41.2	41.2	42.4	42.6	43.9	44.1	45.7	47.7
85°	21.8	20.5	21.8	21.1	22.4	21.1	21.8	23.1	23.1	23.7	26.3
87.5°	10.0	11.0	9.9	10.4	10.3	10.7	10.5	10.4	11.3	10.6	10.6
90°	24.5	24.2	23.8	23.5	23.1	22.6	21.9	21.1	20.4	19.6	17.3
92.5°	27.1	27.0	26.7	26.5	26.3	25.6	24.5	23.3	22.1	21.0	19.2
95°	31.1	31.1	31.1	31.1	31.1	30.5	29.2	28.0	26.7	25.4	23.4
97.5°	33.8	33.6	33.3	33.2	33.0	32.2	30.7	29.3	27.8	26.3	23.9
100°	34.4	34.2	34.0	33.8	33.7	32.9	31.4	29.9	28.5	27.0	25.4
102.5°	35.1	34.7	34.4	34.1	33.8	33.8	32.9	31.4	29.9	28.5	27.0
105°	36.0	35.6	35.3	35.0	34.6	34.6	33.8	32.9	31.4	29.9	28.5
107.5°	113.2	137.5	161.8	186.0	210.3	234.2	257.9	281.4	305.1	328.7	326.1
110°	225.2	251.2	277.2	303.3	329.3	345.3	351.3	357.3	363.3	369.3	367.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	386.4	391.8	397.4	402.8	408.3	411.0	410.9	410.8	410.7	410.6	408.6
115°	481.5	480.8	480.0	479.3	478.6	477.4	475.5	473.7	471.9	470.0	468.4
117.5°	534.9	534.8	534.6	534.4	534.3	533.5	532.1	530.6	529.1	527.7	526.8
120°	571.6	571.6	571.6	571.6	571.6	570.9	569.4	567.9	566.5	565.0	564.5
122.5°	607.6	607.5	607.3	607.2	607.1	606.4	605.4	604.4	603.4	602.3	601.7
125°	658.4	658.0	657.6	657.3	657.0	656.6	656.2	655.8	655.5	655.1	654.4
127.5°	707.2	707.6	707.9	708.3	708.7	708.6	707.9	707.4	706.8	706.2	705.3
130°	738.7	739.0	739.4	739.7	740.1	739.9	739.2	738.5	737.8	737.0	736.3
132.5°	767.4	768.0	768.5	769.0	769.5	769.4	768.7	767.9	767.2	766.5	765.9
135°	811.5	812.0	812.6	813.2	813.7	813.7	813.2	812.6	812.0	811.5	810.8
137.5°	853.0	853.3	853.7	854.0	854.4	854.2	853.3	852.4	851.5	850.7	850.3
140°	877.8	878.2	878.6	879.0	879.3	879.1	878.4	877.7	876.9	876.2	875.6
142.5°	900.7	901.3	901.8	902.3	902.8	902.8	902.2	901.6	901.1	900.4	899.9
145°	936.0	936.0	936.0	936.0	936.0	935.8	935.5	935.1	934.7	934.3	934.0
147.5°	962.2	963.0	963.8	964.7	965.6	965.8	965.4	965.1	964.7	964.3	963.9
150°	981.9	982.4	982.9	983.5	984.1	984.1	983.7	983.4	983.0	982.7	982.3
152.5°	997.6	998.4	999.2	1000.0	1000.9	1001.0	1000.4	999.7	999.1	998.4	998.2
155°	1019.5	1020.6	1021.7	1022.8	1023.9	1024.0	1023.0	1022.1	1021.2	1020.3	1020.2
157.5°	1038.0	1039.4	1040.9	1042.3	1043.7	1043.8	1042.8	1041.7	1040.6	1039.5	1039.7
160°	1049.8	1051.1	1052.4	1053.6	1054.9	1055.0	1053.9	1052.8	1051.7	1050.7	1050.8
162.5°	1060.9	1062.1	1063.2	1064.4	1065.4	1065.4	1064.2	1062.9	1061.7	1060.5	1060.6
165°	1074.4	1075.6	1076.9	1078.2	1079.5	1079.4	1077.9	1076.4	1075.1	1073.6	1073.7
167.5°	1084.0	1085.5	1087.0	1088.4	1089.9	1089.9	1088.4	1087.0	1085.5	1084.0	1084.0
170°	1090.0	1091.4	1092.8	1094.3	1095.8	1095.8	1094.3	1092.8	1091.4	1090.0	1090.0
172.5°	1093.2	1094.8	1096.4	1098.0	1099.6	1099.7	1098.2	1096.8	1095.4	1093.9	1093.7
175°	1098.1	1099.6	1101.1	1102.5	1104.0	1104.1	1102.8	1101.5	1100.2	1098.9	1098.8
177.5°	1099.6	1101.1	1102.5	1104.0	1105.5	1105.5	1104.4	1103.3	1102.1	1100.9	1100.7
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1545.6	1544.1	1536.9	1528.7	1517.9	1510.7	1505.1	1502.0	1492.8	1481.6	1473.8
5°	1641.1	1621.9	1601.3	1576.4	1553.3	1529.6	1514.8	1497.5	1476.4	1452.7	1436.1
7.5°	1743.4	1705.7	1665.1	1623.2	1581.8	1544.6	1511.8	1483.7	1450.0	1416.0	1392.2
10°	1821.8	1766.7	1709.7	1651.3	1598.1	1548.2	1509.7	1471.9	1431.6	1392.4	1363.0
12.5°	1893.0	1820.5	1754.8	1683.1	1615.1	1555.3	1500.0	1455.5	1407.0	1365.3	1331.7
15°	1983.3	1908.9	1829.5	1720.5	1630.2	1554.6	1487.3	1429.0	1370.0	1318.7	1286.1
17.5°	2067.6	1955.7	1848.9	1758.1	1640.7	1546.2	1464.1	1394.4	1329.7	1275.3	1235.1
20°	2102.5	1994.1	1878.2	1762.2	1646.8	1541.2	1445.6	1368.7	1301.5	1239.9	1202.8
22.5°	2123.4	2000.8	1878.7	1754.0	1631.5	1521.7	1427.2	1342.6	1269.7	1211.2	1165.4
25°	2148.0	2001.9	1867.3	1744.3	1619.3	1500.2	1388.0	1298.3	1219.4	1157.3	1108.6
27.5°	2164.1	1992.3	1833.2	1696.5	1569.7	1451.0	1348.3	1253.1	1173.2	1107.4	1055.2
30°	2167.1	1984.5	1807.0	1659.1	1530.2	1421.3	1312.4	1221.4	1136.8	1066.9	1018.2
32.5°	2171.3	1965.6	1771.6	1614.5	1482.5	1374.7	1275.9	1189.0	1102.4	1033.6	983.9
35°	2154.3	1955.1	1718.0	1537.2	1405.2	1300.8	1211.8	1131.6	1046.4	979.7	929.2
37.5°	2081.5	1913.4	1662.4	1450.4	1312.4	1215.6	1143.0	1073.2	995.1	923.2	875.5
40°	2008.2	1872.4	1619.3	1397.6	1253.4	1154.1	1088.8	1031.7	956.1	888.8	837.6
42.5°	1899.1	1816.6	1578.3	1342.2	1186.7	1091.0	1035.9	982.4	916.1	847.7	799.6
45°	1698.8	1709.7	1494.4	1254.0	1094.5	998.3	946.5	909.3	850.4	793.9	744.6
47.5°	1447.6	1549.5	1395.8	1160.1	997.2	907.0	861.6	829.2	789.5	734.1	689.1
50°	1283.5	1429.0	1316.9	1097.1	936.2	846.5	801.6	775.3	740.8	697.2	654.3
52.5°	1132.3	1288.5	1221.5	1026.8	870.1	788.1	744.2	722.6	695.1	654.1	615.3
55°	923.4	1081.7	1066.3	920.8	770.9	697.2	663.9	639.5	620.9	590.2	559.5
57.5°	746.9	897.0	904.9	802.9	683.5	610.7	582.0	563.6	551.5	528.3	499.9
60°	635.7	773.5	800.4	723.5	620.9	556.8	528.6	513.9	504.3	485.8	463.9
62.5°	543.4	660.6	691.1	635.8	560.9	501.0	478.9	464.7	458.2	442.1	422.9
65°	415.9	513.3	542.7	512.0	472.9	424.9	406.9	394.8	389.0	380.0	365.9
67.5°	312.7	383.7	416.0	394.4	380.3	349.8	338.4	331.9	326.8	320.7	308.8
70°	251.2	303.7	337.0	331.3	319.8	303.7	295.4	290.9	285.8	280.7	270.4
72.5°	201.9	238.1	269.4	272.3	262.9	259.7	252.3	250.5	247.4	241.2	235.5
75°	134.0	158.9	180.7	189.1	192.9	196.1	192.9	192.2	191.6	186.5	183.3
77.5°	87.8	101.3	115.0	129.2	135.2	139.6	140.6	142.9	141.2	138.5	137.0
80°	67.3	70.5	80.1	92.3	101.9	105.7	108.3	109.6	108.9	108.3	105.7
82.5°	48.8	51.5	56.0	64.6	72.6	79.1	80.6	80.4	81.8	82.2	80.1
85°	26.3	26.9	28.2	29.5	34.0	41.0	43.0	44.2	45.5	45.5	41.7
87.5°	11.2	10.2	10.8	10.4	11.5	11.7	14.3	16.6	17.4	15.7	16.1
90°	14.9	12.6	10.2	8.1	6.3	4.5	2.6	0.8	2.6	4.5	6.3
92.5°	17.4	15.7	13.9	13.2	13.7	14.2	14.8	15.2	14.8	14.2	13.7
95°	21.4	19.4	17.4	20.1	27.6	35.1	42.5	50.0	42.5	35.1	27.6
97.5°	52.6	65.7	78.8	87.0	90.3	93.7	97.0	100.4	97.0	93.7	90.3
100°	83.8	112.2	140.6	153.0	149.3	145.7	142.0	138.4	142.0	145.7	149.3
102.5°	115.9	146.9	177.9	192.1	189.5	186.9	184.3	181.6	184.3	186.9	189.5
105°	212.1	228.4	244.8	252.0	250.1	248.0	246.1	244.0	246.1	248.0	250.1
107.5°	323.5	321.0	318.4	316.3	314.7	313.1	311.4	309.9	311.4	313.1	314.7
110°	365.3	363.3	361.3	359.5	358.2	356.7	355.2	353.8	355.2	356.7	358.2



