

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: P332223-930

Luminaire Tested: **S123DIW-S1165D1030U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332223-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S1165D1030U930-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1030 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6908.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.49
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

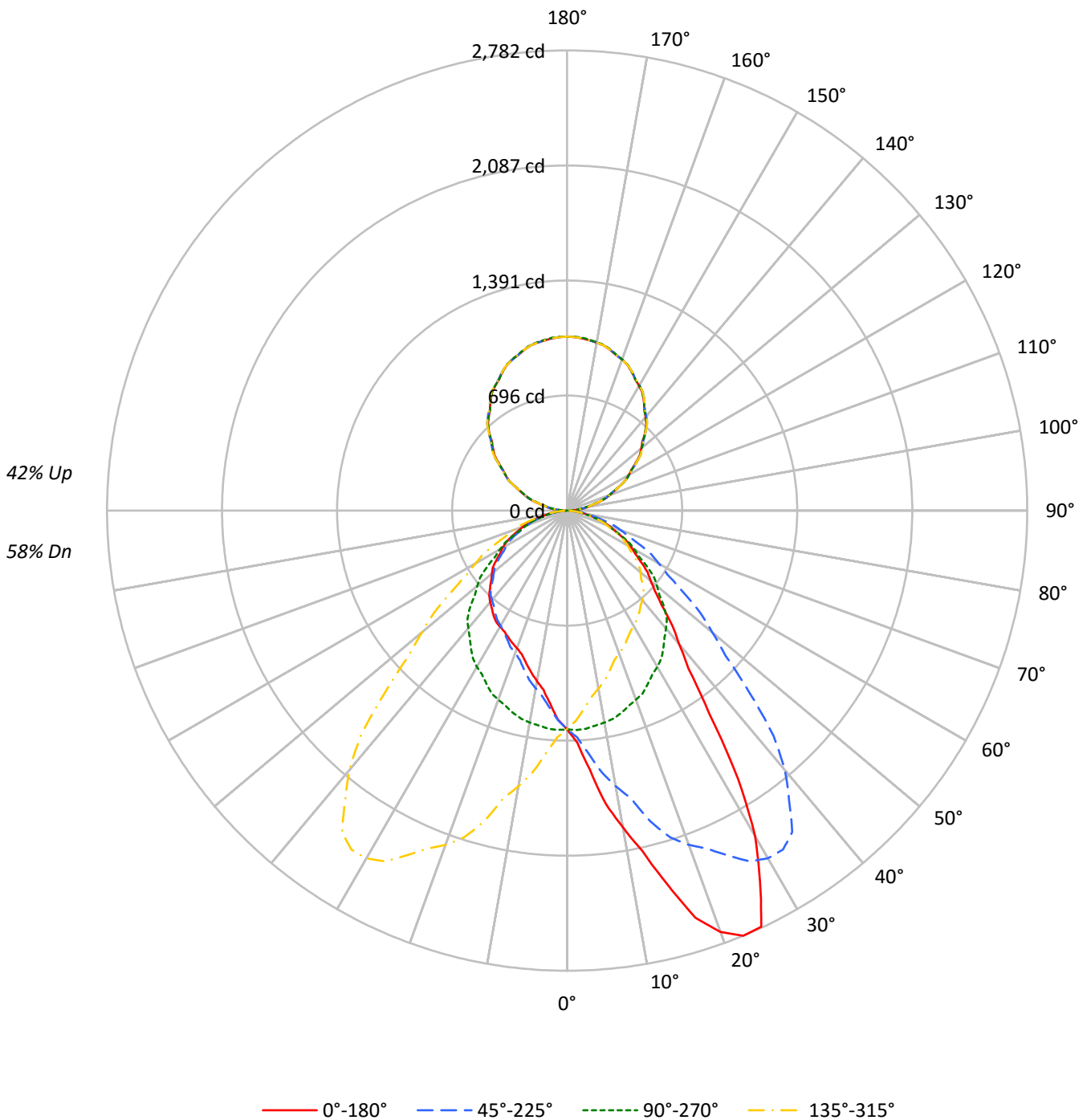
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	56	55	54	49
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42
3	83	74	67	61	77	69	63	58	60	55	51	52	48	45	45	42	39	36
4	76	66	58	52	71	62	55	49	54	48	44	47	42	39	40	37	34	31
5	70	59	51	45	65	55	48	42	48	43	38	42	38	34	36	33	30	27
6	65	53	45	39	60	50	42	37	44	38	33	38	33	30	33	29	26	24
7	60	48	40	34	56	45	38	33	40	34	29	35	30	27	30	26	24	21
8	56	43	36	30	52	41	34	29	36	30	26	32	27	24	28	24	21	19
9	52	40	32	27	48	37	31	26	33	28	24	29	25	21	25	22	19	17
10	48	36	29	24	45	34	28	23	31	25	21	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14235	14235	14235	14235
5°	16977	14296	12670	14296
10°	21249	14224	11444	14224
15°	26063	14110	10653	14110
20°	31047	13931	10143	13931
25°	32967	13713	10030	13713
30°	28256	13554	10082	13554
35°	19651	13328	10188	13328
40°	14802	13065	10156	13065
45°	12291	12670	10027	12670
50°	11010	11868	9937	11868
55°	10293	11003	9813	11003
60°	9655	10097	9711	10097
65°	9075	9205	9401	9205
70°	8510	8189	8954	8189
75°	7623	7170	8210	7170
80°	6670	5876	7073	5876
85°	5224	4273	4755	4273



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	1.9
10°-20°	417.7	6.0
20°-30°	701.1	10.1
30°-40°	793.9	11.5
40°-50°	711.9	10.3
50°-60°	574.5	8.3
60°-70°	400.3	5.8
70°-80°	210.4	3.0
80°-90°	54.6	0.8
90°-100°	68.5	1.0
100°-110°	205.0	3.0
110°-120°	348.7	5.0
120°-130°	458.7	6.6
130°-140°	515.5	7.5
140°-150°	506.8	7.3
150°-160°	426.6	6.2
160°-170°	284.0	4.1
170°-180°	99.4	1.4
0°-30°	1249.1	18.1
0°-40°	2043.0	29.6
0°-60°	3329.4	48.2
0°-90°	3994.8	57.8
90°-120°	622.2	9.0
90°-150°	2103.2	30.4
90°-180°	2913.0	42.2
0°-180°	6908.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1322	1322	1322	1322	1322	
5°	1571	1323	1173	1323	1571	163
15°	2339	1266	956	1266	2339	675
25°	2776	1155	844	1155	2776	1217
35°	1496	1014	775	1014	1496	972
45°	807	832	659	832	807	639
55°	548	586	523	586	548	492
65°	356	361	369	361	356	355
75°	183	172	197	172	183	196
85°	42	35	38	35	42	51
90°	25	1	25	1	25	14
95°	64	49	64	49	64	66
105°	197	186	197	186	197	209
115°	352	351	352	351	352	348
125°	508	514	508	514	508	454
135°	666	667	666	667	666	512
145°	809	809	809	809	809	505
155°	924	926	924	926	924	426
165°	1005	1008	1005	1008	1005	284
175°	1045	1049	1045	1049	1045	99
180°	1052	1052	1052	1052	1052	



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1403.5	1402.5	1400.0	1402.0	1397.9	1392.2	1391.7	1386.6	1371.7	1370.7	1366.6
5°	1571.2	1566.0	1565.4	1564.7	1555.8	1543.6	1520.5	1518.6	1487.8	1472.4	1453.9
7.5°	1788.2	1790.9	1781.6	1773.4	1746.0	1727.9	1703.2	1671.5	1633.7	1595.4	1569.9
10°	1944.1	1965.2	1938.9	1921.0	1904.4	1872.9	1836.5	1790.9	1745.4	1692.2	1651.9
12.5°	2111.2	2121.6	2116.3	2099.4	2073.5	2025.7	1961.0	1910.9	1869.0	1780.5	1744.7
15°	2338.8	2377.9	2352.9	2295.2	2296.5	2251.0	2166.4	2073.5	2024.1	1946.6	1840.9
17.5°	2581.2	2586.1	2575.4	2527.4	2495.4	2432.9	2354.8	2265.7	2165.8	2072.0	1959.8
20°	2710.4	2706.5	2684.1	2659.2	2604.1	2555.4	2470.1	2370.8	2242.6	2150.4	2028.0
22.5°	2782.2	2775.8	2765.2	2744.2	2698.4	2646.1	2569.6	2461.1	2339.0	2211.9	2070.5
25°	2775.8	2784.1	2785.4	2779.6	2763.6	2732.2	2672.0	2585.5	2463.8	2300.4	2153.0
27.5°	2524.6	2536.4	2570.6	2601.0	2635.0	2669.5	2664.9	2622.0	2531.9	2390.8	2210.6
30°	2273.4	2247.8	2311.2	2391.4	2445.8	2541.9	2595.7	2598.9	2548.3	2427.2	2251.6
32.5°	1924.8	1953.0	1981.1	2079.7	2198.7	2306.6	2413.8	2500.0	2509.9	2429.3	2275.7
35°	1495.5	1530.8	1582.0	1633.3	1761.5	1871.7	2060.0	2224.1	2354.8	2372.1	2277.9
37.5°	1205.2	1222.5	1255.0	1306.4	1390.2	1520.9	1666.6	1874.0	2063.4	2204.2	2210.4
40°	1053.4	1058.5	1095.0	1134.2	1202.1	1309.7	1441.0	1624.3	1851.1	2047.9	2129.9
42.5°	939.6	950.9	966.4	1004.0	1058.0	1139.1	1261.2	1412.6	1620.5	1846.9	2007.3
45°	807.4	820.2	829.8	854.8	893.2	947.7	1032.9	1171.3	1329.6	1563.4	1779.4
47.5°	720.0	721.0	728.1	747.0	773.1	814.0	874.2	963.2	1108.5	1298.2	1519.9
50°	657.5	667.6	670.3	684.9	705.5	735.6	785.5	861.2	980.4	1147.0	1350.7
52.5°	613.3	616.4	623.6	634.2	652.2	675.6	718.9	778.1	871.7	1013.7	1201.0
55°	548.5	548.5	555.5	563.9	574.1	595.3	624.1	667.6	738.8	849.0	1004.0
57.5°	488.5	491.7	496.7	499.3	508.0	522.0	546.1	579.1	632.2	717.0	840.3
60°	448.5	454.3	453.6	458.8	466.5	477.4	497.9	524.8	572.2	640.1	744.0
62.5°	413.7	413.3	413.2	419.3	427.0	437.4	450.7	474.0	514.3	574.5	662.9
