

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: P332180-830

Luminaire Tested: **S123DIW-S1000D460U830-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332180-830  
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-S1000D460U830-4F0-1E-UDD-A  
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 460 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5735.3 lumens  
Efficiency: N/A  
Efficacy: 124.1 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

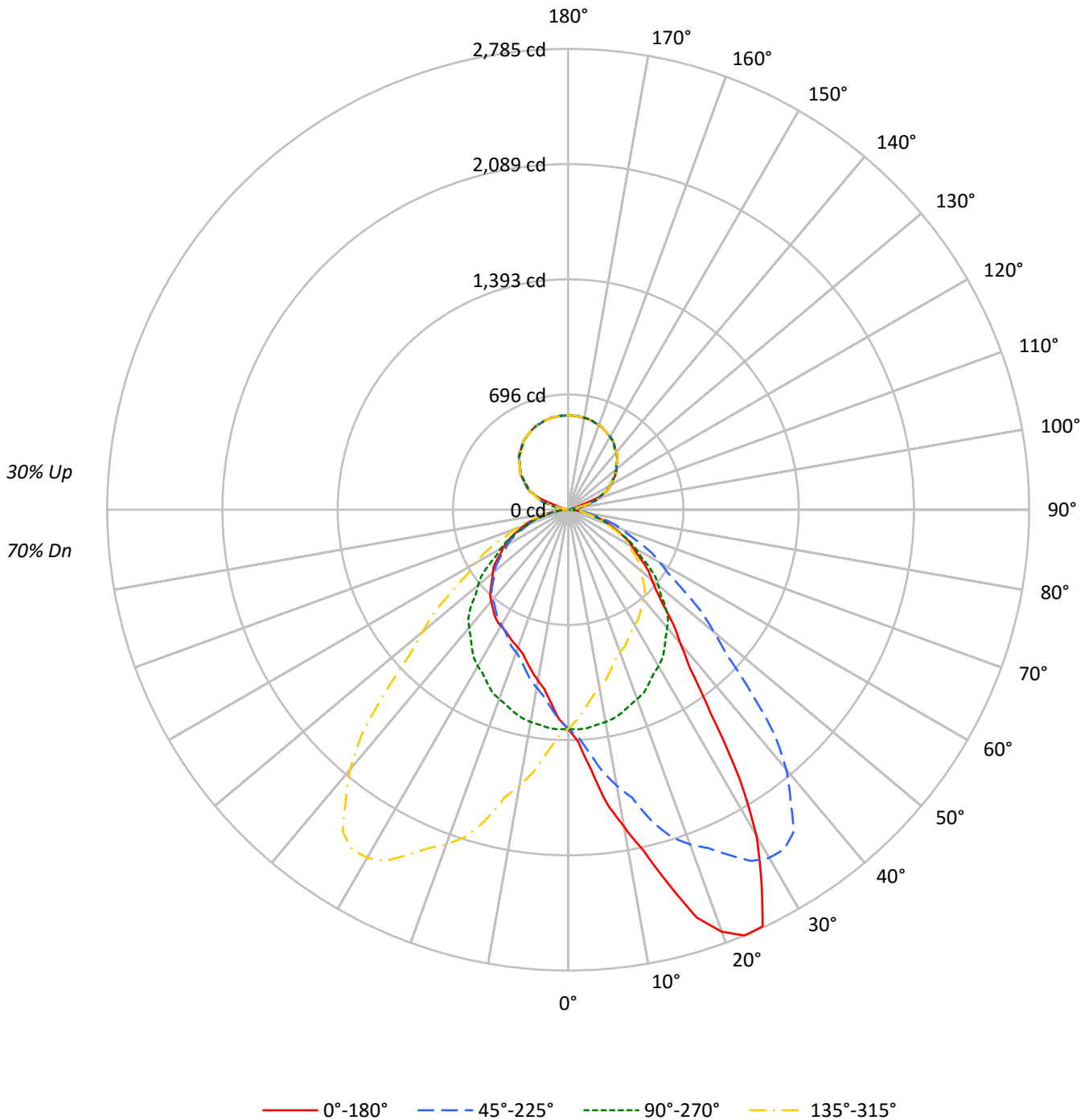
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	103	98	94	91	97	93	90	87	83	81	78	74	73	71	66	65	64	60
2	94	86	80	75	88	82	76	72	74	69	66	66	63	60	59	56	54	50
3	86	76	69	63	81	72	66	60	65	60	56	59	54	51	52	49	46	43
4	79	68	60	54	74	64	57	52	58	52	48	52	48	44	47	43	40	37
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35	32
6	67	55	46	40	63	52	44	39	47	41	36	43	38	34	39	34	31	29
7	62	49	41	36	58	47	40	34	43	37	32	39	34	30	35	31	28	25
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25	23
9	54	41	34	28	51	39	32	27	36	30	26	33	28	24	30	26	23	20
10	50	38	30	26	48	36	29	25	33	27	23	30	25	22	28	24	20	19

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

	0°	90°	180°	270°
0°	14249	14249	14249	14249
5°	16993	14311	12682	14311
10°	21270	14238	11455	14238
15°	26088	14123	10664	14123
20°	31078	13945	10153	13945
25°	32999	13726	10041	13726
30°	28285	13569	10092	13569
35°	19671	13341	10198	13341
40°	14816	13078	10166	13078
45°	12301	12683	10036	12683
50°	11020	11879	9945	11879
55°	10303	11012	9822	11012
60°	9664	10107	9722	10107
65°	9085	9212	9411	9212
70°	8519	8195	8960	8195
75°	7627	7178	8218	7178
80°	6676	5883	7073	5883
85°	5224	4273	4755	4273