TEST NUMBER: P332478-930

CATALOG NUMBER: S123RDIW-S1165D1030U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	406.6	404.6	402.6	401.0	399.7	398.3	397.0	395.7	397.0	398.3	399.7
115°	466.8	465.1	463.5	462.1	461.1	459.9	458.9	457.8	458.9	459.9	461.1
117.5°	526.0	525.2	524.3	523.3	521.9	520.6	519.2	517.9	519.2	520.6	521.9
120°	563.9	563.4	562.9	561.7	560.1	558.5	556.8	555.2	556.8	558.5	560.1
122.5°	601.0	600.3	599.6	598.6	597.2	595.9	594.5	593.2	594.5	595.9	597.2
125°	653.6	652.9	652.2	651.1	649.6	648.2	646.8	645.3	646.8	648.2	649.6
127.5°	704.5	703.6	702.7	701.6	700.1	698.6	697.2	695.7	697.2	698.6	700.1
130°	735.6	734.8	734.1	733.0	731.6	730.1	728.6	727.2	728.6	730.1	731.6
132.5°	765.3	764.8	764.2	763.1	761.7	760.2	758.8	757.3	758.8	760.2	761.7
135°	810.1	809.3	808.6	807.7	806.6	805.5	804.5	803.3	804.5	805.5	806.6
137.5°	849.9	849.5	849.1	848.2	846.8	845.4	844.0	842.6	844.0	845.4	846.8
140°	875.1	874.6	874.0	873.2	872.1	871.1	869.9	868.9	869.9	871.1	872.1
142.5°	899.4	898.8	898.3	897.5	896.3	895.3	894.1	893.1	894.1	895.3	896.3
145°	933.6	933.3	932.9	932.1	930.8	929.5	928.2	927.0	928.2	929.5	930.8
147.5°	963.6	963.2	962.9	962.3	961.4	960.6	959.8	959.0	959.8	960.6	961.4
150°	981.9	981.5	981.2	980.7	980.2	979.7	979.1	978.6	979.1	979.7	980.2
152.5°	997.9	997.8	997.5	997.3	997.0	996.8	996.5	996.3	996.5	996.8	997.0
155°	1019.9	1019.8	1019.6	1019.7	1020.1	1020.4	1020.8	1021.2	1020.8	1020.4	1020.1
157.5°	1039.8	1040.1	1040.2	1040.3	1040.4	1040.4	1040.5	1040.5	1040.5	1040.4	1040.4
160°	1051.0	1051.2	1051.3	1051.6	1051.7	1051.9	1052.1	1052.3	1052.1	1051.9	1051.7
162.5°	1060.9	1061.0	1061.2	1061.5	1062.0	1062.5	1062.9	1063.4	1062.9	1062.5	1062.0
165°	1073.9	1074.1	1074.3	1074.6	1075.2	1075.8	1076.3	1076.8	1076.3	1075.8	1075.2
167.5°	1084.0	1084.0	1084.0	1084.4	1085.2	1085.9	1086.6	1087.3	1086.6	1085.9	1085.2
170°	1090.0	1090.0	1090.0	1090.3	1091.0	1091.8	1092.5	1093.2	1092.5	1091.8	1091.0
172.5°	1093.6	1093.4	1093.3	1093.6	1094.5	1095.4	1096.3	1097.1	1096.3	1095.4	1094.5
175°	1098.6	1098.4	1098.2	1098.6	1099.5	1100.4	1101.3	1102.2	1101.3	1100.4	1099.5
177.5°	1100.7	1100.5	1100.3	1100.7	1101.4	1102.1	1102.8	1103.5	1102.8	1102.1	1101.4
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



