

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: P332211-930

Luminaire Tested: **S123DIW-S1165D460U930-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332211-930
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-S1165D460U930-4F0-1E-UDD-A1
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1165 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 460 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5296.2 lumens
Efficiency: N/A
Efficacy: 101.1 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-Direct

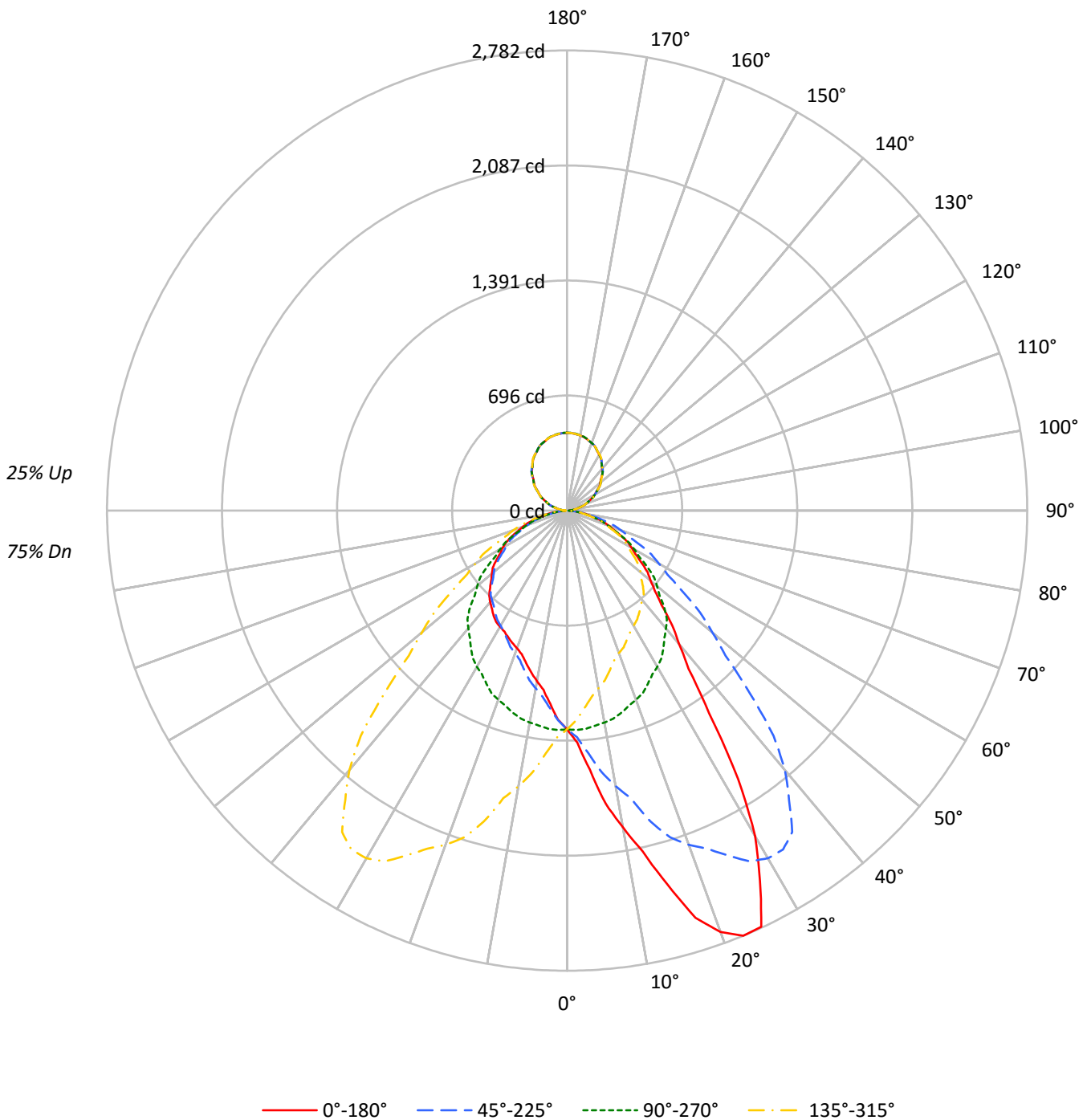
Input Watts (W): 52.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	75
1	104	100	96	92	99	95	92	88	86	84	81	78	76	74	71	69	68	64
2	95	87	81	76	90	83	78	73	76	72	68	69	66	63	63	60	58	55
3	87	77	70	64	82	74	67	62	67	62	58	62	57	54	56	53	50	47
4	80	69	61	54	76	66	58	53	60	54	49	55	50	46	50	46	43	40
5	73	61	53	47	70	59	51	46	54	48	43	50	44	40	45	41	38	35
6	68	55	47	41	64	53	46	40	49	43	38	45	40	36	41	37	33	31
7	63	50	42	36	60	48	41	35	45	38	33	41	36	32	38	33	30	27
8	58	46	38	32	56	44	37	31	41	34	30	38	32	28	35	30	27	25
9	55	42	34	29	52	40	33	28	37	31	27	35	29	25	32	28	24	22
10	51	39	31	26	49	37	30	26	35	29	24	32	27	23	30	25	22	20