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	2.3
10°-20°	418.2	7.3
20°-30°	701.8	12.2
30°-40°	794.6	13.9
40°-50°	712.6	12.4
50°-60°	575.1	10.0
60°-70°	400.7	7.0
70°-80°	210.6	3.7
80°-90°	53.1	0.9
90°-100°	20.7	0.4
100°-110°	98.8	1.7
110°-120°	237.2	4.1
120°-130°	302.1	5.3
130°-140°	322.8	5.6
140°-150°	301.8	5.3
150°-160°	243.5	4.2
160°-170°	157.1	2.7
170°-180°	54.2	0.9
0°-30°	1250.4	21.8
0°-40°	2045.0	35.7
0°-60°	3332.7	58.1
0°-90°	3997.2	69.7
90°-120°	356.7	6.2
90°-150°	1283.4	22.4
90°-180°	1738.0	30.3
0°-180°	5735.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1324	1324	1324	1324	1324	
5°	1573	1324	1174	1324	1573	163
15°	2341	1267	957	1267	2341	676
25°	2778	1156	845	1156	2778	1219
35°	1497	1015	776	1015	1497	973
45°	808	833	659	833	808	640
55°	549	587	523	587	549	493
65°	357	362	370	362	357	355
75°	183	173	198	173	183	196
85°	42	35	38	35	42	50
90°	13	0	13	0	13	8
95°	16	26	16	26	16	13
105°	19	126	19	126	19	43
115°	249	237	249	237	249	230
125°	340	334	340	334	340	304
135°	420	415	420	415	420	324
145°	484	479	484	479	484	302
155°	527	528	527	528	527	243
165°	556	557	556	557	556	157
175°	568	570	568	570	568	54
180°	570	570	570	570	570	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1404.9	1403.9	1401.3	1403.4	1399.3	1393.6	1393.1	1388.0	1373.1	1372.1	1368.0
5°	1572.7	1567.5	1566.9	1566.3	1557.3	1545.1	1522.0	1520.1	1489.3	1473.9	1455.3
7.5°	1790.0	1792.7	1783.3	1775.1	1747.7	1729.6	1704.8	1673.1	1635.3	1596.9	1571.4
10°	1946.0	1967.2	1940.9	1922.9	1906.2	1874.8	1838.2	1792.7	1747.2	1693.9	1653.5
12.5°	2113.3	2123.6	2118.4	2101.5	2075.6	2027.7	1962.9	1912.8	1870.9	1782.2	1746.3
15°	2341.1	2380.2	2355.2	2297.4	2298.8	2253.2	2168.5	2075.6	2026.2	1948.5	1842.8
17.5°	2583.8	2588.7	2578.0	2529.9	2497.8	2435.2	2357.1	2267.9	2167.9	2074.0	1961.8
20°	2713.1	2709.2	2686.8	2661.7	2606.6	2557.9	2472.6	2373.1	2244.9	2152.5	2030.0
22.5°	2784.9	2778.5	2767.9	2746.9	2701.0	2648.7	2572.1	2463.4	2341.4	2214.1	2072.6
25°	2778.5	2786.8	2788.1	2782.4	2766.4	2734.9	2674.6	2588.0	2466.2	2302.6	2155.1
27.5°	2527.1	2538.9	2573.1	2603.6	2637.5	2672.2	2667.6	2624.6	2534.4	2393.1	2212.8
30°	2275.7	2250.0	2313.5	2393.7	2448.2	2544.4	2598.3	2601.5	2550.8	2429.6	2253.8
32.5°	1926.7	1954.9	1983.0	2081.7	2200.8	2308.9	2416.1	2502.5	2512.3	2431.7	2277.9
35°	1497.0	1532.3	1583.6	1634.9	1763.2	1873.5	2062.1	2226.3	2357.1	2374.5	2280.1
37.5°	1206.4	1223.8	1256.2	1307.7	1391.6	1522.4	1668.3	1875.8	2065.4	2206.4	2212.5
40°	1054.4	1059.6	1096.2	1135.3	1203.2	1311.0	1442.5	1625.9	1852.9	2049.9	2132.0
42.5°	940.6	951.8	967.3	1004.9	1059.0	1140.1	1262.3	1414.0	1622.1	1848.7	2009.3
45°	808.1	821.0	830.6	855.6	894.1	948.6	1034.0	1172.4	1330.9	1565.0	1781.1
47.5°	720.7	721.7	728.9	747.7	773.9	814.8	875.2	964.1	1109.6	1299.5	1521.4
50°	658.1	668.4	670.9	685.6	706.2	736.3	786.4	862.0	981.4	1148.1	1352.1
52.5°	614.0	617.0	624.2	634.9	652.8	676.3	719.6	778.9	872.5	1014.6	1202.2
55°	549.0	549.0	556.1	564.4	574.7	595.9	624.7	668.4	739.5	849.9	1005.0
57.5°	489.0	492.2	497.2	499.7	508.5	522.5	546.6	579.7	632.8	717.7	841.1
60°	448.9	454.8	454.1	459.2	466.9	477.9	498.3	525.3	572.8	640.7	744.7
62.5°	414.1	413.7	413.6	419.7	427.4	437.8	451.2	474.5	514.8	575.0	663.5
65°	356.7	355.3	359.9	363.6	366.3	373.9	384.2	404.7	431.7	476.5	545.2
67.5°	305.6	301.8	304.3	305.6	309.9	315.9	325.6	338.3	359.7	395.8	447.4
70°	270.7	267.5	266.8	268.1	271.9	276.4	283.5	295.7	315.6	344.4	382.3
72.5°	234.8	232.5	232.4	235.3	237.0	240.0	245.0	256.2	271.9	293.6	328.9
75°	183.4	183.4	183.4	184.1	186.0	188.6	192.4	198.2	210.4	225.7	249.5
77.5°	137.5	137.4	136.6	136.5	139.3	140.4	141.4	146.8	153.5	163.9	181.3
80°	107.7	104.5	105.8	107.7	109.1	109.7	111.6	112.9	118.7	124.4	136.6
82.5°	80.0	77.4	77.6	80.6	80.8	81.4	83.4	85.2	87.4	92.7	99.2
85°	42.3	42.3	43.0	43.0	43.6	43.0	44.9	45.5	45.5	48.7	52.6
87.5°	17.9	16.9	17.3	17.8	17.2	17.7	18.2	18.6	19.0	19.5	19.8
90°	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9	10.6	10.2	9.0
92.5°	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1	11.4	10.8	9.9
95°	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4	13.8	13.1	12.1
97.5°	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2	14.4	13.7	20.5
100°	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5	14.7	13.9	28.7
102.5°	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2	25.5	27.9	43.9
105°	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4	76.1	92.7	101.2
107.5°	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5	157.8	169.9	168.6
110°	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7	187.8	191.0	189.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4	212.4	212.4	211.3
115°	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0	244.0	243.1	242.2
117.5°	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4	273.6	272.9	272.5
120°	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7	292.9	292.2	291.9
122.5°	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5	312.0	311.5	311.1
125°	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1	338.9	338.7	338.4
127.5°	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8	365.5	365.2	364.8
130°	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8	381.4	381.1	380.8
132.5°	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1	396.7	396.3	396.1
135°	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2	419.9	419.6	419.2
137.5°	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8	440.4	439.9	439.7
140°	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8	453.5	453.1	452.8
142.5°	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3	465.9	465.6	465.3
145°	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5	483.3	483.1	483.0
147.5°	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1	498.9	498.7	498.5
150°	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5	508.3	508.1	507.9
152.5°	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0	516.6	516.3	516.1
155°	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6	528.1	527.6	527.5
157.5°	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7	538.1	537.5	537.6
160°	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4	543.8	543.3	543.4
162.5°	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7	549.0	548.4	548.5
165°	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7	555.9	555.2	555.3
167.5°	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1	561.4	560.6	560.6
170°	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1	564.4	563.6	563.6
172.5°	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1	566.4	565.6	565.6
175°	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6	568.9	568.3	568.2
177.5°	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5	569.9	569.3	569.2
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1364.9	1360.7	1356.7	1349.5	1343.3	1334.6	1332.0	1329.0	1319.7	1311.5	1305.3
5°	1448.2	1432.9	1410.4	1389.9	1373.2	1350.8	1337.9	1324.5	1305.2	1287.9	1273.8
7.5°	1535.5	1505.2	1470.4	1432.6	1397.5	1363.6	1336.2	1311.9	1285.0	1259.4	1239.5
10°	1604.8	1561.1	1512.4	1459.8	1414.9	1371.3	1334.7	1302.7	1268.0	1237.8	1212.9
12.5°	1683.8	1619.1	1551.9	1488.0	1434.9	1374.4	1330.1	1289.3	1250.1	1213.8	1185.7
15°	1777.3	1695.2	1615.7	1527.8	1447.0	1371.3	1318.7	1267.4	1221.8	1184.7	1148.8
17.5°	1862.5	1769.4	1664.6	1557.8	1460.3	1370.6	1296.9	1238.9	1181.9	1136.4	1100.6
20°	1910.7	1804.9	1686.2	1575.3	1467.5	1367.4	1286.7	1217.4	1155.7	1107.7	1067.2
22.5°	1952.3	1828.4	1705.7	1587.1	1467.0	1359.2	1267.6	1196.4	1129.6	1082.5	1039.5
25°	1995.4	1847.2	1724.1	1584.9	1450.9	1339.3	1236.6	1155.7	1089.1	1034.0	989.7
27.5°	2032.3	1846.0	1699.8	1550.1	1425.4	1313.5	1204.0	1117.3	1046.5	986.6	941.7
30°	2056.9	1848.5	1674.7	1526.5	1400.8	1285.3	1178.8	1091.7	1017.3	956.3	914.0
32.5°	2072.4	1846.9	1651.6	1493.6	1361.8	1259.7	1151.7	1061.4	985.0	925.0	884.2
35°	2081.3	1835.7	1611.8	1425.8	1298.8	1199.4	1109.0	1015.3	935.2	879.4	833.2
37.5°	2063.3	1811.9	1565.7	1360.4	1221.3	1123.4	1047.4	967.6	890.9	829.4	789.7
40°	2035.1	1796.6	1529.7	1314.2	1168.0	1073.7	1008.9	930.7	855.0	796.6	759.4
42.5°	1981.2	1765.2	1490.3	1262.9	1112.6	1018.2	958.7	893.2	821.6	766.9	729.6
45°	1849.7	1697.1	1431.0	1185.9	1030.7	933.2	880.6	833.2	768.4	715.1	683.1
47.5°	1667.4	1594.6	1345.3	1104.8	945.3	851.5	796.8	758.7	711.3	668.4	637.5
50°	1540.6	1510.5	1287.2	1049.3	888.3	796.6	744.0	709.4	675.4	632.4	604.2
52.5°	1394.4	1413.0	1219.6	991.8	830.4	740.2	690.7	663.2	632.3	597.0	572.4
55°	1188.5	1255.8	1102.6	895.4	744.0	658.1	611.2	586.8	568.9	542.6	521.4
57.5°	995.7	1081.4	976.1	796.0	659.2	585.0	540.2	513.6	502.1	488.3	471.6
60°	881.3	965.9	885.8	729.2	602.3	531.7	491.9	469.5	458.0	448.4	434.2
62.5°	779.2	864.9	797.5	661.6	546.3	480.9	446.3	424.3	415.4	410.4	398.3
65°	638.9	712.6	667.7	556.1	466.3	408.6	377.1	361.7	353.5	351.5	343.7
67.5°	519.9	576.1	543.4	461.3	390.6	340.7	314.1	301.0	294.5	293.9	288.1
70°	442.0	494.6	469.5	395.1	334.1	295.0	271.9	260.4	256.6	255.9	252.7
72.5°	381.4	418.0	398.1	336.1	289.0	253.4	236.6	224.5	220.1	221.0	218.9
75°	282.2	309.8	298.2	255.2	217.4	194.4	180.2	172.6	168.7	170.6	168.1
77.5°	203.0	220.6	210.1	180.4	157.0	140.3	130.0	125.2	121.8	121.6	120.5
80°	153.3	163.5	157.8	139.8	120.6	106.5	98.1	94.9	93.0	92.4	91.7
82.5°	109.1	117.9	111.1	98.8	85.7	77.2	72.5	68.2	66.8	67.2	66.5
85°	55.1	58.3	55.8	48.1	43.0	39.1	36.6	34.6	33.4	34.0	32.7
87.5°	20.5	20.8	19.0	16.8	15.6	13.8	13.6	12.4	11.6	11.8	11.4
90°	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4	1.3	2.3	3.2
92.5°	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9	7.6	7.4	7.1
95°	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8	22.0	18.1	14.2
97.5°	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9	50.1	48.4	46.8
100°	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5	73.4	75.3	77.2
102.5°	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9	95.3	96.6	98.0
105°	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2	127.2	128.3	129.3
107.5°	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2	161.1	161.9	162.7
110°	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9	183.7	184.5	185.2





TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6	205.3	205.9	206.6
115°	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7	237.2	237.8	238.4
117.5°	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8	268.5	269.2	269.8
120°	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1	287.9	288.8	289.6
122.5°	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8	307.5	308.1	308.9
125°	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7	334.4	335.2	335.9
127.5°	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8	360.5	361.3	362.0
130°	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1	376.8	377.6	378.3
132.5°	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6	392.4	393.1	393.9
135°	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4	415.9	416.5	417.1
137.5°	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7	436.5	437.2	437.9
140°	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3	449.9	450.4	451.0
142.5°	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8	462.4	463.0	463.5
145°	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4	480.0	480.7	481.4
147.5°	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9	496.3	496.7	497.2
150°	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1	506.3	506.6	506.9
152.5°	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2	515.3	515.5	515.6
155°	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0	527.8	527.6	527.5
157.5°	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1	538.0	538.0	538.0
160°	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1	544.0	543.9	543.8
162.5°	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9	549.7	549.4	549.2
165°	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9	556.6	556.3	556.0
167.5°	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3	561.9	561.6	561.2
170°	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3	565.0	564.6	564.2
172.5°	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3	566.9	566.5	566.0
175°	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0	569.5	569.0	568.5
177.5°	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6	570.2	569.9	569.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1301.7	1298.2	1293.1	1285.3	1279.2	1269.4	1269.4	1271.0	1271.0	1270.5	1269.4
5°	1262.3	1252.6	1241.1	1227.7	1213.5	1199.4	1196.8	1191.8	1187.9	1185.2	1182.0
7.5°	1220.6	1203.5	1186.7	1167.8	1150.7	1136.4	1126.5	1118.3	1113.0	1107.4	1103.3
10°	1192.3	1171.2	1151.3	1131.4	1109.6	1092.3	1081.4	1073.7	1067.9	1062.8	1060.3
12.5°	1159.0	1134.7	1112.9	1093.9	1070.1	1052.3	1041.9	1038.3	1031.5	1020.7	1015.0
15°	1110.2	1087.8	1061.5	1032.6	1021.1	999.3	987.1	981.4	977.5	969.1	966.6
17.5°	1068.6	1039.2	1009.7	988.2	966.7	949.0	942.2	935.0	929.9	923.1	921.1
20°	1035.2	1008.9	981.9	958.8	936.4	917.2	911.4	906.3	901.2	898.0	895.4
22.5°	1001.4	975.1	952.7	931.1	907.2	894.6	888.3	882.7	879.1	876.9	874.3
25°	953.8	930.7	905.7	886.4	867.1	858.8	855.0	851.8	849.2	846.0	845.4
27.5°	911.2	886.0	865.7	847.8	834.0	827.0	823.3	821.7	822.3	823.4	824.2
30°	879.4	856.3	839.6	824.2	811.3	804.9	804.3	804.3	806.9	807.5	808.8
32.5°	850.1	831.1	814.5	799.6	789.9	785.4	787.9	787.9	789.9	791.6	793.9
35°	807.5	790.8	778.0	765.2	756.9	758.7	760.1	761.3	764.5	768.4	771.0
37.5°	766.9	752.3	739.0	729.0	725.2	728.6	731.7	734.4	738.1	741.0	743.7
40°	737.6	726.7	713.9	704.9	706.2	708.1	710.7	713.9	717.1	719.0	721.6
42.5°	710.4	699.0	689.3	681.8	683.6	686.1	687.6	689.3	693.0	696.4	698.0
45°	669.0	660.0	651.0	646.5	647.8	649.1	650.4	652.3	655.5	658.1	658.7
47.5°	622.4	616.1	610.1	605.8	607.8	607.3	609.0	613.0	614.1	615.6	619.2
50°	592.7	586.8	579.9	578.5	578.5	578.5	579.2	584.3	584.3	586.8	589.5
52.5°	559.8	556.1	551.6	549.3	548.3	548.3	550.9	553.6	554.6	558.2	560.7
55°	511.2	507.4	503.5	501.5	500.3	501.5	506.7	507.9	511.2	513.1	515.0
57.5°	460.5	457.6	454.5	453.5	453.2	454.9	457.7	461.6	462.3	468.3	471.2
60°	427.2	422.6	420.1	420.1	418.9	424.6	423.3	429.7	431.0	434.9	439.3
62.5°	392.8	386.7	385.7	385.7	387.6	389.2	391.0	393.8	397.2	402.0	405.5
65°	337.3	334.1	338.7	338.0	336.8	340.5	340.5	343.7	347.6	352.1	359.2
67.5°	284.9	283.2	283.6	283.6	285.6	287.8	289.5	292.4	297.0	301.7	306.3
70°	249.5	251.5	248.3	250.8	252.7	253.4	254.7	258.4	263.6	266.8	271.9
72.5°	215.1	215.0	215.4	216.4	218.3	219.5	220.7	225.2	230.7	233.5	237.6
75°	165.5	164.9	166.7	166.7	169.9	171.3	172.6	174.5	179.6	183.4	186.6
77.5°	120.8	121.6	121.2	123.4	122.5	122.7	126.8	128.7	129.2	136.8	138.5
80°	91.0	92.4	93.0	93.7	94.3	93.0	97.5	99.4	99.4	103.9	107.1
82.5°	65.4	66.2	67.9	68.5	68.6	69.9	70.3	71.7	73.2	75.2	79.4
85°	32.7	34.6	35.3	34.6	35.3	34.0	35.9	36.6	37.2	37.2	37.2
87.5°	11.1	11.9	11.6	12.3	12.1	12.8	12.9	12.0	12.0	13.7	11.6
90°	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9	11.3	11.7	12.0
92.5°	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1	12.6	13.3	13.6
95°	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4	15.1	15.7	16.1
97.5°	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2	15.9	16.7	17.1
100°	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5	16.2	17.0	17.4
102.5°	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2	20.8	18.6	17.4
105°	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4	42.8	26.1	17.9
107.5°	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5	133.4	121.1	108.8
110°	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7	181.6	178.5	170.3



