

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: P332427-830

Luminaire Tested: **S123RDIW-S560D1535U830-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332427-830  
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: S123RDIW-S560D1535U830-4F0-1E-UDD-A1  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1535 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7118.1 lumens  
Efficiency: N/A  
Efficacy: 117.5 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: Semi-Indirect

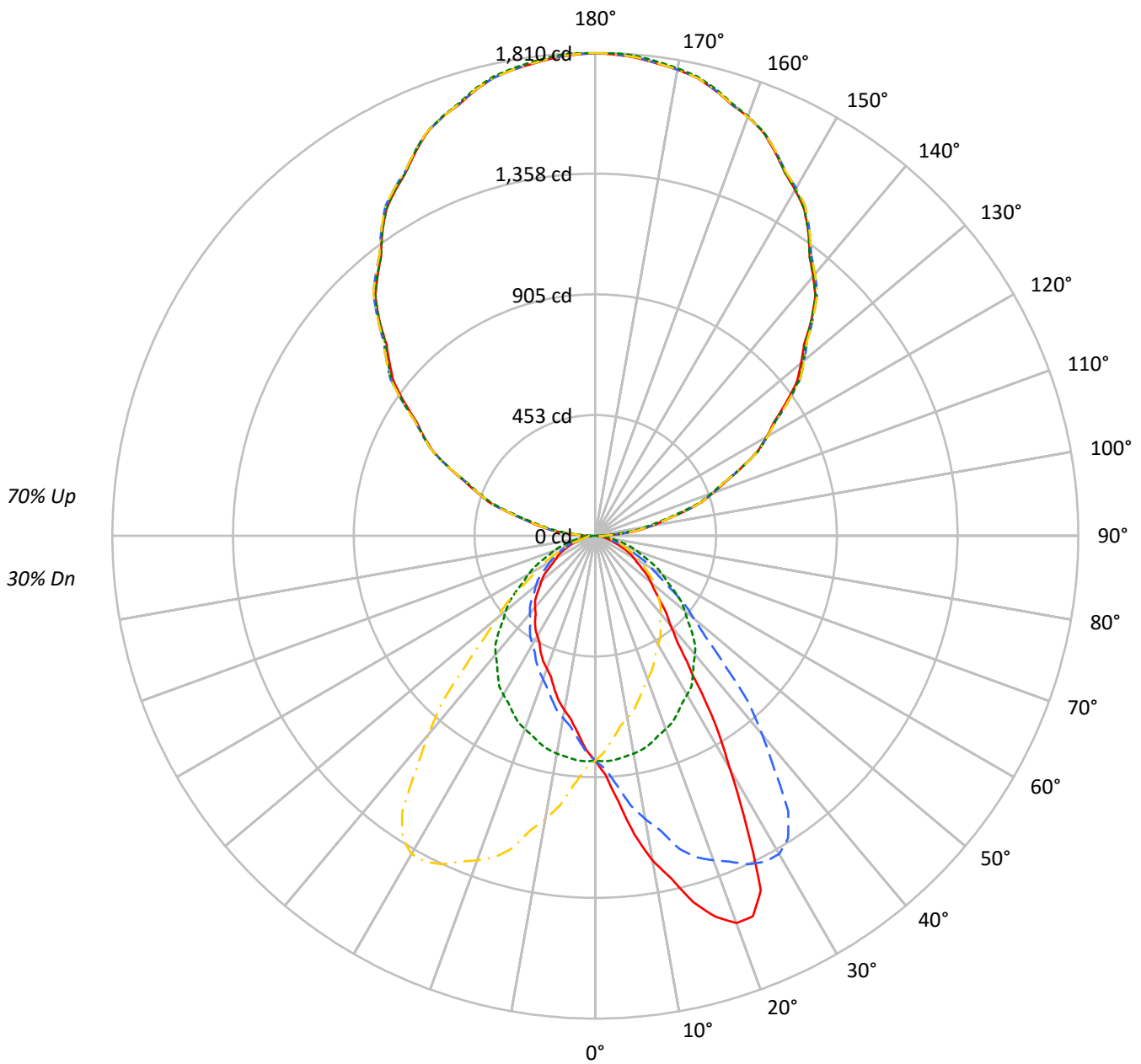
Input Watts (W): 60.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot



— 0°-180°    - - 45°-225°    - · - · 90°-270°    - · - · 135°-315°



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	89	86	83	84	80	77	75	63	61	60	48	47	45	33	33	32	26
2	85	78	73	68	76	71	66	62	56	53	50	42	40	38	30	29	28	22
3	78	69	62	57	70	62	57	52	50	46	42	38	35	33	27	25	24	19
4	72	61	54	48	64	55	49	44	44	40	36	34	31	28	24	22	21	17
5	66	55	47	41	59	49	43	38	40	35	31	30	27	25	22	20	18	15
6	60	49	41	36	54	44	38	33	36	31	27	28	24	22	20	18	16	13
7	56	44	37	31	50	40	34	29	32	28	24	25	22	19	18	16	14	12
8	52	40	33	28	46	36	30	26	29	25	21	23	20	17	17	15	13	10
9	48	37	29	25	43	33	27	23	27	22	19	21	18	15	15	13	12	10
10	45	33	27	22	40	30	24	20	25	20	17	19	16	14	14	12	11	9

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

	0°	90°	180°	270°
0°	9077	9077	9077	9077
5°	10821	9116	8028	9116
10°	13511	9063	7252	9063
15°	15858	8971	6614	8971
20°	17699	8833	6071	8833
25°	17416	8687	5738	8687
30°	12519	8552	5393	8552
35°	8359	8377	5171	8377
40°	6159	8168	4942	8168
45°	5165	7798	4714	7798
50°	4558	7316	4401	7316
55°	3997	6762	3969	6762
60°	3559	6232	3638	6232
65°	3125	5662	3385	5662
70°	2452	5158	3091	5158
75°	2163	4504	2824	4504
80°	1878	3825	2777	3825
85°	1519	3075	2939	3075



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.9	1.2
10°-20°	259.1	3.6
20°-30°	407.0	5.7
30°-40°	424.7	6.0
40°-50°	363.4	5.1
50°-60°	277.0	3.9
60°-70°	177.6	2.5
70°-80°	85.4	1.2
80°-90°	28.0	0.4
90°-100°	117.9	1.7
100°-110°	352.8	5.0
110°-120°	600.0	8.4
120°-130°	789.3	11.1
130°-140°	887.1	12.5
140°-150°	872.0	12.3
150°-160°	734.1	10.3
160°-170°	488.7	6.9
170°-180°	171.1	2.4
0°-30°	749.1	10.5
0°-40°	1173.7	16.5
0°-60°	1814.2	25.5
0°-90°	2105.1	29.6
90°-120°	1070.7	15.0
90°-150°	3619.1	50.8
90°-180°	5013.0	70.4
0°-180°	7118.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	843	843	843	843	843	
5°	1002	844	743	844	1002	103
15°	1423	805	594	805	1423	404
25°	1466	731	483	731	1466	630
35°	636	638	394	638	636	417
45°	339	512	310	512	339	267
55°	213	360	212	360	213	193
65°	123	222	133	222	123	121
75°	52	108	68	108	52	56
85°	12	25	24	25	12	15
90°	43	1	43	1	43	21
95°	111	84	111	84	111	114
105°	338	320	338	320	338	359
115°	606	604	606	604	606	599
125°	874	884	874	884	874	781
135°	1146	1147	1146	1147	1146	881
145°	1392	1392	1392	1392	1392	869
155°	1590	1593	1590	1593	1590	732
165°	1730	1735	1730	1735	1730	488
175°	1798	1805	1798	1805	1798	171
180°	1809	1809	1809	1809	1809	