TEST NUMBER: P332478-930

CATALOG NUMBER: S123RDIW-S1165D1030U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1471.3	1464.6	1460.0	1449.8	1443.1	1435.9	1428.7	1433.4	1432.8	1432.3	1432.3
5°	1422.0	1407.2	1393.8	1376.5	1365.5	1352.1	1341.8	1340.5	1343.1	1334.2	1329.0
7.5°	1373.0	1352.8	1333.7	1314.7	1294.5	1278.3	1268.1	1263.4	1256.9	1251.3	1245.6
10°	1338.6	1314.9	1296.3	1272.6	1250.8	1231.6	1219.4	1211.1	1206.6	1202.2	1193.8
12.5°	1303.3	1280.1	1256.4	1229.6	1208.8	1186.5	1177.4	1168.1	1159.4	1154.5	1143.0
15°	1251.5	1221.4	1196.4	1168.2	1145.1	1123.3	1110.5	1091.9	1089.3	1083.0	1071.4
17.5°	1199.5	1166.9	1132.5	1111.5	1085.5	1062.8	1043.3	1037.1	1018.7	1011.8	1001.8
20°	1158.5	1128.5	1102.2	1074.6	1036.8	1015.7	1000.3	992.0	977.2	968.2	961.8
22.5°	1123.2	1092.6	1062.2	1030.0	998.9	975.2	963.9	951.0	942.9	930.3	923.4
25°	1072.7	1039.3	1002.8	968.2	945.8	927.9	910.0	898.4	886.9	881.1	868.3
27.5°	1014.0	979.2	945.0	918.8	891.2	873.5	857.3	847.0	833.2	823.5	816.4
30°	981.7	940.7	911.2	887.5	852.2	835.6	823.5	810.7	800.4	790.1	783.1
32.5°	944.3	906.9	878.9	849.5	822.6	804.3	788.6	777.3	768.6	758.8	751.8
35°	885.6	854.2	825.3	795.9	776.0	757.4	738.8	729.2	720.9	711.9	705.6
37.5°	832.5	803.2	775.8	747.8	723.2	708.1	693.1	685.7	674.5	668.5	661.9
40°	799.7	770.9	741.4	714.5	688.8	677.4	663.9	653.0	642.7	638.2	631.2
42.5°	763.9	735.0	710.1	681.2	660.1	644.5	632.1	620.2	612.5	605.9	601.9
45°	710.6	685.0	660.6	631.9	612.0	598.5	584.4	573.5	566.5	562.0	554.9
47.5°	659.0	633.4	608.6	583.5	564.3	548.9	534.8	527.3	517.9	512.4	507.6
50°	621.6	598.5	572.3	549.2	529.9	514.5	503.0	493.4	485.1	478.0	474.8
52.5°	587.3	562.6	540.0	518.4	498.1	480.7	470.2	460.1	453.8	445.7	442.1
55°	530.6	506.9	487.6	466.5	446.6	431.9	419.1	410.1	403.7	394.8	389.6
57.5°	477.4	456.2	433.2	414.8	394.4	381.9	371.3	359.1	351.3	344.2	339.2
60°	441.5	417.2	397.3	380.0	362.1	346.0	336.4	326.8	318.5	311.4	307.0
62.5°	404.1	382.8	363.9	345.1	328.7	314.8	303.6	295.5	288.2	283.7	279.2
65°	346.7	330.0	310.8	295.4	280.1	269.8	260.8	253.7	248.7	245.4	241.6
67.5°	293.8	277.7	260.9	245.8	235.5	227.7	221.8	215.8	213.3	209.1	206.6
70°	259.5	242.9	228.1	216.6	206.4	200.6	196.7	192.2	189.6	184.6	182.0
72.5°	222.1	210.0	199.4	190.0	181.7	176.5	171.6	166.1	162.0	156.4	153.8
75°	175.0	164.0	155.7	149.3	144.1	137.1	130.1	124.3	122.4	120.5	119.8
77.5°	129.6	122.6	116.6	111.2	104.8	99.7	98.2	96.9	96.5	95.5	95.5
80°	101.9	95.5	91.0	84.5	80.7	80.7	80.7	79.5	80.1	80.1	80.1
82.5°	75.7	69.9	67.4	65.1	64.3	64.8	64.8	65.1	64.7	65.7	65.2
85°	39.1	39.7	41.0	40.4	41.0	41.0	42.3	41.7	42.3	41.0	42.3
87.5°	16.0	17.9	18.9	19.9	20.9	20.9	21.5	21.7	22.3	22.4	22.6
90°	8.1	10.2	12.6	14.9	17.3	19.6	20.4	21.1	21.9	22.6	23.1
92.5°	13.2	13.9	15.7	17.4	19.2	21.0	22.1	23.3	24.5	25.6	26.3
95°	20.1	17.4	19.4	21.4	23.4	25.4	26.7	28.0	29.2	30.5	31.1
97.5°	87.0	78.8	65.7	52.6	39.5	26.3	27.8	29.3	30.7	32.2	33.0
100°	153.0	140.6	112.2	83.8	55.4	27.0	28.5	29.9	31.4	32.9	33.7
102.5°	192.1	177.9	146.9	115.9	84.9	53.9	49.4	44.8	40.4	35.8	33.8
105°	252.0	244.8	228.4	212.1	195.8	179.4	147.2	115.0	82.7	50.5	34.6
107.5°	316.3	318.4	321.0	323.5	326.1	328.7	305.1	281.4	257.9	234.2	210.3
110°	359.5	361.3	363.3	365.3	367.3	369.3	363.3	357.3	351.3	345.3	329.3