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4	212.4	212.5	211.1
115°	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0	245.9	246.9	247.5
117.5°	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4	275.1	275.9	276.3
120°	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7	294.5	295.2	295.6
122.5°	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5	313.1	313.6	313.9
125°	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1	339.3	339.5	339.7
127.5°	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8	366.1	366.4	366.5
130°	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8	382.2	382.6	382.7
132.5°	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1	397.5	397.8	397.9
135°	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2	420.5	420.8	420.8
137.5°	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8	441.2	441.7	441.9
140°	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8	454.2	454.6	454.7
142.5°	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3	466.6	466.8	466.8
145°	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5	483.7	483.9	484.0
147.5°	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1	499.3	499.5	499.3
150°	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5	508.7	508.9	508.9
152.5°	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0	517.3	517.6	517.6
155°	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6	529.0	529.5	529.4
157.5°	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7	539.2	539.8	539.7
160°	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4	545.0	545.5	545.5
162.5°	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7	550.4	550.9	551.0
165°	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7	557.4	558.2	558.2
167.5°	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1	562.8	563.5	563.5
170°	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1	565.9	566.7	566.7
172.5°	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1	567.9	568.6	568.6
175°	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6	570.2	570.9	570.9
177.5°	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5	571.1	571.7	571.7
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1265.8	1265.4	1268.9	1266.4	1268.9	1265.4	1265.8	1269.4	1270.5	1271.0	1271.0
5°	1178.3	1180.2	1173.7	1173.7	1173.7	1180.2	1178.3	1182.0	1185.2	1187.9	1191.8
7.5°	1100.2	1097.4	1097.7	1094.2	1097.7	1097.4	1100.2	1103.3	1107.4	1113.0	1118.3
10°	1052.5	1048.7	1047.4	1048.0	1047.4	1048.7	1052.5	1060.3	1062.8	1067.9	1073.7
12.5°	1013.0	1012.3	1003.8	1003.9	1003.8	1012.3	1013.0	1015.0	1020.7	1031.5	1038.3
15°	966.6	954.4	953.1	957.0	953.1	954.4	966.6	966.6	969.1	977.5	981.4
17.5°	920.0	913.6	914.0	912.1	914.0	913.6	920.0	921.1	923.1	929.9	935.0
20°	895.4	891.6	890.9	886.4	890.9	891.6	895.4	895.4	898.0	901.2	906.3
22.5°	872.8	871.6	871.9	867.0	871.9	871.6	872.8	874.3	876.9	879.1	882.7
25°	844.7	847.9	845.4	845.4	845.4	847.9	844.7	845.4	846.0	849.2	851.8
27.5°	825.8	825.6	824.3	824.3	824.3	825.6	825.8	824.2	823.4	822.3	821.7
30°	811.3	810.7	812.0	812.0	812.0	810.7	811.3	808.8	807.5	806.9	804.3
32.5°	797.0	797.9	798.1	798.6	798.1	797.9	797.0	793.9	791.6	789.9	787.9
35°	774.8	775.4	777.4	776.1	777.4	775.4	774.8	771.0	768.4	764.5	761.3
37.5°	744.8	747.7	747.1	748.1	747.1	747.7	744.8	743.7	741.0	738.1	734.4
40°	722.2	724.2	723.5	723.5	723.5	724.2	722.2	721.6	719.0	717.1	713.9
42.5°	699.1	700.5	698.9	697.9	698.9	700.5	699.1	698.0	696.4	693.0	689.3
45°	661.3	660.0	661.9	659.3	661.9	660.0	661.3	658.7	658.1	655.5	652.3
47.5°	619.0	620.2	620.8	622.6	620.8	620.2	619.0	619.2	615.6	614.1	613.0
50°	590.7	594.6	594.6	593.9	594.6	594.6	590.7	589.5	586.8	584.3	584.3
52.5°	563.0	564.8	567.4	567.2	567.4	564.8	563.0	560.7	558.2	554.6	553.6
55°	520.2	521.4	522.7	523.4	522.7	521.4	520.2	515.0	513.1	511.2	507.9
57.5°	475.8	475.2	478.3	479.3	478.3	475.2	475.8	471.2	468.3	462.3	461.6
60°	444.5	444.5	449.6	451.6	449.6	444.5	444.5	439.3	434.9	431.0	429.7
62.5°	411.1	413.2	418.3	415.7	418.3	413.2	411.1	405.5	402.0	397.2	393.8
65°	362.4	367.5	366.8	369.5	366.8	367.5	362.4	359.2	352.1	347.6	343.7
67.5°	311.4	314.6	319.2	319.7	319.2	314.6	311.4	306.3	301.7	297.0	292.4
70°	277.1	280.3	282.9	284.7	282.9	280.3	277.1	271.9	266.8	263.6	258.4
72.5°	243.7	245.4	251.6	248.8	251.6	245.4	243.7	237.6	233.5	230.7	225.2
75°	191.1	195.6	199.4	197.6	199.4	195.6	191.1	186.6	183.4	179.6	174.5
77.5°	141.4	145.8	147.6	146.0	147.6	145.8	141.4	138.5	136.8	129.2	128.7
80°	111.6	110.9	114.8	114.1	114.8	110.9	111.6	107.1	103.9	99.4	99.4
82.5°	81.8	81.2	83.0	83.4	83.0	81.2	81.8	79.4	75.2	73.2	71.7
85°	39.8	41.7	39.1	38.5	39.1	41.7	39.8	37.2	37.2	37.2	36.6
87.5°	11.7	11.7	11.2	10.7	11.2	11.7	11.7	11.6	13.7	12.0	12.0
90°	12.2	12.3	12.5	12.7	12.5	12.3	12.2	12.0	11.7	11.3	10.9
92.5°	13.8	13.9	13.9	14.0	13.9	13.9	13.8	13.6	13.3	12.6	12.1
95°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	15.7	15.1	14.4
97.5°	17.2	17.2	17.3	17.4	17.3	17.2	17.2	17.1	16.7	15.9	15.2
100°	17.5	17.6	17.7	17.8	17.7	17.6	17.5	17.4	17.0	16.2	15.5
102.5°	17.6	17.8	17.9	18.1	17.9	17.8	17.6	17.4	18.6	20.8	23.2
105°	18.1	18.3	18.5	18.7	18.5	18.3	18.1	17.9	26.1	42.8	59.4
107.5°	96.1	83.6	71.1	58.5	71.1	83.6	96.1	108.8	121.1	133.4	145.5
110°	156.8	143.4	129.9	116.5	129.9	143.4	156.8	170.3	178.5	181.6	184.7