65°	356.3	355.0	359.5	363.3	365.9	373.6	383.8	404.3	431.2	476.1	544.6
67.5°	305.2	301.6	303.9	305.2	309.7	315.6	325.2	337.9	359.3	395.3	447.0
70°	270.4	267.2	266.5	267.8	271.7	276.1	283.2	295.4	315.3	344.1	381.9
72.5°	234.5	232.4	232.2	235.1	236.8	239.8	244.8	255.9	271.7	293.3	328.6
75°	183.3	183.3	183.3	183.9	185.8	188.4	192.2	198.0	210.2	225.5	249.2
77.5°	137.4	137.2	136.5	136.3	139.2	140.3	141.2	146.6	153.4	163.8	181.1
80°	107.6	104.4	105.7	107.6	108.9	109.6	111.5	112.8	118.5	124.3	136.5
82.5°	80.0	77.3	77.5	80.5	80.7	81.4	83.3	85.1	87.2	92.5	99.1
85°	42.3	42.3	43.0	43.0	43.5	43.0	44.8	45.5	45.5	48.7	52.5
87.5°	20.3	19.2	19.6	20.1	19.6	19.9	20.3	20.6	21.0	21.4	21.4
90°	24.8	24.4	24.1	23.6	23.3	22.7	22.0	21.3	20.5	19.8	17.4
92.5°	33.3	33.6	33.8	34.0	34.2	34.1	33.5	32.9	32.3	31.7	30.3
95°	64.4	64.4	64.4	64.4	64.4	64.1	63.3	62.6	61.9	61.1	59.7
97.5°	99.1	99.2	99.3	99.3	99.4	99.1	98.2	97.3	96.5	95.6	94.6
100°	125.6	125.1	124.8	124.4	124.1	123.6	123.1	122.5	122.0	121.4	120.5
102.5°	152.6	152.7	152.8	152.9	153.0	152.7	152.1	151.6	151.1	150.5	149.3
105°	196.6	196.2	195.8	195.5	195.1	194.9	194.9	194.9	194.9	194.9	193.3
107.5°	242.3	242.6	242.8	243.0	243.2	243.0	242.5	241.9	241.2	240.7	240.0
110°	273.4	273.8	274.1	274.5	274.8	274.7	273.9	273.2	272.5	271.7	271.4



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	306.5	306.6	306.6	306.6	306.7	306.3	305.4	304.6	303.7	302.8	302.7
115°	351.9	352.0	352.2	352.5	352.6	352.6	352.5	352.2	352.0	351.9	352.2
117.5°	397.9	398.4	399.0	399.5	400.0	400.3	400.3	400.4	400.4	400.5	400.9
120°	430.3	430.7	431.0	431.5	431.8	432.1	432.3	432.4	432.6	432.8	433.7
122.5°	461.4	461.9	462.4	462.9	463.4	464.0	464.4	464.9	465.4	465.9	466.4
125°	508.0	508.7	509.5	510.2	510.9	511.7	512.4	513.1	513.9	514.6	514.9
127.5°	554.4	555.2	556.1	556.9	557.7	558.7	559.8	560.8	561.8	562.8	563.2
130°	584.8	586.1	587.3	588.6	590.0	590.9	591.7	592.4	593.1	593.9	594.4
132.5°	616.5	617.5	618.5	619.5	620.5	621.4	622.3	623.2	624.0	624.9	625.3
135°	665.8	666.1	666.5	666.8	667.2	667.7	668.5	669.2	669.9	670.7	670.9
137.5°	709.2	709.9	710.6	711.3	712.0	712.7	713.5	714.3	715.0	715.8	715.3
140°	737.6	738.9	740.2	741.4	742.7	743.5	743.6	743.9	744.0	744.2	744.0
142.5°	766.7	767.7	768.7	769.6	770.6	771.3	771.4	771.6	771.8	772.0	771.7
145°	808.6	809.3	810.1	810.8	811.5	812.0	812.2	812.4	812.6	812.8	812.2
147.5°	846.0	847.1	848.2	849.3	850.4	850.9	850.9	850.9	850.9	850.9	850.4
150°	869.8	870.9	872.0	873.1	874.2	874.7	874.7	874.7	874.7	874.7	874.3
152.5°	892.9	893.8	894.8	895.8	896.7	897.1	896.7	896.4	896.2	895.9	895.7
155°	924.3	925.6	926.8	928.1	929.4	929.7	929.0	928.2	927.5	926.8	926.6
157.5°	952.8	953.9	955.0	955.9	957.0	957.1	956.3	955.5	954.8	954.0	953.9
160°	971.3	972.1	972.8	973.5	974.3	974.2	973.3	972.4	971.4	970.5	970.5
162.5°	985.2	986.4	987.6	988.8	989.9	990.1	989.1	988.2	987.3	986.4	986.3
165°	1005.3	1006.5	1007.8	1009.1	1010.4	1010.5	1009.3	1008.3	1007.1	1006.1	1006.1
167.5°	1022.2	1023.4	1024.5	1025.6	1026.8	1026.8	1025.6	1024.5	1023.4	1022.2	1022.1
170°	1030.9	1032.1	1033.4	1034.7	1036.0	1036.0	1034.7	1033.4	1032.1	1030.9	1030.9
172.5°	1037.5	1038.7	1040.0	1041.3	1042.6	1042.7	1041.5	1040.4	1039.3	1038.1	1038.1
175°	1044.9	1046.2	1047.4	1048.7	1050.0	1050.1	1049.0	1047.9	1046.8	1045.7	1045.7
177.5°	1048.9	1049.9	1050.9	1051.9	1053.0	1053.0	1052.1	1051.2	1050.4	1049.5	1049.5
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1363.5	1359.4	1355.4	1348.2	1342.0	1333.3	1330.7	1327.6	1318.4	1310.3	1304.1
5°	1446.8	1431.4	1409.0	1388.5	1371.9	1349.5	1336.6	1323.1	1303.9	1286.6	1272.5
7.5°	1534.0	1503.7	1468.8	1431.2	1396.1	1362.3	1335.0	1310.6	1283.7	1258.2	1238.4
10°	1603.2	1559.6	1510.9	1458.4	1413.5	1369.9	1333.4	1301.4	1266.8	1236.6	1211.7
12.5°	1682.1	1617.6	1550.4	1486.5	1433.5	1373.0	1328.8	1288.1	1248.9	1212.6	1184.5
15°	1775.6	1693.5	1614.0	1526.3	1445.5	1369.9	1317.4	1266.2	1220.7	1183.5	1147.6
17.5°	1860.7	1767.7	1663.0	1556.2	1458.9	1369.2	1295.6	1237.7	1180.8	1135.3	1099.5
20°	1908.9	1803.1	1684.6	1573.7	1466.1	1366.1	1285.4	1216.2	1154.6	1106.6	1066.2
22.5°	1950.4	1826.7	1704.1	1585.5	1465.6	1357.9	1266.4	1195.1	1128.5	1081.5	1038.5
25°	1993.4	1845.4	1722.4	1583.3	1449.4	1337.9	1235.4	1154.6	1088.0	1032.9	988.7
27.5°	2030.3	1844.1	1698.1	1548.6	1424.0	1312.3	1202.8	1116.2	1045.5	985.6	940.8
30°	2054.9	1846.7	1673.0	1525.0	1399.5	1284.1	1177.7	1090.5	1016.3	955.4	913.1
32.5°	2070.3	1845.1	1649.9	1492.2	1360.5	1258.4	1150.6	1060.3	984.0	924.1	883.4
35°	2079.3	1833.9	1610.2	1424.4	1297.5	1198.2	1107.9	1014.3	934.3	878.5	832.3
37.5°	2061.3	1810.1	1564.1	1359.0	1220.2	1122.3	1046.4	966.6	890.0	828.7	788.9
40°	2033.1	1794.8	1528.2	1313.0	1166.9	1072.6	1008.0	929.8	854.1	795.8	758.6
42.5°	1979.3	1763.5	1488.7	1261.7	1111.5	1017.2	957.7	892.3	820.8	766.1	729.0
