

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: P332144-830

Luminaire Tested: **S123DIW-S560D1535U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332144-830
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: S123DIW-S560D1535U830-4F0-1E-UDD-A
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1535 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8038.0 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: Semi-Indirect

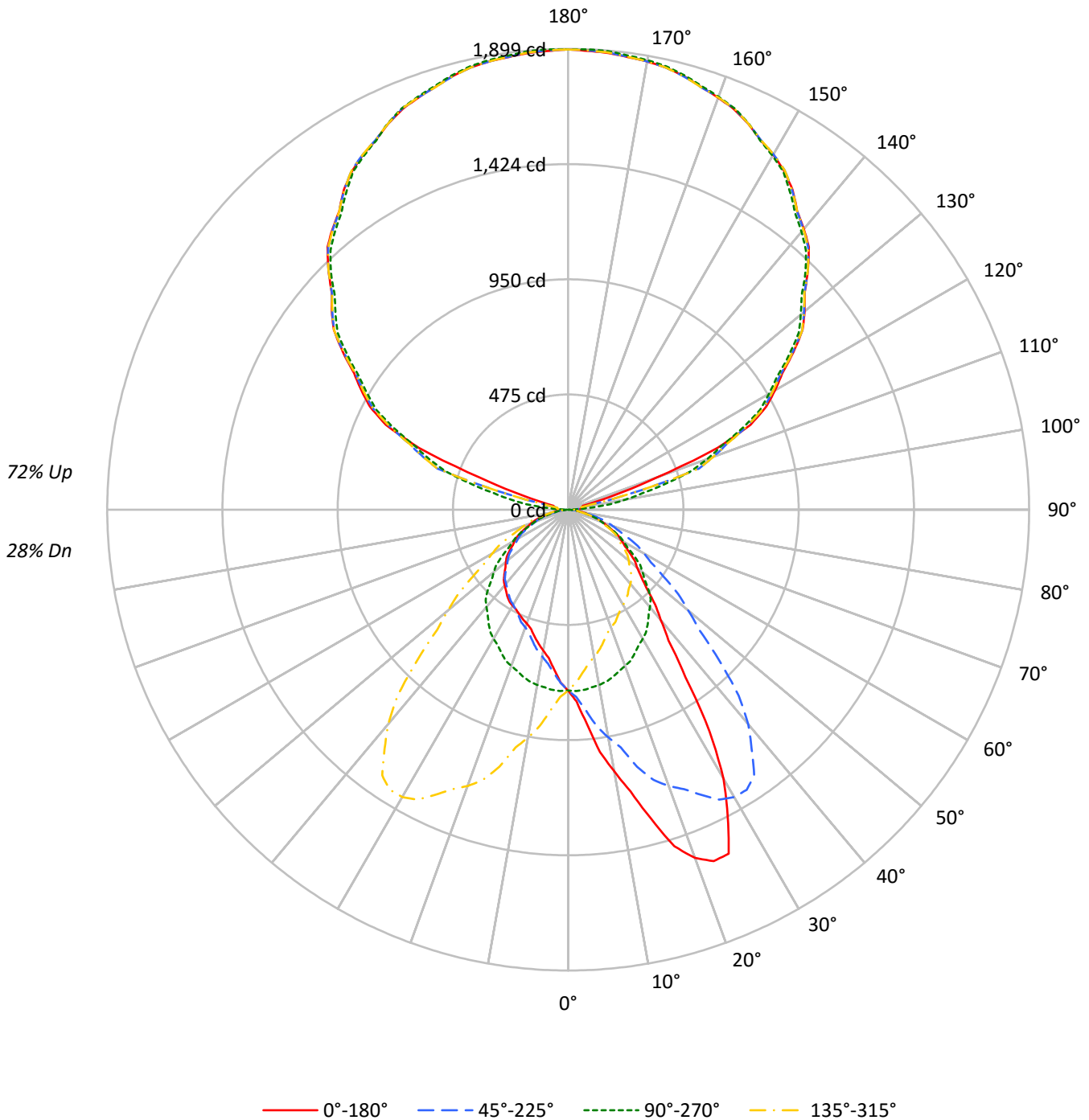
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	80	77	74	62	60	58	47	45	44	32	31	31	24
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26	20
3	77	68	61	56	69	61	56	51	48	44	41	36	34	31	25	24	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	18	16	15	11
7	55	43	36	30	49	39	33	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	15	13	12	9
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	39	30	23	19	24	19	16	18	15	13	13	11	10	7

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8020	8020	8020	8020
5°	9564	8055	7138	8055
10°	11970	8014	6446	8014
15°	14683	7949	6002	7949
20°	17491	7848	5715	7848
25°	18573	7726	5651	7726
30°	15919	7636	5680	7636
35°	11071	7510	5740	7510
40°	8338	7360	5722	7360
45°	6925	7138	5649	7138
50°	6203	6687	5598	6687
55°	5799	6199	5527	6199
60°	5440	5690	5470	5690
65°	5112	5186	5295	5186
70°	4793	4614	5042	4614
75°	4292	4038	4625	4038
80°	3756	3310	3986	3310
85°	2939	2408	2680	2408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	0.9
10°-20°	235.3	2.9
20°-30°	395.0	4.9
30°-40°	447.2	5.6
40°-50°	401.1	5.0
50°-60°	323.7	4.0
60°-70°	225.5	2.8
70°-80°	118.5	1.5
80°-90°	34.3	0.4
90°-100°	69.0	0.9
100°-110°	328.6	4.1
110°-120°	789.4	9.8
120°-130°	1005.2	12.5
130°-140°	1074.1	13.4
140°-150°	1004.4	12.5
150°-160°	810.1	10.1
160°-170°	522.9	6.5
170°-180°	180.2	2.2
0°-30°	703.7	8.8
0°-40°	1151.0	14.3
0°-60°	1875.7	23.3
0°-90°	2254.1	28.0
90°-120°	1187.0	14.8
90°-150°	4270.6	53.1
90°-180°	5784.0	72.0
0°-180°	8038.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	745	745	745	745	745	
5°	885	746	661	746	885	92
15°	1318	713	539	713	1318	380
25°	1564	650	476	650	1564	686
35°	842	572	437	572	842	547
45°	455	469	371	469	455	360
55°	309	330	294	330	309	277
65°	201	204	208	204	201	200
75°	103	97	111	97	103	110
85°	24	20	22	20	24	29
90°	42	1	42	1	42	20
95°	54	86	54	86	54	45
105°	62	420	62	420	62	142
115°	829	788	829	788	829	766
125°	1133	1110	1133	1110	1133	1012
135°	1396	1382	1396	1382	1396	1077
145°	1611	1595	1611	1595	1611	1005
155°	1754	1757	1754	1757	1754	809
165°	1849	1853	1849	1853	1849	522
175°	1890	1897	1890	1897	1890	180
180°	1897	1897	1897	1897	1897	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	790.7	790.1	788.7	789.9	787.5	784.4	784.1	781.2	772.8	772.2	770.0
5°	885.1	882.2	881.9	881.6	876.5	869.6	856.6	855.5	838.2	829.5	819.1
7.5°	1007.5	1009.0	1003.7	999.1	983.6	973.5	959.5	941.7	920.4	898.8	884.4
10°	1095.2	1107.1	1092.3	1082.2	1072.9	1055.2	1034.6	1009.0	983.4	953.4	930.7
12.5°	1189.4	1195.2	1192.3	1182.7	1168.2	1141.2	1104.8	1076.6	1052.9	1003.1	982.9
15°	1317.6	1339.6	1325.6	1293.1	1293.8	1268.2	1220.5	1168.2	1140.4	1096.6	1037.1
17.5°	1454.2	1457.0	1451.0	1423.9	1405.8	1370.6	1326.6	1276.5	1220.1	1167.3	1104.1
20°	1527.0	1524.8	1512.2	1498.1	1467.1	1439.6	1391.6	1335.7	1263.5	1211.4	1142.6
22.5°	1567.4	1563.8	1557.8	1546.1	1520.2	1490.7	1447.7	1386.5	1317.8	1246.1	1166.5
25°	1563.8	1568.5	1569.2	1565.9	1557.0	1539.3	1505.3	1456.6	1388.0	1296.0	1213.0
27.5°	1422.3	1428.9	1448.2	1465.4	1484.5	1503.9	1501.4	1477.2	1426.4	1346.9	1245.4
30°	1280.8	1266.3	1302.1	1347.2	1377.9	1432.0	1462.4	1464.1	1435.7	1367.4	1268.5
32.5°	1084.4	1100.3	1116.1	1171.6	1238.7	1299.5	1359.8	1408.4	1414.0	1368.6	1282.0
35°	842.5	862.4	891.3	920.2	992.4	1054.4	1160.6	1253.0	1326.6	1336.3	1283.3
37.5°	678.9	688.8	707.0	735.9	783.2	856.9	939.0	1055.7	1162.4	1241.8	1245.3
40°	593.4	596.3	616.9	638.9	677.2	737.8	811.9	915.1	1042.9	1153.8	1200.0
42.5°	529.3	535.7	544.4	565.6	596.1	641.7	710.5	795.9	912.9	1040.5	1130.9
45°	454.9	462.0	467.5	481.5	503.2	533.9	581.9	659.9	749.0	880.8	1002.5
47.5°	405.6	406.1	410.2	420.8	435.5	458.6	492.6	542.6	624.5	731.3	856.3
50°	370.4	376.2	377.6	385.9	397.5	414.4	442.6	485.1	552.3	646.2	761.0
52.5°	345.5	347.2	351.3	357.3	367.4	380.6	405.0	438.4	491.1	571.1	676.7
55°	309.0	309.0	313.0	317.6	323.5	335.4	351.6	376.2	416.2	478.3	565.7
57.5°	275.2	277.0	279.8	281.3	286.2	294.1	307.6	326.3	356.2	404.0	473.4
60°	252.7	255.9	255.6	258.4	262.8	268.9	280.5	295.7	322.3	360.6	419.1
62.5°	233.1	232.8	232.8	236.2	240.5	246.4	253.9	267.0	289.7	323.7	373.4
65°	200.7	200.0	202.6	204.7	206.1	210.5	216.2	227.8	243.0	268.2	306.8
67.5°	172.0	169.8	171.3	172.0	174.5	177.9	183.2	190.4	202.5	222.7	251.8
70°	152.3	150.5	150.1	150.9	153.1	155.6	159.6	166.5	177.6	193.9	215.2
72.5°	132.1	130.9	130.8	132.4	133.5	135.1	137.9	144.2	153.1	165.2	185.1