TEST NUMBER: P332478-930

CATALOG NUMBER: S123RDIW-S1165D1030U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	401.0	402.6	404.6	406.6	408.6	410.6	410.7	410.8	410.9	411.0	408.3
115°	462.1	463.5	465.1	466.8	468.4	470.0	471.9	473.7	475.5	477.4	478.6
117.5°	523.3	524.3	525.2	526.0	526.8	527.7	529.1	530.6	532.1	533.5	534.3
120°	561.7	562.9	563.4	563.9	564.5	565.0	566.5	567.9	569.4	570.9	571.6
122.5°	598.6	599.6	600.3	601.0	601.7	602.3	603.4	604.4	605.4	606.4	607.1
125°	651.1	652.2	652.9	653.6	654.4	655.1	655.5	655.8	656.2	656.6	657.0
127.5°	701.6	702.7	703.6	704.5	705.3	706.2	706.8	707.4	707.9	708.6	708.7
130°	733.0	734.1	734.8	735.6	736.3	737.0	737.8	738.5	739.2	739.9	740.1
132.5°	763.1	764.2	764.8	765.3	765.9	766.5	767.2	767.9	768.7	769.4	769.5
135°	807.7	808.6	809.3	810.1	810.8	811.5	812.0	812.6	813.2	813.7	813.7
137.5°	848.2	849.1	849.5	849.9	850.3	850.7	851.5	852.4	853.3	854.2	854.4
140°	873.2	874.0	874.6	875.1	875.6	876.2	876.9	877.7	878.4	879.1	879.3
142.5°	897.5	898.3	898.8	899.4	899.9	900.4	901.1	901.6	902.2	902.8	902.8
145°	932.1	932.9	933.3	933.6	934.0	934.3	934.7	935.1	935.5	935.8	936.0
147.5°	962.3	962.9	963.2	963.6	963.9	964.3	964.7	965.1	965.4	965.8	965.6
150°	980.7	981.2	981.5	981.9	982.3	982.7	983.0	983.4	983.7	984.1	984.1
152.5°	997.3	997.5	997.8	997.9	998.2	998.4	999.1	999.7	1000.4	1001.0	1000.9
155°	1019.7	1019.6	1019.8	1019.9	1020.2	1020.3	1021.2	1022.1	1023.0	1024.0	1023.9
157.5°	1040.3	1040.2	1040.1	1039.8	1039.7	1039.5	1040.6	1041.7	1042.8	1043.8	1043.7
160°	1051.6	1051.3	1051.2	1051.0	1050.8	1050.7	1051.7	1052.8	1053.9	1055.0	1054.9
162.5°	1061.5	1061.2	1061.0	1060.9	1060.6	1060.5	1061.7	1062.9	1064.2	1065.4	1065.4
165°	1074.6	1074.3	1074.1	1073.9	1073.7	1073.6	1075.1	1076.4	1077.9	1079.4	1079.5
167.5°	1084.4	1084.0	1084.0	1084.0	1084.0	1084.0	1085.5	1087.0	1088.4	1089.9	1089.9
170°	1090.3	1090.0	1090.0	1090.0	1090.0	1090.0	1091.4	1092.8	1094.3	1095.8	1095.8
172.5°	1093.6	1093.3	1093.4	1093.6	1093.7	1093.9	1095.4	1096.8	1098.2	1099.7	1099.6
175°	1098.6	1098.2	1098.4	1098.6	1098.8	1098.9	1100.2	1101.5	1102.8	1104.1	1104.0
177.5°	1100.7	1100.3	1100.5	1100.7	1100.7	1100.9	1102.1	1103.3	1104.4	1105.5	1105.5
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



TEST NUMBER: P332478-930

CATALOG NUMBER: S123RDIW-S1165D1030U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1426.2	1425.6	1426.2	1424.1	1426.2	1425.6	1426.2	1432.3	1432.3	1432.8	1433.4
5°	1327.1	1326.5	1324.5	1318.7	1324.5	1326.5	1327.1	1329.0	1334.2	1343.1	1340.5
7.5°	1240.6	1239.7	1234.0	1234.2	1234.0	1239.7	1240.6	1245.6	1251.3	1256.9	1263.4
10°	1189.4	1189.9	1182.3	1177.8	1182.3	1189.9	1189.4	1193.8	1202.2	1206.6	1211.1
12.5°	1139.6	1136.7	1130.5	1125.5	1130.5	1136.7	1139.6	1143.0	1154.5	1159.4	1168.1
15°	1074.0	1067.6	1052.2	1053.4	1052.2	1067.6	1074.0	1071.4	1083.0	1089.3	1091.9
17.5°	996.7	992.0	991.7	982.8	991.7	992.0	996.7	1001.8	1011.8	1018.7	1037.1
20°	951.6	948.4	949.7	940.7	949.7	948.4	951.6	961.8	968.2	977.2	992.0
22.5°	916.2	913.0	907.6	904.8	907.6	913.0	916.2	923.4	930.3	942.9	951.0
25°	864.5	859.3	854.2	857.4	854.2	859.3	864.5	868.3	881.1	886.9	898.4
27.5°	812.7	808.9	803.7	803.1	803.7	808.9	812.7	816.4	823.5	833.2	847.0
30°	779.8	776.0	773.5	770.2	773.5	776.0	779.8	783.1	790.1	800.4	810.7
32.5°	746.6	745.8	741.2	740.5	741.2	745.8	746.6	751.8	758.8	768.6	777.3
35°	703.0	699.1	697.8	698.5	697.8	699.1	703.0	705.6	711.9	720.9	729.2
37.5°	661.5	656.4	654.1	651.8	654.1	656.4	661.5	661.9	668.5	674.5	685.7
40°	631.9	626.7	625.4	624.1	625.4	626.7	631.9	631.2	638.2	642.7	653.0
42.5°	598.5	596.5	595.7	593.4	595.7	596.5	598.5	601.9	605.9	612.5	620.2
45°	553.0	552.4	548.5	549.8	548.5	552.4	553.0	554.9	562.0	566.5	573.5
47.5°	505.1	502.2	499.5	501.3	499.5	502.2	505.1	507.6	512.4	517.9	527.3
50°	472.3	471.0	465.2	466.5	465.2	471.0	472.3	474.8	478.0	485.1	493.4
52.5°	439.4	434.6	432.4	431.6	432.4	434.6	439.4	442.1	445.7	453.8	460.1
55°	385.1	379.4	376.7	375.5	376.7	379.4	385.1	389.6	394.8	403.7	410.1
57.5°	331.8	330.3	328.2	329.6	328.2	330.3	331.8	339.2	344.2	351.3	359.1
60°	300.5	300.5	300.5	299.9	300.5	300.5	300.5	307.0	311.4	318.5	326.8
62.5°	276.5	274.9	274.4	275.3	274.4	274.9	276.5	279.2	283.7	288.2	295.5
65°	239.7	239.0	236.4	235.8	236.4	239.0	239.7	241.6	245.4	248.7	253.7
67.5°	205.0	202.6	201.9	201.0	201.9	202.6	205.0	206.6	209.1	213.3	215.8
70°	178.8	177.5	173.7	174.3	173.7	177.5	178.8	182.0	184.6	189.6	192.2
72.5°	150.6	149.3	148.5	147.7	148.5	149.3	150.6	153.8	156.4	162.0	166.1
75°	119.2	118.5	117.9	120.5	117.9	118.5	119.2	119.8	120.5	122.4	124.3
77.5°	95.5	95.5	95.9	94.8	95.9	95.5	95.5	95.5	95.5	96.5	96.9
80°	80.1	80.1	79.5	79.5	79.5	80.1	80.1	80.1	80.1	80.1	79.5
82.5°	64.2	64.7	65.1	64.1	65.1	64.7	64.2	65.2	65.7	64.7	65.1
85°	42.3	41.7	43.0	42.3	43.0	41.7	42.3	42.3	41.0	42.3	41.7
87.5°	23.6	22.7	22.7	23.4	22.7	22.7	23.6	22.6	22.4	22.3	21.7
90°	23.5	23.8	24.2	24.5	24.2	23.8	23.5	23.1	22.6	21.9	21.1
92.5°	26.5	26.7	27.0	27.1	27.0	26.7	26.5	26.3	25.6	24.5	23.3
95°	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	30.5	29.2	28.0
97.5°	33.2	33.3	33.6	33.8	33.6	33.3	33.2	33.0	32.2	30.7	29.3
100°	33.8	34.0	34.2	34.4	34.2	34.0	33.8	33.7	32.9	31.4	29.9
102.5°	34.1	34.4	34.7	35.1	34.7	34.4	34.1	33.8	35.8	40.4	44.8
105°	35.0	35.3	35.6	36.0	35.6	35.3	35.0	34.6	50.5	82.7	115.0
107.5°	186.0	161.8	137.5	113.2	137.5	161.8	186.0	210.3	234.2	257.9	281.4
110°	303.3	277.2	251.2	225.2	251.2	277.2	303.3	329.3	345.3	351.3	357.3