45°	1848.0	1695.4	1429.5	1184.8	1029.7	932.3	879.8	832.3	767.6	714.4	682.4
47.5°	1665.7	1593.1	1343.9	1103.7	944.4	850.7	796.1	757.9	710.6	667.6	636.9
50°	1539.1	1509.0	1286.0	1048.3	887.5	795.8	743.3	708.7	674.7	631.8	603.6
52.5°	1393.0	1411.6	1218.4	990.8	829.6	739.5	690.0	662.5	631.7	596.4	571.9
55°	1187.3	1254.6	1101.5	894.5	743.3	657.5	610.7	586.3	568.3	542.1	521.0
57.5°	994.7	1080.4	975.1	795.2	658.6	584.5	539.6	513.1	501.6	487.9	471.2
60°	880.4	965.0	884.9	728.6	601.7	531.2	491.5	469.0	457.5	447.9	433.8
62.5°	778.4	864.0	796.7	660.9	545.8	480.5	445.8	424.0	415.0	409.9	397.9
65°	638.2	711.9	667.0	555.5	465.9	408.1	376.7	361.4	353.0	351.1	343.5
67.5°	519.4	575.5	542.8	460.8	390.2	340.4	313.7	300.7	294.2	293.6	287.8
70°	441.5	494.0	469.0	394.7	333.9	294.7	271.7	260.2	256.3	255.7	252.5
72.5°	381.0	417.7	397.8	335.7	288.7	253.2	236.3	224.3	219.9	220.8	218.7
75°	281.9	309.5	298.0	255.0	217.2	194.1	180.0	172.4	168.5	170.5	167.9
77.5°	202.8	220.3	209.9	180.2	156.9	140.2	129.8	125.1	121.6	121.5	120.3
80°	153.1	163.4	157.6	139.7	120.5	106.4	98.0	94.8	92.9	92.3	91.6
82.5°	109.1	117.8	111.0	98.7	85.6	77.1	72.4	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.0	43.0	39.1	36.5	34.6	33.3	34.0	32.7
87.5°	22.0	22.0	20.0	17.5	16.1	14.3	13.9	12.5	11.8	12.1	12.1
90°	15.1	12.6	10.3	8.2	6.4	4.5	2.7	0.8	2.7	4.5	6.4
92.5°	29.0	27.6	26.3	24.9	23.7	22.5	21.2	20.0	21.2	22.5	23.7
95°	58.2	56.7	55.3	53.9	52.6	51.3	50.0	48.8	50.0	51.3	52.6
97.5°	93.5	92.5	91.4	90.4	89.4	88.5	87.5	86.6	87.5	88.5	89.4
100°	119.6	118.7	117.7	116.8	115.6	114.5	113.4	112.3	113.4	114.5	115.6
102.5°	148.1	146.8	145.6	144.7	144.1	143.4	142.8	142.1	142.8	143.4	144.1
105°	191.6	190.0	188.3	187.4	186.9	186.6	186.2	185.9	186.2	186.6	186.9
107.5°	239.4	238.7	238.1	237.6	237.4	237.2	236.9	236.8	236.9	237.2	237.4
110°	271.0	270.7	270.3	269.9	269.5	269.2	268.8	268.5	268.8	269.2	269.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	302.6	302.6	302.5	302.4	302.1	301.9	301.7	301.5	301.7	301.9	302.1
115°	352.6	352.9	353.4	353.3	352.7	352.1	351.6	351.1	351.6	352.1	352.7
117.5°	401.4	401.9	402.4	402.4	402.0	401.7	401.3	401.0	401.3	401.7	402.0
120°	434.6	435.5	436.5	436.4	435.3	434.2	433.1	432.0	433.1	434.2	435.3
122.5°	466.8	467.3	467.7	467.6	466.8	466.0	465.2	464.4	465.2	466.0	466.8
125°	515.4	515.7	516.1	516.0	515.4	514.9	514.3	513.8	514.3	514.9	515.4
127.5°	563.6	564.0	564.4	564.0	562.9	561.7	560.5	559.4	560.5	561.7	562.9
130°	595.0	595.6	596.1	595.7	594.2	592.7	591.3	589.8	591.3	592.7	594.2
132.5°	625.7	626.1	626.6	626.1	624.6	623.1	621.6	620.1	621.6	623.1	624.6
135°	671.1	671.2	671.4	671.0	669.8	668.8	667.6	666.6	667.6	668.8	669.8
137.5°	714.9	714.4	713.9	713.2	712.2	711.3	710.5	709.6	710.5	711.3	712.2
140°	743.9	743.6	743.5	742.9	742.0	741.1	740.2	739.2	740.2	741.1	742.0
142.5°	771.3	770.9	770.6	770.1	769.1	768.2	767.3	766.4	767.3	768.2	769.1
145°	811.7	811.1	810.6	810.1	809.8	809.3	809.0	808.6	809.0	809.3	809.8
147.5°	849.9	849.4	848.9	848.3	847.7	846.9	846.3	845.6	846.3	846.9	847.7
150°	874.0	873.6	873.3	872.9	872.5	872.1	871.8	871.4	871.8	872.1	872.5
152.5°	895.4	895.2	895.0	894.6	894.1	893.6	893.1	892.6	893.1	893.6	894.1
155°	926.4	926.2	926.0	925.9	925.9	925.9	925.9	925.9	925.9	925.9	925.9
157.5°	953.7	953.6	953.4	953.5	953.7	953.9	954.1	954.4	954.1	953.9	953.7
160°	970.5	970.5	970.5	970.7	971.1	971.4	971.8	972.2	971.8	971.4	971.1
162.5°	986.1	985.9	985.8	986.0	986.5	987.0	987.6	988.1	987.6	987.0	986.5
165°	1006.1	1006.1	1006.1	1006.3	1006.9	1007.5	1008.0	1008.5	1008.0	1007.5	1006.9
167.5°	1022.0	1021.8	1021.7	1022.0	1022.7	1023.4	1024.2	1024.9	1024.2	1023.4	1022.7
170°	1030.9	1030.9	1030.9	1031.2	1031.9	1032.7	1033.4	1034.1	1033.4	1032.7	1031.9
172.5°	1038.1	1038.1	1038.1	1038.4	1039.2	1039.9	1040.6	1041.4	1040.6	1039.9	1039.2
175°	1045.7	1045.7	1045.7	1046.1	1046.8	1047.6	1048.3	1049.0	1048.3	1047.6	1046.8
177.5°	1049.5	1049.5	1049.5	1049.8	1050.4	1051.0	1051.6	1052.1	1051.6	1051.0	1050.4
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1300.5	1296.9	1291.8	1284.1	1277.9	1268.2	1268.2	1269.7	1269.7	1269.3	1268.2
5°	1261.0	1251.4	1239.9	1226.5	1212.4	1198.2	1195.6	1190.5	1186.7	1184.1	1181.0
7.5°	1219.4	1202.3	1185.5	1166.7	1149.5	1135.3	1125.4	1117.2	1112.0	1106.4	1102.2
10°	1191.2	1170.0	1150.1	1130.3	1108.5	1091.2	1080.4	1072.6	1066.9	1061.8	1059.2
12.5°	1157.9	1133.7	1111.7	1092.9	1069.0	1051.2	1040.9	1037.2	1030.5	1019.7	1014.1
15°	1109.1	1086.7	1060.5	1031.6	1020.1	998.3	986.1	980.4	976.5	968.2	965.6
17.5°	1067.5	1038.1	1008.7	987.2	965.7	948.0	941.3	934.1	929.0	922.2	920.1
20°	1034.2	1008.0	981.0	958.0	935.5	916.3	910.5	905.4	900.3	897.1	894.5
22.5°	1000.4	974.1	951.8	930.3	906.3	893.7	887.5	881.8	878.2	876.0	873.5
25°	952.8	929.8	904.7	885.5	866.3	857.9	854.1	850.9	848.4	845.1	844.5
27.5°	910.3	885.2	864.9	846.9	833.2	826.2	822.5	820.9	821.5	822.6	823.4