75°	103.2	103.2	103.2	103.6	104.7	106.1	108.3	111.5	118.4	127.1	140.4
77.5°	77.4	77.3	76.9	76.8	78.4	79.1	79.6	82.6	86.4	92.3	102.0
80°	60.6	58.8	59.6	60.6	61.4	61.7	62.8	63.5	66.8	70.0	76.9
82.5°	45.1	43.5	43.6	45.3	45.5	45.8	46.9	48.0	49.2	52.1	55.8
85°	23.8	23.8	24.2	24.2	24.5	24.2	25.3	25.6	25.6	27.4	29.6
87.5°	17.2	16.4	16.6	16.8	16.3	16.4	16.5	16.5	16.6	16.6	16.0
90°	42.2	41.7	41.0	40.4	39.8	38.8	37.6	36.3	35.1	33.8	29.8
92.5°	46.8	46.4	46.0	45.6	45.2	44.1	42.1	40.1	38.1	36.1	33.0
95°	53.5	53.5	53.5	53.5	53.5	52.4	50.2	48.1	45.9	43.6	40.2
97.5°	58.1	57.8	57.4	57.1	56.8	55.4	52.9	50.4	47.9	45.3	68.0
100°	59.2	58.9	58.5	58.2	58.0	56.6	54.0	51.5	49.0	46.5	95.4
102.5°	60.3	59.8	59.2	58.6	58.1	61.6	69.5	77.2	84.9	92.7	146.1
105°	62.0	61.4	60.8	60.1	59.5	86.9	142.3	197.7	253.2	308.6	336.8
107.5°	194.7	236.5	278.2	320.1	361.8	403.0	443.7	484.3	525.0	565.6	561.2
110°	387.5	432.3	477.0	521.8	566.6	594.2	604.5	614.8	625.2	635.5	632.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	664.8	674.3	683.7	693.1	702.7	707.3	707.1	706.9	706.7	706.5	703.0
115°	828.6	827.3	826.0	824.8	823.5	821.3	818.2	815.1	811.9	808.8	806.0
117.5°	920.4	920.2	919.9	919.6	919.5	918.0	915.5	913.0	910.5	908.0	906.5
120°	983.5	983.5	983.5	983.5	983.5	982.3	979.8	977.3	974.8	972.2	971.3
122.5°	1045.6	1045.3	1045.0	1044.8	1044.5	1043.6	1041.8	1040.0	1038.3	1036.5	1035.3
125°	1132.9	1132.3	1131.6	1131.1	1130.4	1129.7	1129.2	1128.5	1127.9	1127.3	1126.1
127.5°	1216.9	1217.5	1218.1	1218.8	1219.4	1219.2	1218.2	1217.2	1216.2	1215.2	1213.7
130°	1271.0	1271.6	1272.2	1272.9	1273.5	1273.2	1272.0	1270.6	1269.4	1268.2	1267.0
132.5°	1320.6	1321.4	1322.4	1323.2	1324.1	1323.9	1322.7	1321.4	1320.1	1318.9	1317.9
135°	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1	1399.2	1398.3	1397.3	1396.4	1395.2
137.5°	1467.7	1468.3	1469.0	1469.6	1470.2	1469.8	1468.3	1466.8	1465.3	1463.8	1463.1
140°	1510.5	1511.2	1511.8	1512.4	1513.1	1512.7	1511.5	1510.2	1509.0	1507.7	1506.7
142.5°	1550.0	1550.9	1551.7	1552.7	1553.5	1553.4	1552.5	1551.4	1550.4	1549.4	1548.5
145°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.2	1609.7	1609.0	1608.4	1607.8	1607.1
147.5°	1655.7	1657.1	1658.6	1660.0	1661.4	1661.9	1661.2	1660.6	1660.0	1659.3	1658.7
150°	1689.5	1690.5	1691.4	1692.3	1693.3	1693.4	1692.8	1692.1	1691.5	1690.9	1690.3
152.5°	1716.6	1718.0	1719.4	1720.9	1722.3	1722.5	1721.4	1720.2	1719.1	1718.0	1717.6
155°	1754.4	1756.1	1758.0	1759.9	1761.8	1762.0	1760.4	1758.9	1757.3	1755.7	1755.4
157.5°	1786.1	1788.6	1791.0	1793.5	1795.9	1796.2	1794.3	1792.4	1790.5	1788.7	1789.0
160°	1806.5	1808.6	1810.8	1813.0	1815.2	1815.3	1813.5	1811.7	1809.8	1807.9	1808.2
162.5°	1825.6	1827.6	1829.5	1831.5	1833.3	1833.2	1831.2	1829.0	1826.9	1824.8	1825.0
165°	1848.7	1850.9	1853.1	1855.3	1857.5	1857.4	1854.8	1852.3	1849.8	1847.3	1847.7
167.5°	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4	1872.8	1870.4	1867.8	1865.4	1865.4
170°	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6	1883.0	1880.5	1878.0	1875.5	1875.5
172.5°	1881.1	1883.9	1886.7	1889.4	1892.2	1892.2	1889.8	1887.3	1884.8	1882.3	1882.0
175°	1889.6	1892.1	1894.6	1897.1	1899.6	1899.8	1897.5	1895.4	1893.2	1891.0	1890.6
177.5°	1892.2	1894.6	1897.1	1899.6	1902.1	1902.4	1900.4	1898.4	1896.4	1894.4	1894.1
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	768.2	765.9	763.6	759.5	756.0	751.1	749.7	748.0	742.8	738.1	734.7
5°	815.1	806.4	793.8	782.2	772.9	760.3	753.0	745.5	734.6	724.9	716.9
7.5°	864.2	847.2	827.6	806.3	786.6	767.4	752.1	738.4	723.2	708.8	697.7
10°	903.2	878.6	851.2	821.6	796.4	771.8	751.2	733.2	713.7	696.7	682.6
12.5°	947.6	911.3	873.5	837.4	807.6	773.5	748.7	725.7	703.6	683.2	667.3
15°	1000.3	954.1	909.4	859.9	814.4	771.8	742.2	713.3	687.7	666.8	646.5
17.5°	1048.2	995.9	936.9	876.8	821.9	771.4	729.9	697.3	665.2	639.6	619.4
20°	1075.3	1015.8	949.0	886.6	826.0	769.6	724.2	685.1	650.5	623.4	600.7
22.5°	1098.8	1029.1	960.0	893.2	825.7	765.0	713.5	673.4	635.7	609.3	585.1
25°	1123.0	1039.6	970.3	892.0	816.5	753.8	696.0	650.5	612.9	581.9	557.0
27.5°	1143.9	1039.0	956.7	872.4	802.3	739.3	677.7	628.9	589.0	555.3	530.0
30°	1157.7	1040.4	942.5	859.1	788.4	723.4	663.5	614.4	572.5	538.2	514.4
32.5°	1166.4	1039.5	929.5	840.7	766.5	709.0	648.2	597.4	554.3	520.7	497.7
35°	1171.4	1033.1	907.2	802.5	731.0	675.0	624.2	571.5	526.3	494.9	468.9
37.5°	1161.3	1019.8	881.2	765.6	687.4	632.4	589.5	544.6	501.4	466.8	444.4
40°	1145.4	1011.2	860.9	739.7	657.3	604.3	567.9	523.8	481.2	448.4	427.4
42.5°	1115.1	993.5	838.8	710.8	626.1	573.1	539.5	502.8	462.4	431.6	410.7
45°	1041.1	955.2	805.4	667.5	580.1	525.3	495.7	468.9	432.4	402.5	384.5
47.5°	938.4	897.5	757.1	621.8	532.1	479.3	448.5	427.0	400.3	376.2	358.8
50°	867.1	850.2	724.5	590.6	499.9	448.4	418.8	399.3	380.1	355.9	340.1
52.5°	784.8	795.2	686.4	558.3	467.3	416.6	388.7	373.2	355.9	336.0	322.2