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: P332211-930

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	2.5
10°-20°	417.7	7.9
20°-30°	701.1	13.2
30°-40°	793.9	15.0
40°-50°	711.9	13.4
50°-60°	574.5	10.8
60°-70°	400.3	7.6
70°-80°	210.4	4.0
80°-90°	52.9	1.0
90°-100°	30.6	0.6
100°-110°	91.7	1.7
110°-120°	156.0	2.9
120°-130°	205.2	3.9
130°-140°	230.6	4.4
140°-150°	226.7	4.3
150°-160°	190.8	3.6
160°-170°	127.0	2.4
170°-180°	44.5	0.8
0°-30°	1249.1	23.6
0°-40°	2043.0	38.6
0°-60°	3329.4	62.9
0°-90°	3993.1	75.4
90°-120°	278.3	5.3
90°-150°	940.8	17.8
90°-180°	1303.0	24.6
0°-180°	5296.2	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	50
90°	11	0	11	0	11	7
95°	29	22	29	22	29	30
105°	88	83	88	83	88	93
115°	157	157	157	157	157	156
125°	227	230	227	230	227	203
135°	298	298	298	298	298	229
145°	362	362	362	362	362	226
155°	413	414	413	414	413	190
165°	450	451	450	451	450	127
175°	467	469	467	469	467	44
180°	470	470	470	470	470	



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	17.6	16.6	17.0	17.5	17.0	17.4	17.9	18.3	18.8	19.2	19.5
90°	11.1	10.9	10.8	10.6	10.4	10.2	9.9	9.5	9.2	8.9	7.8
92.5°	14.9	15.0	15.1	15.2	15.3	15.2	15.0	14.7	14.4	14.2	13.6
95°	28.8	28.8	28.8	28.8	28.8	28.6	28.3	28.0	27.6	27.3	26.7
97.5°	44.4	44.4	44.4	44.4	44.4	44.3	43.9	43.5	43.1	42.8	42.3
100°	56.2	56.0	55.8	55.7	55.5	55.3	55.0	54.8	54.5	54.3	53.9
102.5°	68.2	68.3	68.3	68.4	68.4	68.3	68.1	67.8	67.6	67.3	66.8
105°	88.0	87.8	87.6	87.5	87.2	87.2	87.2	87.2	87.2	87.2	86.4
107.5°	108.4	108.5	108.6	108.7	108.8	108.7	108.4	108.2	107.9	107.7	107.4
110°	122.3	122.5	122.6	122.8	122.9	122.9	122.5	122.2	121.9	121.6	121.4