30°	878.5	855.4	838.8	823.4	810.6	804.1	803.5	803.5	806.1	806.7	808.0
32.5°	849.3	830.3	813.7	798.7	789.0	784.6	787.1	787.1	789.1	790.8	793.1
35°	806.7	790.0	777.2	764.4	756.1	758.0	759.3	760.6	763.8	767.6	770.2
37.5°	766.1	751.6	738.3	728.3	724.5	727.9	731.0	733.7	737.4	740.4	742.9
40°	736.9	725.9	713.1	704.2	705.5	707.4	710.0	713.1	716.4	718.3	720.9
42.5°	709.7	698.3	688.6	681.1	682.9	685.3	686.9	688.6	692.3	695.8	697.2
45°	668.3	659.3	650.4	645.9	647.2	648.5	649.7	651.7	654.8	657.5	658.0
47.5°	621.8	615.6	609.5	605.1	607.2	606.7	608.4	612.5	613.4	615.0	618.6
50°	592.1	586.3	579.3	578.0	578.0	578.0	578.6	583.8	583.8	586.3	588.9
52.5°	559.3	555.5	551.1	548.8	547.7	547.7	550.4	553.0	554.0	557.6	560.2
55°	510.7	506.9	503.0	501.1	499.8	501.1	506.2	507.4	510.7	512.6	514.5
57.5°	460.1	457.1	454.0	453.0	452.7	454.4	457.2	461.1	461.9	467.7	470.7
60°	426.7	422.2	419.7	419.7	418.4	424.2	422.9	429.3	430.6	434.5	439.0
62.5°	392.4	386.4	385.4	385.4	387.2	388.8	390.6	393.5	396.7	401.6	405.1
65°	337.0	333.9	338.3	337.7	336.4	340.2	340.2	343.5	347.3	351.8	358.8
67.5°	284.6	283.0	283.3	283.3	285.3	287.5	289.3	292.0	296.7	301.4	306.1
70°	249.2	251.2	248.0	250.5	252.5	253.1	254.4	258.2	263.3	266.5	271.7
72.5°	214.9	214.7	215.2	216.2	218.1	219.2	220.5	224.9	230.6	233.3	237.3
75°	165.3	164.7	166.6	166.6	169.8	171.0	172.4	174.3	179.4	183.3	186.5
77.5°	120.7	121.5	121.1	123.3	122.4	122.6	126.6	128.6	129.1	136.6	138.3
80°	91.0	92.3	92.9	93.5	94.2	92.9	97.4	99.3	99.3	103.8	107.0
82.5°	65.4	66.1	67.8	68.4	68.6	69.9	70.2	71.7	73.2	75.1	79.3
85°	32.7	34.6	35.2	34.6	35.2	34.0	35.9	36.5	37.2	37.2	37.2
87.5°	11.9	12.8	12.8	13.8	13.8	14.8	14.8	14.0	14.1	15.8	13.9
90°	8.2	10.3	12.6	15.1	17.4	19.8	20.5	21.3	22.0	22.7	23.3
92.5°	24.9	26.3	27.6	29.0	30.3	31.7	32.3	32.9	33.5	34.1	34.2
95°	53.9	55.3	56.7	58.2	59.7	61.1	61.9	62.6	63.3	64.1	64.4
97.5°	90.4	91.4	92.5	93.5	94.6	95.6	96.5	97.3	98.2	99.1	99.4
100°	116.8	117.7	118.7	119.6	120.5	121.4	122.0	122.5	123.1	123.6	124.1
102.5°	144.7	145.6	146.8	148.1	149.3	150.5	151.1	151.6	152.1	152.7	153.0
105°	187.4	188.3	190.0	191.6	193.3	194.9	194.9	194.9	194.9	194.9	195.1
107.5°	237.6	238.1	238.7	239.4	240.0	240.7	241.2	241.9	242.5	243.0	243.2
110°	269.9	270.3	270.7	271.0	271.4	271.7	272.5	273.2	273.9	274.7	274.8



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	302.4	302.5	302.6	302.6	302.7	302.8	303.7	304.6	305.4	306.3	306.7
115°	353.3	353.4	352.9	352.6	352.2	351.9	352.0	352.2	352.5	352.6	352.6
117.5°	402.4	402.4	401.9	401.4	400.9	400.5	400.4	400.4	400.3	400.3	400.0
120°	436.4	436.5	435.5	434.6	433.7	432.8	432.6	432.4	432.3	432.1	431.8
122.5°	467.6	467.7	467.3	466.8	466.4	465.9	465.4	464.9	464.4	464.0	463.4
125°	516.0	516.1	515.7	515.4	514.9	514.6	513.9	513.1	512.4	511.7	510.9
127.5°	564.0	564.4	564.0	563.6	563.2	562.8	561.8	560.8	559.8	558.7	557.7
130°	595.7	596.1	595.6	595.0	594.4	593.9	593.1	592.4	591.7	590.9	590.0
132.5°	626.1	626.6	626.1	625.7	625.3	624.9	624.0	623.2	622.3	621.4	620.5
135°	671.0	671.4	671.2	671.1	670.9	670.7	669.9	669.2	668.5	667.7	667.2
137.5°	713.2	713.9	714.4	714.9	715.3	715.8	715.0	714.3	713.5	712.7	712.0
140°	742.9	743.5	743.6	743.9	744.0	744.2	744.0	743.9	743.6	743.5	742.7
142.5°	770.1	770.6	770.9	771.3	771.7	772.0	771.8	771.6	771.4	771.3	770.6
145°	810.1	810.6	811.1	811.7	812.2	812.8	812.6	812.4	812.2	812.0	811.5
147.5°	848.3	848.9	849.4	849.9	850.4	850.9	850.9	850.9	850.9	850.9	850.4
150°	872.9	873.3	873.6	874.0	874.3	874.7	874.7	874.7	874.7	874.7	874.2
152.5°	894.6	895.0	895.2	895.4	895.7	895.9	896.2	896.4	896.7	897.1	896.7
155°	925.9	926.0	926.2	926.4	926.6	926.8	927.5	928.2	929.0	929.7	929.4
157.5°	953.5	953.4	953.6	953.7	953.9	954.0	954.8	955.5	956.3	957.1	957.0
160°	970.7	970.5	970.5	970.5	970.5	970.5	971.4	972.4	973.3	974.2	974.3
162.5°	986.0	985.8	985.9	986.1	986.3	986.4	987.3	988.2	989.1	990.1	989.9
165°	1006.3	1006.1	1006.1	1006.1	1006.1	1006.1	1007.1	1008.3	1009.3	1010.5	1010.4
167.5°	1022.0	1021.7	1021.8	1022.0	1022.1	1022.2	1023.4	1024.5	1025.6	1026.8	1026.8
170°	1031.2	1030.9	1030.9	1030.9	1030.9	1030.9	1032.1	1033.4	1034.7	1036.0	1036.0
172.5°	1038.4	1038.1	1038.1	1038.1	1038.1	1038.1	1039.3	1040.4	1041.5	1042.7	1042.6
175°	1046.1	1045.7	1045.7	1045.7	1045.7	1045.7	1046.8	1047.9	1049.0	1050.1	1050.0
177.5°	1049.8	1049.5	1049.5	1049.5	1049.5	1049.5	1050.4	1051.2	1052.1	1053.0	1053.0
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1264.6	1264.1	1267.7	1265.1	1267.7	1264.1	1264.6	1268.2	1269.3	1269.7	1269.7
5°	1177.0	1179.0	1172.6	1172.6	1172.6	1179.0	1177.0	1181.0	1184.1	1186.7	1190.5
7.5°	1099.2	1096.3	1096.6	1093.2	1096.6	1096.3	1099.2	1102.2	1106.4	1112.0	1117.2
10°	1051.5	1047.7	1046.4	1047.0	1046.4	1047.7	1051.5	1059.2	1061.8	1066.9	1072.6
12.5°	1012.0	1011.2	1002.8	1002.9	1002.8	1011.2	1012.0	1014.1	1019.7	1030.5	1037.2