55°	668.9	706.8	620.6	504.0	418.8	370.4	344.0	330.3	320.2	305.4	293.5
57.5°	560.4	608.6	549.3	448.0	371.0	329.3	304.1	289.1	282.6	274.8	265.5
60°	496.0	543.7	498.5	410.5	338.9	299.3	276.9	264.3	257.8	252.3	244.4
62.5°	438.6	486.7	448.8	372.3	307.5	270.7	251.2	238.8	233.8	230.9	224.1
65°	359.6	401.1	375.8	313.0	262.4	230.0	212.3	203.6	198.9	197.8	193.5
67.5°	292.7	324.2	305.9	259.6	219.8	191.7	176.7	169.4	165.8	165.4	162.1
70°	248.7	278.3	264.3	222.3	188.0	166.1	153.1	146.6	144.4	144.0	142.2
72.5°	214.6	235.3	224.1	189.2	162.7	142.7	133.1	126.3	123.9	124.4	123.2
75°	158.8	174.4	167.9	143.6	122.3	109.3	101.4	97.1	94.9	96.0	94.5
77.5°	114.3	124.1	118.3	101.5	88.4	79.0	73.1	70.5	68.5	68.4	67.8
80°	86.2	92.1	88.8	78.7	67.9	59.9	55.2	53.4	52.3	52.0	51.7
82.5°	61.5	66.4	62.5	55.6	48.3	43.5	40.8	38.5	37.6	37.8	37.5
85°	31.0	32.9	31.4	27.1	24.2	22.1	20.5	19.5	18.8	19.1	18.4
87.5°	15.8	15.3	13.6	11.8	10.6	9.0	8.4	7.3	7.3	7.9	8.2
90°	25.6	21.6	17.5	13.9	10.8	7.6	4.5	1.4	4.5	7.6	10.8
92.5°	30.0	26.9	23.8	22.7	23.6	24.4	25.4	26.2	25.4	24.4	23.6
95°	36.8	33.4	29.9	34.6	47.4	60.3	73.1	86.0	73.1	60.3	47.4
97.5°	90.5	113.0	135.5	149.7	155.4	161.3	167.0	172.8	167.0	161.3	155.4
100°	144.2	193.0	241.9	263.2	256.9	250.6	244.4	238.2	244.4	250.6	256.9
102.5°	199.4	252.8	306.1	330.5	326.0	321.6	317.1	312.5	317.1	321.6	326.0
105°	365.0	393.1	421.3	433.7	430.3	426.8	423.4	419.9	423.4	426.8	430.3
107.5°	556.8	552.2	547.8	544.2	541.5	538.7	535.9	533.2	535.9	538.7	541.5
110°	628.6	625.2	621.7	618.8	616.2	613.7	611.2	608.7	611.2	613.7	616.2



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	699.6	696.2	692.8	689.8	687.7	685.4	683.2	680.9	683.2	685.4	687.7
115°	803.1	800.4	797.6	795.2	793.3	791.5	789.6	787.7	789.6	791.5	793.3
117.5°	905.1	903.7	902.3	900.4	898.1	895.7	893.4	891.1	893.4	895.7	898.1
120°	970.3	969.4	968.6	966.7	963.8	961.0	958.2	955.4	958.2	961.0	963.8
122.5°	1034.2	1032.9	1031.8	1030.0	1027.7	1025.4	1023.0	1020.8	1023.0	1025.4	1027.7
125°	1124.7	1123.5	1122.3	1120.4	1117.9	1115.4	1112.9	1110.3	1112.9	1115.4	1117.9
127.5°	1212.2	1210.7	1209.2	1207.2	1204.7	1202.2	1199.7	1197.1	1199.7	1202.2	1204.7
130°	1265.6	1264.4	1263.2	1261.3	1258.8	1256.3	1253.8	1251.2	1253.8	1256.3	1258.8
132.5°	1316.9	1315.9	1314.9	1313.2	1310.6	1308.2	1305.6	1303.2	1305.6	1308.2	1310.6
135°	1393.9	1392.6	1391.4	1389.9	1388.0	1386.1	1384.2	1382.3	1384.2	1386.1	1388.0
137.5°	1462.4	1461.7	1461.0	1459.4	1457.1	1454.7	1452.4	1449.9	1452.4	1454.7	1457.1
140°	1505.8	1504.9	1503.9	1502.6	1500.7	1498.8	1496.9	1495.1	1496.9	1498.8	1500.7
142.5°	1547.6	1546.6	1545.7	1544.3	1542.4	1540.5	1538.6	1536.7	1538.6	1540.5	1542.4
145°	1606.5	1605.9	1605.2	1603.8	1601.7	1599.5	1597.2	1595.1	1597.2	1599.5	1601.7
147.5°	1658.1	1657.5	1656.8	1655.8	1654.4	1652.9	1651.5	1650.0	1651.5	1652.9	1654.4
150°	1689.7	1689.0	1688.4	1687.6	1686.7	1685.7	1684.8	1683.9	1684.8	1685.7	1686.7
152.5°	1717.2	1716.8	1716.5	1716.1	1715.6	1715.1	1714.8	1714.3	1714.8	1715.1	1715.6
155°	1755.1	1754.8	1754.4	1754.6	1755.3	1755.9	1756.5	1757.1	1756.5	1755.9	1755.3
157.5°	1789.3	1789.6	1790.0	1790.2	1790.2	1790.3	1790.4	1790.4	1790.4	1790.3	1790.2
160°	1808.5	1808.8	1809.1	1809.4	1809.8	1810.1	1810.3	1810.7	1810.3	1810.1	1809.8
162.5°	1825.4	1825.7	1826.0	1826.6	1827.4	1828.2	1829.0	1829.9	1829.0	1828.2	1827.4
165°	1847.9	1848.2	1848.6	1849.2	1850.1	1851.1	1852.0	1852.9	1852.0	1851.1	1850.1
167.5°	1865.4	1865.4	1865.4	1866.0	1867.3	1868.5	1869.7	1870.9	1869.7	1868.5	1867.3
170°	1875.5	1875.5	1875.5	1876.1	1877.4	1878.6	1879.9	1881.1	1879.9	1878.6	1877.4
172.5°	1881.8	1881.5	1881.2	1881.9	1883.4	1884.9	1886.4	1887.9	1886.4	1884.9	1883.4
175°	1890.4	1890.1	1889.7	1890.4	1892.0	1893.5	1895.1	1896.6	1895.1	1893.5	1892.0
177.5°	1893.9	1893.7	1893.4	1893.9	1895.2	1896.4	1897.6	1898.8	1897.6	1896.4	1895.2
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	732.6	730.7	727.7	723.4	719.9	714.4	714.4	715.3	715.3	715.0	714.4
5°	710.4	705.0	698.5	691.0	683.0	675.0	673.6	670.7	668.5	667.1	665.3
7.5°	686.9	677.4	667.9	657.3	647.6	639.6	634.0	629.4	626.4	623.3	620.9
10°	671.1	659.1	648.0	636.8	624.5	614.7	608.6	604.3	601.1	598.1	596.7
12.5°	652.3	638.7	626.3	615.7	602.3	592.2	586.4	584.4	580.5	574.5	571.3
15°	624.9	612.3	597.5	581.2	574.7	562.4	555.5	552.3	550.2	545.4	544.0
17.5°	601.4	584.8	568.3	556.1	544.0	534.1	530.3	526.2	523.4	519.5	518.4
20°	582.7	567.9	552.7	539.7	527.1	516.2	512.9	510.1	507.2	505.4	504.0
22.5°	563.5	548.7	536.2	524.1	510.6	503.5	499.9	496.8	494.7	493.5	492.1
25°	536.8	523.8	509.7	498.9	488.0	483.3	481.2	479.4	478.0	476.2	475.8
27.5°	512.8	498.7	487.3	477.1	469.4	465.4	463.4	462.5	462.8	463.4	463.8
30°	494.9	481.9	472.5	463.8	456.7	453.1	452.7	452.7	454.1	454.5	455.2
32.5°	478.4	467.8	458.4	450.0	444.5	442.1	443.5	443.5	444.6	445.5	446.9
35°	454.5	445.1	437.9	430.6	425.9	427.1	427.7	428.5	430.3	432.4	433.9