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	898.1	899.4	895.6	895.0	890.7	889.6	889.6	883.4	879.7	874.8	871.9
5°	1001.5	1007.2	1004.4	997.9	987.0	984.5	977.6	966.8	954.5	939.3	932.2
7.5°	1130.4	1138.3	1135.2	1125.2	1113.9	1104.7	1085.3	1067.3	1042.2	1020.1	1001.2
10°	1236.1	1227.8	1221.3	1211.5	1201.1	1184.1	1163.9	1136.1	1104.0	1078.7	1050.6
12.5°	1315.2	1313.9	1305.6	1295.6	1280.8	1264.7	1239.8	1206.0	1168.7	1132.1	1099.9
15°	1423.1	1425.3	1419.8	1409.4	1388.5	1359.9	1322.4	1308.3	1254.9	1215.1	1175.4
17.5°	1497.8	1497.3	1496.6	1482.1	1460.8	1440.4	1405.6	1368.6	1320.2	1264.2	1210.8
20°	1545.1	1541.5	1542.3	1526.0	1510.1	1486.7	1452.7	1398.9	1359.2	1294.6	1239.3
22.5°	1544.0	1543.2	1546.0	1540.4	1528.9	1510.9	1484.2	1438.8	1388.1	1322.9	1260.7
25°	1466.4	1463.6	1480.5	1485.2	1503.6	1506.8	1498.9	1474.0	1426.0	1358.9	1282.0
27.5°	1227.3	1225.7	1257.2	1296.6	1346.6	1385.4	1423.0	1441.1	1426.0	1377.9	1300.9
30°	1007.2	1041.1	1057.1	1114.1	1177.6	1253.4	1319.8	1383.0	1398.5	1377.6	1314.5
32.5°	836.2	865.8	879.1	928.1	987.3	1076.1	1175.7	1265.2	1328.4	1344.4	1306.4
35°	636.1	636.5	666.8	688.4	743.3	834.6	931.4	1051.2	1170.4	1260.7	1270.1
37.5°	507.6	509.3	527.7	549.3	590.5	638.8	724.0	823.6	961.2	1099.8	1181.0
40°	438.3	441.5	455.2	476.5	506.1	542.6	609.1	702.9	817.7	971.9	1097.9
42.5°	393.8	399.1	406.1	422.5	440.8	475.0	528.8	601.2	705.6	851.4	996.7
45°	339.3	342.2	347.6	355.2	371.8	395.7	431.8	480.5	567.1	684.5	830.0
47.5°	299.4	297.8	303.5	309.7	320.7	337.0	361.2	401.0	462.8	556.9	680.3
50°	272.2	271.8	275.8	280.5	291.0	302.9	322.7	352.7	401.8	479.8	592.8
52.5°	246.8	248.2	251.0	256.8	264.4	274.0	291.8	313.4	355.6	422.9	517.1
55°	213.0	214.1	218.0	221.3	226.7	236.5	247.7	265.7	294.5	341.5	419.1
57.5°	184.4	183.9	187.8	188.5	194.6	202.6	211.2	225.3	246.2	281.1	333.4
60°	165.3	164.3	167.5	170.0	173.2	179.7	187.0	200.8	217.4	243.0	287.8
62.5°	148.0	147.5	149.9	152.4	155.0	161.0	167.1	177.6	190.8	212.4	247.9
65°	122.7	123.9	124.9	126.0	127.4	131.0	136.9	144.0	153.1	168.2	193.9
67.5°	96.4	97.6	97.9	100.1	103.2	105.5	109.1	115.5	121.8	134.5	149.1
70°	77.9	77.6	77.9	79.1	83.0	87.0	91.7	96.4	100.4	109.4	121.7
72.5°	67.0	66.4	67.3	67.5	69.5	70.5	73.5	77.9	83.0	89.2	98.0
75°	52.0	52.0	52.0	52.0	53.4	54.2	55.2	56.4	58.2	61.0	67.5
77.5°	38.5	38.5	39.0	39.3	39.7	40.1	40.7	41.8	42.4	44.0	46.8
80°	30.3	30.7	30.3	30.7	30.7	31.4	31.8	32.9	33.2	35.1	36.1
82.5°	22.8	22.6	22.8	23.2	23.2	23.9	23.9	24.8	24.9	25.7	26.9
85°	12.3	11.6	12.3	11.9	12.6	11.9	12.3	13.0	13.0	13.4	14.8
87.5°	11.4	11.9	11.1	11.3	11.2	11.3	11.0	10.8	11.1	10.6	10.1
90°	42.6	42.0	41.4	40.7	40.2	39.2	37.9	36.7	35.3	34.1	30.0
92.5°	57.4	57.8	58.2	58.5	58.9	58.6	57.6	56.6	55.6	54.6	52.2
95°	110.8	110.8	110.8	110.8	110.8	110.2	109.0	107.7	106.4	105.2	102.6
97.5°	170.6	170.7	170.8	171.0	171.1	170.4	168.9	167.5	166.1	164.6	162.8
100°	216.0	215.4	214.8	214.1	213.5	212.7	211.8	210.8	209.9	209.0	207.4
102.5°	262.7	262.8	262.9	263.1	263.2	262.8	261.8	260.9	260.0	258.9	256.8
105°	338.3	337.6	337.1	336.4	335.7	335.5	335.5	335.5	335.5	335.5	332.6
107.5°	417.0	417.4	417.7	418.1	418.5	418.2	417.2	416.2	415.2	414.2	413.0
110°	470.4	471.1	471.7	472.3	473.0	472.7	471.4	470.1	468.9	467.6	466.9