15°	965.6	953.5	952.2	956.0	952.2	953.5	965.6	965.6	968.2	976.5	980.4
17.5°	919.1	912.7	913.1	911.2	913.1	912.7	919.1	920.1	922.2	929.0	934.1
20°	894.5	890.6	890.0	885.5	890.0	890.6	894.5	894.5	897.1	900.3	905.4
22.5°	872.0	870.7	871.1	866.1	871.1	870.7	872.0	873.5	876.0	878.2	881.8
25°	843.9	847.1	844.5	844.5	844.5	847.1	843.9	844.5	845.1	848.4	850.9
27.5°	824.9	824.8	823.5	823.5	823.5	824.8	824.9	823.4	822.6	821.5	820.9
30°	810.6	809.9	811.2	811.2	811.2	809.9	810.6	808.0	806.7	806.1	803.5
32.5°	796.2	797.1	797.4	797.9	797.4	797.1	796.2	793.1	790.8	789.1	787.1
35°	774.0	774.7	776.6	775.3	776.6	774.7	774.0	770.2	767.6	763.8	760.6
37.5°	744.0	747.0	746.3	747.4	746.3	747.0	744.0	742.9	740.4	737.4	733.7
40°	721.5	723.4	722.8	722.8	722.8	723.4	721.5	720.9	718.3	716.4	713.1
42.5°	698.5	699.9	698.1	697.2	698.1	699.9	698.5	697.2	695.8	692.3	688.6
45°	660.6	659.3	661.3	658.7	661.3	659.3	660.6	658.0	657.5	654.8	651.7
47.5°	618.3	619.6	620.1	622.1	620.1	619.6	618.3	618.6	615.0	613.4	612.5
50°	590.1	593.9	593.9	593.4	593.9	593.9	590.1	588.9	586.3	583.8	583.8
52.5°	562.5	564.3	566.8	566.7	566.8	564.3	562.5	560.2	557.6	554.0	553.0
55°	519.7	521.0	522.2	522.9	522.2	521.0	519.7	514.5	512.6	510.7	507.4
57.5°	475.3	474.8	477.8	478.7	477.8	474.8	475.3	470.7	467.7	461.9	461.1
60°	444.0	444.0	449.1	451.1	449.1	444.0	444.0	439.0	434.5	430.6	429.3
62.5°	410.7	412.8	417.9	415.2	417.9	412.8	410.7	405.1	401.6	396.7	393.5
65°	362.0	367.1	366.5	369.1	366.5	367.1	362.0	358.8	351.8	347.3	343.5
67.5°	311.1	314.4	318.9	319.4	318.9	314.4	311.1	306.1	301.4	296.7	292.0
70°	276.8	280.0	282.6	284.5	282.6	280.0	276.8	271.7	266.5	263.3	258.2
72.5°	243.5	245.2	251.3	248.6	251.3	245.2	243.5	237.3	233.3	230.6	224.9
75°	190.9	195.4	199.3	197.4	199.3	195.4	190.9	186.5	183.3	179.4	174.3
77.5°	141.2	145.7	147.5	145.9	147.5	145.7	141.2	138.3	136.6	129.1	128.6
80°	111.5	110.9	114.7	114.1	114.7	110.9	111.5	107.0	103.8	99.3	99.3
82.5°	81.8	81.1	82.9	83.3	82.9	81.1	81.8	79.3	75.1	73.2	71.7
85°	39.7	41.7	39.1	38.5	39.1	41.7	39.7	37.2	37.2	37.2	36.5
87.5°	13.9	14.0	13.6	13.1	13.6	14.0	13.9	13.9	15.8	14.1	14.0
90°	23.6	24.1	24.4	24.8	24.4	24.1	23.6	23.3	22.7	22.0	21.3
92.5°	34.0	33.8	33.6	33.3	33.6	33.8	34.0	34.2	34.1	33.5	32.9
95°	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.1	63.3	62.6
97.5°	99.3	99.3	99.2	99.1	99.2	99.3	99.3	99.4	99.1	98.2	97.3
100°	124.4	124.8	125.1	125.6	125.1	124.8	124.4	124.1	123.6	123.1	122.5
102.5°	152.9	152.8	152.7	152.6	152.7	152.8	152.9	153.0	152.7	152.1	151.6
105°	195.5	195.8	196.2	196.6	196.2	195.8	195.5	195.1	194.9	194.9	194.9
107.5°	243.0	242.8	242.6	242.3	242.6	242.8	243.0	243.2	243.0	242.5	241.9
110°	274.5	274.1	273.8	273.4	273.8	274.1	274.5	274.8	274.7	273.9	273.2



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	306.6	306.6	306.6	306.5	306.6	306.6	306.6	306.7	306.3	305.4	304.6
115°	352.5	352.2	352.0	351.9	352.0	352.2	352.5	352.6	352.6	352.5	352.2
117.5°	399.5	399.0	398.4	397.9	398.4	399.0	399.5	400.0	400.3	400.3	400.4
120°	431.5	431.0	430.7	430.3	430.7	431.0	431.5	431.8	432.1	432.3	432.4
122.5°	462.9	462.4	461.9	461.4	461.9	462.4	462.9	463.4	464.0	464.4	464.9
125°	510.2	509.5	508.7	508.0	508.7	509.5	510.2	510.9	511.7	512.4	513.1
127.5°	556.9	556.1	555.2	554.4	555.2	556.1	556.9	557.7	558.7	559.8	560.8
130°	588.6	587.3	586.1	584.8	586.1	587.3	588.6	590.0	590.9	591.7	592.4
132.5°	619.5	618.5	617.5	616.5	617.5	618.5	619.5	620.5	621.4	622.3	623.2
135°	666.8	666.5	666.1	665.8	666.1	666.5	666.8	667.2	667.7	668.5	669.2
137.5°	711.3	710.6	709.9	709.2	709.9	710.6	711.3	712.0	712.7	713.5	714.3
140°	741.4	740.2	738.9	737.6	738.9	740.2	741.4	742.7	743.5	743.6	743.9
142.5°	769.6	768.7	767.7	766.7	767.7	768.7	769.6	770.6	771.3	771.4	771.6
145°	810.8	810.1	809.3	808.6	809.3	810.1	810.8	811.5	812.0	812.2	812.4
147.5°	849.3	848.2	847.1	846.0	847.1	848.2	849.3	850.4	850.9	850.9	850.9
150°	873.1	872.0	870.9	869.8	870.9	872.0	873.1	874.2	874.7	874.7	874.7
152.5°	895.8	894.8	893.8	892.9	893.8	894.8	895.8	896.7	897.1	896.7	896.4
155°	928.1	926.8	925.6	924.3	925.6	926.8	928.1	929.4	929.7	929.0	928.2
157.5°	955.9	955.0	953.9	952.8	953.9	955.0	955.9	957.0	957.1	956.3	955.5
160°	973.5	972.8	972.1	971.3	972.1	972.8	973.5	974.3	974.2	973.3	972.4
162.5°	988.8	987.6	986.4	985.2	986.4	987.6	988.8	989.9	990.1	989.1	988.2
165°	1009.1	1007.8	1006.5	1005.3	1006.5	1007.8	1009.1	1010.4	1010.5	1009.3	1008.3
167.5°	1025.6	1024.5	1023.4	1022.2	1023.4	1024.5	1025.6	1026.8	1026.8	1025.6	1024.5
170°	1034.7	1033.4	1032.1	1030.9	1032.1	1033.4	1034.7	1036.0	1036.0	1034.7	1033.4
172.5°	1041.3	1040.0	1038.7	1037.5	1038.7	1040.0	1041.3	1042.6	1042.7	1041.5	1040.4
175°	1048.7	1047.4	1046.2	1044.9	1046.2	1047.4	1048.7	1050.0	1050.1	1049.0	1047.9
177.5°	1051.9	1050.9	1049.9	1048.9	1049.9	1050.9	1051.9	1053.0	1053.0	1052.1	1051.2