37.5°	431.6	423.5	415.9	410.3	408.1	410.1	411.8	413.3	415.5	417.1	418.5
40°	415.1	409.0	401.8	396.7	397.5	398.5	400.0	401.8	403.6	404.6	406.1
42.5°	399.8	393.4	388.0	383.7	384.7	386.2	387.0	388.0	390.0	392.0	392.9
45°	376.5	371.5	366.4	363.9	364.6	365.3	366.1	367.1	368.9	370.4	370.7
47.5°	350.3	346.8	343.4	340.9	342.0	341.8	342.7	345.1	345.6	346.5	348.5
50°	333.6	330.3	326.3	325.6	325.6	325.6	325.9	328.9	328.9	330.3	331.8
52.5°	315.1	313.0	310.5	309.2	308.6	308.6	310.1	311.5	312.1	314.1	315.6
55°	287.7	285.5	283.4	282.3	281.5	282.3	285.2	285.9	287.7	288.8	289.8
57.5°	259.2	257.5	255.8	255.2	255.1	256.0	257.6	259.8	260.2	263.5	265.1
60°	240.4	237.9	236.5	236.5	235.7	238.9	238.3	241.9	242.6	244.8	247.3
62.5°	221.0	217.6	217.1	217.1	218.1	219.0	220.1	221.7	223.6	226.3	228.2
65°	189.9	188.0	190.6	190.2	189.5	191.7	191.7	193.5	195.7	198.2	202.2
67.5°	160.3	159.4	159.7	159.7	160.7	161.9	163.0	164.6	167.1	169.8	172.4
70°	140.4	141.5	139.7	141.2	142.2	142.6	143.3	145.4	148.4	150.1	153.1
72.5°	121.1	121.0	121.2	121.8	122.9	123.6	124.2	126.7	129.9	131.4	133.7
75°	93.1	92.7	93.9	93.9	95.7	96.4	97.1	98.2	101.0	103.2	105.1
77.5°	68.1	68.4	68.2	69.5	69.0	69.1	71.4	72.4	72.7	77.0	77.9
80°	51.3	52.0	52.3	52.7	53.1	52.3	54.9	56.0	56.0	58.4	60.3
82.5°	36.9	37.2	38.2	38.5	38.6	39.3	39.6	40.3	41.2	42.3	44.7
85°	18.4	19.5	19.9	19.5	19.9	19.1	20.2	20.5	20.9	20.9	20.9
87.5°	8.6	9.6	10.1	11.2	11.7	12.8	13.1	12.7	13.0	14.1	13.2
90°	13.9	17.5	21.6	25.6	29.8	33.8	35.1	36.3	37.6	38.8	39.8
92.5°	22.7	23.8	26.9	30.0	33.0	36.1	38.1	40.1	42.1	44.1	45.2
95°	34.6	29.9	33.4	36.8	40.2	43.6	45.9	48.1	50.2	52.4	53.5
97.5°	149.7	135.5	113.0	90.5	68.0	45.3	47.9	50.4	52.9	55.4	56.8
100°	263.2	241.9	193.0	144.2	95.4	46.5	49.0	51.5	54.0	56.6	58.0
102.5°	330.5	306.1	252.8	199.4	146.1	92.7	84.9	77.2	69.5	61.6	58.1
105°	433.7	421.3	393.1	365.0	336.8	308.6	253.2	197.7	142.3	86.9	59.5
107.5°	544.2	547.8	552.2	556.8	561.2	565.6	525.0	484.3	443.7	403.0	361.8
110°	618.8	621.7	625.2	628.6	632.1	635.5	625.2	614.8	604.5	594.2	566.6



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	689.8	692.8	696.2	699.6	703.0	706.5	706.7	706.9	707.1	707.3	702.7
115°	795.2	797.6	800.4	803.1	806.0	808.8	811.9	815.1	818.2	821.3	823.5
117.5°	900.4	902.3	903.7	905.1	906.5	908.0	910.5	913.0	915.5	918.0	919.5
120°	966.7	968.6	969.4	970.3	971.3	972.2	974.8	977.3	979.8	982.3	983.5
122.5°	1030.0	1031.8	1032.9	1034.2	1035.3	1036.5	1038.3	1040.0	1041.8	1043.6	1044.5
125°	1120.4	1122.3	1123.5	1124.7	1126.1	1127.3	1127.9	1128.5	1129.2	1129.7	1130.4
127.5°	1207.2	1209.2	1210.7	1212.2	1213.7	1215.2	1216.2	1217.2	1218.2	1219.2	1219.4
130°	1261.3	1263.2	1264.4	1265.6	1267.0	1268.2	1269.4	1270.6	1272.0	1273.2	1273.5
132.5°	1313.2	1314.9	1315.9	1316.9	1317.9	1318.9	1320.1	1321.4	1322.7	1323.9	1324.1
135°	1389.9	1391.4	1392.6	1393.9	1395.2	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1
137.5°	1459.4	1461.0	1461.7	1462.4	1463.1	1463.8	1465.3	1466.8	1468.3	1469.8	1470.2
140°	1502.6	1503.9	1504.9	1505.8	1506.7	1507.7	1509.0	1510.2	1511.5	1512.7	1513.1
142.5°	1544.3	1545.7	1546.6	1547.6	1548.5	1549.4	1550.4	1551.4	1552.5	1553.4	1553.5
145°	1603.8	1605.2	1605.9	1606.5	1607.1	1607.8	1608.4	1609.0	1609.7	1610.2	1610.6
147.5°	1655.8	1656.8	1657.5	1658.1	1658.7	1659.3	1660.0	1660.6	1661.2	1661.9	1661.4
150°	1687.6	1688.4	1689.0	1689.7	1690.3	1690.9	1691.5	1692.1	1692.8	1693.4	1693.3
152.5°	1716.1	1716.5	1716.8	1717.2	1717.6	1718.0	1719.1	1720.2	1721.4	1722.5	1722.3
155°	1754.6	1754.4	1754.8	1755.1	1755.4	1755.7	1757.3	1758.9	1760.4	1762.0	1761.8
157.5°	1790.2	1790.0	1789.6	1789.3	1789.0	1788.7	1790.5	1792.4	1794.3	1796.2	1795.9
160°	1809.4	1809.1	1808.8	1808.5	1808.2	1807.9	1809.8	1811.7	1813.5	1815.3	1815.2
162.5°	1826.6	1826.0	1825.7	1825.4	1825.0	1824.8	1826.9	1829.0	1831.2	1833.2	1833.3
165°	1849.2	1848.6	1848.2	1847.9	1847.7	1847.3	1849.8	1852.3	1854.8	1857.4	1857.5
167.5°	1866.0	1865.4	1865.4	1865.4	1865.4	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4
170°	1876.1	1875.5	1875.5	1875.5	1875.5	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6
172.5°	1881.9	1881.2	1881.5	1881.8	1882.0	1882.3	1884.8	1887.3	1889.8	1892.2	1892.2
175°	1890.4	1889.7	1890.1	1890.4	1890.6	1891.0	1893.2	1895.4	1897.5	1899.8	1899.6
177.5°	1893.9	1893.4	1893.7	1893.9	1894.1	1894.4	1896.4	1898.4	1900.4	1902.4	1902.1
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	712.5	712.2	714.2	712.8	714.2	712.2	712.5	714.4	715.0	715.3	715.3
5°	663.2	664.2	660.6	660.6	660.6	664.2	663.2	665.3	667.1	668.5	670.7
7.5°	619.3	617.6	617.8	615.9	617.8	617.6	619.3	620.9	623.3	626.4	629.4
10°	592.4	590.2	589.5	589.8	589.5	590.2	592.4	596.7	598.1	601.1	604.3
12.5°	570.1	569.7	565.0	565.1	565.0	569.7	570.1	571.3	574.5	580.5	584.4
15°	544.0	537.2	536.4	538.6	536.4	537.2	544.0	544.0	545.4	550.2	552.3
17.5°	517.8	514.2	514.4	513.3	514.4	514.2	517.8	518.4	519.5	523.4	526.2