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	527.3	527.4	527.5	527.7	527.8	527.1	525.6	524.1	522.5	521.0	520.9
115°	605.5	605.8	606.1	606.4	606.7	606.7	606.4	606.1	605.8	605.5	606.1
117.5°	684.8	685.7	686.5	687.4	688.3	688.8	688.9	688.9	689.0	689.1	689.8
120°	740.5	741.1	741.8	742.4	743.0	743.5	743.9	744.1	744.4	744.8	746.3
122.5°	793.9	794.8	795.7	796.6	797.5	798.3	799.2	799.9	800.8	801.6	802.5
125°	874.1	875.3	876.7	877.9	879.1	880.4	881.7	883.0	884.2	885.5	886.1
127.5°	953.9	955.5	956.9	958.4	959.8	961.4	963.2	965.0	966.7	968.5	969.2
130°	1006.3	1008.5	1010.7	1013.0	1015.1	1016.9	1018.1	1019.4	1020.7	1021.9	1022.8
132.5°	1060.8	1062.5	1064.3	1066.0	1067.7	1069.3	1070.8	1072.3	1073.8	1075.3	1076.0
135°	1145.6	1146.2	1146.8	1147.5	1148.1	1149.1	1150.3	1151.6	1152.8	1154.1	1154.4
137.5°	1220.3	1221.5	1222.8	1223.9	1225.1	1226.4	1227.8	1229.1	1230.4	1231.7	1230.9
140°	1269.2	1271.4	1273.7	1275.8	1278.1	1279.3	1279.7	1280.0	1280.3	1280.6	1280.3
142.5°	1319.3	1321.0	1322.7	1324.4	1326.1	1327.1	1327.4	1327.8	1328.0	1328.3	1327.8
145°	1391.5	1392.7	1394.0	1395.2	1396.5	1397.3	1397.6	1397.9	1398.3	1398.5	1397.6
147.5°	1455.7	1457.5	1459.5	1461.4	1463.3	1464.2	1464.2	1464.2	1464.2	1464.2	1463.3
150°	1496.7	1498.5	1500.4	1502.3	1504.2	1505.1	1505.1	1505.1	1505.1	1505.1	1504.5
152.5°	1536.4	1538.0	1539.7	1541.3	1543.0	1543.6	1543.0	1542.6	1542.1	1541.5	1541.2
155°	1590.4	1592.6	1594.9	1597.0	1599.3	1599.8	1598.5	1597.2	1596.0	1594.7	1594.4
157.5°	1639.6	1641.3	1643.1	1644.9	1646.7	1646.9	1645.6	1644.3	1642.9	1641.6	1641.3
160°	1671.4	1672.7	1674.0	1675.3	1676.5	1676.3	1674.8	1673.2	1671.6	1670.0	1670.0
162.5°	1695.4	1697.3	1699.4	1701.4	1703.5	1703.6	1702.0	1700.4	1698.9	1697.3	1697.0
165°	1729.8	1731.9	1734.2	1736.4	1738.6	1738.7	1736.8	1734.9	1733.1	1731.2	1731.2
167.5°	1759.0	1761.0	1762.9	1764.9	1766.8	1766.8	1764.9	1762.9	1761.0	1759.0	1758.8
170°	1773.8	1776.0	1778.2	1780.5	1782.6	1782.6	1780.5	1778.2	1776.0	1773.8	1773.8
172.5°	1785.2	1787.3	1789.6	1791.8	1794.0	1794.1	1792.2	1790.2	1788.3	1786.3	1786.3
175°	1798.0	1800.2	1802.3	1804.6	1806.8	1806.9	1805.1	1803.2	1801.3	1799.4	1799.4
177.5°	1804.8	1806.6	1808.3	1810.1	1811.8	1811.9	1810.4	1808.9	1807.4	1805.9	1805.9
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	870.7	869.9	865.8	861.2	855.2	851.1	847.9	846.2	841.0	834.6	830.3
5°	924.5	913.7	902.2	888.1	875.1	861.8	853.5	843.7	831.8	818.4	809.0
7.5°	982.1	960.9	938.0	914.5	891.1	870.2	851.7	835.8	816.9	797.8	784.3
10°	1026.3	995.3	963.2	930.3	900.3	872.2	850.6	829.2	806.5	784.5	767.9
12.5°	1066.5	1025.7	988.6	948.2	909.9	876.3	845.1	820.0	792.7	769.2	750.3
15°	1117.3	1075.4	1030.7	969.3	918.4	875.8	837.9	805.0	771.8	743.0	724.5
17.5°	1164.8	1101.8	1041.7	990.4	924.4	871.1	824.8	785.5	749.1	718.5	695.8
20°	1184.5	1123.5	1058.1	992.8	927.8	868.3	814.5	771.1	733.2	698.5	677.6
22.5°	1196.3	1127.2	1058.4	988.2	919.2	857.2	804.1	756.4	715.3	682.4	656.6
25°	1210.1	1127.8	1052.0	982.7	912.3	845.1	781.9	731.4	687.0	652.0	624.5
27.5°	1219.2	1122.4	1032.7	955.7	884.3	817.5	759.6	706.0	660.9	623.9	594.5
30°	1221.0	1118.0	1018.0	934.6	862.0	800.7	739.3	688.1	640.5	601.1	573.6
32.5°	1223.2	1107.4	998.2	909.6	835.3	774.5	718.9	669.9	621.0	582.3	554.3
35°	1213.7	1101.5	967.9	866.1	791.7	732.8	682.7	637.5	589.6	552.0	523.5
37.5°	1172.7	1078.0	936.5	817.1	739.3	684.9	643.9	604.6	560.6	520.1	493.2
40°	1131.4	1054.9	912.3	787.4	706.2	650.2	613.3	581.3	538.7	500.7	471.8
42.5°	1069.9	1023.4	889.2	756.2	668.5	614.6	583.6	553.5	516.1	477.6	450.4
45°	957.1	963.2	841.9	706.5	616.6	562.4	533.2	512.3	479.1	447.3	419.5
47.5°	815.5	872.9	786.4	653.6	561.8	511.0	485.4	467.1	444.8	413.6	388.2
50°	723.1	805.0	741.9	618.0	527.4	476.9	451.7	436.9	417.4	392.8	368.6
52.5°	637.9	725.9	688.2	578.4	490.2	443.9	419.2	407.1	391.6	368.5	346.7
55°	520.2	609.4	600.7	518.8	434.3	392.8	374.0	360.3	349.8	332.5	315.2
57.5°	420.8	505.3	509.8	452.3	385.0	344.0	327.9	317.5	310.7	297.7	281.6
60°	358.2	435.7	450.9	407.6	349.8	313.7	297.8	289.5	284.1	273.6	261.4
62.5°	306.1	372.2	389.4	358.2	316.0	282.2	269.8	261.8	258.2	249.1	238.3
65°	234.3	289.2	305.8	288.4	266.5	239.3	229.2	222.3	219.1	214.1	206.1
67.5°	176.2	216.2	234.4	222.2	214.2	197.1	190.7	187.0	184.1	180.7	174.0
70°	141.5	171.2	189.9	186.6	180.1	171.2	166.5	163.9	161.0	158.2	152.3
72.5°	113.8	134.1	151.7	153.4	148.1	146.3	142.1	141.1	139.3	135.9	132.7
75°	75.5	89.5	101.8	106.5	108.7	110.5	108.7	108.3	107.9	105.1	103.2
77.5°	49.5	57.0	64.8	72.8	76.2	78.6	79.2	80.5	79.6	78.0	77.2
80°	37.9	39.7	45.1	52.0	57.4	59.6	61.0	61.7	61.4	61.0	59.6
82.5°	27.5	29.0	31.6	36.4	40.9	44.6	45.4	45.2	46.1	46.3	45.1
85°	14.8	15.2	15.9	16.6	19.1	23.1	24.2	24.9	25.6	25.6	23.5
87.5°	9.8	8.7	8.5	7.7	7.9	7.6	8.7	9.5	10.5	9.9	10.6
90°	25.9	21.8	17.7	14.0	10.9	7.7	4.6	1.4	4.6	7.7	10.9
92.5°	49.9	47.6	45.2	43.0	40.8	38.6	36.6	34.4	36.6	38.6	40.8
95°	100.1	97.6	95.1	92.7	90.5	88.3	86.1	83.9	86.1	88.3	90.5
97.5°	160.9	159.1	157.2	155.5	153.9	152.2	150.6	148.9	150.6	152.2	153.9
100°	205.8	204.2	202.6	200.9	199.0	197.1	195.2	193.3	195.2	197.1	199.0
102.5°	254.8	252.7	250.6	249.0	247.9	246.8	245.6	244.5	245.6	246.8	247.9
105°	329.7	326.9	324.0	322.3	321.7	321.0	320.5	319.8	320.5	321.0	321.7
107.5°	411.9	410.8	409.6	408.9	408.5	408.1	407.7	407.4	407.7	408.1	408.5
110°	466.4	465.7	465.1	464.5	463.8	463.2	462.6	461.9	462.6	463.2	463.8





TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	520.8	520.7	520.6	520.3	519.9	519.5	519.2	518.8	519.2	519.5	519.9
115°	606.7	607.4	608.0	607.8	606.9	606.0	605.0	604.1	605.0	606.0	606.9
117.5°	690.7	691.5	692.3	692.4	691.8	691.2	690.5	689.9	690.5	691.2	691.8
120°	747.9	749.5	751.1	750.9	749.0	747.2	745.3	743.4	745.3	747.2	749.0
122.5°	803.2	804.1	804.9	804.6	803.2	801.8	800.4	799.1	800.4	801.8	803.2
125°	886.7	887.4	888.0	887.9	886.9	886.0	885.0	884.0	885.0	886.0	886.9
127.5°	969.9	970.5	971.3	970.6	968.6	966.6	964.5	962.5	964.5	966.6	968.6
130°	1023.8	1024.7	1025.7	1024.9	1022.4	1019.8	1017.4	1014.8	1017.4	1019.8	1022.4
132.5°	1076.8	1077.4	1078.2	1077.2	1074.7	1072.1	1069.6	1067.1	1069.6	1072.1	1074.7
135°	1154.7	1155.1	1155.4	1154.6	1152.6	1150.8	1148.9	1147.0	1148.9	1150.8	1152.6
137.5°	1230.0	1229.3	1228.4	1227.2	1225.7	1224.1	1222.5	1220.9	1222.5	1224.1	1225.7
140°	1280.0	1279.7	1279.3	1278.4	1276.8	1275.3	1273.7	1272.1	1273.7	1275.3	1276.8
142.5°	1327.2	1326.6	1326.1	1325.0	1323.4	1321.8	1320.2	1318.7	1320.2	1321.8	1323.4
145°	1396.7	1395.7	1394.8	1394.0	1393.4	1392.7	1392.1	1391.5	1392.1	1392.7	1393.4
147.5°	1462.4	1461.6	1460.7	1459.7	1458.6	1457.4	1456.2	1455.1	1456.2	1457.4	1458.6
150°	1503.9	1503.3	1502.6	1502.0	1501.4	1500.7	1500.2	1499.5	1500.2	1500.7	1501.4
152.5°	1540.8	1540.4	1540.0	1539.4	1538.5	1537.7	1536.7	1535.9	1536.7	1537.7	1538.5
155°	1594.0	1593.7	1593.5	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3	1593.3
157.5°	1641.1	1640.9	1640.6	1640.7	1641.1	1641.4	1641.8	1642.2	1641.8	1641.4	1641.1
160°	1670.0	1670.0	1670.0	1670.4	1670.9	1671.6	1672.3	1672.9	1672.3	1671.6	1670.9
162.5°	1696.9	1696.6	1696.3	1696.7	1697.5	1698.4	1699.3	1700.2	1699.3	1698.4	1697.5
165°	1731.2	1731.2	1731.2	1731.6	1732.6	1733.5	1734.5	1735.4	1734.5	1733.5	1732.6
167.5°	1758.5	1758.2	1758.0	1758.5	1759.7	1761.0	1762.3	1763.6	1762.3	1761.0	1759.7
170°	1773.8	1773.8	1773.8	1774.4	1775.7	1777.0	1778.2	1779.4	1778.2	1777.0	1775.7
172.5°	1786.3	1786.3	1786.3	1787.0	1788.2	1789.4	1790.7	1792.0	1790.7	1789.4	1788.2
175°	1799.4	1799.4	1799.4	1800.0	1801.3	1802.5	1803.8	1805.1	1803.8	1802.5	1801.3
177.5°	1805.9	1805.9	1805.9	1806.4	1807.4	1808.5	1809.5	1810.4	1809.5	1808.5	1807.4
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	828.9	825.1	822.6	816.7	813.0	809.0	804.9	807.5	807.2	806.9	806.9
5°	801.1	792.8	785.2	775.4	769.3	761.8	755.9	755.3	756.7	751.6	748.8
7.5°	773.5	762.1	751.4	740.6	729.2	720.1	714.4	711.8	708.1	705.0	701.7
10°	754.1	740.8	730.3	717.0	704.7	693.9	687.0	682.3	679.8	677.2	672.6
12.5°	734.2	721.1	707.8	692.7	681.0	668.5	663.4	658.1	653.2	650.4	643.9
15°	705.0	688.1	674.0	658.1	645.2	632.8	625.7	615.2	613.7	610.1	603.6
17.5°	675.8	657.4	638.0	626.2	611.5	598.8	587.8	584.3	573.9	570.0	564.4
20°	652.7	635.7	620.9	605.4	584.1	572.2	563.5	558.8	550.5	545.4	541.9
22.5°	632.8	615.5	598.4	580.3	562.7	549.4	543.0	535.7	531.2	524.1	520.2
25°	604.4	585.6	565.0	545.4	532.8	522.7	512.6	506.1	499.6	496.3	489.2
27.5°	571.3	551.7	532.4	517.6	502.1	492.1	483.0	477.2	469.4	463.9	460.0
30°	553.1	530.0	513.4	500.0	480.1	470.8	463.9	456.7	450.9	445.2	441.1
32.5°	532.0	510.9	495.1	478.6	463.4	453.2	444.2	437.9	433.0	427.5	423.6
35°	498.9	481.3	465.0	448.4	437.2	426.7	416.2	410.9	406.1	401.1	397.5
37.5°	469.0	452.5	437.1	421.3	407.5	398.9	390.5	386.3	380.0	376.6	373.0
40°	450.5	434.3	417.7	402.6	388.0	381.6	374.0	367.9	362.1	359.6	355.6
42.5°	430.4	414.1	400.1	383.7	371.9	363.1	356.1	349.4	345.1	341.4	339.1
45°	400.4	385.9	372.2	356.0	344.8	337.1	329.2	323.1	319.1	316.6	312.6
47.5°	371.3	356.8	342.9	328.8	317.9	309.2	301.3	297.0	291.8	288.7	286.0
50°	350.2	337.1	322.3	309.3	298.6	289.9	283.4	278.0	273.2	269.3	267.5
52.5°	330.8	317.0	304.2	292.1	280.7	270.8	264.9	259.2	255.7	251.1	249.0
55°	298.9	285.6	274.8	262.8	251.7	243.4	236.1	231.0	227.4	222.3	219.5
57.5°	268.9	256.9	244.0	233.8	222.2	215.2	209.2	202.3	197.9	194.0	191.1
60°	248.7	235.0	223.9	214.1	204.0	194.9	189.5	184.1	179.5	175.4	173.0
62.5°	227.6	215.7	205.1	194.4	185.2	177.3	171.1	166.5	162.4	159.9	157.3
65°	195.3	186.0	175.1	166.5	157.8	152.0	146.9	143.0	140.1	138.3	136.1
67.5°	165.6	156.5	147.0	138.5	132.7	128.3	125.0	121.6	120.2	117.8	116.4
70°	146.2	136.9	128.6	122.1	116.2	113.0	110.8	108.3	106.9	104.0	102.5
72.5°	125.2	118.4	112.4	107.0	102.4	99.4	96.7	93.6	91.2	88.1	86.6
75°	98.6	92.5	87.8	84.1	81.2	77.3	73.3	70.0	69.0	67.9	67.5
77.5°	73.0	69.1	65.7	62.7	59.1	56.2	55.3	54.6	54.4	53.8	53.8
80°	57.4	53.8	51.3	47.7	45.5	45.5	45.5	44.8	45.1	45.1	45.1
82.5°	42.7	39.3	38.0	36.7	36.3	36.6	36.6	36.7	36.5	37.0	36.8
85°	22.1	22.3	23.1	22.7	23.1	23.1	23.8	23.5	23.8	23.1	23.8
87.5°	10.9	12.5	13.6	14.7	15.8	16.3	16.9	17.2	17.7	17.9	18.1
90°	14.0	17.7	21.8	25.9	30.0	34.1	35.3	36.7	37.9	39.2	40.2
92.5°	43.0	45.2	47.6	49.9	52.2	54.6	55.6	56.6	57.6	58.6	58.9
95°	92.7	95.1	97.6	100.1	102.6	105.2	106.4	107.7	109.0	110.2	110.8
97.5°	155.5	157.2	159.1	160.9	162.8	164.6	166.1	167.5	168.9	170.4	171.1
100°	200.9	202.6	204.2	205.8	207.4	209.0	209.9	210.8	211.8	212.7	213.5
102.5°	249.0	250.6	252.7	254.8	256.8	258.9	260.0	260.9	261.8	262.8	263.2
105°	322.3	324.0	326.9	329.7	332.6	335.5	335.5	335.5	335.5	335.5	335.7
107.5°	408.9	409.6	410.8	411.9	413.0	414.2	415.2	416.2	417.2	418.2	418.5
110°	464.5	465.1	465.7	466.4	466.9	467.6	468.9	470.1	471.4	472.7	473.0



