

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1030910

Luminaire Tested: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030910
REPORT IS A COMBINATION OF REPORTS P991718 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

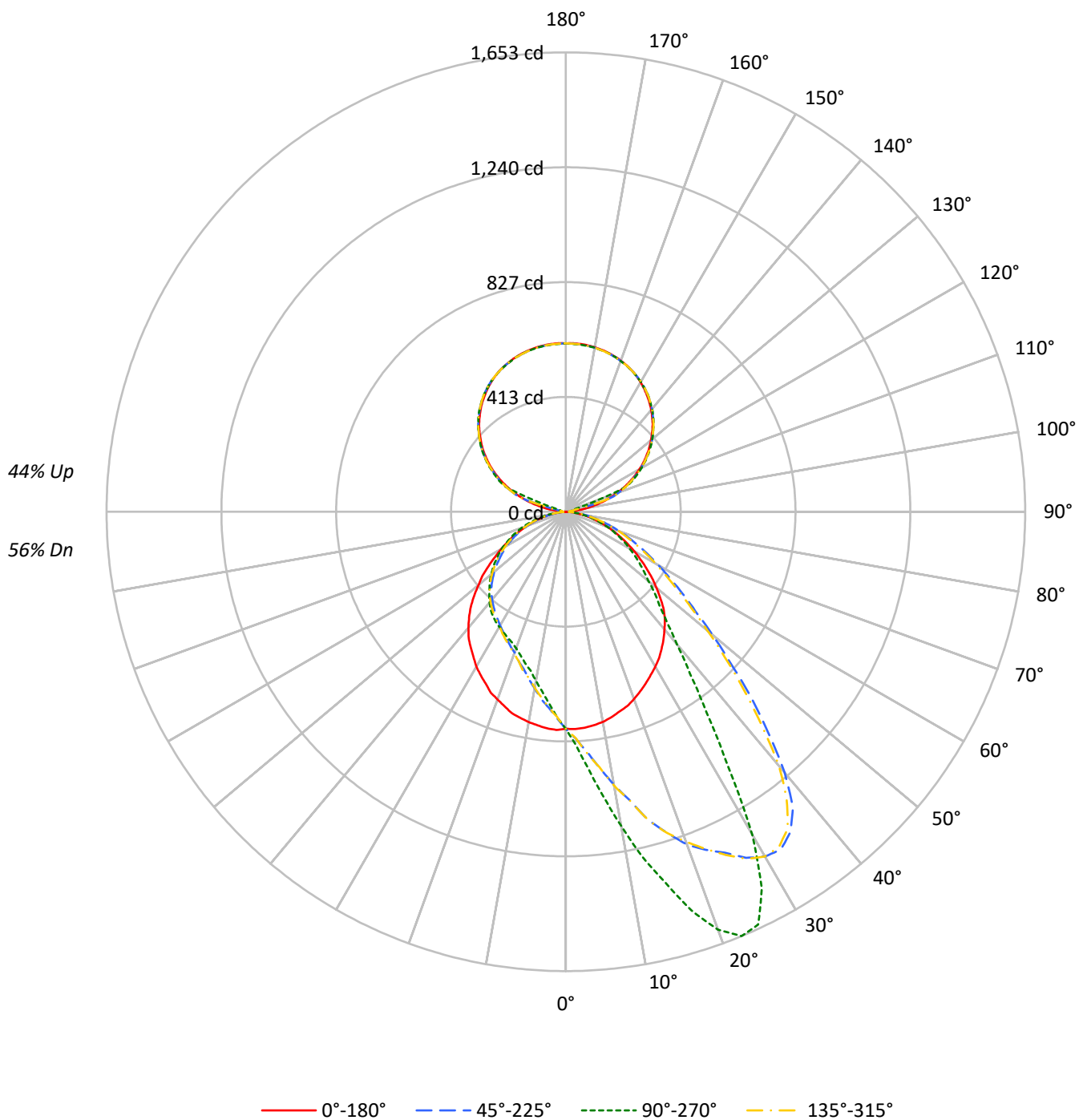
Lumens per Lamp: N/A
Luminaire Lumens: 4205.0 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
Input Voltage (V):
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: 24 FT