20°	504.0	501.8	501.4	498.9	501.4	501.8	504.0	504.0	505.4	507.2	510.1
22.5°	491.3	490.5	490.7	488.0	490.7	490.5	491.3	492.1	493.5	494.7	496.8
25°	475.4	477.2	475.8	475.8	475.8	477.2	475.4	475.8	476.2	478.0	479.4
27.5°	464.8	464.7	463.9	463.9	463.9	464.7	464.8	463.8	463.4	462.8	462.5
30°	456.7	456.3	457.0	457.0	457.0	456.3	456.7	455.2	454.5	454.1	452.7
32.5°	448.6	449.0	449.2	449.5	449.2	449.0	448.6	446.9	445.5	444.6	443.5
35°	436.1	436.4	437.5	436.8	437.5	436.4	436.1	433.9	432.4	430.3	428.5
37.5°	419.1	420.8	420.5	421.0	420.5	420.8	419.1	418.5	417.1	415.5	413.3
40°	406.5	407.6	407.2	407.2	407.2	407.6	406.5	406.1	404.6	403.6	401.8
42.5°	393.5	394.3	393.3	392.8	393.3	394.3	393.5	392.9	392.0	390.0	388.0
45°	372.2	371.5	372.6	371.1	372.6	371.5	372.2	370.7	370.4	368.9	367.1
47.5°	348.4	349.1	349.4	350.4	349.4	349.1	348.4	348.5	346.5	345.6	345.1
50°	332.4	334.6	334.6	334.3	334.6	334.6	332.4	331.8	330.3	328.9	328.9
52.5°	316.9	317.9	319.3	319.2	319.3	317.9	316.9	315.6	314.1	312.1	311.5
55°	292.8	293.5	294.2	294.5	294.2	293.5	292.8	289.8	288.8	287.7	285.9
57.5°	267.8	267.5	269.2	269.8	269.2	267.5	267.8	265.1	263.5	260.2	259.8
60°	250.2	250.2	253.1	254.1	253.1	250.2	250.2	247.3	244.8	242.6	241.9
62.5°	231.4	232.5	235.4	233.9	235.4	232.5	231.4	228.2	226.3	223.6	221.7
65°	204.0	206.9	206.5	207.9	206.5	206.9	204.0	202.2	198.2	195.7	193.5
67.5°	175.3	177.1	179.7	179.9	179.7	177.1	175.3	172.4	169.8	167.1	164.6
70°	156.0	157.8	159.2	160.2	159.2	157.8	156.0	153.1	150.1	148.4	145.4
72.5°	137.1	138.1	141.6	140.1	141.6	138.1	137.1	133.7	131.4	129.9	126.7
75°	107.5	110.1	112.3	111.2	112.3	110.1	107.5	105.1	103.2	101.0	98.2
77.5°	79.6	82.1	83.1	82.2	83.1	82.1	79.6	77.9	77.0	72.7	72.4
80°	62.8	62.5	64.7	64.3	64.7	62.5	62.8	60.3	58.4	56.0	56.0
82.5°	46.1	45.7	46.8	46.9	46.8	45.7	46.1	44.7	42.3	41.2	40.3
85°	22.3	23.5	22.1	21.7	22.1	23.5	22.3	20.9	20.9	20.9	20.5
87.5°	13.3	13.4	13.2	13.1	13.2	13.4	13.3	13.2	14.1	13.0	12.7
90°	40.4	41.0	41.7	42.2	41.7	41.0	40.4	39.8	38.8	37.6	36.3
92.5°	45.6	46.0	46.4	46.8	46.4	46.0	45.6	45.2	44.1	42.1	40.1
95°	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	52.4	50.2	48.1
97.5°	57.1	57.4	57.8	58.1	57.8	57.4	57.1	56.8	55.4	52.9	50.4
100°	58.2	58.5	58.9	59.2	58.9	58.5	58.2	58.0	56.6	54.0	51.5
102.5°	58.6	59.2	59.8	60.3	59.8	59.2	58.6	58.1	61.6	69.5	77.2
105°	60.1	60.8	61.4	62.0	61.4	60.8	60.1	59.5	86.9	142.3	197.7
107.5°	320.1	278.2	236.5	194.7	236.5	278.2	320.1	361.8	403.0	443.7	484.3
110°	521.8	477.0	432.3	387.5	432.3	477.0	521.8	566.6	594.2	604.5	614.8



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	693.1	683.7	674.3	664.8	674.3	683.7	693.1	702.7	707.3	707.1	706.9
115°	824.8	826.0	827.3	828.6	827.3	826.0	824.8	823.5	821.3	818.2	815.1
117.5°	919.6	919.9	920.2	920.4	920.2	919.9	919.6	919.5	918.0	915.5	913.0
120°	983.5	983.5	983.5	983.5	983.5	983.5	983.5	983.5	982.3	979.8	977.3
122.5°	1044.8	1045.0	1045.3	1045.6	1045.3	1045.0	1044.8	1044.5	1043.6	1041.8	1040.0
125°	1131.1	1131.6	1132.3	1132.9	1132.3	1131.6	1131.1	1130.4	1129.7	1129.2	1128.5
127.5°	1218.8	1218.1	1217.5	1216.9	1217.5	1218.1	1218.8	1219.4	1219.2	1218.2	1217.2
130°	1272.9	1272.2	1271.6	1271.0	1271.6	1272.2	1272.9	1273.5	1273.2	1272.0	1270.6
132.5°	1323.2	1322.4	1321.4	1320.6	1321.4	1322.4	1323.2	1324.1	1323.9	1322.7	1321.4
135°	1399.2	1398.3	1397.3	1396.4	1397.3	1398.3	1399.2	1400.1	1400.1	1399.2	1398.3
137.5°	1469.6	1469.0	1468.3	1467.7	1468.3	1469.0	1469.6	1470.2	1469.8	1468.3	1466.8
140°	1512.4	1511.8	1511.2	1510.5	1511.2	1511.8	1512.4	1513.1	1512.7	1511.5	1510.2
142.5°	1552.7	1551.7	1550.9	1550.0	1550.9	1551.7	1552.7	1553.5	1553.4	1552.5	1551.4
145°	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.6	1610.2	1609.7	1609.0
147.5°	1660.0	1658.6	1657.1	1655.7	1657.1	1658.6	1660.0	1661.4	1661.9	1661.2	1660.6
150°	1692.3	1691.4	1690.5	1689.5	1690.5	1691.4	1692.3	1693.3	1693.4	1692.8	1692.1
152.5°	1720.9	1719.4	1718.0	1716.6	1718.0	1719.4	1720.9	1722.3	1722.5	1721.4	1720.2
155°	1759.9	1758.0	1756.1	1754.4	1756.1	1758.0	1759.9	1761.8	1762.0	1760.4	1758.9
157.5°	1793.5	1791.0	1788.6	1786.1	1788.6	1791.0	1793.5	1795.9	1796.2	1794.3	1792.4
160°	1813.0	1810.8	1808.6	1806.5	1808.6	1810.8	1813.0	1815.2	1815.3	1813.5	1811.7
162.5°	1831.5	1829.5	1827.6	1825.6	1827.6	1829.5	1831.5	1833.3	1833.2	1831.2	1829.0
165°	1855.3	1853.1	1850.9	1848.7	1850.9	1853.1	1855.3	1857.5	1857.4	1854.8	1852.3
167.5°	1872.8	1870.4	1867.8	1865.4	1867.8	1870.4	1872.8	1875.4	1875.4	1872.8	1870.4
170°	1883.0	1880.5	1878.0	1875.5	1878.0	1880.5	1883.0	1885.6	1885.6	1883.0	1880.5
172.5°	1889.4	1886.7	1883.9	1881.1	1883.9	1886.7	1889.4	1892.2	1892.2	1889.8	1887.3
175°	1897.1	1894.6	1892.1	1889.6	1892.1	1894.6	1897.1	1899.6	1899.8	1897.5	1895.4
177.5°	1899.6	1897.1	1894.6	1892.2	1894.6	1897.1	1899.6	1902.1	1902.4	1900.4	1898.4
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	714.4	714.4	719.9	723.4	727.7	730.7	732.6	734.7	738.1	742.8	748.0