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	137.1	137.1	137.1	137.1	137.2	137.1	136.6	136.2	135.8	135.4	135.4
115°	157.4	157.5	157.6	157.7	157.8	157.8	157.7	157.6	157.5	157.4	157.6
117.5°	178.0	178.2	178.5	178.7	179.0	179.0	179.0	179.1	179.1	179.1	179.4
120°	192.5	192.7	192.8	193.0	193.1	193.3	193.4	193.5	193.6	193.6	194.0
122.5°	206.4	206.6	206.8	207.1	207.3	207.5	207.7	208.0	208.1	208.4	208.6
125°	227.2	227.6	227.9	228.2	228.5	228.9	229.2	229.5	229.8	230.2	230.3
127.5°	248.0	248.3	248.7	249.2	249.5	249.9	250.4	250.9	251.3	251.8	251.9
130°	261.5	262.2	262.8	263.3	263.9	264.3	264.6	265.0	265.3	265.6	265.9
132.5°	275.7	276.2	276.6	277.1	277.5	277.9	278.3	278.8	279.2	279.6	279.7
135°	297.8	298.0	298.2	298.3	298.5	298.7	299.1	299.4	299.7	300.0	300.1
137.5°	317.2	317.6	317.9	318.1	318.5	318.8	319.2	319.5	319.8	320.2	320.0
140°	330.0	330.5	331.1	331.7	332.2	332.6	332.6	332.7	332.8	332.9	332.8
142.5°	342.9	343.4	343.8	344.3	344.7	345.0	345.0	345.1	345.2	345.3	345.2
145°	361.7	362.1	362.4	362.7	363.1	363.2	363.3	363.4	363.5	363.5	363.3
147.5°	378.4	378.9	379.4	379.9	380.4	380.7	380.7	380.7	380.7	380.7	380.4
150°	389.1	389.6	390.0	390.5	391.0	391.3	391.3	391.3	391.3	391.3	391.1
152.5°	399.4	399.8	400.2	400.7	401.1	401.3	401.1	401.0	400.9	400.7	400.6
155°	413.4	414.0	414.6	415.2	415.7	415.9	415.6	415.2	414.9	414.6	414.5
157.5°	426.2	426.6	427.1	427.6	428.0	428.1	427.8	427.5	427.1	426.7	426.6
160°	434.5	434.8	435.1	435.5	435.8	435.8	435.4	435.0	434.6	434.1	434.1
162.5°	440.7	441.2	441.7	442.3	442.8	442.9	442.5	442.1	441.6	441.2	441.2
165°	449.6	450.2	450.8	451.3	451.9	452.0	451.5	451.0	450.5	450.0	450.0
167.5°	457.2	457.8	458.3	458.8	459.3	459.3	458.8	458.3	457.8	457.2	457.2
170°	461.1	461.7	462.3	462.8	463.4	463.4	462.8	462.3	461.7	461.1	461.1
172.5°	464.1	464.6	465.2	465.8	466.4	466.4	465.9	465.4	464.9	464.3	464.3
175°	467.4	468.0	468.6	469.1	469.7	469.7	469.2	468.7	468.2	467.7	467.7
177.5°	469.1	469.6	470.1	470.5	471.0	471.0	470.7	470.3	469.9	469.4	469.4
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	20.3	20.6	18.8	16.6	15.4	13.7	13.5	12.4	11.5	11.7	11.3
90°	6.8	5.6	4.6	3.7	2.9	2.0	1.2	0.4	1.2	2.0	2.9
92.5°	13.0	12.4	11.7	11.2	10.6	10.0	9.5	9.0	9.5	10.0	10.6
95°	26.0	25.4	24.7	24.1	23.6	22.9	22.3	21.8	22.3	22.9	23.6
97.5°	41.8	41.3	40.8	40.4	40.0	39.5	39.1	38.7	39.1	39.5	40.0
100°	53.5	53.1	52.7	52.2	51.7	51.2	50.7	50.2	50.7	51.2	51.7
102.5°	66.2	65.7	65.1	64.7	64.4	64.2	63.8	63.5	63.8	64.2	64.4
105°	85.7	85.0	84.2	83.8	83.6	83.5	83.3	83.2	83.3	83.5	83.6
107.5°	107.0	106.8	106.5	106.3	106.2	106.1	106.0	105.9	106.0	106.1	106.2
110°	121.2	121.1	120.9	120.7	120.6	120.4	120.3	120.1	120.3	120.4	120.6