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	208.3	205.5	202.6	199.8	202.6	205.5	208.3	211.1	212.5	212.4	212.4
115°	247.9	248.3	248.6	249.0	248.6	248.3	247.9	247.5	246.9	245.9	245.0
117.5°	276.4	276.4	276.5	276.6	276.5	276.4	276.4	276.3	275.9	275.1	274.4
120°	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.6	295.2	294.5	293.7
122.5°	314.0	314.1	314.1	314.2	314.1	314.1	314.0	313.9	313.6	313.1	312.5
125°	339.9	340.1	340.3	340.4	340.3	340.1	339.9	339.7	339.5	339.3	339.1
127.5°	366.3	366.1	365.9	365.7	365.9	366.1	366.3	366.5	366.4	366.1	365.8
130°	382.5	382.3	382.1	381.9	382.1	382.3	382.5	382.7	382.6	382.2	381.8
132.5°	397.7	397.4	397.1	396.9	397.1	397.4	397.7	397.9	397.8	397.5	397.1
135°	420.5	420.2	419.9	419.6	419.9	420.2	420.5	420.8	420.8	420.5	420.2
137.5°	441.7	441.5	441.3	441.1	441.3	441.5	441.7	441.9	441.7	441.2	440.8
140°	454.5	454.3	454.1	453.9	454.1	454.3	454.5	454.7	454.6	454.2	453.8
142.5°	466.6	466.4	466.1	465.8	466.1	466.4	466.6	466.8	466.8	466.6	466.3
145°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	483.9	483.7	483.5
147.5°	498.9	498.4	498.0	497.6	498.0	498.4	498.9	499.3	499.5	499.3	499.1
150°	508.6	508.3	508.0	507.7	508.0	508.3	508.6	508.9	508.9	508.7	508.5
152.5°	517.2	516.7	516.3	515.9	516.3	516.7	517.2	517.6	517.6	517.3	517.0
155°	528.9	528.3	527.7	527.3	527.7	528.3	528.9	529.4	529.5	529.0	528.6
157.5°	538.9	538.3	537.5	536.8	537.5	538.3	538.9	539.7	539.8	539.2	538.7
160°	544.9	544.2	543.6	542.9	543.6	544.2	544.9	545.5	545.5	545.0	544.4
162.5°	550.4	549.8	549.2	548.7	549.2	549.8	550.4	551.0	550.9	550.4	549.7
165°	557.5	556.9	556.3	555.6	556.3	556.9	557.5	558.2	558.2	557.4	556.7
167.5°	562.8	562.1	561.4	560.6	561.4	562.1	562.8	563.5	563.5	562.8	562.1
170°	565.9	565.1	564.4	563.6	564.4	565.1	565.9	566.7	566.7	565.9	565.1
172.5°	567.8	566.9	566.2	565.3	566.2	566.9	567.8	568.6	568.6	567.9	567.1
175°	570.1	569.4	568.6	567.9	568.6	569.4	570.1	570.9	570.9	570.2	569.6
177.5°	570.9	570.1	569.4	568.6	569.4	570.1	570.9	571.7	571.7	571.1	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1269.4	1269.4	1279.2	1285.3	1293.1	1298.2	1301.7	1305.3	1311.5	1319.7	1329.0
5°	1196.8	1199.4	1213.5	1227.7	1241.1	1252.6	1262.3	1273.8	1287.9	1305.2	1324.5
7.5°	1126.5	1136.4	1150.7	1167.8	1186.7	1203.5	1220.6	1239.5	1259.4	1285.0	1311.9
10°	1081.4	1092.3	1109.6	1131.4	1151.3	1171.2	1192.3	1212.9	1237.8	1268.0	1302.7
12.5°	1041.9	1052.3	1070.1	1093.9	1112.9	1134.7	1159.0	1185.7	1213.8	1250.1	1289.3
15°	987.1	999.3	1021.1	1032.6	1061.5	1087.8	1110.2	1148.8	1184.7	1221.8	1267.4
17.5°	942.2	949.0	966.7	988.2	1009.7	1039.2	1068.6	1100.6	1136.4	1181.9	1238.9
20°	911.4	917.2	936.4	958.8	981.9	1008.9	1035.2	1067.2	1107.7	1155.7	1217.4
22.5°	888.3	894.6	907.2	931.1	952.7	975.1	1001.4	1039.5	1082.5	1129.6	1196.4
25°	855.0	858.8	867.1	886.4	905.7	930.7	953.8	989.7	1034.0	1089.1	1155.7
27.5°	823.3	827.0	834.0	847.8	865.7	886.0	911.2	941.7	986.6	1046.5	1117.3
30°	804.3	804.9	811.3	824.2	839.6	856.3	879.4	914.0	956.3	1017.3	1091.7
32.5°	787.9	785.4	789.9	799.6	814.5	831.1	850.1	884.2	925.0	985.0	1061.4
35°	760.1	758.7	756.9	765.2	778.0	790.8	807.5	833.2	879.4	935.2	1015.3
37.5°	731.7	728.6	725.2	729.0	739.0	752.3	766.9	789.7	829.4	890.9	967.6
40°	710.7	708.1	706.2	704.9	713.9	726.7	737.6	759.4	796.6	855.0	930.7
42.5°	687.6	686.1	683.6	681.8	689.3	699.0	710.4	729.6	766.9	821.6	893.2
45°	650.4	649.1	647.8	646.5	651.0	660.0	669.0	683.1	715.1	768.4	833.2
47.5°	609.0	607.3	607.8	605.8	610.1	616.1	622.4	637.5	668.4	711.3	758.7
50°	579.2	578.5	578.5	578.5	579.9	586.8	592.7	604.2	632.4	675.4	709.4
52.5°	550.9	548.3	548.3	549.3	551.6	556.1	559.8	572.4	597.0	632.3	663.2
55°	506.7	501.5	500.3	501.5	503.5	507.4	511.2	521.4	542.6	568.9	586.8
57.5°	457.7	454.9	453.2	453.5	454.5	457.6	460.5	471.6	488.3	502.1	513.6
60°	423.3	424.6	418.9	420.1	420.1	422.6	427.2	434.2	448.4	458.0	469.5
62.5°	391.0	389.2	387.6	385.7	385.7	386.7	392.8	398.3	410.4	415.4	424.3
65°	340.5	340.5	336.8	338.0	338.7	334.1	337.3	343.7	351.5	353.5	361.7
67.5°	289.5	287.8	285.6	283.6	283.6	283.2	284.9	288.1	293.9	294.5	301.0
70°	254.7	253.4	252.7	250.8	248.3	251.5	249.5	252.7	255.9	256.6	260.4
72.5°	220.7	219.5	218.3	216.4	215.4	215.0	215.1	218.9	221.0	220.1	224.5
75°	172.6	171.3	169.9	166.7	166.7	164.9	165.5	168.1	170.6	168.7	172.6
77.5°	126.8	122.7	122.5	123.4	121.2	121.6	120.8	120.5	121.6	121.8	125.2
80°	97.5	93.0	94.3	93.7	93.0	92.4	91.0	91.7	92.4	93.0	94.9
82.5°	70.3	69.9	68.6	68.5	67.9	66.2	65.4	66.5	67.2	66.8	68.2
85°	35.9	34.0	35.3	34.6	35.3	34.6	32.7	32.7	34.0	33.4	34.6
87.5°	12.9	12.8	12.1	12.3	11.6	11.9	11.1	11.4	11.8	11.6	12.4
90°	10.6	10.2	9.0	7.7	6.5	5.3	4.1	3.2	2.3	1.3	0.4
92.5°	11.4	10.8	9.9	9.0	8.1	7.2	6.8	7.1	7.4	7.6	7.9
95°	13.8	13.1	12.1	11.0	10.0	9.0	10.4	14.2	18.1	22.0	25.8
97.5°	14.4	13.7	20.5	27.1	33.9	40.7	45.0	46.8	48.4	50.1	51.9
100°	14.7	13.9	28.7	43.4	58.1	72.7	79.1	77.2	75.3	73.4	71.5
102.5°	25.5	27.9	43.9	59.9	76.0	92.0	99.3	98.0	96.6	95.3	93.9
105°	76.1	92.7	101.2	109.7	118.1	126.6	130.4	129.3	128.3	127.2	126.2
107.5°	157.8	169.9	168.6	167.3	166.0	164.7	163.5	162.7	161.9	161.1	160.2
110°	187.8	191.0	189.9	188.9	187.8	186.8	186.0	185.2	184.5	183.7	182.9