TEST NUMBER: P332478-930

CATALOG NUMBER: S123RDIW-S1165D1030U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	402.8	397.4	391.8	386.4	391.8	397.4	402.8	408.3	411.0	410.9	410.8
115°	479.3	480.0	480.8	481.5	480.8	480.0	479.3	478.6	477.4	475.5	473.7
117.5°	534.4	534.6	534.8	534.9	534.8	534.6	534.4	534.3	533.5	532.1	530.6
120°	571.6	571.6	571.6	571.6	571.6	571.6	571.6	571.6	570.9	569.4	567.9
122.5°	607.2	607.3	607.5	607.6	607.5	607.3	607.2	607.1	606.4	605.4	604.4
125°	657.3	657.6	658.0	658.4	658.0	657.6	657.3	657.0	656.6	656.2	655.8
127.5°	708.3	707.9	707.6	707.2	707.6	707.9	708.3	708.7	708.6	707.9	707.4
130°	739.7	739.4	739.0	738.7	739.0	739.4	739.7	740.1	739.9	739.2	738.5
132.5°	769.0	768.5	768.0	767.4	768.0	768.5	769.0	769.5	769.4	768.7	767.9
135°	813.2	812.6	812.0	811.5	812.0	812.6	813.2	813.7	813.7	813.2	812.6
137.5°	854.0	853.7	853.3	853.0	853.3	853.7	854.0	854.4	854.2	853.3	852.4
140°	879.0	878.6	878.2	877.8	878.2	878.6	879.0	879.3	879.1	878.4	877.7
142.5°	902.3	901.8	901.3	900.7	901.3	901.8	902.3	902.8	902.8	902.2	901.6
145°	936.0	936.0	936.0	936.0	936.0	936.0	936.0	936.0	935.8	935.5	935.1
147.5°	964.7	963.8	963.0	962.2	963.0	963.8	964.7	965.6	965.8	965.4	965.1
150°	983.5	982.9	982.4	981.9	982.4	982.9	983.5	984.1	984.1	983.7	983.4
152.5°	1000.0	999.2	998.4	997.6	998.4	999.2	1000.0	1000.9	1001.0	1000.4	999.7
155°	1022.8	1021.7	1020.6	1019.5	1020.6	1021.7	1022.8	1023.9	1024.0	1023.0	1022.1
157.5°	1042.3	1040.9	1039.4	1038.0	1039.4	1040.9	1042.3	1043.7	1043.8	1042.8	1041.7
160°	1053.6	1052.4	1051.1	1049.8	1051.1	1052.4	1053.6	1054.9	1055.0	1053.9	1052.8
162.5°	1064.4	1063.2	1062.1	1060.9	1062.1	1063.2	1064.4	1065.4	1065.4	1064.2	1062.9
165°	1078.2	1076.9	1075.6	1074.4	1075.6	1076.9	1078.2	1079.5	1079.4	1077.9	1076.4
167.5°	1088.4	1087.0	1085.5	1084.0	1085.5	1087.0	1088.4	1089.9	1089.9	1088.4	1087.0
170°	1094.3	1092.8	1091.4	1090.0	1091.4	1092.8	1094.3	1095.8	1095.8	1094.3	1092.8
172.5°	1098.0	1096.4	1094.8	1093.2	1094.8	1096.4	1098.0	1099.6	1099.7	1098.2	1096.8
175°	1102.5	1101.1	1099.6	1098.1	1099.6	1101.1	1102.5	1104.0	1104.1	1102.8	1101.5
177.5°	1104.0	1102.5	1101.1	1099.6	1101.1	1102.5	1104.0	1105.5	1105.5	1104.4	1103.3
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1428.7	1435.9	1443.1	1449.8	1460.0	1464.6	1471.3	1473.8	1481.6	1492.8	1502.0
5°	1341.8	1352.1	1365.5	1376.5	1393.8	1407.2	1422.0	1436.1	1452.7	1476.4	1497.5
7.5°	1268.1	1278.3	1294.5	1314.7	1333.7	1352.8	1373.0	1392.2	1416.0	1450.0	1483.7
10°	1219.4	1231.6	1250.8	1272.6	1296.3	1314.9	1338.6	1363.0	1392.4	1431.6	1471.9
12.5°	1177.4	1186.5	1208.8	1229.6	1256.4	1280.1	1303.3	1331.7	1365.3	1407.0	1455.5
15°	1110.5	1123.3	1145.1	1168.2	1196.4	1221.4	1251.5	1286.1	1318.7	1370.0	1429.0
17.5°	1043.3	1062.8	1085.5	1111.5	1132.5	1166.9	1199.5	1235.1	1275.3	1329.7	1394.4
20°	1000.3	1015.7	1036.8	1074.6	1102.2	1128.5	1158.5	1202.8	1239.9	1301.5	1368.7
22.5°	963.9	975.2	998.9	1030.0	1062.2	1092.6	1123.2	1165.4	1211.2	1269.7	1342.6
25°	910.0	927.9	945.8	968.2	1002.8	1039.3	1072.7	1108.6	1157.3	1219.4	1298.3
27.5°	857.3	873.5	891.2	918.8	945.0	979.2	1014.0	1055.2	1107.4	1173.2	1253.1
30°	823.5	835.6	852.2	887.5	911.2	940.7	981.7	1018.2	1066.9	1136.8	1221.4
32.5°	788.6	804.3	822.6	849.5	878.9	906.9	944.3	983.9	1033.6	1102.4	1189.0
35°	738.8	757.4	776.0	795.9	825.3	854.2	885.6	929.2	979.7	1046.4	1131.6
37.5°	693.1	708.1	723.2	747.8	775.8	803.2	832.5	875.5	923.2	995.1	1073.2
40°	663.9	677.4	688.8	714.5	741.4	770.9	799.7	837.6	888.8	956.1	1031.7
42.5°	632.1	644.5	660.1	681.2	710.1	735.0	763.9	799.6	847.7	916.1	982.4
45°	584.4	598.5	612.0	631.9	660.6	685.0	710.6	744.6	793.9	850.4	909.3
47.5°	534.8	548.9	564.3	583.5	608.6	633.4	659.0	689.1	734.1	789.5	829.2
50°	503.0	514.5	529.9	549.2	572.3	598.5	621.6	654.3	697.2	740.8	775.3
52.5°	470.2	480.7	498.1	518.4	540.0	562.6	587.3	615.3	654.1	695.1	722.6
55°	419.1	431.9	446.6	466.5	487.6	506.9	530.6	559.5	590.2	620.9	639.5
57.5°	371.3	381.9	394.4	414.8	433.2	456.2	477.4	499.9	528.3	551.5	563.6
60°	336.4	346.0	362.1	380.0	397.3	417.2	441.5	463.9	485.8	504.3	513.9
62.5°	303.6	314.8	328.7	345.1	363.9	382.8	404.1	422.9	442.1	458.2	464.7
65°	260.8	269.8	280.1	295.4	310.8	330.0	346.7	365.9	380.0	389.0	394.8
67.5°	221.8	227.7	235.5	245.8	260.9	277.7	293.8	308.8	320.7	326.8	331.9
70°	196.7	200.6	206.4	216.6	228.1	242.9	259.5	270.4	280.7	285.8	290.9
72.5°	171.6	176.5	181.7	190.0	199.4	210.0	222.1	235.5	241.2	247.4	250.5
75°	130.1	137.1	144.1	149.3	155.7	164.0	175.0	183.3	186.5	191.6	192.2
77.5°	98.2	99.7	104.8	111.2	116.6	122.6	129.6	137.0	138.5	141.2	142.9
80°	80.7	80.7	80.7	84.5	91.0	95.5	101.9	105.7	108.3	108.9	109.6
82.5°	64.8	64.8	64.3	65.1	67.4	69.9	75.7	80.1	82.2	81.8	80.4
85°	42.3	41.0	41.0	40.4	41.0	39.7	39.1	41.7	45.5	45.5	44.2
87.5°	21.5	20.9	20.9	19.9	18.9	17.9	16.0	16.1	15.7	17.4	16.6
90°	20.4	19.6	17.3	14.9	12.6	10.2	8.1	6.3	4.5	2.6	0.8
92.5°	22.1	21.0	19.2	17.4	15.7	13.9	13.2	13.7	14.2	14.8	15.2
95°	26.7	25.4	23.4	21.4	19.4	17.4	20.1	27.6	35.1	42.5	50.0
97.5°	27.8	26.3	39.5	52.6	65.7	78.8	87.0	90.3	93.7	97.0	100.4
100°	28.5	27.0	55.4	83.8	112.2	140.6	153.0	149.3	145.7	142.0	138.4
102.5°	49.4	53.9	84.9	115.9	146.9	177.9	192.1	189.5	186.9	184.3	181.6
105°	147.2	179.4	195.8	212.1	228.4	244.8	252.0	250.1	248.0	246.1	244.0
107.5°	305.1	328.7	326.1	323.5	321.0	318.4	316.3	314.7	313.1	311.4	309.9
110°	363.3	369.3	367.3	365.3	363.3	361.3	359.5	358.2	356.7	355.2	353.8