5°	673.6	675.0	683.0	691.0	698.5	705.0	710.4	716.9	724.9	734.6	745.5
7.5°	634.0	639.6	647.6	657.3	667.9	677.4	686.9	697.7	708.8	723.2	738.4
10°	608.6	614.7	624.5	636.8	648.0	659.1	671.1	682.6	696.7	713.7	733.2
12.5°	586.4	592.2	602.3	615.7	626.3	638.7	652.3	667.3	683.2	703.6	725.7
15°	555.5	562.4	574.7	581.2	597.5	612.3	624.9	646.5	666.8	687.7	713.3
17.5°	530.3	534.1	544.0	556.1	568.3	584.8	601.4	619.4	639.6	665.2	697.3
20°	512.9	516.2	527.1	539.7	552.7	567.9	582.7	600.7	623.4	650.5	685.1
22.5°	499.9	503.5	510.6	524.1	536.2	548.7	563.5	585.1	609.3	635.7	673.4
25°	481.2	483.3	488.0	498.9	509.7	523.8	536.8	557.0	581.9	612.9	650.5
27.5°	463.4	465.4	469.4	477.1	487.3	498.7	512.8	530.0	555.3	589.0	628.9
30°	452.7	453.1	456.7	463.8	472.5	481.9	494.9	514.4	538.2	572.5	614.4
32.5°	443.5	442.1	444.5	450.0	458.4	467.8	478.4	497.7	520.7	554.3	597.4
35°	427.7	427.1	425.9	430.6	437.9	445.1	454.5	468.9	494.9	526.3	571.5
37.5°	411.8	410.1	408.1	410.3	415.9	423.5	431.6	444.4	466.8	501.4	544.6
40°	400.0	398.5	397.5	396.7	401.8	409.0	415.1	427.4	448.4	481.2	523.8
42.5°	387.0	386.2	384.7	383.7	388.0	393.4	399.8	410.7	431.6	462.4	502.8
45°	366.1	365.3	364.6	363.9	366.4	371.5	376.5	384.5	402.5	432.4	468.9
47.5°	342.7	341.8	342.0	340.9	343.4	346.8	350.3	358.8	376.2	400.3	427.0
50°	325.9	325.6	325.6	325.6	326.3	330.3	333.6	340.1	355.9	380.1	399.3
52.5°	310.1	308.6	308.6	309.2	310.5	313.0	315.1	322.2	336.0	355.9	373.2
55°	285.2	282.3	281.5	282.3	283.4	285.5	287.7	293.5	305.4	320.2	330.3
57.5°	257.6	256.0	255.1	255.2	255.8	257.5	259.2	265.5	274.8	282.6	289.1
60°	238.3	238.9	235.7	236.5	236.5	237.9	240.4	244.4	252.3	257.8	264.3
62.5°	220.1	219.0	218.1	217.1	217.1	217.6	221.0	224.1	230.9	233.8	238.8
65°	191.7	191.7	189.5	190.2	190.6	188.0	189.9	193.5	197.8	198.9	203.6
67.5°	163.0	161.9	160.7	159.7	159.7	159.4	160.3	162.1	165.4	165.8	169.4
70°	143.3	142.6	142.2	141.2	139.7	141.5	140.4	142.2	144.0	144.4	146.6
72.5°	124.2	123.6	122.9	121.8	121.2	121.0	121.1	123.2	124.4	123.9	126.3
75°	97.1	96.4	95.7	93.9	93.9	92.7	93.1	94.5	96.0	94.9	97.1
77.5°	71.4	69.1	69.0	69.5	68.2	68.4	68.1	67.8	68.4	68.5	70.5
80°	54.9	52.3	53.1	52.7	52.3	52.0	51.3	51.7	52.0	52.3	53.4
82.5°	39.6	39.3	38.6	38.5	38.2	37.2	36.9	37.5	37.8	37.6	38.5
85°	20.2	19.1	19.9	19.5	19.9	19.5	18.4	18.4	19.1	18.8	19.5
87.5°	13.1	12.8	11.7	11.2	10.1	9.6	8.6	8.2	7.9	7.3	7.3
90°	35.1	33.8	29.8	25.6	21.6	17.5	13.9	10.8	7.6	4.5	1.4
92.5°	38.1	36.1	33.0	30.0	26.9	23.8	22.7	23.6	24.4	25.4	26.2
95°	45.9	43.6	40.2	36.8	33.4	29.9	34.6	47.4	60.3	73.1	86.0
97.5°	47.9	45.3	68.0	90.5	113.0	135.5	149.7	155.4	161.3	167.0	172.8
100°	49.0	46.5	95.4	144.2	193.0	241.9	263.2	256.9	250.6	244.4	238.2
102.5°	84.9	92.7	146.1	199.4	252.8	306.1	330.5	326.0	321.6	317.1	312.5
105°	253.2	308.6	336.8	365.0	393.1	421.3	433.7	430.3	426.8	423.4	419.9
107.5°	525.0	565.6	561.2	556.8	552.2	547.8	544.2	541.5	538.7	535.9	533.2
110°	625.2	635.5	632.1	628.6	625.2	621.7	618.8	616.2	613.7	611.2	608.7



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	706.7	706.5	703.0	699.6	696.2	692.8	689.8	687.7	685.4	683.2	680.9
115°	811.9	808.8	806.0	803.1	800.4	797.6	795.2	793.3	791.5	789.6	787.7
117.5°	910.5	908.0	906.5	905.1	903.7	902.3	900.4	898.1	895.7	893.4	891.1
120°	974.8	972.2	971.3	970.3	969.4	968.6	966.7	963.8	961.0	958.2	955.4
122.5°	1038.3	1036.5	1035.3	1034.2	1032.9	1031.8	1030.0	1027.7	1025.4	1023.0	1020.8
125°	1127.9	1127.3	1126.1	1124.7	1123.5	1122.3	1120.4	1117.9	1115.4	1112.9	1110.3
127.5°	1216.2	1215.2	1213.7	1212.2	1210.7	1209.2	1207.2	1204.7	1202.2	1199.7	1197.1
130°	1269.4	1268.2	1267.0	1265.6	1264.4	1263.2	1261.3	1258.8	1256.3	1253.8	1251.2
132.5°	1320.1	1318.9	1317.9	1316.9	1315.9	1314.9	1313.2	1310.6	1308.2	1305.6	1303.2
135°	1397.3	1396.4	1395.2	1393.9	1392.6	1391.4	1389.9	1388.0	1386.1	1384.2	1382.3
137.5°	1465.3	1463.8	1463.1	1462.4	1461.7	1461.0	1459.4	1457.1	1454.7	1452.4	1449.9
140°	1509.0	1507.7	1506.7	1505.8	1504.9	1503.9	1502.6	1500.7	1498.8	1496.9	1495.1
142.5°	1550.4	1549.4	1548.5	1547.6	1546.6	1545.7	1544.3	1542.4	1540.5	1538.6	1536.7
145°	1608.4	1607.8	1607.1	1606.5	1605.9	1605.2	1603.8	1601.7	1599.5	1597.2	1595.1
147.5°	1660.0	1659.3	1658.7	1658.1	1657.5	1656.8	1655.8	1654.4	1652.9	1651.5	1650.0
150°	1691.5	1690.9	1690.3	1689.7	1689.0	1688.4	1687.6	1686.7	1685.7	1684.8	1683.9
152.5°	1719.1	1718.0	1717.6	1717.2	1716.8	1716.5	1716.1	1715.6	1715.1	1714.8	1714.3
155°	1757.3	1755.7	1755.4	1755.1	1754.8	1754.4	1754.6	1755.3	1755.9	1756.5	1757.1
157.5°	1790.5	1788.7	1789.0	1789.3	1789.6	1790.0	1790.2	1790.2	1790.3	1790.4	1790.4
160°	1809.8	1807.9	1808.2	1808.5	1808.8	1809.1	1809.4	1809.8	1810.1	1810.3	1810.7
162.5°	1826.9	1824.8	1825.0	1825.4	1825.7	1826.0	1826.6	1827.4	1828.2	1829.0	1829.9
165°	1849.8	1847.3	1847.7	1847.9	1848.2	1848.6	1849.2	1850.1	1851.1	1852.0	1852.9