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	520.3	520.6	520.7	520.8	520.9	521.0	522.5	524.1	525.6	527.1	527.8
115°	607.8	608.0	607.4	606.7	606.1	605.5	605.8	606.1	606.4	606.7	606.7
117.5°	692.4	692.3	691.5	690.7	689.8	689.1	689.0	688.9	688.9	688.8	688.3
120°	750.9	751.1	749.5	747.9	746.3	744.8	744.4	744.1	743.9	743.5	743.0
122.5°	804.6	804.9	804.1	803.2	802.5	801.6	800.8	799.9	799.2	798.3	797.5
125°	887.9	888.0	887.4	886.7	886.1	885.5	884.2	883.0	881.7	880.4	879.1
127.5°	970.6	971.3	970.5	969.9	969.2	968.5	966.7	965.0	963.2	961.4	959.8
130°	1024.9	1025.7	1024.7	1023.8	1022.8	1021.9	1020.7	1019.4	1018.1	1016.9	1015.1
132.5°	1077.2	1078.2	1077.4	1076.8	1076.0	1075.3	1073.8	1072.3	1070.8	1069.3	1067.7
135°	1154.6	1155.4	1155.1	1154.7	1154.4	1154.1	1152.8	1151.6	1150.3	1149.1	1148.1
137.5°	1227.2	1228.4	1229.3	1230.0	1230.9	1231.7	1230.4	1229.1	1227.8	1226.4	1225.1
140°	1278.4	1279.3	1279.7	1280.0	1280.3	1280.6	1280.3	1280.0	1279.7	1279.3	1278.1
142.5°	1325.0	1326.1	1326.6	1327.2	1327.8	1328.3	1328.0	1327.8	1327.4	1327.1	1326.1
145°	1394.0	1394.8	1395.7	1396.7	1397.6	1398.5	1398.3	1397.9	1397.6	1397.3	1396.5
147.5°	1459.7	1460.7	1461.6	1462.4	1463.3	1464.2	1464.2	1464.2	1464.2	1464.2	1463.3
150°	1502.0	1502.6	1503.3	1503.9	1504.5	1505.1	1505.1	1505.1	1505.1	1505.1	1504.2
152.5°	1539.4	1540.0	1540.4	1540.8	1541.2	1541.5	1542.1	1542.6	1543.0	1543.6	1543.0
155°	1593.3	1593.5	1593.7	1594.0	1594.4	1594.7	1596.0	1597.2	1598.5	1599.8	1599.3
157.5°	1640.7	1640.6	1640.9	1641.1	1641.3	1641.6	1642.9	1644.3	1645.6	1646.9	1646.7
160°	1670.4	1670.0	1670.0	1670.0	1670.0	1670.0	1671.6	1673.2	1674.8	1676.3	1676.5
162.5°	1696.7	1696.3	1696.6	1696.9	1697.0	1697.3	1698.9	1700.4	1702.0	1703.6	1703.5
165°	1731.6	1731.2	1731.2	1731.2	1731.2	1731.2	1733.1	1734.9	1736.8	1738.7	1738.6
167.5°	1758.5	1758.0	1758.2	1758.5	1758.8	1759.0	1761.0	1762.9	1764.9	1766.8	1766.8
170°	1774.4	1773.8	1773.8	1773.8	1773.8	1773.8	1776.0	1778.2	1780.5	1782.6	1782.6
172.5°	1787.0	1786.3	1786.3	1786.3	1786.3	1786.3	1788.3	1790.2	1792.2	1794.1	1794.0
175°	1800.0	1799.4	1799.4	1799.4	1799.4	1799.4	1801.3	1803.2	1805.1	1806.9	1806.8
177.5°	1806.4	1805.9	1805.9	1805.9	1805.9	1805.9	1807.4	1808.9	1810.4	1811.9	1811.8
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	803.4	803.1	803.4	802.3	803.4	803.1	803.4	806.9	806.9	807.2	807.5
5°	747.6	747.2	746.2	743.0	746.2	747.2	747.6	748.8	751.6	756.7	755.3
7.5°	698.9	698.4	695.2	695.3	695.2	698.4	698.9	701.7	705.0	708.1	711.8
10°	670.1	670.4	666.1	663.5	666.1	670.4	670.1	672.6	677.2	679.8	682.3
12.5°	642.1	640.4	636.9	634.0	636.9	640.4	642.1	643.9	650.4	653.2	658.1
15°	605.0	601.4	592.8	593.5	592.8	601.4	605.0	603.6	610.1	613.7	615.2
17.5°	561.5	558.8	558.7	553.6	558.7	558.8	561.5	564.4	570.0	573.9	584.3
20°	536.1	534.3	535.0	530.0	535.0	534.3	536.1	541.9	545.4	550.5	558.8
22.5°	516.1	514.3	511.3	509.7	511.3	514.3	516.1	520.2	524.1	531.2	535.7
25°	487.0	484.1	481.3	483.1	481.3	484.1	487.0	489.2	496.3	499.6	506.1
27.5°	457.8	455.6	452.8	452.4	452.8	455.6	457.8	460.0	463.9	469.4	477.2
30°	439.3	437.2	435.7	433.9	435.7	437.2	439.3	441.1	445.2	450.9	456.7
32.5°	420.6	420.2	417.5	417.2	417.5	420.2	420.6	423.6	427.5	433.0	437.9
35°	396.1	393.9	393.1	393.5	393.1	393.9	396.1	397.5	401.1	406.1	410.9
37.5°	372.7	369.9	368.5	367.2	368.5	369.9	372.7	373.0	376.6	380.0	386.3
40°	356.0	353.1	352.3	351.7	352.3	353.1	356.0	355.6	359.6	362.1	367.9
42.5°	337.1	336.0	335.6	334.3	335.6	336.0	337.1	339.1	341.4	345.1	349.4
45°	311.5	311.2	309.1	309.7	309.1	311.2	311.5	312.6	316.6	319.1	323.1
47.5°	284.6	283.0	281.4	282.5	281.4	283.0	284.6	286.0	288.7	291.8	297.0
50°	266.1	265.3	262.1	262.8	262.1	265.3	266.1	267.5	269.3	273.2	278.0
52.5°	247.6	244.9	243.6	243.2	243.6	244.9	247.6	249.0	251.1	255.7	259.2
55°	217.0	213.7	212.3	211.5	212.3	213.7	217.0	219.5	222.3	227.4	231.0
57.5°	186.9	186.1	184.9	185.7	184.9	186.1	186.9	191.1	194.0	197.9	202.3
60°	169.3	169.3	169.3	169.0	169.3	169.3	169.3	173.0	175.4	179.5	184.1
62.5°	155.7	154.9	154.6	155.0	154.6	154.9	155.7	157.3	159.9	162.4	166.5
65°	135.0	134.7	133.2	132.9	133.2	134.7	135.0	136.1	138.3	140.1	143.0
67.5°	115.5	114.1	113.8	113.2	113.8	114.1	115.5	116.4	117.8	120.2	121.6
70°	100.8	100.0	97.8	98.2	97.8	100.0	100.8	102.5	104.0	106.9	108.3
72.5°	84.8	84.1	83.7	83.1	83.7	84.1	84.8	86.6	88.1	91.2	93.6
75°	67.1	66.8	66.4	67.9	66.4	66.8	67.1	67.5	67.9	69.0	70.0
77.5°	53.8	53.8	54.0	53.4	54.0	53.8	53.8	53.8	53.8	54.4	54.6
80°	45.1	45.1	44.8	44.8	44.8	45.1	45.1	45.1	45.1	45.1	44.8
82.5°	36.2	36.5	36.7	36.1	36.7	36.5	36.2	36.8	37.0	36.5	36.7
85°	23.8	23.5	24.2	23.8	24.2	23.5	23.8	23.8	23.1	23.8	23.5
87.5°	18.9	18.4	18.5	18.9	18.5	18.4	18.9	18.1	17.9	17.7	17.2
90°	40.7	41.4	42.0	42.6	42.0	41.4	40.7	40.2	39.2	37.9	36.7
92.5°	58.5	58.2	57.8	57.4	57.8	58.2	58.5	58.9	58.6	57.6	56.6
95°	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.8	110.2	109.0	107.7
97.5°	171.0	170.8	170.7	170.6	170.7	170.8	171.0	171.1	170.4	168.9	167.5
100°	214.1	214.8	215.4	216.0	215.4	214.8	214.1	213.5	212.7	211.8	210.8
102.5°	263.1	262.9	262.8	262.7	262.8	262.9	263.1	263.2	262.8	261.8	260.9
105°	336.4	337.1	337.6	338.3	337.6	337.1	336.4	335.7	335.5	335.5	335.5
107.5°	418.1	417.7	417.4	417.0	417.4	417.7	418.1	418.5	418.2	417.2	416.2
110°	472.3	471.7	471.1	470.4	471.1	471.7	472.3	473.0	472.7	471.4	470.1