TEST NUMBER: P332478-930

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CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	410.7	410.6	408.6	406.6	404.6	402.6	401.0	399.7	398.3	397.0	395.7
115°	471.9	470.0	468.4	466.8	465.1	463.5	462.1	461.1	459.9	458.9	457.8
117.5°	529.1	527.7	526.8	526.0	525.2	524.3	523.3	521.9	520.6	519.2	517.9
120°	566.5	565.0	564.5	563.9	563.4	562.9	561.7	560.1	558.5	556.8	555.2
122.5°	603.4	602.3	601.7	601.0	600.3	599.6	598.6	597.2	595.9	594.5	593.2
125°	655.5	655.1	654.4	653.6	652.9	652.2	651.1	649.6	648.2	646.8	645.3
127.5°	706.8	706.2	705.3	704.5	703.6	702.7	701.6	700.1	698.6	697.2	695.7
130°	737.8	737.0	736.3	735.6	734.8	734.1	733.0	731.6	730.1	728.6	727.2
132.5°	767.2	766.5	765.9	765.3	764.8	764.2	763.1	761.7	760.2	758.8	757.3
135°	812.0	811.5	810.8	810.1	809.3	808.6	807.7	806.6	805.5	804.5	803.3
137.5°	851.5	850.7	850.3	849.9	849.5	849.1	848.2	846.8	845.4	844.0	842.6
140°	876.9	876.2	875.6	875.1	874.6	874.0	873.2	872.1	871.1	869.9	868.9
142.5°	901.1	900.4	899.9	899.4	898.8	898.3	897.5	896.3	895.3	894.1	893.1
145°	934.7	934.3	934.0	933.6	933.3	932.9	932.1	930.8	929.5	928.2	927.0
147.5°	964.7	964.3	963.9	963.6	963.2	962.9	962.3	961.4	960.6	959.8	959.0
150°	983.0	982.7	982.3	981.9	981.5	981.2	980.7	980.2	979.7	979.1	978.6
152.5°	999.1	998.4	998.2	997.9	997.8	997.5	997.3	997.0	996.8	996.5	996.3
155°	1021.2	1020.3	1020.2	1019.9	1019.8	1019.6	1019.7	1020.1	1020.4	1020.8	1021.2
157.5°	1040.6	1039.5	1039.7	1039.8	1040.1	1040.2	1040.3	1040.4	1040.4	1040.5	1040.5
160°	1051.7	1050.7	1050.8	1051.0	1051.2	1051.3	1051.6	1051.7	1051.9	1052.1	1052.3
162.5°	1061.7	1060.5	1060.6	1060.9	1061.0	1061.2	1061.5	1062.0	1062.5	1062.9	1063.4
165°	1075.1	1073.6	1073.7	1073.9	1074.1	1074.3	1074.6	1075.2	1075.8	1076.3	1076.8
167.5°	1085.5	1084.0	1084.0	1084.0	1084.0	1084.0	1084.4	1085.2	1085.9	1086.6	1087.3
170°	1091.4	1090.0	1090.0	1090.0	1090.0	1090.0	1090.3	1091.0	1091.8	1092.5	1093.2
172.5°	1095.4	1093.9	1093.7	1093.6	1093.4	1093.3	1093.6	1094.5	1095.4	1096.3	1097.1
175°	1100.2	1098.9	1098.8	1098.6	1098.4	1098.2	1098.6	1099.5	1100.4	1101.3	1102.2
177.5°	1102.1	1100.9	1100.7	1100.7	1100.5	1100.3	1100.7	1101.4	1102.1	1102.8	1103.5
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1505.1	1510.7	1517.9	1528.7	1536.9	1544.1	1545.6	1547.7	1552.8	1561.5	1568.1
5°	1514.8	1529.6	1553.3	1576.4	1601.3	1621.9	1641.1	1654.6	1667.4	1694.3	1716.0
7.5°	1511.8	1544.6	1581.8	1623.2	1665.1	1705.7	1743.4	1777.0	1810.6	1849.8	1894.6
10°	1509.7	1548.2	1598.1	1651.3	1709.7	1766.7	1821.8	1864.8	1914.7	1959.6	2016.6
12.5°	1500.0	1555.3	1615.1	1683.1	1754.8	1820.5	1893.0	1952.4	2009.5	2074.4	2140.6
15°	1487.3	1554.6	1630.2	1720.5	1829.5	1908.9	1983.3	2086.4	2157.0	2227.4	2322.3
17.5°	1464.1	1546.2	1640.7	1758.1	1848.9	1955.7	2067.6	2149.1	2244.1	2343.4	2429.3
20°	1445.6	1541.2	1646.8	1762.2	1878.2	1994.1	2102.5	2199.8	2297.9	2412.6	2483.1
22.5°	1427.2	1521.7	1631.5	1754.0	1878.7	2000.8	2123.4	2237.8	2348.1	2463.9	2553.8
25°	1388.0	1500.2	1619.3	1744.3	1867.3	2001.9	2148.0	2275.5	2412.0	2531.2	2616.4
27.5°	1348.3	1451.0	1569.7	1696.5	1833.2	1992.3	2164.1	2309.1	2445.8	2531.2	2557.9
30°	1312.4	1421.3	1530.2	1659.1	1807.0	1984.5	2167.1	2333.1	2445.3	2482.4	2454.9
32.5°	1275.9	1374.7	1482.5	1614.5	1771.6	1965.6	2171.3	2318.8	2386.3	2357.9	2245.7
35°	1211.8	1300.8	1405.2	1537.2	1718.0	1955.1	2154.3	2254.3	2237.7	2077.5	1866.0
37.5°	1143.0	1215.6	1312.4	1450.4	1662.4	1913.4	2081.5	2096.3	1952.2	1706.2	1461.9
40°	1088.8	1154.1	1253.4	1397.6	1619.3	1872.4	2008.2	1948.6	1725.0	1451.4	1247.7
42.5°	1035.9	1091.0	1186.7	1342.2	1578.3	1816.6	1899.1	1769.3	1511.2	1252.5	1067.2
45°	946.5	998.3	1094.5	1254.0	1494.4	1709.7	1698.8	1473.2	1215.0	1006.7	852.9
47.5°	861.6	907.0	997.2	1160.1	1395.8	1549.5	1447.6	1207.5	988.5	821.4	711.7
50°	801.6	846.5	936.2	1097.1	1316.9	1429.0	1283.5	1052.2	851.7	713.2	626.1
52.5°	744.2	788.1	870.1	1026.8	1221.5	1288.5	1132.3	917.9	750.6	631.2	556.4
55°	663.9	697.2	770.9	920.8	1066.3	1081.7	923.4	744.0	606.2	522.9	471.7
57.5°	582.0	610.7	683.5	802.9	904.9	897.0	746.9	591.7	499.0	437.0	399.8
60°	528.6	556.8	620.9	723.5	800.4	773.5	635.7	510.7	431.3	385.8	356.3
62.5°	478.9	501.0	560.9	635.8	691.1	660.6	543.4	439.9	376.9	338.6	315.3
65°	406.9	424.9	472.9	512.0	542.7	513.3	415.9	344.1	298.6	271.7	255.7
67.5°	338.4	349.8	380.3	394.4	416.0	383.7	312.7	264.6	238.8	216.1	205.0
70°	295.4	303.7	319.8	331.3	337.0	303.7	251.2	216.0	194.1	178.1	171.1
72.5°	252.3	259.7	262.9	272.3	269.4	238.1	201.9	173.9	158.2	147.4	138.3
75°	192.9	196.1	192.9	189.1	180.7	158.9	134.0	119.8	108.3	103.1	100.0
77.5°	140.6	139.6	135.2	129.2	115.0	101.3	87.8	83.1	78.0	75.3	74.2
80°	108.3	105.7	101.9	92.3	80.1	70.5	67.3	64.1	62.1	58.9	58.3
82.5°	80.6	79.1	72.6	64.6	56.0	51.5	48.8	47.7	45.7	44.1	43.9
85°	43.0	41.0	34.0	29.5	28.2	26.9	26.3	26.3	23.7	23.1	23.1
87.5°	14.3	11.7	11.5	10.4	10.8	10.2	11.2	10.6	10.6	11.3	10.4
90°	2.6	4.5	6.3	8.1	10.2	12.6	14.9	17.3	19.6	20.4	21.1
92.5°	14.8	14.2	13.7	13.2	13.9	15.7	17.4	19.2	21.0	22.1	23.3
95°	42.5	35.1	27.6	20.1	17.4	19.4	21.4	23.4	25.4	26.7	28.0
97.5°	97.0	93.7	90.3	87.0	78.8	65.7	52.6	39.5	26.3	27.8	29.3
100°	142.0	145.7	149.3	153.0	140.6	112.2	83.8	55.4	27.0	28.5	29.9
102.5°	184.3	186.9	189.5	192.1	177.9	146.9	115.9	84.9	53.9	49.4	44.8
105°	246.1	248.0	250.1	252.0	244.8	228.4	212.1	195.8	179.4	147.2	115.0
107.5°	311.4	313.1	314.7	316.3	318.4	321.0	323.5	326.1	328.7	305.1	281.4
110°	355.2	356.7	358.2	359.5	361.3	363.3	365.3	367.3	369.3	363.3	357.3