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1268.2	1268.2	1277.9	1284.1	1291.8	1296.9	1300.5	1304.1	1310.3	1318.4	1327.6
5°	1195.6	1198.2	1212.4	1226.5	1239.9	1251.4	1261.0	1272.5	1286.6	1303.9	1323.1
7.5°	1125.4	1135.3	1149.5	1166.7	1185.5	1202.3	1219.4	1238.4	1258.2	1283.7	1310.6
10°	1080.4	1091.2	1108.5	1130.3	1150.1	1170.0	1191.2	1211.7	1236.6	1266.8	1301.4
12.5°	1040.9	1051.2	1069.0	1092.9	1111.7	1133.7	1157.9	1184.5	1212.6	1248.9	1288.1
15°	986.1	998.3	1020.1	1031.6	1060.5	1086.7	1109.1	1147.6	1183.5	1220.7	1266.2
17.5°	941.3	948.0	965.7	987.2	1008.7	1038.1	1067.5	1099.5	1135.3	1180.8	1237.7
20°	910.5	916.3	935.5	958.0	981.0	1008.0	1034.2	1066.2	1106.6	1154.6	1216.2
22.5°	887.5	893.7	906.3	930.3	951.8	974.1	1000.4	1038.5	1081.5	1128.5	1195.1
25°	854.1	857.9	866.3	885.5	904.7	929.8	952.8	988.7	1032.9	1088.0	1154.6
27.5°	822.5	826.2	833.2	846.9	864.9	885.2	910.3	940.8	985.6	1045.5	1116.2
30°	803.5	804.1	810.6	823.4	838.8	855.4	878.5	913.1	955.4	1016.3	1090.5
32.5°	787.1	784.6	789.0	798.7	813.7	830.3	849.3	883.4	924.1	984.0	1060.3
35°	759.3	758.0	756.1	764.4	777.2	790.0	806.7	832.3	878.5	934.3	1014.3
37.5°	731.0	727.9	724.5	728.3	738.3	751.6	766.1	788.9	828.7	890.0	966.6
40°	710.0	707.4	705.5	704.2	713.1	725.9	736.9	758.6	795.8	854.1	929.8
42.5°	686.9	685.3	682.9	681.1	688.6	698.3	709.7	729.0	766.1	820.8	892.3
45°	649.7	648.5	647.2	645.9	650.4	659.3	668.3	682.4	714.4	767.6	832.3
47.5°	608.4	606.7	607.2	605.1	609.5	615.6	621.8	636.9	667.6	710.6	757.9
50°	578.6	578.0	578.0	578.0	579.3	586.3	592.1	603.6	631.8	674.7	708.7
52.5°	550.4	547.7	547.7	548.8	551.1	555.5	559.3	571.9	596.4	631.7	662.5
55°	506.2	501.1	499.8	501.1	503.0	506.9	510.7	521.0	542.1	568.3	586.3
57.5°	457.2	454.4	452.7	453.0	454.0	457.1	460.1	471.2	487.9	501.6	513.1
60°	422.9	424.2	418.4	419.7	419.7	422.2	426.7	433.8	447.9	457.5	469.0
62.5°	390.6	388.8	387.2	385.4	385.4	386.4	392.4	397.9	409.9	415.0	424.0
65°	340.2	340.2	336.4	337.7	338.3	333.9	337.0	343.5	351.1	353.0	361.4
67.5°	289.3	287.5	285.3	283.3	283.3	283.0	284.6	287.8	293.6	294.2	300.7
70°	254.4	253.1	252.5	250.5	248.0	251.2	249.2	252.5	255.7	256.3	260.2
72.5°	220.5	219.2	218.1	216.2	215.2	214.7	214.9	218.7	220.8	219.9	224.3
75°	172.4	171.0	169.8	166.6	166.6	164.7	165.3	167.9	170.5	168.5	172.4
77.5°	126.6	122.6	122.4	123.3	121.1	121.5	120.7	120.3	121.5	121.6	125.1
80°	97.4	92.9	94.2	93.5	92.9	92.3	91.0	91.6	92.3	92.9	94.8
82.5°	70.2	69.9	68.6	68.4	67.8	66.1	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.2	34.6	35.2	34.6	32.7	32.7	34.0	33.3	34.6
87.5°	14.8	14.8	13.8	13.8	12.8	12.8	11.9	12.1	12.1	11.8	12.5
90°	20.5	19.8	17.4	15.1	12.6	10.3	8.2	6.4	4.5	2.7	0.8
92.5°	32.3	31.7	30.3	29.0	27.6	26.3	24.9	23.7	22.5	21.2	20.0
95°	61.9	61.1	59.7	58.2	56.7	55.3	53.9	52.6	51.3	50.0	48.8
97.5°	96.5	95.6	94.6	93.5	92.5	91.4	90.4	89.4	88.5	87.5	86.6
100°	122.0	121.4	120.5	119.6	118.7	117.7	116.8	115.6	114.5	113.4	112.3
102.5°	151.1	150.5	149.3	148.1	146.8	145.6	144.7	144.1	143.4	142.8	142.1
105°	194.9	194.9	193.3	191.6	190.0	188.3	187.4	186.9	186.6	186.2	185.9
107.5°	241.2	240.7	240.0	239.4	238.7	238.1	237.6	237.4	237.2	236.9	236.8
110°	272.5	271.7	271.4	271.0	270.7	270.3	269.9	269.5	269.2	268.8	268.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	303.7	302.8	302.7	302.6	302.6	302.5	302.4	302.1	301.9	301.7	301.5
115°	352.0	351.9	352.2	352.6	352.9	353.4	353.3	352.7	352.1	351.6	351.1
117.5°	400.4	400.5	400.9	401.4	401.9	402.4	402.4	402.0	401.7	401.3	401.0
120°	432.6	432.8	433.7	434.6	435.5	436.5	436.4	435.3	434.2	433.1	432.0
122.5°	465.4	465.9	466.4	466.8	467.3	467.7	467.6	466.8	466.0	465.2	464.4
125°	513.9	514.6	514.9	515.4	515.7	516.1	516.0	515.4	514.9	514.3	513.8
127.5°	561.8	562.8	563.2	563.6	564.0	564.4	564.0	562.9	561.7	560.5	559.4
130°	593.1	593.9	594.4	595.0	595.6	596.1	595.7	594.2	592.7	591.3	589.8
132.5°	624.0	624.9	625.3	625.7	626.1	626.6	626.1	624.6	623.1	621.6	620.1
135°	669.9	670.7	670.9	671.1	671.2	671.4	671.0	669.8	668.8	667.6	666.6
137.5°	715.0	715.8	715.3	714.9	714.4	713.9	713.2	712.2	711.3	710.5	709.6
140°	744.0	744.2	744.0	743.9	743.6	743.5	742.9	742.0	741.1	740.2	739.2
142.5°	771.8	772.0	771.7	771.3	770.9	770.6	770.1	769.1	768.2	767.3	766.4
145°	812.6	812.8	812.2	811.7	811.1	810.6	810.1	809.8	809.3	809.0	808.6
147.5°	850.9	850.9	850.4	849.9	849.4	848.9	848.3	847.7	846.9	846.3	845.6
150°	874.7	874.7	874.3	874.0	873.6	873.3	872.9	872.5	872.1	871.8	871.4
152.5°	896.2	895.9	895.7	895.4	895.2	895.0	894.6	894.1	893.6	893.1	892.6
155°	927.5	926.8	926.6	926.4	926.2	926.0	925.9	925.9	925.9	925.9	925.9
157.5°	954.8	954.0	953.9	953.7	953.6	953.4	953.5	953.7	953.9	954.1	954.4
160°	971.4	970.5	970.5	970.5	970.5	970.5	970.7	971.1	971.4	971.8	972.2
162.5°	987.3	986.4	986.3	986.1	985.9	985.8	986.0	986.5	987.0	987.6	988.1
165°	1007.1	1006.1	1006.1	1006.1	1006.1	1006.1	1006.3	1006.9	1007.5	1008.0	1008.5