167.5°	1867.8	1865.4	1865.4	1865.4	1865.4	1865.4	1866.0	1867.3	1868.5	1869.7	1870.9
170°	1878.0	1875.5	1875.5	1875.5	1875.5	1875.5	1876.1	1877.4	1878.6	1879.9	1881.1
172.5°	1884.8	1882.3	1882.0	1881.8	1881.5	1881.2	1881.9	1883.4	1884.9	1886.4	1887.9
175°	1893.2	1891.0	1890.6	1890.4	1890.1	1889.7	1890.4	1892.0	1893.5	1895.1	1896.6
177.5°	1896.4	1894.4	1894.1	1893.9	1893.7	1893.4	1893.9	1895.2	1896.4	1897.6	1898.8
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



TEST NUMBER: P332144-830

CATALOG NUMBER: S123DIW-S560D1535U830-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	749.7	751.1	756.0	759.5	763.6	765.9	768.2	770.0	772.2	772.8	781.2
5°	753.0	760.3	772.9	782.2	793.8	806.4	815.1	819.1	829.5	838.2	855.5
7.5°	752.1	767.4	786.6	806.3	827.6	847.2	864.2	884.4	898.8	920.4	941.7
10°	751.2	771.8	796.4	821.6	851.2	878.6	903.2	930.7	953.4	983.4	1009.0
12.5°	748.7	773.5	807.6	837.4	873.5	911.3	947.6	982.9	1003.1	1052.9	1076.6
15°	742.2	771.8	814.4	859.9	909.4	954.1	1000.3	1037.1	1096.6	1140.4	1168.2
17.5°	729.9	771.4	821.9	876.8	936.9	995.9	1048.2	1104.1	1167.3	1220.1	1276.5
20°	724.2	769.6	826.0	886.6	949.0	1015.8	1075.3	1142.6	1211.4	1263.5	1335.7
22.5°	713.5	765.0	825.7	893.2	960.0	1029.1	1098.8	1166.5	1246.1	1317.8	1386.5
25°	696.0	753.8	816.5	892.0	970.3	1039.6	1123.0	1213.0	1296.0	1388.0	1456.6
27.5°	677.7	739.3	802.3	872.4	956.7	1039.0	1143.9	1245.4	1346.9	1426.4	1477.2
30°	663.5	723.4	788.4	859.1	942.5	1040.4	1157.7	1268.5	1367.4	1435.7	1464.1
32.5°	648.2	709.0	766.5	840.7	929.5	1039.5	1166.4	1282.0	1368.6	1414.0	1408.4
35°	624.2	675.0	731.0	802.5	907.2	1033.1	1171.4	1283.3	1336.3	1326.6	1253.0
37.5°	589.5	632.4	687.4	765.6	881.2	1019.8	1161.3	1245.3	1241.8	1162.4	1055.7
40°	567.9	604.3	657.3	739.7	860.9	1011.2	1145.4	1200.0	1153.8	1042.9	915.1
42.5°	539.5	573.1	626.1	710.8	838.8	993.5	1115.1	1130.9	1040.5	912.9	795.9
45°	495.7	525.3	580.1	667.5	805.4	955.2	1041.1	1002.5	880.8	749.0	659.9
47.5°	448.5	479.3	532.1	621.8	757.1	897.5	938.4	856.3	731.3	624.5	542.6
50°	418.8	448.4	499.9	590.6	724.5	850.2	867.1	761.0	646.2	552.3	485.1
52.5°	388.7	416.6	467.3	558.3	686.4	795.2	784.8	676.7	571.1	491.1	438.4
55°	344.0	370.4	418.8	504.0	620.6	706.8	668.9	565.7	478.3	416.2	376.2
57.5°	304.1	329.3	371.0	448.0	549.3	608.6	560.4	473.4	404.0	356.2	326.3
60°	276.9	299.3	338.9	410.5	498.5	543.7	496.0	419.1	360.6	322.3	295.7
62.5°	251.2	270.7	307.5	372.3	448.8	486.7	438.6	373.4	323.7	289.7	267.0
65°	212.3	230.0	262.4	313.0	375.8	401.1	359.6	306.8	268.2	243.0	227.8
67.5°	176.7	191.7	219.8	259.6	305.9	324.2	292.7	251.8	222.7	202.5	190.4
70°	153.1	166.1	188.0	222.3	264.3	278.3	248.7	215.2	193.9	177.6	166.5
72.5°	133.1	142.7	162.7	189.2	224.1	235.3	214.6	185.1	165.2	153.1	144.2
75°	101.4	109.3	122.3	143.6	167.9	174.4	158.8	140.4	127.1	118.4	111.5
77.5°	73.1	79.0	88.4	101.5	118.3	124.1	114.3	102.0	92.3	86.4	82.6
80°	55.2	59.9	67.9	78.7	88.8	92.1	86.2	76.9	70.0	66.8	63.5
82.5°	40.8	43.5	48.3	55.6	62.5	66.4	61.5	55.8	52.1	49.2	48.0
85°	20.5	22.1	24.2	27.1	31.4	32.9	31.0	29.6	27.4	25.6	25.6
87.5°	8.4	9.0	10.6	11.8	13.6	15.3	15.8	16.0	16.6	16.6	16.5
90°	4.5	7.6	10.8	13.9	17.5	21.6	25.6	29.8	33.8	35.1	36.3
92.5°	25.4	24.4	23.6	22.7	23.8	26.9	30.0	33.0	36.1	38.1	40.1
95°	73.1	60.3	47.4	34.6	29.9	33.4	36.8	40.2	43.6	45.9	48.1
97.5°	167.0	161.3	155.4	149.7	135.5	113.0	90.5	68.0	45.3	47.9	50.4
100°	244.4	250.6	256.9	263.2	241.9	193.0	144.2	95.4	46.5	49.0	51.5
102.5°	317.1	321.6	326.0	330.5	306.1	252.8	199.4	146.1	92.7	84.9	77.2
105°	423.4	426.8	430.3	433.7	421.3	393.1	365.0	336.8	308.6	253.2	197.7
107.5°	535.9	538.7	541.5	544.2	547.8	552.2	556.8	561.2	565.6	525.0	484.3
110°	611.2	613.7	616.2	618.8	621.7	625.2	628.6	632.1	635.5	625.2	614.8



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	683.2	685.4	687.7	689.8	692.8	696.2	699.6	703.0	706.5	706.7	706.9
115°	789.6	791.5	793.3	795.2	797.6	800.4	803.1	806.0	808.8	811.9	815.1
117.5°	893.4	895.7	898.1	900.4	902.3	903.7	905.1	906.5	908.0	910.5	913.0
120°	958.2	961.0	963.8	966.7	968.6	969.4	970.3	971.3	972.2	974.8	977.3
122.5°	1023.0	1025.4	1027.7	1030.0	1031.8	1032.9	1034.2	1035.3	1036.5	1038.3	1040.0
125°	1112.9	1115.4	1117.9	1120.4	1122.3	1123.5	1124.7	1126.1	1127.3	1127.9	1128.5
127.5°	1199.7	1202.2	1204.7	1207.2	1209.2	1210.7	1212.2	1213.7	1215.2	1216.2	1217.2
130°	1253.8	1256.3	1258.8	1261.3	1263.2	1264.4	1265.6	1267.0	1268.2	1269.4	1270.6
132.5°	1305.6	1308.2	1310.6	1313.2	1314.9	1315.9	1316.9	1317.9	1318.9	1320.1	1321.4
135°	1384.2	1386.1	1388.0	1389.9	1391.4	1392.6	1393.9	1395.2	1396.4	1397.3	1398.3
137.5°	1452.4	1454.7	1457.1	1459.4	1461.0	1461.7	1462.4	1463.1	1463.8	1465.3	1466.8
140°	1496.9	1498.8	1500.7	1502.6	1503.9	1504.9	1505.8	1506.7	1507.7	1509.0	1510.2
142.5°	1538.6	1540.5	1542.4	1544.3	1545.7	1546.6	1547.6	1548.5	1549.4	1550.4	1551.4
145°	1597.2	1599.5	1601.7	1603.8	1605.2	1605.9	1606.5	1607.1	1607.8	1608.4	1609.0