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	212.4	212.4	211.3	210.3	209.2	208.2	207.4	206.6	205.9	205.3	204.6
115°	244.0	243.1	242.2	241.4	240.5	239.7	238.9	238.4	237.8	237.2	236.7
117.5°	273.6	272.9	272.5	272.0	271.5	271.2	270.6	269.8	269.2	268.5	267.8
120°	292.9	292.2	291.9	291.6	291.3	291.1	290.5	289.6	288.8	287.9	287.1
122.5°	312.0	311.5	311.1	310.8	310.5	310.1	309.5	308.9	308.1	307.5	306.8
125°	338.9	338.7	338.4	338.0	337.6	337.2	336.7	335.9	335.2	334.4	333.7
127.5°	365.5	365.2	364.8	364.3	363.8	363.4	362.8	362.0	361.3	360.5	359.8
130°	381.4	381.1	380.8	380.4	380.0	379.7	379.1	378.3	377.6	376.8	376.1
132.5°	396.7	396.3	396.1	395.8	395.5	395.1	394.6	393.9	393.1	392.4	391.6
135°	419.9	419.6	419.2	418.9	418.5	418.1	417.6	417.1	416.5	415.9	415.4
137.5°	440.4	439.9	439.7	439.5	439.3	439.0	438.6	437.9	437.2	436.5	435.7
140°	453.5	453.1	452.8	452.5	452.2	451.9	451.6	451.0	450.4	449.9	449.3
142.5°	465.9	465.6	465.3	465.1	464.8	464.5	464.1	463.5	463.0	462.4	461.8
145°	483.3	483.1	483.0	482.8	482.6	482.4	482.0	481.4	480.7	480.0	479.4
147.5°	498.9	498.7	498.5	498.3	498.1	497.9	497.6	497.2	496.7	496.3	495.9
150°	508.3	508.1	507.9	507.7	507.6	507.4	507.2	506.9	506.6	506.3	506.1
152.5°	516.6	516.3	516.1	516.0	515.9	515.9	515.8	515.6	515.5	515.3	515.2
155°	528.1	527.6	527.5	527.4	527.4	527.3	527.4	527.5	527.6	527.8	528.0
157.5°	538.1	537.5	537.6	537.7	537.8	537.9	538.0	538.0	538.0	538.0	538.1
160°	543.8	543.3	543.4	543.5	543.6	543.7	543.8	543.8	543.9	544.0	544.1
162.5°	549.0	548.4	548.5	548.6	548.7	548.7	548.9	549.2	549.4	549.7	549.9
165°	555.9	555.2	555.3	555.3	555.4	555.5	555.7	556.0	556.3	556.6	556.9
167.5°	561.4	560.6	560.6	560.6	560.6	560.6	560.8	561.2	561.6	561.9	562.3
170°	564.4	563.6	563.6	563.6	563.6	563.6	563.8	564.2	564.6	565.0	565.3
172.5°	566.4	565.6	565.6	565.5	565.4	565.3	565.5	566.0	566.5	566.9	567.3
175°	568.9	568.3	568.2	568.1	568.0	567.9	568.1	568.5	569.0	569.5	570.0
177.5°	569.9	569.3	569.2	569.1	569.1	569.0	569.1	569.5	569.9	570.2	570.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