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	397.0	398.3	399.7	401.0	402.6	404.6	406.6	408.6	410.6	410.7	410.8
115°	458.9	459.9	461.1	462.1	463.5	465.1	466.8	468.4	470.0	471.9	473.7
117.5°	519.2	520.6	521.9	523.3	524.3	525.2	526.0	526.8	527.7	529.1	530.6
120°	556.8	558.5	560.1	561.7	562.9	563.4	563.9	564.5	565.0	566.5	567.9
122.5°	594.5	595.9	597.2	598.6	599.6	600.3	601.0	601.7	602.3	603.4	604.4
125°	646.8	648.2	649.6	651.1	652.2	652.9	653.6	654.4	655.1	655.5	655.8
127.5°	697.2	698.6	700.1	701.6	702.7	703.6	704.5	705.3	706.2	706.8	707.4
130°	728.6	730.1	731.6	733.0	734.1	734.8	735.6	736.3	737.0	737.8	738.5
132.5°	758.8	760.2	761.7	763.1	764.2	764.8	765.3	765.9	766.5	767.2	767.9
135°	804.5	805.5	806.6	807.7	808.6	809.3	810.1	810.8	811.5	812.0	812.6
137.5°	844.0	845.4	846.8	848.2	849.1	849.5	849.9	850.3	850.7	851.5	852.4
140°	869.9	871.1	872.1	873.2	874.0	874.6	875.1	875.6	876.2	876.9	877.7
142.5°	894.1	895.3	896.3	897.5	898.3	898.8	899.4	899.9	900.4	901.1	901.6
145°	928.2	929.5	930.8	932.1	932.9	933.3	933.6	934.0	934.3	934.7	935.1
147.5°	959.8	960.6	961.4	962.3	962.9	963.2	963.6	963.9	964.3	964.7	965.1
150°	979.1	979.7	980.2	980.7	981.2	981.5	981.9	982.3	982.7	983.0	983.4
152.5°	996.5	996.8	997.0	997.3	997.5	997.8	997.9	998.2	998.4	999.1	999.7
155°	1020.8	1020.4	1020.1	1019.7	1019.6	1019.8	1019.9	1020.2	1020.3	1021.2	1022.1
157.5°	1040.5	1040.4	1040.4	1040.3	1040.2	1040.1	1039.8	1039.7	1039.5	1040.6	1041.7
160°	1052.1	1051.9	1051.7	1051.6	1051.3	1051.2	1051.0	1050.8	1050.7	1051.7	1052.8
162.5°	1062.9	1062.5	1062.0	1061.5	1061.2	1061.0	1060.9	1060.6	1060.5	1061.7	1062.9
165°	1076.3	1075.8	1075.2	1074.6	1074.3	1074.1	1073.9	1073.7	1073.6	1075.1	1076.4
167.5°	1086.6	1085.9	1085.2	1084.4	1084.0	1084.0	1084.0	1084.0	1084.0	1085.5	1087.0
170°	1092.5	1091.8	1091.0	1090.3	1090.0	1090.0	1090.0	1090.0	1090.0	1091.4	1092.8
172.5°	1096.3	1095.4	1094.5	1093.6	1093.3	1093.4	1093.6	1093.7	1093.9	1095.4	1096.8
175°	1101.3	1100.4	1099.5	1098.6	1098.2	1098.4	1098.6	1098.8	1098.9	1100.2	1101.5
177.5°	1102.8	1102.1	1101.4	1100.7	1100.3	1100.5	1100.7	1100.7	1100.9	1102.1	1103.3
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9	1496.9
2.5°	1578.9	1578.9	1580.9	1588.7	1589.7	1596.4	1594.3
5°	1735.3	1747.4	1751.9	1771.2	1782.7	1787.9	1777.6
7.5°	1926.5	1960.9	1977.1	1997.2	2015.1	2020.5	2006.5
10°	2066.0	2101.8	2131.9	2150.5	2167.8	2179.4	2194.1
12.5°	2200.7	2244.8	2273.5	2299.7	2317.5	2332.2	2334.5
15°	2347.2	2413.9	2464.5	2501.7	2520.3	2529.9	2526.0
17.5°	2495.0	2556.8	2592.8	2630.7	2656.5	2657.8	2658.5
20°	2578.5	2638.8	2680.5	2708.7	2737.5	2736.2	2742.6
22.5°	2634.5	2681.8	2713.8	2734.3	2744.1	2739.3	2740.5
25°	2660.6	2674.7	2669.0	2636.3	2628.0	2597.8	2602.9
27.5°	2525.8	2459.1	2390.2	2301.5	2231.6	2175.6	2178.5
30°	2342.8	2224.9	2090.3	1977.5	1876.2	1848.0	1787.9
32.5°	2086.9	1910.1	1752.5	1647.4	1560.5	1536.9	1484.3
35°	1653.3	1481.6	1319.4	1222.0	1183.6	1129.8	1129.1
37.5°	1285.1	1133.8	1048.1	975.0	936.7	904.2	901.0
40°	1081.0	963.1	898.4	845.9	808.0	783.7	778.0
42.5°	938.5	843.2	782.5	750.0	720.9	708.3	699.0
45°	766.4	702.3	660.0	630.6	617.1	607.5	602.3
47.5°	641.1	598.1	569.3	549.7	538.7	528.6	531.3
50°	572.9	537.6	516.5	497.9	489.6	482.5	483.1
52.5°	518.0	486.4	469.3	455.8	445.5	440.5	438.1
55°	439.6	419.7	402.4	392.8	387.0	380.0	378.1
57.5°	375.0	359.6	345.5	334.6	333.2	326.4	327.3
60°	331.9	319.1	307.6	301.8	297.3	291.6	293.5
62.5°	296.5	285.8	275.3	270.5	266.0	261.8	262.7
65°	242.9	232.6	226.2	223.6	221.7	219.8	217.8
67.5°	193.6	187.3	183.3	177.7	173.8	173.2	171.2
70°	162.7	154.4	147.4	140.3	138.4	137.8	138.4
72.5°	130.4	125.2	123.3	119.8	119.4	117.8	119.0
75°	98.1	96.1	94.8	92.3	92.3	92.3	92.3
77.5°	72.3	71.1	70.4	69.9	69.2	68.3	68.2
80°	56.4	55.8	54.5	54.5	53.8	54.5	53.8
82.5°	42.6	42.4	41.2	41.2	40.5	40.1	40.5
85°	21.8	21.1	22.4	21.1	21.8	20.5	21.8
87.5°	10.5	10.7	10.3	10.4	9.9	11.0	10.0
90°	21.9	22.6	23.1	23.5	23.8	24.2	24.5
92.5°	24.5	25.6	26.3	26.5	26.7	27.0	27.1
95°	29.2	30.5	31.1	31.1	31.1	31.1	31.1
97.5°	30.7	32.2	33.0	33.2	33.3	33.6	33.8
100°	31.4	32.9	33.7	33.8	34.0	34.2	34.4
102.5°	40.4	35.8	33.8	34.1	34.4	34.7	35.1
105°	82.7	50.5	34.6	35.0	35.3	35.6	36.0
107.5°	257.9	234.2	210.3	186.0	161.8	137.5	113.2
110°	351.3	345.3	329.3	303.3	277.2	251.2	225.2