167.5°	1023.4	1022.2	1022.1	1022.0	1021.8	1021.7	1022.0	1022.7	1023.4	1024.2	1024.9
170°	1032.1	1030.9	1030.9	1030.9	1030.9	1030.9	1031.2	1031.9	1032.7	1033.4	1034.1
172.5°	1039.3	1038.1	1038.1	1038.1	1038.1	1038.1	1038.4	1039.2	1039.9	1040.6	1041.4
175°	1046.8	1045.7	1045.7	1045.7	1045.7	1045.7	1046.1	1046.8	1047.6	1048.3	1049.0
177.5°	1050.4	1049.5	1049.5	1049.5	1049.5	1049.5	1049.8	1050.4	1051.0	1051.6	1052.1
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1330.7	1333.3	1342.0	1348.2	1355.4	1359.4	1363.5	1366.6	1370.7	1371.7	1386.6
5°	1336.6	1349.5	1371.9	1388.5	1409.0	1431.4	1446.8	1453.9	1472.4	1487.8	1518.6
7.5°	1335.0	1362.3	1396.1	1431.2	1468.8	1503.7	1534.0	1569.9	1595.4	1633.7	1671.5
10°	1333.4	1369.9	1413.5	1458.4	1510.9	1559.6	1603.2	1651.9	1692.2	1745.4	1790.9
12.5°	1328.8	1373.0	1433.5	1486.5	1550.4	1617.6	1682.1	1744.7	1780.5	1869.0	1910.9
15°	1317.4	1369.9	1445.5	1526.3	1614.0	1693.5	1775.6	1840.9	1946.6	2024.1	2073.5
17.5°	1295.6	1369.2	1458.9	1556.2	1663.0	1767.7	1860.7	1959.8	2072.0	2165.8	2265.7
20°	1285.4	1366.1	1466.1	1573.7	1684.6	1803.1	1908.9	2028.0	2150.4	2242.6	2370.8
22.5°	1266.4	1357.9	1465.6	1585.5	1704.1	1826.7	1950.4	2070.5	2211.9	2339.0	2461.1
25°	1235.4	1337.9	1449.4	1583.3	1722.4	1845.4	1993.4	2153.0	2300.4	2463.8	2585.5
27.5°	1202.8	1312.3	1424.0	1548.6	1698.1	1844.1	2030.3	2210.6	2390.8	2531.9	2622.0
30°	1177.7	1284.1	1399.5	1525.0	1673.0	1846.7	2054.9	2251.6	2427.2	2548.3	2598.9
32.5°	1150.6	1258.4	1360.5	1492.2	1649.9	1845.1	2070.3	2275.7	2429.3	2509.9	2500.0
35°	1107.9	1198.2	1297.5	1424.4	1610.2	1833.9	2079.3	2277.9	2372.1	2354.8	2224.1
37.5°	1046.4	1122.3	1220.2	1359.0	1564.1	1810.1	2061.3	2210.4	2204.2	2063.4	1874.0
40°	1008.0	1072.6	1166.9	1313.0	1528.2	1794.8	2033.1	2129.9	2047.9	1851.1	1624.3
42.5°	957.7	1017.2	1111.5	1261.7	1488.7	1763.5	1979.3	2007.3	1846.9	1620.5	1412.6
45°	879.8	932.3	1029.7	1184.8	1429.5	1695.4	1848.0	1779.4	1563.4	1329.6	1171.3
47.5°	796.1	850.7	944.4	1103.7	1343.9	1593.1	1665.7	1519.9	1298.2	1108.5	963.2
50°	743.3	795.8	887.5	1048.3	1286.0	1509.0	1539.1	1350.7	1147.0	980.4	861.2
52.5°	690.0	739.5	829.6	990.8	1218.4	1411.6	1393.0	1201.0	1013.7	871.7	778.1
55°	610.7	657.5	743.3	894.5	1101.5	1254.6	1187.3	1004.0	849.0	738.8	667.6
57.5°	539.6	584.5	658.6	795.2	975.1	1080.4	994.7	840.3	717.0	632.2	579.1
60°	491.5	531.2	601.7	728.6	884.9	965.0	880.4	744.0	640.1	572.2	524.8
62.5°	445.8	480.5	545.8	660.9	796.7	864.0	778.4	662.9	574.5	514.3	474.0
65°	376.7	408.1	465.9	555.5	667.0	711.9	638.2	544.6	476.1	431.2	404.3
67.5°	313.7	340.4	390.2	460.8	542.8	575.5	519.4	447.0	395.3	359.3	337.9
70°	271.7	294.7	333.9	394.7	469.0	494.0	441.5	381.9	344.1	315.3	295.4
72.5°	236.3	253.2	288.7	335.7	397.8	417.7	381.0	328.6	293.3	271.7	255.9
75°	180.0	194.1	217.2	255.0	298.0	309.5	281.9	249.2	225.5	210.2	198.0
77.5°	129.8	140.2	156.9	180.2	209.9	220.3	202.8	181.1	163.8	153.4	146.6
80°	98.0	106.4	120.5	139.7	157.6	163.4	153.1	136.5	124.3	118.5	112.8
82.5°	72.4	77.1	85.6	98.7	111.0	117.8	109.1	99.1	92.5	87.2	85.1
85°	36.5	39.1	43.0	48.0	55.8	58.3	55.1	52.5	48.7	45.5	45.5
87.5°	13.9	14.3	16.1	17.5	20.0	22.0	22.0	21.4	21.4	21.0	20.6
90°	2.7	4.5	6.4	8.2	10.3	12.6	15.1	17.4	19.8	20.5	21.3
92.5°	21.2	22.5	23.7	24.9	26.3	27.6	29.0	30.3	31.7	32.3	32.9
95°	50.0	51.3	52.6	53.9	55.3	56.7	58.2	59.7	61.1	61.9	62.6
97.5°	87.5	88.5	89.4	90.4	91.4	92.5	93.5	94.6	95.6	96.5	97.3
100°	113.4	114.5	115.6	116.8	117.7	118.7	119.6	120.5	121.4	122.0	122.5
102.5°	142.8	143.4	144.1	144.7	145.6	146.8	148.1	149.3	150.5	151.1	151.6
105°	186.2	186.6	186.9	187.4	188.3	190.0	191.6	193.3	194.9	194.9	194.9
107.5°	236.9	237.2	237.4	237.6	238.1	238.7	239.4	240.0	240.7	241.2	241.9
110°	268.8	269.2	269.5	269.9	270.3	270.7	271.0	271.4	271.7	272.5	273.2



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	301.7	301.9	302.1	302.4	302.5	302.6	302.6	302.7	302.8	303.7	304.6
115°	351.6	352.1	352.7	353.3	353.4	352.9	352.6	352.2	351.9	352.0	352.2
117.5°	401.3	401.7	402.0	402.4	402.4	401.9	401.4	400.9	400.5	400.4	400.4
120°	433.1	434.2	435.3	436.4	436.5	435.5	434.6	433.7	432.8	432.6	432.4
122.5°	465.2	466.0	466.8	467.6	467.7	467.3	466.8	466.4	465.9	465.4	464.9
125°	514.3	514.9	515.4	516.0	516.1	515.7	515.4	514.9	514.6	513.9	513.1
127.5°	560.5	561.7	562.9	564.0	564.4	564.0	563.6	563.2	562.8	561.8	560.8
130°	591.3	592.7	594.2	595.7	596.1	595.6	595.0	594.4	593.9	593.1	592.4
132.5°	621.6	623.1	624.6	626.1	626.6	626.1	625.7	625.3	624.9	624.0	623.2
135°	667.6	668.8	669.8	671.0	671.4	671.2	671.1	670.9	670.7	669.9	669.2
137.5°	710.5	711.3	712.2	713.2	713.9	714.4	714.9	715.3	715.8	715.0	714.3
140°	740.2	741.1	742.0	742.9	743.5	743.6	743.9	744.0	744.2	744.0	743.9
142.5°	767.3	768.2	769.1	770.1	770.6	770.9	771.3	771.7	772.0	771.8	771.6