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	135.4	135.3	135.3	135.3	135.2	135.1	134.9	134.9	134.9	135.1	135.2
115°	157.8	157.9	158.1	158.0	157.8	157.5	157.3	157.0	157.3	157.5	157.8
117.5°	179.5	179.8	179.9	180.0	179.9	179.7	179.5	179.4	179.5	179.7	179.9
120°	194.4	194.9	195.3	195.2	194.7	194.2	193.7	193.2	193.7	194.2	194.7
122.5°	208.8	209.0	209.2	209.1	208.8	208.5	208.1	207.7	208.1	208.5	208.8
125°	230.5	230.6	230.8	230.8	230.6	230.3	230.1	229.8	230.1	230.3	230.6
127.5°	252.1	252.3	252.5	252.3	251.8	251.3	250.7	250.2	250.7	251.3	251.8
130°	266.1	266.4	266.6	266.4	265.8	265.1	264.5	263.8	264.5	265.1	265.8
132.5°	279.9	280.1	280.3	280.1	279.4	278.8	278.0	277.4	278.0	278.8	279.4
135°	300.2	300.3	300.4	300.1	299.6	299.1	298.6	298.2	298.6	299.1	299.6
137.5°	319.8	319.5	319.4	319.0	318.6	318.2	317.8	317.4	317.8	318.2	318.6
140°	332.7	332.6	332.6	332.3	331.9	331.5	331.1	330.7	331.1	331.5	331.9
142.5°	345.0	344.9	344.7	344.5	344.1	343.6	343.2	342.8	343.2	343.6	344.1
145°	363.1	362.8	362.6	362.4	362.2	362.1	361.9	361.7	361.9	362.1	362.2
147.5°	380.2	379.9	379.7	379.4	379.1	378.9	378.5	378.3	378.5	378.9	379.1
150°	390.9	390.8	390.6	390.4	390.3	390.1	390.0	389.8	390.0	390.1	390.3
152.5°	400.6	400.4	400.3	400.1	399.9	399.7	399.5	399.3	399.5	399.7	399.9
155°	414.4	414.3	414.3	414.2	414.2	414.2	414.2	414.2	414.2	414.2	414.2
157.5°	426.6	426.6	426.5	426.5	426.6	426.7	426.8	426.9	426.8	426.7	426.6
160°	434.1	434.1	434.1	434.2	434.4	434.6	434.7	434.9	434.7	434.6	434.4
162.5°	441.1	441.0	441.0	441.1	441.2	441.5	441.7	442.0	441.7	441.5	441.2
165°	450.0	450.0	450.0	450.1	450.4	450.6	450.9	451.1	450.9	450.6	450.4
167.5°	457.1	457.1	457.0	457.1	457.5	457.8	458.1	458.4	458.1	457.8	457.5
170°	461.1	461.1	461.1	461.3	461.6	461.9	462.3	462.6	462.3	461.9	461.6
172.5°	464.3	464.3	464.3	464.5	464.9	465.2	465.5	465.9	465.5	465.2	464.9
175°	467.7	467.7	467.7	467.9	468.2	468.6	468.9	469.2	468.9	468.6	468.2
177.5°	469.4	469.4	469.4	469.6	469.9	470.1	470.3	470.7	470.3	470.1	469.9
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	11.0	11.7	11.4	12.1	11.8	12.6	12.6	11.7	11.7	13.3	11.3
90°	3.7	4.6	5.6	6.8	7.8	8.9	9.2	9.5	9.9	10.2	10.4
92.5°	11.2	11.7	12.4	13.0	13.6	14.2	14.4	14.7	15.0	15.2	15.3
95°	24.1	24.7	25.4	26.0	26.7	27.3	27.6	28.0	28.3	28.6	28.8
97.5°	40.4	40.8	41.3	41.8	42.3	42.8	43.1	43.5	43.9	44.3	44.4
100°	52.2	52.7	53.1	53.5	53.9	54.3	54.5	54.8	55.0	55.3	55.5
102.5°	64.7	65.1	65.7	66.2	66.8	67.3	67.6	67.8	68.1	68.3	68.4
105°	83.8	84.2	85.0	85.7	86.4	87.2	87.2	87.2	87.2	87.2	87.2
107.5°	106.3	106.5	106.8	107.0	107.4	107.7	107.9	108.2	108.4	108.7	108.8
110°	120.7	120.9	121.1	121.2	121.4	121.6	121.9	122.2	122.5	122.9	122.9