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	410.9	411.0	408.3	402.8	397.4	391.8	386.4
115°	475.5	477.4	478.6	479.3	480.0	480.8	481.5
117.5°	532.1	533.5	534.3	534.4	534.6	534.8	534.9
120°	569.4	570.9	571.6	571.6	571.6	571.6	571.6
122.5°	605.4	606.4	607.1	607.2	607.3	607.5	607.6
125°	656.2	656.6	657.0	657.3	657.6	658.0	658.4
127.5°	707.9	708.6	708.7	708.3	707.9	707.6	707.2
130°	739.2	739.9	740.1	739.7	739.4	739.0	738.7
132.5°	768.7	769.4	769.5	769.0	768.5	768.0	767.4
135°	813.2	813.7	813.7	813.2	812.6	812.0	811.5
137.5°	853.3	854.2	854.4	854.0	853.7	853.3	853.0
140°	878.4	879.1	879.3	879.0	878.6	878.2	877.8
142.5°	902.2	902.8	902.8	902.3	901.8	901.3	900.7
145°	935.5	935.8	936.0	936.0	936.0	936.0	936.0
147.5°	965.4	965.8	965.6	964.7	963.8	963.0	962.2
150°	983.7	984.1	984.1	983.5	982.9	982.4	981.9
152.5°	1000.4	1001.0	1000.9	1000.0	999.2	998.4	997.6
155°	1023.0	1024.0	1023.9	1022.8	1021.7	1020.6	1019.5
157.5°	1042.8	1043.8	1043.7	1042.3	1040.9	1039.4	1038.0
160°	1053.9	1055.0	1054.9	1053.6	1052.4	1051.1	1049.8
162.5°	1064.2	1065.4	1065.4	1064.4	1063.2	1062.1	1060.9
165°	1077.9	1079.4	1079.5	1078.2	1076.9	1075.6	1074.4
167.5°	1088.4	1089.9	1089.9	1088.4	1087.0	1085.5	1084.0
170°	1094.3	1095.8	1095.8	1094.3	1092.8	1091.4	1090.0
172.5°	1098.2	1099.7	1099.6	1098.0	1096.4	1094.8	1093.2
175°	1102.8	1104.1	1104.0	1102.5	1101.1	1099.6	1098.1
177.5°	1104.4	1105.5	1105.5	1104.0	1102.5	1101.1	1099.6
180°	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2	1102.2

(END OF REPORT)