TEST NUMBER: P332180-830

CATALOG NUMBER: S123DIW-S1000D460U830-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1332.0	1334.6	1343.3	1349.5	1356.7	1360.7	1364.9	1368.0	1372.1	1373.1	1388.0
5°	1337.9	1350.8	1373.2	1389.9	1410.4	1432.9	1448.2	1455.3	1473.9	1489.3	1520.1
7.5°	1336.2	1363.6	1397.5	1432.6	1470.4	1505.2	1535.5	1571.4	1596.9	1635.3	1673.1
10°	1334.7	1371.3	1414.9	1459.8	1512.4	1561.1	1604.8	1653.5	1693.9	1747.2	1792.7
12.5°	1330.1	1374.4	1434.9	1488.0	1551.9	1619.1	1683.8	1746.3	1782.2	1870.9	1912.8
15°	1318.7	1371.3	1447.0	1527.8	1615.7	1695.2	1777.3	1842.8	1948.5	2026.2	2075.6
17.5°	1296.9	1370.6	1460.3	1557.8	1664.6	1769.4	1862.5	1961.8	2074.0	2167.9	2267.9
20°	1286.7	1367.4	1467.5	1575.3	1686.2	1804.9	1910.7	2030.0	2152.5	2244.9	2373.1
22.5°	1267.6	1359.2	1467.0	1587.1	1705.7	1828.4	1952.3	2072.6	2214.1	2341.4	2463.4
25°	1236.6	1339.3	1450.9	1584.9	1724.1	1847.2	1995.4	2155.1	2302.6	2466.2	2588.0
27.5°	1204.0	1313.5	1425.4	1550.1	1699.8	1846.0	2032.3	2212.8	2393.1	2534.4	2624.6
30°	1178.8	1285.3	1400.8	1526.5	1674.7	1848.5	2056.9	2253.8	2429.6	2550.8	2601.5
32.5°	1151.7	1259.7	1361.8	1493.6	1651.6	1846.9	2072.4	2277.9	2431.7	2512.3	2502.5
35°	1109.0	1199.4	1298.8	1425.8	1611.8	1835.7	2081.3	2280.1	2374.5	2357.1	2226.3
37.5°	1047.4	1123.4	1221.3	1360.4	1565.7	1811.9	2063.3	2212.5	2206.4	2065.4	1875.8
40°	1008.9	1073.7	1168.0	1314.2	1529.7	1796.6	2035.1	2132.0	2049.9	1852.9	1625.9
42.5°	958.7	1018.2	1112.6	1262.9	1490.3	1765.2	1981.2	2009.3	1848.7	1622.1	1414.0
45°	880.6	933.2	1030.7	1185.9	1431.0	1697.1	1849.7	1781.1	1565.0	1330.9	1172.4
47.5°	796.8	851.5	945.3	1104.8	1345.3	1594.6	1667.4	1521.4	1299.5	1109.6	964.1
50°	744.0	796.6	888.3	1049.3	1287.2	1510.5	1540.6	1352.1	1148.1	981.4	862.0
52.5°	690.7	740.2	830.4	991.8	1219.6	1413.0	1394.4	1202.2	1014.6	872.5	778.9
55°	611.2	658.1	744.0	895.4	1102.6	1255.8	1188.5	1005.0	849.9	739.5	668.4
57.5°	540.2	585.0	659.2	796.0	976.1	1081.4	995.7	841.1	717.7	632.8	579.7
60°	491.9	531.7	602.3	729.2	885.8	965.9	881.3	744.7	640.7	572.8	525.3
62.5°	446.3	480.9	546.3	661.6	797.5	864.9	779.2	663.5	575.0	514.8	474.5
65°	377.1	408.6	466.3	556.1	667.7	712.6	638.9	545.2	476.5	431.7	404.7
67.5°	314.1	340.7	390.6	461.3	543.4	576.1	519.9	447.4	395.8	359.7	338.3
70°	271.9	295.0	334.1	395.1	469.5	494.6	442.0	382.3	344.4	315.6	295.7
72.5°	236.6	253.4	289.0	336.1	398.1	418.0	381.4	328.9	293.6	271.9	256.2
75°	180.2	194.4	217.4	255.2	298.2	309.8	282.2	249.5	225.7	210.4	198.2
77.5°	130.0	140.3	157.0	180.4	210.1	220.6	203.0	181.3	163.9	153.5	146.8
80°	98.1	106.5	120.6	139.8	157.8	163.5	153.3	136.6	124.4	118.7	112.9
82.5°	72.5	77.2	85.7	98.8	111.1	117.9	109.1	99.2	92.7	87.4	85.2
85°	36.6	39.1	43.0	48.1	55.8	58.3	55.1	52.6	48.7	45.5	45.5
87.5°	13.6	13.8	15.6	16.8	19.0	20.8	20.5	19.8	19.5	19.0	18.6
90°	1.3	2.3	3.2	4.1	5.3	6.5	7.7	9.0	10.2	10.6	10.9
92.5°	7.6	7.4	7.1	6.8	7.2	8.1	9.0	9.9	10.8	11.4	12.1
95°	22.0	18.1	14.2	10.4	9.0	10.0	11.0	12.1	13.1	13.8	14.4
97.5°	50.1	48.4	46.8	45.0	40.7	33.9	27.1	20.5	13.7	14.4	15.2
100°	73.4	75.3	77.2	79.1	72.7	58.1	43.4	28.7	13.9	14.7	15.5
102.5°	95.3	96.6	98.0	99.3	92.0	76.0	59.9	43.9	27.9	25.5	23.2
105°	127.2	128.3	129.3	130.4	126.6	118.1	109.7	101.2	92.7	76.1	59.4
107.5°	161.1	161.9	162.7	163.5	164.7	166.0	167.3	168.6	169.9	157.8	145.5
110°	183.7	184.5	185.2	186.0	186.8	187.8	188.9	189.9	191.0	187.8	184.7