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	527.7	527.5	527.4	527.3	527.4	527.5	527.7	527.8	527.1	525.6	524.1
115°	606.4	606.1	605.8	605.5	605.8	606.1	606.4	606.7	606.7	606.4	606.1
117.5°	687.4	686.5	685.7	684.8	685.7	686.5	687.4	688.3	688.8	688.9	688.9
120°	742.4	741.8	741.1	740.5	741.1	741.8	742.4	743.0	743.5	743.9	744.1
122.5°	796.6	795.7	794.8	793.9	794.8	795.7	796.6	797.5	798.3	799.2	799.9
125°	877.9	876.7	875.3	874.1	875.3	876.7	877.9	879.1	880.4	881.7	883.0
127.5°	958.4	956.9	955.5	953.9	955.5	956.9	958.4	959.8	961.4	963.2	965.0
130°	1013.0	1010.7	1008.5	1006.3	1008.5	1010.7	1013.0	1015.1	1016.9	1018.1	1019.4
132.5°	1066.0	1064.3	1062.5	1060.8	1062.5	1064.3	1066.0	1067.7	1069.3	1070.8	1072.3
135°	1147.5	1146.8	1146.2	1145.6	1146.2	1146.8	1147.5	1148.1	1149.1	1150.3	1151.6
137.5°	1223.9	1222.8	1221.5	1220.3	1221.5	1222.8	1223.9	1225.1	1226.4	1227.8	1229.1
140°	1275.8	1273.7	1271.4	1269.2	1271.4	1273.7	1275.8	1278.1	1279.3	1279.7	1280.0
142.5°	1324.4	1322.7	1321.0	1319.3	1321.0	1322.7	1324.4	1326.1	1327.1	1327.4	1327.8
145°	1395.2	1394.0	1392.7	1391.5	1392.7	1394.0	1395.2	1396.5	1397.3	1397.6	1397.9
147.5°	1461.4	1459.5	1457.5	1455.7	1457.5	1459.5	1461.4	1463.3	1464.2	1464.2	1464.2
150°	1502.3	1500.4	1498.5	1496.7	1498.5	1500.4	1502.3	1504.2	1505.1	1505.1	1505.1
152.5°	1541.3	1539.7	1538.0	1536.4	1538.0	1539.7	1541.3	1543.0	1543.6	1543.0	1542.6
155°	1597.0	1594.9	1592.6	1590.4	1592.6	1594.9	1597.0	1599.3	1599.8	1598.5	1597.2
157.5°	1644.9	1643.1	1641.3	1639.6	1641.3	1643.1	1644.9	1646.7	1646.9	1645.6	1644.3
160°	1675.3	1674.0	1672.7	1671.4	1672.7	1674.0	1675.3	1676.5	1676.3	1674.8	1673.2
162.5°	1701.4	1699.4	1697.3	1695.4	1697.3	1699.4	1701.4	1703.5	1703.6	1702.0	1700.4
165°	1736.4	1734.2	1731.9	1729.8	1731.9	1734.2	1736.4	1738.6	1738.7	1736.8	1734.9
167.5°	1764.9	1762.9	1761.0	1759.0	1761.0	1762.9	1764.9	1766.8	1766.8	1764.9	1762.9
170°	1780.5	1778.2	1776.0	1773.8	1776.0	1778.2	1780.5	1782.6	1782.6	1780.5	1778.2
172.5°	1791.8	1789.6	1787.3	1785.2	1787.3	1789.6	1791.8	1794.0	1794.1	1792.2	1790.2
175°	1804.6	1802.3	1800.2	1798.0	1800.2	1802.3	1804.6	1806.8	1806.9	1805.1	1803.2
177.5°	1810.1	1808.3	1806.6	1804.8	1806.6	1808.3	1810.1	1811.8	1811.9	1810.4	1808.9
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	804.9	809.0	813.0	816.7	822.6	825.1	828.9	830.3	834.6	841.0	846.2
5°	755.9	761.8	769.3	775.4	785.2	792.8	801.1	809.0	818.4	831.8	843.7
7.5°	714.4	720.1	729.2	740.6	751.4	762.1	773.5	784.3	797.8	816.9	835.8
10°	687.0	693.9	704.7	717.0	730.3	740.8	754.1	767.9	784.5	806.5	829.2
12.5°	663.4	668.5	681.0	692.7	707.8	721.1	734.2	750.3	769.2	792.7	820.0
15°	625.7	632.8	645.2	658.1	674.0	688.1	705.0	724.5	743.0	771.8	805.0
17.5°	587.8	598.8	611.5	626.2	638.0	657.4	675.8	695.8	718.5	749.1	785.5
20°	563.5	572.2	584.1	605.4	620.9	635.7	652.7	677.6	698.5	733.2	771.1
22.5°	543.0	549.4	562.7	580.3	598.4	615.5	632.8	656.6	682.4	715.3	756.4
25°	512.6	522.7	532.8	545.4	565.0	585.6	604.4	624.5	652.0	687.0	731.4
27.5°	483.0	492.1	502.1	517.6	532.4	551.7	571.3	594.5	623.9	660.9	706.0
30°	463.9	470.8	480.1	500.0	513.4	530.0	553.1	573.6	601.1	640.5	688.1
32.5°	444.2	453.2	463.4	478.6	495.1	510.9	532.0	554.3	582.3	621.0	669.9
35°	416.2	426.7	437.2	448.4	465.0	481.3	498.9	523.5	552.0	589.6	637.5
37.5°	390.5	398.9	407.5	421.3	437.1	452.5	469.0	493.2	520.1	560.6	604.6
40°	374.0	381.6	388.0	402.6	417.7	434.3	450.5	471.8	500.7	538.7	581.3
42.5°	356.1	363.1	371.9	383.7	400.1	414.1	430.4	450.4	477.6	516.1	553.5
45°	329.2	337.1	344.8	356.0	372.2	385.9	400.4	419.5	447.3	479.1	512.3
47.5°	301.3	309.2	317.9	328.8	342.9	356.8	371.3	388.2	413.6	444.8	467.1
50°	283.4	289.9	298.6	309.3	322.3	337.1	350.2	368.6	392.8	417.4	436.9
52.5°	264.9	270.8	280.7	292.1	304.2	317.0	330.8	346.7	368.5	391.6	407.1
55°	236.1	243.4	251.7	262.8	274.8	285.6	298.9	315.2	332.5	349.8	360.3
57.5°	209.2	215.2	222.2	233.8	244.0	256.9	268.9	281.6	297.7	310.7	317.5
60°	189.5	194.9	204.0	214.1	223.9	235.0	248.7	261.4	273.6	284.1	289.5
62.5°	171.1	177.3	185.2	194.4	205.1	215.7	227.6	238.3	249.1	258.2	261.8
65°	146.9	152.0	157.8	166.5	175.1	186.0	195.3	206.1	214.1	219.1	222.3
67.5°	125.0	128.3	132.7	138.5	147.0	156.5	165.6	174.0	180.7	184.1	187.0
70°	110.8	113.0	116.2	122.1	128.6	136.9	146.2	152.3	158.2	161.0	163.9
72.5°	96.7	99.4	102.4	107.0	112.4	118.4	125.2	132.7	135.9	139.3	141.1
75°	73.3	77.3	81.2	84.1	87.8	92.5	98.6	103.2	105.1	107.9	108.3
77.5°	55.3	56.2	59.1	62.7	65.7	69.1	73.0	77.2	78.0	79.6	80.5
80°	45.5	45.5	45.5	47.7	51.3	53.8	57.4	59.6	61.0	61.4	61.7
82.5°	36.6	36.6	36.3	36.7	38.0	39.3	42.7	45.1	46.3	46.1	45.2
85°	23.8	23.1	23.1	22.7	23.1	22.3	22.1	23.5	25.6	25.6	24.9
87.5°	16.9	16.3	15.8	14.7	13.6	12.5	10.9	10.6	9.9	10.5	9.5
90°	35.3	34.1	30.0	25.9	21.8	17.7	14.0	10.9	7.7	4.6	1.4
92.5°	55.6	54.6	52.2	49.9	47.6	45.2	43.0	40.8	38.6	36.6	34.4
95°	106.4	105.2	102.6	100.1	97.6	95.1	92.7	90.5	88.3	86.1	83.9
97.5°	166.1	164.6	162.8	160.9	159.1	157.2	155.5	153.9	152.2	150.6	148.9
100°	209.9	209.0	207.4	205.8	204.2	202.6	200.9	199.0	197.1	195.2	193.3
102.5°	260.0	258.9	256.8	254.8	252.7	250.6	249.0	247.9	246.8	245.6	244.5
105°	335.5	335.5	332.6	329.7	326.9	324.0	322.3	321.7	321.0	320.5	319.8
107.5°	415.2	414.2	413.0	411.9	410.8	409.6	408.9	408.5	408.1	407.7	407.4
110°	468.9	467.6	466.9	466.4	465.7	465.1	464.5	463.8	463.2	462.6	461.9