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	135.3	135.3	135.3	135.4	135.4	135.4	135.8	136.2	136.6	137.1	137.2
115°	158.0	158.1	157.9	157.8	157.6	157.4	157.5	157.6	157.7	157.8	157.8
117.5°	180.0	179.9	179.8	179.5	179.4	179.1	179.1	179.1	179.0	179.0	179.0
120°	195.2	195.3	194.9	194.4	194.0	193.6	193.6	193.5	193.4	193.3	193.1
122.5°	209.1	209.2	209.0	208.8	208.6	208.4	208.1	208.0	207.7	207.5	207.3
125°	230.8	230.8	230.6	230.5	230.3	230.2	229.8	229.5	229.2	228.9	228.5
127.5°	252.3	252.5	252.3	252.1	251.9	251.8	251.3	250.9	250.4	249.9	249.5
130°	266.4	266.6	266.4	266.1	265.9	265.6	265.3	265.0	264.6	264.3	263.9
132.5°	280.1	280.3	280.1	279.9	279.7	279.6	279.2	278.8	278.3	277.9	277.5
135°	300.1	300.4	300.3	300.2	300.1	300.0	299.7	299.4	299.1	298.7	298.5
137.5°	319.0	319.4	319.5	319.8	320.0	320.2	319.8	319.5	319.2	318.8	318.5
140°	332.3	332.6	332.6	332.7	332.8	332.9	332.8	332.7	332.6	332.6	332.2
142.5°	344.5	344.7	344.9	345.0	345.2	345.3	345.2	345.1	345.0	345.0	344.7
145°	362.4	362.6	362.8	363.1	363.3	363.5	363.5	363.4	363.3	363.2	363.1
147.5°	379.4	379.7	379.9	380.2	380.4	380.7	380.7	380.7	380.7	380.7	380.4
150°	390.4	390.6	390.8	390.9	391.1	391.3	391.3	391.3	391.3	391.3	391.0
152.5°	400.1	400.3	400.4	400.6	400.6	400.7	400.9	401.0	401.1	401.3	401.1
155°	414.2	414.3	414.3	414.4	414.5	414.6	414.9	415.2	415.6	415.9	415.7
157.5°	426.5	426.5	426.6	426.6	426.6	426.7	427.1	427.5	427.8	428.1	428.0
160°	434.2	434.1	434.1	434.1	434.1	434.1	434.6	435.0	435.4	435.8	435.8
162.5°	441.1	441.0	441.0	441.1	441.2	441.2	441.6	442.1	442.5	442.9	442.8
165°	450.1	450.0	450.0	450.0	450.0	450.0	450.5	451.0	451.5	452.0	451.9
167.5°	457.1	457.0	457.1	457.1	457.2	457.2	457.8	458.3	458.8	459.3	459.3
170°	461.3	461.1	461.1	461.1	461.1	461.1	461.7	462.3	462.8	463.4	463.4
172.5°	464.5	464.3	464.3	464.3	464.3	464.3	464.9	465.4	465.9	466.4	466.4
175°	467.9	467.7	467.7	467.7	467.7	467.7	468.2	468.7	469.2	469.7	469.7
177.5°	469.6	469.4	469.4	469.4	469.4	469.4	469.9	470.3	470.7	471.0	471.0
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	11.3	11.4	10.9	10.4	10.9	11.4	11.3	11.3	13.3	11.7	11.7
90°	10.6	10.8	10.9	11.1	10.9	10.8	10.6	10.4	10.2	9.9	9.5
92.5°	15.2	15.1	15.0	14.9	15.0	15.1	15.2	15.3	15.2	15.0	14.7
95°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.6	28.3	28.0
97.5°	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.3	43.9	43.5
100°	55.7	55.8	56.0	56.2	56.0	55.8	55.7	55.5	55.3	55.0	54.8
102.5°	68.4	68.3	68.3	68.2	68.3	68.3	68.4	68.4	68.3	68.1	67.8
105°	87.5	87.6	87.8	88.0	87.8	87.6	87.5	87.2	87.2	87.2	87.2
107.5°	108.7	108.6	108.5	108.4	108.5	108.6	108.7	108.8	108.7	108.4	108.2
110°	122.8	122.6	122.5	122.3	122.5	122.6	122.8	122.9	122.9	122.5	122.2