147.5°	1651.5	1652.9	1654.4	1655.8	1656.8	1657.5	1658.1	1658.7	1659.3	1660.0	1660.6
150°	1684.8	1685.7	1686.7	1687.6	1688.4	1689.0	1689.7	1690.3	1690.9	1691.5	1692.1
152.5°	1714.8	1715.1	1715.6	1716.1	1716.5	1716.8	1717.2	1717.6	1718.0	1719.1	1720.2
155°	1756.5	1755.9	1755.3	1754.6	1754.4	1754.8	1755.1	1755.4	1755.7	1757.3	1758.9
157.5°	1790.4	1790.3	1790.2	1790.2	1790.0	1789.6	1789.3	1789.0	1788.7	1790.5	1792.4
160°	1810.3	1810.1	1809.8	1809.4	1809.1	1808.8	1808.5	1808.2	1807.9	1809.8	1811.7
162.5°	1829.0	1828.2	1827.4	1826.6	1826.0	1825.7	1825.4	1825.0	1824.8	1826.9	1829.0
165°	1852.0	1851.1	1850.1	1849.2	1848.6	1848.2	1847.9	1847.7	1847.3	1849.8	1852.3
167.5°	1869.7	1868.5	1867.3	1866.0	1865.4	1865.4	1865.4	1865.4	1865.4	1867.8	1870.4
170°	1879.9	1878.6	1877.4	1876.1	1875.5	1875.5	1875.5	1875.5	1875.5	1878.0	1880.5
172.5°	1886.4	1884.9	1883.4	1881.9	1881.2	1881.5	1881.8	1882.0	1882.3	1884.8	1887.3
175°	1895.1	1893.5	1892.0	1890.4	1889.7	1890.1	1890.4	1890.6	1891.0	1893.2	1895.4
177.5°	1897.6	1896.4	1895.2	1893.9	1893.4	1893.7	1893.9	1894.1	1894.4	1896.4	1898.4
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	745.1	745.1	745.1	745.1	745.1	745.1	745.1
2.5°	784.1	784.4	787.5	789.9	788.7	790.1	790.7
5°	856.6	869.6	876.5	881.6	881.9	882.2	885.1
7.5°	959.5	973.5	983.6	999.1	1003.7	1009.0	1007.5
10°	1034.6	1055.2	1072.9	1082.2	1092.3	1107.1	1095.2
12.5°	1104.8	1141.2	1168.2	1182.7	1192.3	1195.2	1189.4
15°	1220.5	1268.2	1293.8	1293.1	1325.6	1339.6	1317.6
17.5°	1326.6	1370.6	1405.8	1423.9	1451.0	1457.0	1454.2
20°	1391.6	1439.6	1467.1	1498.1	1512.2	1524.8	1527.0
22.5°	1447.7	1490.7	1520.2	1546.1	1557.8	1563.8	1567.4
25°	1505.3	1539.3	1557.0	1565.9	1569.2	1568.5	1563.8
27.5°	1501.4	1503.9	1484.5	1465.4	1448.2	1428.9	1422.3
30°	1462.4	1432.0	1377.9	1347.2	1302.1	1266.3	1280.8
32.5°	1359.8	1299.5	1238.7	1171.6	1116.1	1100.3	1084.4
35°	1160.6	1054.4	992.4	920.2	891.3	862.4	842.5
37.5°	939.0	856.9	783.2	735.9	707.0	688.8	678.9
40°	811.9	737.8	677.2	638.9	616.9	596.3	593.4
42.5°	710.5	641.7	596.1	565.6	544.4	535.7	529.3
45°	581.9	533.9	503.2	481.5	467.5	462.0	454.9
47.5°	492.6	458.6	435.5	420.8	410.2	406.1	405.6
50°	442.6	414.4	397.5	385.9	377.6	376.2	370.4
52.5°	405.0	380.6	367.4	357.3	351.3	347.2	345.5
55°	351.6	335.4	323.5	317.6	313.0	309.0	309.0
57.5°	307.6	294.1	286.2	281.3	279.8	277.0	275.2
60°	280.5	268.9	262.8	258.4	255.6	255.9	252.7
62.5°	253.9	246.4	240.5	236.2	232.8	232.8	233.1
65°	216.2	210.5	206.1	204.7	202.6	200.0	200.7
67.5°	183.2	177.9	174.5	172.0	171.3	169.8	172.0
70°	159.6	155.6	153.1	150.9	150.1	150.5	152.3
72.5°	137.9	135.1	133.5	132.4	130.8	130.9	132.1
75°	108.3	106.1	104.7	103.6	103.2	103.2	103.2
77.5°	79.6	79.1	78.4	76.8	76.9	77.3	77.4
80°	62.8	61.7	61.4	60.6	59.6	58.8	60.6
82.5°	46.9	45.8	45.5	45.3	43.6	43.5	45.1
85°	25.3	24.2	24.5	24.2	24.2	23.8	23.8
87.5°	16.5	16.4	16.3	16.8	16.6	16.4	17.2
90°	37.6	38.8	39.8	40.4	41.0	41.7	42.2
92.5°	42.1	44.1	45.2	45.6	46.0	46.4	46.8
95°	50.2	52.4	53.5	53.5	53.5	53.5	53.5
97.5°	52.9	55.4	56.8	57.1	57.4	57.8	58.1
100°	54.0	56.6	58.0	58.2	58.5	58.9	59.2
102.5°	69.5	61.6	58.1	58.6	59.2	59.8	60.3
105°	142.3	86.9	59.5	60.1	60.8	61.4	62.0
107.5°	443.7	403.0	361.8	320.1	278.2	236.5	194.7
110°	604.5	594.2	566.6	521.8	477.0	432.3	387.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	707.1	707.3	702.7	693.1	683.7	674.3	664.8
115°	818.2	821.3	823.5	824.8	826.0	827.3	828.6
117.5°	915.5	918.0	919.5	919.6	919.9	920.2	920.4
120°	979.8	982.3	983.5	983.5	983.5	983.5	983.5
122.5°	1041.8	1043.6	1044.5	1044.8	1045.0	1045.3	1045.6
125°	1129.2	1129.7	1130.4	1131.1	1131.6	1132.3	1132.9
127.5°	1218.2	1219.2	1219.4	1218.8	1218.1	1217.5	1216.9
130°	1272.0	1273.2	1273.5	1272.9	1272.2	1271.6	1271.0
132.5°	1322.7	1323.9	1324.1	1323.2	1322.4	1321.4	1320.6
135°	1399.2	1400.1	1400.1	1399.2	1398.3	1397.3	1396.4
137.5°	1468.3	1469.8	1470.2	1469.6	1469.0	1468.3	1467.7
140°	1511.5	1512.7	1513.1	1512.4	1511.8	1511.2	1510.5
142.5°	1552.5	1553.4	1553.5	1552.7	1551.7	1550.9	1550.0
145°	1609.7	1610.2	1610.6	1610.6	1610.6	1610.6	1610.6
147.5°	1661.2	1661.9	1661.4	1660.0	1658.6	1657.1	1655.7
150°	1692.8	1693.4	1693.3	1692.3	1691.4	1690.5	1689.5
152.5°	1721.4	1722.5	1722.3	1720.9	1719.4	1718.0	1716.6
155°	1760.4	1762.0	1761.8	1759.9	1758.0	1756.1	1754.4
157.5°	1794.3	1796.2	1795.9	1793.5	1791.0	1788.6	1786.1
160°	1813.5	1815.3	1815.2	1813.0	1810.8	1808.6	1806.5
162.5°	1831.2	1833.2	1833.3	1831.5	1829.5	1827.6	1825.6
165°	1854.8	1857.4	1857.5	1855.3	1853.1	1850.9	1848.7
167.5°	1872.8	1875.4	1875.4	1872.8	1870.4	1867.8	1865.4
170°	1883.0	1885.6	1885.6	1883.0	1880.5	1878.0	1875.5
172.5°	1889.8	1892.2	1892.2	1889.4	1886.7	1883.9	1881.1
175°	1897.5	1899.8	1899.6	1897.1	1894.6	1892.1	1889.6
177.5°	1900.4	1902.4	1902.1	1899.6	1897.1	1894.6	1892.2
180°	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6	1896.6

(END OF REPORT)