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	522.5	521.0	520.9	520.8	520.7	520.6	520.3	519.9	519.5	519.2	518.8
115°	605.8	605.5	606.1	606.7	607.4	608.0	607.8	606.9	606.0	605.0	604.1
117.5°	689.0	689.1	689.8	690.7	691.5	692.3	692.4	691.8	691.2	690.5	689.9
120°	744.4	744.8	746.3	747.9	749.5	751.1	750.9	749.0	747.2	745.3	743.4
122.5°	800.8	801.6	802.5	803.2	804.1	804.9	804.6	803.2	801.8	800.4	799.1
125°	884.2	885.5	886.1	886.7	887.4	888.0	887.9	886.9	886.0	885.0	884.0
127.5°	966.7	968.5	969.2	969.9	970.5	971.3	970.6	968.6	966.6	964.5	962.5
130°	1020.7	1021.9	1022.8	1023.8	1024.7	1025.7	1024.9	1022.4	1019.8	1017.4	1014.8
132.5°	1073.8	1075.3	1076.0	1076.8	1077.4	1078.2	1077.2	1074.7	1072.1	1069.6	1067.1
135°	1152.8	1154.1	1154.4	1154.7	1155.1	1155.4	1154.6	1152.6	1150.8	1148.9	1147.0
137.5°	1230.4	1231.7	1230.9	1230.0	1229.3	1228.4	1227.2	1225.7	1224.1	1222.5	1220.9
140°	1280.3	1280.6	1280.3	1280.0	1279.7	1279.3	1278.4	1276.8	1275.3	1273.7	1272.1
142.5°	1328.0	1328.3	1327.8	1327.2	1326.6	1326.1	1325.0	1323.4	1321.8	1320.2	1318.7
145°	1398.3	1398.5	1397.6	1396.7	1395.7	1394.8	1394.0	1393.4	1392.7	1392.1	1391.5
147.5°	1464.2	1464.2	1463.3	1462.4	1461.6	1460.7	1459.7	1458.6	1457.4	1456.2	1455.1
150°	1505.1	1505.1	1504.5	1503.9	1503.3	1502.6	1502.0	1501.4	1500.7	1500.2	1499.5
152.5°	1542.1	1541.5	1541.2	1540.8	1540.4	1540.0	1539.4	1538.5	1537.7	1536.7	1535.9
155°	1596.0	1594.7	1594.4	1594.0	1593.7	1593.5	1593.3	1593.3	1593.3	1593.3	1593.3
157.5°	1642.9	1641.6	1641.3	1641.1	1640.9	1640.6	1640.7	1641.1	1641.4	1641.8	1642.2
160°	1671.6	1670.0	1670.0	1670.0	1670.0	1670.0	1670.4	1670.9	1671.6	1672.3	1672.9
162.5°	1698.9	1697.3	1697.0	1696.9	1696.6	1696.3	1696.7	1697.5	1698.4	1699.3	1700.2
165°	1733.1	1731.2	1731.2	1731.2	1731.2	1731.2	1731.6	1732.6	1733.5	1734.5	1735.4
167.5°	1761.0	1759.0	1758.8	1758.5	1758.2	1758.0	1758.5	1759.7	1761.0	1762.3	1763.6
170°	1776.0	1773.8	1773.8	1773.8	1773.8	1773.8	1774.4	1775.7	1777.0	1778.2	1779.4
172.5°	1788.3	1786.3	1786.3	1786.3	1786.3	1786.3	1787.0	1788.2	1789.4	1790.7	1792.0
175°	1801.3	1799.4	1799.4	1799.4	1799.4	1799.4	1800.0	1801.3	1802.5	1803.8	1805.1
177.5°	1807.4	1805.9	1805.9	1805.9	1805.9	1805.9	1806.4	1807.4	1808.5	1809.5	1810.4
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	847.9	851.1	855.2	861.2	865.8	869.9	870.7	871.9	874.8	879.7	883.4
5°	853.5	861.8	875.1	888.1	902.2	913.7	924.5	932.2	939.3	954.5	966.8
7.5°	851.7	870.2	891.1	914.5	938.0	960.9	982.1	1001.2	1020.1	1042.2	1067.3
10°	850.6	872.2	900.3	930.3	963.2	995.3	1026.3	1050.6	1078.7	1104.0	1136.1
12.5°	845.1	876.3	909.9	948.2	988.6	1025.7	1066.5	1099.9	1132.1	1168.7	1206.0
15°	837.9	875.8	918.4	969.3	1030.7	1075.4	1117.3	1175.4	1215.1	1254.9	1308.3
17.5°	824.8	871.1	924.4	990.4	1041.7	1101.8	1164.8	1210.8	1264.2	1320.2	1368.6
20°	814.5	868.3	927.8	992.8	1058.1	1123.5	1184.5	1239.3	1294.6	1359.2	1398.9
22.5°	804.1	857.2	919.2	988.2	1058.4	1127.2	1196.3	1260.7	1322.9	1388.1	1438.8
25°	781.9	845.1	912.3	982.7	1052.0	1127.8	1210.1	1282.0	1358.9	1426.0	1474.0
27.5°	759.6	817.5	884.3	955.7	1032.7	1122.4	1219.2	1300.9	1377.9	1426.0	1441.1
30°	739.3	800.7	862.0	934.6	1018.0	1118.0	1221.0	1314.5	1377.6	1398.5	1383.0
32.5°	718.9	774.5	835.3	909.6	998.2	1107.4	1223.2	1306.4	1344.4	1328.4	1265.2
35°	682.7	732.8	791.7	866.1	967.9	1101.5	1213.7	1270.1	1260.7	1170.4	1051.2
37.5°	643.9	684.9	739.3	817.1	936.5	1078.0	1172.7	1181.0	1099.8	961.2	823.6
40°	613.3	650.2	706.2	787.4	912.3	1054.9	1131.4	1097.9	971.9	817.7	702.9
42.5°	583.6	614.6	668.5	756.2	889.2	1023.4	1069.9	996.7	851.4	705.6	601.2
45°	533.2	562.4	616.6	706.5	841.9	963.2	957.1	830.0	684.5	567.1	480.5
47.5°	485.4	511.0	561.8	653.6	786.4	872.9	815.5	680.3	556.9	462.8	401.0
50°	451.7	476.9	527.4	618.0	741.9	805.0	723.1	592.8	479.8	401.8	352.7
52.5°	419.2	443.9	490.2	578.4	688.2	725.9	637.9	517.1	422.9	355.6	313.4
55°	374.0	392.8	434.3	518.8	600.7	609.4	520.2	419.1	341.5	294.5	265.7
57.5°	327.9	344.0	385.0	452.3	509.8	505.3	420.8	333.4	281.1	246.2	225.3
60°	297.8	313.7	349.8	407.6	450.9	435.7	358.2	287.8	243.0	217.4	200.8
62.5°	269.8	282.2	316.0	358.2	389.4	372.2	306.1	247.9	212.4	190.8	177.6
65°	229.2	239.3	266.5	288.4	305.8	289.2	234.3	193.9	168.2	153.1	144.0
67.5°	190.7	197.1	214.2	222.2	234.4	216.2	176.2	149.1	134.5	121.8	115.5
70°	166.5	171.2	180.1	186.6	189.9	171.2	141.5	121.7	109.4	100.4	96.4
72.5°	142.1	146.3	148.1	153.4	151.7	134.1	113.8	98.0	89.2	83.0	77.9
75°	108.7	110.5	108.7	106.5	101.8	89.5	75.5	67.5	61.0	58.2	56.4
77.5°	79.2	78.6	76.2	72.8	64.8	57.0	49.5	46.8	44.0	42.4	41.8
80°	61.0	59.6	57.4	52.0	45.1	39.7	37.9	36.1	35.1	33.2	32.9
82.5°	45.4	44.6	40.9	36.4	31.6	29.0	27.5	26.9	25.7	24.9	24.8
85°	24.2	23.1	19.1	16.6	15.9	15.2	14.8	14.8	13.4	13.0	13.0
87.5°	8.7	7.6	7.9	7.7	8.5	8.7	9.8	10.1	10.6	11.1	10.8
90°	4.6	7.7	10.9	14.0	17.7	21.8	25.9	30.0	34.1	35.3	36.7
92.5°	36.6	38.6	40.8	43.0	45.2	47.6	49.9	52.2	54.6	55.6	56.6
95°	86.1	88.3	90.5	92.7	95.1	97.6	100.1	102.6	105.2	106.4	107.7
97.5°	150.6	152.2	153.9	155.5	157.2	159.1	160.9	162.8	164.6	166.1	167.5
100°	195.2	197.1	199.0	200.9	202.6	204.2	205.8	207.4	209.0	209.9	210.8
102.5°	245.6	246.8	247.9	249.0	250.6	252.7	254.8	256.8	258.9	260.0	260.9
105°	320.5	321.0	321.7	322.3	324.0	326.9	329.7	332.6	335.5	335.5	335.5
107.5°	407.7	408.1	408.5	408.9	409.6	410.8	411.9	413.0	414.2	415.2	416.2
110°	462.6	463.2	463.8	464.5	465.1	465.7	466.4	466.9	467.6	468.9	470.1





TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	519.2	519.5	519.9	520.3	520.6	520.7	520.8	520.9	521.0	522.5	524.1
115°	605.0	606.0	606.9	607.8	608.0	607.4	606.7	606.1	605.5	605.8	606.1
117.5°	690.5	691.2	691.8	692.4	692.3	691.5	690.7	689.8	689.1	689.0	688.9
120°	745.3	747.2	749.0	750.9	751.1	749.5	747.9	746.3	744.8	744.4	744.1
122.5°	800.4	801.8	803.2	804.6	804.9	804.1	803.2	802.5	801.6	800.8	799.9
125°	885.0	886.0	886.9	887.9	888.0	887.4	886.7	886.1	885.5	884.2	883.0
127.5°	964.5	966.6	968.6	970.6	971.3	970.5	969.9	969.2	968.5	966.7	965.0
130°	1017.4	1019.8	1022.4	1024.9	1025.7	1024.7	1023.8	1022.8	1021.9	1020.7	1019.4
132.5°	1069.6	1072.1	1074.7	1077.2	1078.2	1077.4	1076.8	1076.0	1075.3	1073.8	1072.3
135°	1148.9	1150.8	1152.6	1154.6	1155.4	1155.1	1154.7	1154.4	1154.1	1152.8	1151.6
137.5°	1222.5	1224.1	1225.7	1227.2	1228.4	1229.3	1230.0	1230.9	1231.7	1230.4	1229.1
140°	1273.7	1275.3	1276.8	1278.4	1279.3	1279.7	1280.0	1280.3	1280.6	1280.3	1280.0
142.5°	1320.2	1321.8	1323.4	1325.0	1326.1	1326.6	1327.2	1327.8	1328.3	1328.0	1327.8
145°	1392.1	1392.7	1393.4	1394.0	1394.8	1395.7	1396.7	1397.6	1398.5	1398.3	1397.9
147.5°	1456.2	1457.4	1458.6	1459.7	1460.7	1461.6	1462.4	1463.3	1464.2	1464.2	1464.2
150°	1500.2	1500.7	1501.4	1502.0	1502.6	1503.3	1503.9	1504.5	1505.1	1505.1	1505.1
152.5°	1536.7	1537.7	1538.5	1539.4	1540.0	1540.4	1540.8	1541.2	1541.5	1542.1	1542.6
155°	1593.3	1593.3	1593.3	1593.3	1593.5	1593.7	1594.0	1594.4	1594.7	1596.0	1597.2
157.5°	1641.8	1641.4	1641.1	1640.7	1640.6	1640.9	1641.1	1641.3	1641.6	1642.9	1644.3
160°	1672.3	1671.6	1670.9	1670.4	1670.0	1670.0	1670.0	1670.0	1670.0	1671.6	1673.2
162.5°	1699.3	1698.4	1697.5	1696.7	1696.3	1696.6	1696.9	1697.0	1697.3	1698.9	1700.4
165°	1734.5	1733.5	1732.6	1731.6	1731.2	1731.2	1731.2	1731.2	1731.2	1733.1	1734.9
167.5°	1762.3	1761.0	1759.7	1758.5	1758.0	1758.2	1758.5	1758.8	1759.0	1761.0	1762.9
170°	1778.2	1777.0	1775.7	1774.4	1773.8	1773.8	1773.8	1773.8	1773.8	1776.0	1778.2
172.5°	1790.7	1789.4	1788.2	1787.0	1786.3	1786.3	1786.3	1786.3	1786.3	1788.3	1790.2
175°	1803.8	1802.5	1801.3	1800.0	1799.4	1799.4	1799.4	1799.4	1799.4	1801.3	1803.2
177.5°	1809.5	1808.5	1807.4	1806.4	1805.9	1805.9	1805.9	1805.9	1805.9	1807.4	1808.9
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	889.6	889.6	890.7	895.0	895.6	899.4	898.1
5°	977.6	984.5	987.0	997.9	1004.4	1007.2	1001.5
7.5°	1085.3	1104.7	1113.9	1125.2	1135.2	1138.3	1130.4
10°	1163.9	1184.1	1201.1	1211.5	1221.3	1227.8	1236.1
12.5°	1239.8	1264.7	1280.8	1295.6	1305.6	1313.9	1315.2
15°	1322.4	1359.9	1388.5	1409.4	1419.8	1425.3	1423.1
17.5°	1405.6	1440.4	1460.8	1482.1	1496.6	1497.3	1497.8
20°	1452.7	1486.7	1510.1	1526.0	1542.3	1541.5	1545.1
22.5°	1484.2	1510.9	1528.9	1540.4	1546.0	1543.2	1544.0
25°	1498.9	1506.8	1503.6	1485.2	1480.5	1463.6	1466.4
27.5°	1423.0	1385.4	1346.6	1296.6	1257.2	1225.7	1227.3
30°	1319.8	1253.4	1177.6	1114.1	1057.1	1041.1	1007.2
32.5°	1175.7	1076.1	987.3	928.1	879.1	865.8	836.2
35°	931.4	834.6	743.3	688.4	666.8	636.5	636.1
37.5°	724.0	638.8	590.5	549.3	527.7	509.3	507.6
40°	609.1	542.6	506.1	476.5	455.2	441.5	438.3
42.5°	528.8	475.0	440.8	422.5	406.1	399.1	393.8
45°	431.8	395.7	371.8	355.2	347.6	342.2	339.3
47.5°	361.2	337.0	320.7	309.7	303.5	297.8	299.4
50°	322.7	302.9	291.0	280.5	275.8	271.8	272.2
52.5°	291.8	274.0	264.4	256.8	251.0	248.2	246.8
55°	247.7	236.5	226.7	221.3	218.0	214.1	213.0
57.5°	211.2	202.6	194.6	188.5	187.8	183.9	184.4
60°	187.0	179.7	173.2	170.0	167.5	164.3	165.3
62.5°	167.1	161.0	155.0	152.4	149.9	147.5	148.0
65°	136.9	131.0	127.4	126.0	124.9	123.9	122.7
67.5°	109.1	105.5	103.2	100.1	97.9	97.6	96.4
70°	91.7	87.0	83.0	79.1	77.9	77.6	77.9
72.5°	73.5	70.5	69.5	67.5	67.3	66.4	67.0
75°	55.2	54.2	53.4	52.0	52.0	52.0	52.0
77.5°	40.7	40.1	39.7	39.3	39.0	38.5	38.5
80°	31.8	31.4	30.7	30.7	30.3	30.7	30.3
82.5°	23.9	23.9	23.2	23.2	22.8	22.6	22.8
85°	12.3	11.9	12.6	11.9	12.3	11.6	12.3
87.5°	11.0	11.3	11.2	11.3	11.1	11.9	11.4
90°	37.9	39.2	40.2	40.7	41.4	42.0	42.6
92.5°	57.6	58.6	58.9	58.5	58.2	57.8	57.4
95°	109.0	110.2	110.8	110.8	110.8	110.8	110.8
97.5°	168.9	170.4	171.1	171.0	170.8	170.7	170.6
100°	211.8	212.7	213.5	214.1	214.8	215.4	216.0
102.5°	261.8	262.8	263.2	263.1	262.9	262.8	262.7
105°	335.5	335.5	335.7	336.4	337.1	337.6	338.3
107.5°	417.2	418.2	418.5	418.1	417.7	417.4	417.0
110°	471.4	472.7	473.0	472.3	471.7	471.1	470.4



TEST NUMBER: P332427-830

CATALOG NUMBER: S123RDIW-S560D1535U830-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	525.6	527.1	527.8	527.7	527.5	527.4	527.3
115°	606.4	606.7	606.7	606.4	606.1	605.8	605.5
117.5°	688.9	688.8	688.3	687.4	686.5	685.7	684.8
120°	743.9	743.5	743.0	742.4	741.8	741.1	740.5
122.5°	799.2	798.3	797.5	796.6	795.7	794.8	793.9
125°	881.7	880.4	879.1	877.9	876.7	875.3	874.1
127.5°	963.2	961.4	959.8	958.4	956.9	955.5	953.9
130°	1018.1	1016.9	1015.1	1013.0	1010.7	1008.5	1006.3
132.5°	1070.8	1069.3	1067.7	1066.0	1064.3	1062.5	1060.8
135°	1150.3	1149.1	1148.1	1147.5	1146.8	1146.2	1145.6
137.5°	1227.8	1226.4	1225.1	1223.9	1222.8	1221.5	1220.3
140°	1279.7	1279.3	1278.1	1275.8	1273.7	1271.4	1269.2
142.5°	1327.4	1327.1	1326.1	1324.4	1322.7	1321.0	1319.3
145°	1397.6	1397.3	1396.5	1395.2	1394.0	1392.7	1391.5
147.5°	1464.2	1464.2	1463.3	1461.4	1459.5	1457.5	1455.7
150°	1505.1	1505.1	1504.2	1502.3	1500.4	1498.5	1496.7
152.5°	1543.0	1543.6	1543.0	1541.3	1539.7	1538.0	1536.4
155°	1598.5	1599.8	1599.3	1597.0	1594.9	1592.6	1590.4
157.5°	1645.6	1646.9	1646.7	1644.9	1643.1	1641.3	1639.6
160°	1674.8	1676.3	1676.5	1675.3	1674.0	1672.7	1671.4
162.5°	1702.0	1703.6	1703.5	1701.4	1699.4	1697.3	1695.4
165°	1736.8	1738.7	1738.6	1736.4	1734.2	1731.9	1729.8
167.5°	1764.9	1766.8	1766.8	1764.9	1762.9	1761.0	1759.0
170°	1780.5	1782.6	1782.6	1780.5	1778.2	1776.0	1773.8
172.5°	1792.2	1794.1	1794.0	1791.8	1789.6	1787.3	1785.2
175°	1805.1	1806.9	1806.8	1804.6	1802.3	1800.2	1798.0
177.5°	1810.4	1811.9	1811.8	1810.1	1808.3	1806.6	1804.8
180°	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3	1809.3

(END OF REPORT)