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	137.1	137.1	137.1	137.1	137.1	137.1	137.1	137.2	137.1	136.6	136.2
115°	157.7	157.6	157.5	157.4	157.5	157.6	157.7	157.8	157.8	157.7	157.6
117.5°	178.7	178.5	178.2	178.0	178.2	178.5	178.7	179.0	179.0	179.0	179.1
120°	193.0	192.8	192.7	192.5	192.7	192.8	193.0	193.1	193.3	193.4	193.5
122.5°	207.1	206.8	206.6	206.4	206.6	206.8	207.1	207.3	207.5	207.7	208.0
125°	228.2	227.9	227.6	227.2	227.6	227.9	228.2	228.5	228.9	229.2	229.5
127.5°	249.2	248.7	248.3	248.0	248.3	248.7	249.2	249.5	249.9	250.4	250.9
130°	263.3	262.8	262.2	261.5	262.2	262.8	263.3	263.9	264.3	264.6	265.0
132.5°	277.1	276.6	276.2	275.7	276.2	276.6	277.1	277.5	277.9	278.3	278.8
135°	298.3	298.2	298.0	297.8	298.0	298.2	298.3	298.5	298.7	299.1	299.4
137.5°	318.1	317.9	317.6	317.2	317.6	317.9	318.1	318.5	318.8	319.2	319.5
140°	331.7	331.1	330.5	330.0	330.5	331.1	331.7	332.2	332.6	332.6	332.7
142.5°	344.3	343.8	343.4	342.9	343.4	343.8	344.3	344.7	345.0	345.0	345.1
145°	362.7	362.4	362.1	361.7	362.1	362.4	362.7	363.1	363.2	363.3	363.4
147.5°	379.9	379.4	378.9	378.4	378.9	379.4	379.9	380.4	380.7	380.7	380.7
150°	390.5	390.0	389.6	389.1	389.6	390.0	390.5	391.0	391.3	391.3	391.3
152.5°	400.7	400.2	399.8	399.4	399.8	400.2	400.7	401.1	401.3	401.1	401.0
155°	415.2	414.6	414.0	413.4	414.0	414.6	415.2	415.7	415.9	415.6	415.2
157.5°	427.6	427.1	426.6	426.2	426.6	427.1	427.6	428.0	428.1	427.8	427.5
160°	435.5	435.1	434.8	434.5	434.8	435.1	435.5	435.8	435.8	435.4	435.0
162.5°	442.3	441.7	441.2	440.7	441.2	441.7	442.3	442.8	442.9	442.5	442.1
165°	451.3	450.8	450.2	449.6	450.2	450.8	451.3	451.9	452.0	451.5	451.0
167.5°	458.8	458.3	457.8	457.2	457.8	458.3	458.8	459.3	459.3	458.8	458.3
170°	462.8	462.3	461.7	461.1	461.7	462.3	462.8	463.4	463.4	462.8	462.3
172.5°	465.8	465.2	464.6	464.1	464.6	465.2	465.8	466.4	466.4	465.9	465.4
175°	469.1	468.6	468.0	467.4	468.0	468.6	469.1	469.7	469.7	469.2	468.7
177.5°	470.5	470.1	469.6	469.1	469.6	470.1	470.5	471.0	471.0	470.7	470.3
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	12.6	12.6	11.8	12.1	11.4	11.7	11.0	11.3	11.7	11.5	12.4
90°	9.2	8.9	7.8	6.8	5.6	4.6	3.7	2.9	2.0	1.2	0.4
92.5°	14.4	14.2	13.6	13.0	12.4	11.7	11.2	10.6	10.0	9.5	9.0
95°	27.6	27.3	26.7	26.0	25.4	24.7	24.1	23.6	22.9	22.3	21.8
97.5°	43.1	42.8	42.3	41.8	41.3	40.8	40.4	40.0	39.5	39.1	38.7
100°	54.5	54.3	53.9	53.5	53.1	52.7	52.2	51.7	51.2	50.7	50.2
102.5°	67.6	67.3	66.8	66.2	65.7	65.1	64.7	64.4	64.2	63.8	63.5
105°	87.2	87.2	86.4	85.7	85.0	84.2	83.8	83.6	83.5	83.3	83.2
107.5°	107.9	107.7	107.4	107.0	106.8	106.5	106.3	106.2	106.1	106.0	105.9
110°	121.9	121.6	121.4	121.2	121.1	120.9	120.7	120.6	120.4	120.3	120.1