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	205.3	205.9	206.6	207.4	208.2	209.2	210.3	211.3	212.4	212.4	212.4
115°	237.2	237.8	238.4	238.9	239.7	240.5	241.4	242.2	243.1	244.0	245.0
117.5°	268.5	269.2	269.8	270.6	271.2	271.5	272.0	272.5	272.9	273.6	274.4
120°	287.9	288.8	289.6	290.5	291.1	291.3	291.6	291.9	292.2	292.9	293.7
122.5°	307.5	308.1	308.9	309.5	310.1	310.5	310.8	311.1	311.5	312.0	312.5
125°	334.4	335.2	335.9	336.7	337.2	337.6	338.0	338.4	338.7	338.9	339.1
127.5°	360.5	361.3	362.0	362.8	363.4	363.8	364.3	364.8	365.2	365.5	365.8
130°	376.8	377.6	378.3	379.1	379.7	380.0	380.4	380.8	381.1	381.4	381.8
132.5°	392.4	393.1	393.9	394.6	395.1	395.5	395.8	396.1	396.3	396.7	397.1
135°	415.9	416.5	417.1	417.6	418.1	418.5	418.9	419.2	419.6	419.9	420.2
137.5°	436.5	437.2	437.9	438.6	439.0	439.3	439.5	439.7	439.9	440.4	440.8
140°	449.9	450.4	451.0	451.6	451.9	452.2	452.5	452.8	453.1	453.5	453.8
142.5°	462.4	463.0	463.5	464.1	464.5	464.8	465.1	465.3	465.6	465.9	466.3
145°	480.0	480.7	481.4	482.0	482.4	482.6	482.8	483.0	483.1	483.3	483.5
147.5°	496.3	496.7	497.2	497.6	497.9	498.1	498.3	498.5	498.7	498.9	499.1
150°	506.3	506.6	506.9	507.2	507.4	507.6	507.7	507.9	508.1	508.3	508.5
152.5°	515.3	515.5	515.6	515.8	515.9	515.9	516.0	516.1	516.3	516.6	517.0
155°	527.8	527.6	527.5	527.4	527.3	527.4	527.4	527.5	527.6	528.1	528.6
157.5°	538.0	538.0	538.0	538.0	537.9	537.8	537.7	537.6	537.5	538.1	538.7
160°	544.0	543.9	543.8	543.8	543.7	543.6	543.5	543.4	543.3	543.8	544.4
162.5°	549.7	549.4	549.2	548.9	548.7	548.7	548.6	548.5	548.4	549.0	549.7
165°	556.6	556.3	556.0	555.7	555.5	555.4	555.3	555.3	555.2	555.9	556.7
167.5°	561.9	561.6	561.2	560.8	560.6	560.6	560.6	560.6	560.6	561.4	562.1
170°	565.0	564.6	564.2	563.8	563.6	563.6	563.6	563.6	563.6	564.4	565.1
172.5°	566.9	566.5	566.0	565.5	565.3	565.4	565.5	565.6	565.6	566.4	567.1
175°	569.5	569.0	568.5	568.1	567.9	568.0	568.1	568.2	568.3	568.9	569.6
177.5°	570.2	569.9	569.5	569.1	569.0	569.1	569.1	569.2	569.3	569.9	570.5
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0	570.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8	1323.8
2.5°	1393.1	1393.6	1399.3	1403.4	1401.3	1403.9	1404.9
5°	1522.0	1545.1	1557.3	1566.3	1566.9	1567.5	1572.7
7.5°	1704.8	1729.6	1747.7	1775.1	1783.3	1792.7	1790.0
10°	1838.2	1874.8	1906.2	1922.9	1940.9	1967.2	1946.0
12.5°	1962.9	2027.7	2075.6	2101.5	2118.4	2123.6	2113.3
15°	2168.5	2253.2	2298.8	2297.4	2355.2	2380.2	2341.1
17.5°	2357.1	2435.2	2497.8	2529.9	2578.0	2588.7	2583.8
20°	2472.6	2557.9	2606.6	2661.7	2686.8	2709.2	2713.1
22.5°	2572.1	2648.7	2701.0	2746.9	2767.9	2778.5	2784.9
25°	2674.6	2734.9	2766.4	2782.4	2788.1	2786.8	2778.5
27.5°	2667.6	2672.2	2637.5	2603.6	2573.1	2538.9	2527.1
30°	2598.3	2544.4	2448.2	2393.7	2313.5	2250.0	2275.7
32.5°	2416.1	2308.9	2200.8	2081.7	1983.0	1954.9	1926.7
35°	2062.1	1873.5	1763.2	1634.9	1583.6	1532.3	1497.0
37.5°	1668.3	1522.4	1391.6	1307.7	1256.2	1223.8	1206.4
40°	1442.5	1311.0	1203.2	1135.3	1096.2	1059.6	1054.4
42.5°	1262.3	1140.1	1059.0	1004.9	967.3	951.8	940.6
45°	1034.0	948.6	894.1	855.6	830.6	821.0	808.1
47.5°	875.2	814.8	773.9	747.7	728.9	721.7	720.7
50°	786.4	736.3	706.2	685.6	670.9	668.4	658.1
52.5°	719.6	676.3	652.8	634.9	624.2	617.0	614.0
55°	624.7	595.9	574.7	564.4	556.1	549.0	549.0
57.5°	546.6	522.5	508.5	499.7	497.2	492.2	489.0
60°	498.3	477.9	466.9	459.2	454.1	454.8	448.9
62.5°	451.2	437.8	427.4	419.7	413.6	413.7	414.1
65°	384.2	373.9	366.3	363.6	359.9	355.3	356.7
67.5°	325.6	315.9	309.9	305.6	304.3	301.8	305.6
70°	283.5	276.4	271.9	268.1	266.8	267.5	270.7
72.5°	245.0	240.0	237.0	235.3	232.4	232.5	234.8
75°	192.4	188.6	186.0	184.1	183.4	183.4	183.4
77.5°	141.4	140.4	139.3	136.5	136.6	137.4	137.5
80°	111.6	109.7	109.1	107.7	105.8	104.5	107.7
82.5°	83.4	81.4	80.8	80.6	77.6	77.4	80.0
85°	44.9	43.0	43.6	43.0	43.0	42.3	42.3
87.5°	18.2	17.7	17.2	17.8	17.3	16.9	17.9
90°	11.3	11.7	12.0	12.2	12.3	12.5	12.7
92.5°	12.6	13.3	13.6	13.8	13.9	13.9	14.0
95°	15.1	15.7	16.1	16.1	16.1	16.1	16.1
97.5°	15.9	16.7	17.1	17.2	17.2	17.3	17.4
100°	16.2	17.0	17.4	17.5	17.6	17.7	17.8
102.5°	20.8	18.6	17.4	17.6	17.8	17.9	18.1
105°	42.8	26.1	17.9	18.1	18.3	18.5	18.7
107.5°	133.4	121.1	108.8	96.1	83.6	71.1	58.5
110°	181.6	178.5	170.3	156.8	143.4	129.9	116.5



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	212.4	212.5	211.1	208.3	205.5	202.6	199.8
115°	245.9	246.9	247.5	247.9	248.3	248.6	249.0
117.5°	275.1	275.9	276.3	276.4	276.4	276.5	276.6
120°	294.5	295.2	295.6	295.6	295.6	295.6	295.6
122.5°	313.1	313.6	313.9	314.0	314.1	314.1	314.2
125°	339.3	339.5	339.7	339.9	340.1	340.3	340.4
127.5°	366.1	366.4	366.5	366.3	366.1	365.9	365.7
130°	382.2	382.6	382.7	382.5	382.3	382.1	381.9
132.5°	397.5	397.8	397.9	397.7	397.4	397.1	396.9
135°	420.5	420.8	420.8	420.5	420.2	419.9	419.6
137.5°	441.2	441.7	441.9	441.7	441.5	441.3	441.1
140°	454.2	454.6	454.7	454.5	454.3	454.1	453.9
142.5°	466.6	466.8	466.8	466.6	466.4	466.1	465.8
145°	483.7	483.9	484.0	484.0	484.0	484.0	484.0
147.5°	499.3	499.5	499.3	498.9	498.4	498.0	497.6
150°	508.7	508.9	508.9	508.6	508.3	508.0	507.7
152.5°	517.3	517.6	517.6	517.2	516.7	516.3	515.9
155°	529.0	529.5	529.4	528.9	528.3	527.7	527.3
157.5°	539.2	539.8	539.7	538.9	538.3	537.5	536.8
160°	545.0	545.5	545.5	544.9	544.2	543.6	542.9
162.5°	550.4	550.9	551.0	550.4	549.8	549.2	548.7
165°	557.4	558.2	558.2	557.5	556.9	556.3	555.6
167.5°	562.8	563.5	563.5	562.8	562.1	561.4	560.6
170°	565.9	566.7	566.7	565.9	565.1	564.4	563.6
172.5°	567.9	568.6	568.6	567.8	566.9	566.2	565.3
175°	570.2	570.9	570.9	570.1	569.4	568.6	567.9
177.5°	571.1	571.7	571.7	570.9	570.1	569.4	568.6
180°	570.0	570.0	570.0	570.0	570.0	570.0	570.0

(END OF REPORT)