145°	809.0	809.3	809.8	810.1	810.6	811.1	811.7	812.2	812.8	812.6	812.4
147.5°	846.3	846.9	847.7	848.3	848.9	849.4	849.9	850.4	850.9	850.9	850.9
150°	871.8	872.1	872.5	872.9	873.3	873.6	874.0	874.3	874.7	874.7	874.7
152.5°	893.1	893.6	894.1	894.6	895.0	895.2	895.4	895.7	895.9	896.2	896.4
155°	925.9	925.9	925.9	925.9	926.0	926.2	926.4	926.6	926.8	927.5	928.2
157.5°	954.1	953.9	953.7	953.5	953.4	953.6	953.7	953.9	954.0	954.8	955.5
160°	971.8	971.4	971.1	970.7	970.5	970.5	970.5	970.5	970.5	971.4	972.4
162.5°	987.6	987.0	986.5	986.0	985.8	985.9	986.1	986.3	986.4	987.3	988.2
165°	1008.0	1007.5	1006.9	1006.3	1006.1	1006.1	1006.1	1006.1	1006.1	1007.1	1008.3
167.5°	1024.2	1023.4	1022.7	1022.0	1021.7	1021.8	1022.0	1022.1	1022.2	1023.4	1024.5
170°	1033.4	1032.7	1031.9	1031.2	1030.9	1030.9	1030.9	1030.9	1030.9	1032.1	1033.4
172.5°	1040.6	1039.9	1039.2	1038.4	1038.1	1038.1	1038.1	1038.1	1038.1	1039.3	1040.4
175°	1048.3	1047.6	1046.8	1046.1	1045.7	1045.7	1045.7	1045.7	1045.7	1046.8	1047.9
177.5°	1051.6	1051.0	1050.4	1049.8	1049.5	1049.5	1049.5	1049.5	1049.5	1050.4	1051.2
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5	1322.5
2.5°	1391.7	1392.2	1397.9	1402.0	1400.0	1402.5	1403.5
5°	1520.5	1543.6	1555.8	1564.7	1565.4	1566.0	1571.2
7.5°	1703.2	1727.9	1746.0	1773.4	1781.6	1790.9	1788.2
10°	1836.5	1872.9	1904.4	1921.0	1938.9	1965.2	1944.1
12.5°	1961.0	2025.7	2073.5	2099.4	2116.3	2121.6	2111.2
15°	2166.4	2251.0	2296.5	2295.2	2352.9	2377.9	2338.8
17.5°	2354.8	2432.9	2495.4	2527.4	2575.4	2586.1	2581.2
20°	2470.1	2555.4	2604.1	2659.2	2684.1	2706.5	2710.4
22.5°	2569.6	2646.1	2698.4	2744.2	2765.2	2775.8	2782.2
25°	2672.0	2732.2	2763.6	2779.6	2785.4	2784.1	2775.8
27.5°	2664.9	2669.5	2635.0	2601.0	2570.6	2536.4	2524.6
30°	2595.7	2541.9	2445.8	2391.4	2311.2	2247.8	2273.4
32.5°	2413.8	2306.6	2198.7	2079.7	1981.1	1953.0	1924.8
35°	2060.0	1871.7	1761.5	1633.3	1582.0	1530.8	1495.5
37.5°	1666.6	1520.9	1390.2	1306.4	1255.0	1222.5	1205.2
40°	1441.0	1309.7	1202.1	1134.2	1095.0	1058.5	1053.4
42.5°	1261.2	1139.1	1058.0	1004.0	966.4	950.9	939.6
45°	1032.9	947.7	893.2	854.8	829.8	820.2	807.4
47.5°	874.2	814.0	773.1	747.0	728.1	721.0	720.0
50°	785.5	735.6	705.5	684.9	670.3	667.6	657.5
52.5°	718.9	675.6	652.2	634.2	623.6	616.4	613.3
55°	624.1	595.3	574.1	563.9	555.5	548.5	548.5
57.5°	546.1	522.0	508.0	499.3	496.7	491.7	488.5
60°	497.9	477.4	466.5	458.8	453.6	454.3	448.5
62.5°	450.7	437.4	427.0	419.3	413.2	413.3	413.7
65°	383.8	373.6	365.9	363.3	359.5	355.0	356.3
67.5°	325.2	315.6	309.7	305.2	303.9	301.6	305.2
70°	283.2	276.1	271.7	267.8	266.5	267.2	270.4
72.5°	244.8	239.8	236.8	235.1	232.2	232.4	234.5
75°	192.2	188.4	185.8	183.9	183.3	183.3	183.3
77.5°	141.2	140.3	139.2	136.3	136.5	137.2	137.4
80°	111.5	109.6	108.9	107.6	105.7	104.4	107.6
82.5°	83.3	81.4	80.7	80.5	77.5	77.3	80.0
85°	44.8	43.0	43.5	43.0	43.0	42.3	42.3
87.5°	20.3	19.9	19.6	20.1	19.6	19.2	20.3
90°	22.0	22.7	23.3	23.6	24.1	24.4	24.8
92.5°	33.5	34.1	34.2	34.0	33.8	33.6	33.3
95°	63.3	64.1	64.4	64.4	64.4	64.4	64.4
97.5°	98.2	99.1	99.4	99.3	99.3	99.2	99.1
100°	123.1	123.6	124.1	124.4	124.8	125.1	125.6
102.5°	152.1	152.7	153.0	152.9	152.8	152.7	152.6
105°	194.9	194.9	195.1	195.5	195.8	196.2	196.6
107.5°	242.5	243.0	243.2	243.0	242.8	242.6	242.3
110°	273.9	274.7	274.8	274.5	274.1	273.8	273.4



TEST NUMBER: P332223-930

CATALOG NUMBER: S123DIW-S1165D1030U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	305.4	306.3	306.7	306.6	306.6	306.6	306.5
115°	352.5	352.6	352.6	352.5	352.2	352.0	351.9
117.5°	400.3	400.3	400.0	399.5	399.0	398.4	397.9
120°	432.3	432.1	431.8	431.5	431.0	430.7	430.3
122.5°	464.4	464.0	463.4	462.9	462.4	461.9	461.4
125°	512.4	511.7	510.9	510.2	509.5	508.7	508.0
127.5°	559.8	558.7	557.7	556.9	556.1	555.2	554.4
130°	591.7	590.9	590.0	588.6	587.3	586.1	584.8
132.5°	622.3	621.4	620.5	619.5	618.5	617.5	616.5
135°	668.5	667.7	667.2	666.8	666.5	666.1	665.8
137.5°	713.5	712.7	712.0	711.3	710.6	709.9	709.2
140°	743.6	743.5	742.7	741.4	740.2	738.9	737.6
142.5°	771.4	771.3	770.6	769.6	768.7	767.7	766.7
145°	812.2	812.0	811.5	810.8	810.1	809.3	808.6
147.5°	850.9	850.9	850.4	849.3	848.2	847.1	846.0
150°	874.7	874.7	874.2	873.1	872.0	870.9	869.8
152.5°	896.7	897.1	896.7	895.8	894.8	893.8	892.9
155°	929.0	929.7	929.4	928.1	926.8	925.6	924.3
157.5°	956.3	957.1	957.0	955.9	955.0	953.9	952.8
160°	973.3	974.2	974.3	973.5	972.8	972.1	971.3
162.5°	989.1	990.1	989.9	988.8	987.6	986.4	985.2
165°	1009.3	1010.5	1010.4	1009.1	1007.8	1006.5	1005.3
167.5°	1025.6	1026.8	1026.8	1025.6	1024.5	1023.4	1022.2
170°	1034.7	1036.0	1036.0	1034.7	1033.4	1032.1	1030.9
172.5°	1041.5	1042.7	1042.6	1041.3	1040.0	1038.7	1037.5
175°	1049.0	1050.1	1050.0	1048.7	1047.4	1046.2	1044.9
177.5°	1052.1	1053.0	1053.0	1051.9	1050.9	1049.9	1048.9
180°	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5	1051.5

(END OF REPORT)