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	135.8	135.4	135.4	135.4	135.3	135.3	135.3	135.2	135.1	134.9	134.9
115°	157.5	157.4	157.6	157.8	157.9	158.1	158.0	157.8	157.5	157.3	157.0
117.5°	179.1	179.1	179.4	179.5	179.8	179.9	180.0	179.9	179.7	179.5	179.4
120°	193.6	193.6	194.0	194.4	194.9	195.3	195.2	194.7	194.2	193.7	193.2
122.5°	208.1	208.4	208.6	208.8	209.0	209.2	209.1	208.8	208.5	208.1	207.7
125°	229.8	230.2	230.3	230.5	230.6	230.8	230.8	230.6	230.3	230.1	229.8
127.5°	251.3	251.8	251.9	252.1	252.3	252.5	252.3	251.8	251.3	250.7	250.2
130°	265.3	265.6	265.9	266.1	266.4	266.6	266.4	265.8	265.1	264.5	263.8
132.5°	279.2	279.6	279.7	279.9	280.1	280.3	280.1	279.4	278.8	278.0	277.4
135°	299.7	300.0	300.1	300.2	300.3	300.4	300.1	299.6	299.1	298.6	298.2
137.5°	319.8	320.2	320.0	319.8	319.5	319.4	319.0	318.6	318.2	317.8	317.4
140°	332.8	332.9	332.8	332.7	332.6	332.6	332.3	331.9	331.5	331.1	330.7
142.5°	345.2	345.3	345.2	345.0	344.9	344.7	344.5	344.1	343.6	343.2	342.8
145°	363.5	363.5	363.3	363.1	362.8	362.6	362.4	362.2	362.1	361.9	361.7
147.5°	380.7	380.7	380.4	380.2	379.9	379.7	379.4	379.1	378.9	378.5	378.3
150°	391.3	391.3	391.1	390.9	390.8	390.6	390.4	390.3	390.1	390.0	389.8
152.5°	400.9	400.7	400.6	400.6	400.4	400.3	400.1	399.9	399.7	399.5	399.3
155°	414.9	414.6	414.5	414.4	414.3	414.3	414.2	414.2	414.2	414.2	414.2
157.5°	427.1	426.7	426.6	426.6	426.6	426.5	426.5	426.6	426.7	426.8	426.9
160°	434.6	434.1	434.1	434.1	434.1	434.1	434.2	434.4	434.6	434.7	434.9
162.5°	441.6	441.2	441.2	441.1	441.0	441.0	441.1	441.2	441.5	441.7	442.0
165°	450.5	450.0	450.0	450.0	450.0	450.0	450.1	450.4	450.6	450.9	451.1
167.5°	457.8	457.2	457.2	457.1	457.1	457.0	457.1	457.5	457.8	458.1	458.4
170°	461.7	461.1	461.1	461.1	461.1	461.1	461.3	461.6	461.9	462.3	462.6
172.5°	464.9	464.3	464.3	464.3	464.3	464.3	464.5	464.9	465.2	465.5	465.9
175°	468.2	467.7	467.7	467.7	467.7	467.7	467.9	468.2	468.6	468.9	469.2
177.5°	469.9	469.4	469.4	469.4	469.4	469.4	469.6	469.9	470.1	470.3	470.7
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	13.5	13.7	15.4	16.6	18.8	20.6	20.3	19.5	19.2	18.8	18.3
90°	1.2	2.0	2.9	3.7	4.6	5.6	6.8	7.8	8.9	9.2	9.5
92.5°	9.5	10.0	10.6	11.2	11.7	12.4	13.0	13.6	14.2	14.4	14.7
95°	22.3	22.9	23.6	24.1	24.7	25.4	26.0	26.7	27.3	27.6	28.0
97.5°	39.1	39.5	40.0	40.4	40.8	41.3	41.8	42.3	42.8	43.1	43.5
100°	50.7	51.2	51.7	52.2	52.7	53.1	53.5	53.9	54.3	54.5	54.8
102.5°	63.8	64.2	64.4	64.7	65.1	65.7	66.2	66.8	67.3	67.6	67.8
105°	83.3	83.5	83.6	83.8	84.2	85.0	85.7	86.4	87.2	87.2	87.2
107.5°	106.0	106.1	106.2	106.3	106.5	106.8	107.0	107.4	107.7	107.9	108.2
110°	120.3	120.4	120.6	120.7	120.9	121.1	121.2	121.4	121.6	121.9	122.2



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	134.9	135.1	135.2	135.3	135.3	135.3	135.4	135.4	135.4	135.8	136.2
115°	157.3	157.5	157.8	158.0	158.1	157.9	157.8	157.6	157.4	157.5	157.6
117.5°	179.5	179.7	179.9	180.0	179.9	179.8	179.5	179.4	179.1	179.1	179.1
120°	193.7	194.2	194.7	195.2	195.3	194.9	194.4	194.0	193.6	193.6	193.5
122.5°	208.1	208.5	208.8	209.1	209.2	209.0	208.8	208.6	208.4	208.1	208.0
125°	230.1	230.3	230.6	230.8	230.8	230.6	230.5	230.3	230.2	229.8	229.5
127.5°	250.7	251.3	251.8	252.3	252.5	252.3	252.1	251.9	251.8	251.3	250.9
130°	264.5	265.1	265.8	266.4	266.6	266.4	266.1	265.9	265.6	265.3	265.0
132.5°	278.0	278.8	279.4	280.1	280.3	280.1	279.9	279.7	279.6	279.2	278.8
135°	298.6	299.1	299.6	300.1	300.4	300.3	300.2	300.1	300.0	299.7	299.4
137.5°	317.8	318.2	318.6	319.0	319.4	319.5	319.8	320.0	320.2	319.8	319.5
140°	331.1	331.5	331.9	332.3	332.6	332.6	332.7	332.8	332.9	332.8	332.7
142.5°	343.2	343.6	344.1	344.5	344.7	344.9	345.0	345.2	345.3	345.2	345.1
145°	361.9	362.1	362.2	362.4	362.6	362.8	363.1	363.3	363.5	363.5	363.4
147.5°	378.5	378.9	379.1	379.4	379.7	379.9	380.2	380.4	380.7	380.7	380.7
150°	390.0	390.1	390.3	390.4	390.6	390.8	390.9	391.1	391.3	391.3	391.3
152.5°	399.5	399.7	399.9	400.1	400.3	400.4	400.6	400.6	400.7	400.9	401.0
155°	414.2	414.2	414.2	414.2	414.3	414.3	414.4	414.5	414.6	414.9	415.2
157.5°	426.8	426.7	426.6	426.5	426.5	426.6	426.6	426.6	426.7	427.1	427.5
160°	434.7	434.6	434.4	434.2	434.1	434.1	434.1	434.1	434.1	434.6	435.0
162.5°	441.7	441.5	441.2	441.1	441.0	441.0	441.1	441.2	441.2	441.6	442.1
165°	450.9	450.6	450.4	450.1	450.0	450.0	450.0	450.0	450.0	450.5	451.0
167.5°	458.1	457.8	457.5	457.1	457.0	457.1	457.1	457.2	457.2	457.8	458.3
170°	462.3	461.9	461.6	461.3	461.1	461.1	461.1	461.1	461.1	461.7	462.3
172.5°	465.5	465.2	464.9	464.5	464.3	464.3	464.3	464.3	464.3	464.9	465.4
175°	468.9	468.6	468.2	467.9	467.7	467.7	467.7	467.7	467.7	468.2	468.7
177.5°	470.3	470.1	469.9	469.6	469.4	469.4	469.4	469.4	469.4	469.9	470.3
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3	470.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-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°	17.9	17.4	17.0	17.5	17.0	16.6	17.6
90°	9.9	10.2	10.4	10.6	10.8	10.9	11.1
92.5°	15.0	15.2	15.3	15.2	15.1	15.0	14.9
95°	28.3	28.6	28.8	28.8	28.8	28.8	28.8
97.5°	43.9	44.3	44.4	44.4	44.4	44.4	44.4
100°	55.0	55.3	55.5	55.7	55.8	56.0	56.2
102.5°	68.1	68.3	68.4	68.4	68.3	68.3	68.2
105°	87.2	87.2	87.2	87.5	87.6	87.8	88.0
107.5°	108.4	108.7	108.8	108.7	108.6	108.5	108.4
110°	122.5	122.9	122.9	122.8	122.6	122.5	122.3



TEST NUMBER: P332211-930

CATALOG NUMBER: S123DIW-S1165D460U930-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	136.6	137.1	137.2	137.1	137.1	137.1	137.1
115°	157.7	157.8	157.8	157.7	157.6	157.5	157.4
117.5°	179.0	179.0	179.0	178.7	178.5	178.2	178.0
120°	193.4	193.3	193.1	193.0	192.8	192.7	192.5
122.5°	207.7	207.5	207.3	207.1	206.8	206.6	206.4
125°	229.2	228.9	228.5	228.2	227.9	227.6	227.2
127.5°	250.4	249.9	249.5	249.2	248.7	248.3	248.0
130°	264.6	264.3	263.9	263.3	262.8	262.2	261.5
132.5°	278.3	277.9	277.5	277.1	276.6	276.2	275.7
135°	299.1	298.7	298.5	298.3	298.2	298.0	297.8
137.5°	319.2	318.8	318.5	318.1	317.9	317.6	317.2
140°	332.6	332.6	332.2	331.7	331.1	330.5	330.0
142.5°	345.0	345.0	344.7	344.3	343.8	343.4	342.9
145°	363.3	363.2	363.1	362.7	362.4	362.1	361.7
147.5°	380.7	380.7	380.4	379.9	379.4	378.9	378.4
150°	391.3	391.3	391.0	390.5	390.0	389.6	389.1
152.5°	401.1	401.3	401.1	400.7	400.2	399.8	399.4
155°	415.6	415.9	415.7	415.2	414.6	414.0	413.4
157.5°	427.8	428.1	428.0	427.6	427.1	426.6	426.2
160°	435.4	435.8	435.8	435.5	435.1	434.8	434.5
162.5°	442.5	442.9	442.8	442.3	441.7	441.2	440.7
165°	451.5	452.0	451.9	451.3	450.8	450.2	449.6
167.5°	458.8	459.3	459.3	458.8	458.3	457.8	457.2
170°	462.8	463.4	463.4	462.8	462.3	461.7	461.1
172.5°	465.9	466.4	466.4	465.8	465.2	464.6	464.1
175°	469.2	469.7	469.7	469.1	468.6	468.0	467.4
177.5°	470.7	471.0	471.0	470.5	470.1	469.6	469.1
180°	470.3	470.3	470.3	470.3	470.3	470.3	470.3

(END OF REPORT)