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	88	92	89	85	82	77	74	72	65	64	62	55	54	53
2	91	83	77	72	84	78	73	68	67	63	60	58	55	52	49	47	45
3	83	74	66	61	77	69	62	57	60	55	51	51	48	45	43	41	38
4	76	65	57	51	71	61	54	49	53	48	43	46	42	38	39	36	33
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29
6	64	52	44	39	60	49	42	37	43	37	33	37	33	29	32	29	26
7	60	47	39	34	55	45	37	32	39	33	29	34	29	26	29	26	23
8	55	43	35	30	51	41	34	29	36	30	26	31	27	23	27	23	21
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8402	8402	8402	8402
5°	8408	9682	8432	7225
10°	8354	11716	8363	6310
15°	8239	13894	8307	5680
20°	8140	15996	8157	5226
25°	7992	16400	8010	4990
30°	7887	13549	7887	4835
35°	7756	9061	7707	4697
40°	7600	6542	7506	4488
45°	7403	5181	7189	4227
50°	6926	4400	6678	3971
55°	6400	3866	6141	3686
60°	5868	3366	5557	3387
65°	5284	2883	5028	2986
70°	4676	2393	4367	2517
75°	3998	1805	3739	1944
80°	3160	1204	2915	1276
85°	2180	554	1748	503

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 13551 cd/sqm

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	1.8
10°-20°	246.6	5.9
20°-30°	414.9	9.9
30°-40°	468.9	11.2
40°-50°	419.9	10.0
50°-60°	339.0	8.1
60°-70°	236.2	5.6
70°-80°	124.0	2.9
80°-90°	30.9	0.7
90°-100°	21.4	0.5
100°-110°	103.3	2.5
110°-120°	253.2	6.0
120°-130°	321.5	7.6
130°-140°	343.4	8.2
140°-150°	321.1	7.6
150°-160°	259.0	6.2
160°-170°	167.2	4.0
170°-180°	57.6	1.4
0°-30°	738.2	17.6
0°-40°	1207.1	28.7
0°-60°	1966.1	46.8
0°-90°	2357.2	56.1
90°-120°	378.0	9.0
90°-150°	1364.0	32.4
90°-180°	1848.0	43.9
0°-180°	4205.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	781	781	781	781	781	
5°	780	927	782	692	780	74
15°	744	1380	750	564	744	210
25°	681	1638	682	498	681	314
35°	601	883	597	458	601	376
45°	498	476	484	389	498	381
55°	353	324	339	309	353	316
65°	219	210	208	218	219	218
75°	105	108	98	116	105	113
85°	23	25	18	23	23	26
90°	0	14	0	14	0	3
95°	28	17	28	17	28	33
105°	134	20	134	20	134	142
115°	252	265	252	265	252	249
125°	355	362	355	362	355	317
135°	442	446	442	446	442	340
145°	510	515	510	515	510	319
155°	562	561	562	561	562	259
165°	592	591	592	591	592	167
175°	606	604	606	604	606	58
180°	606	606	606	606	606	

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	782.9	788.9	792.0	796.5	801.0	807.8	810.1	813.9	812.4	815.4	816.9
5°	779.9	790.4	799.5	810.9	821.5	829.0	836.6	848.7	857.8	859.3	866.1
7.5°	774.6	789.7	805.6	821.5	841.9	854.0	867.6	884.2	897.9	919.8	928.1
10°	767.7	788.9	811.6	833.6	861.5	880.5	897.1	925.1	953.1	975.8	996.9
12.5°	757.2	783.6	813.1	845.7	882.0	903.9	926.6	963.7	1006.0	1040.8	1063.5
15°	744.3	777.6	815.4	850.2	890.3	931.1	955.3	996.9	1057.5	1090.0	1148.2
17.5°	733.7	767.7	805.6	860.0	914.5	955.3	972.7	1049.1	1090.7	1145.2	1211.0
20°	717.1	760.2	808.6	863.1	933.4	958.4	993.9	1071.1	1122.5	1193.6	1274.5
22.5°	699.7	745.8	804.1	860.8	939.5	965.9	1014.3	1075.6	1157.3	1227.6	1316.9
25°	680.8	730.7	789.7	857.0	934.2	972.7	1018.1	1093.8	1182.3	1270.8	1353.2
27.5°	661.9	716.3	777.6	844.9	919.8	965.2	1010.6	1089.2	1202.7	1298.7	1403.9
30°	643.7	698.2	759.4	828.3	906.9	950.8	993.9	1092.2	1218.6	1326.7	1432.6
32.5°	624.0	680.0	744.3	801.8	881.2	928.1	976.5	1092.2	1228.4	1343.4	1440.2
35°	600.6	658.1	713.3	770.8	849.4	901.6	956.1	1084.7	1237.5	1348.7	1408.4
37.5°	577.9	628.6	676.2	732.2	814.6	870.6	933.4	1075.6	1232.9	1326.0	1342.6
40°	552.2	602.9	641.4	693.6	780.6	845.7	909.2	1063.5	1213.3	1272.3	1223.9
42.5°	527.2	567.3	600.6	651.3	745.8	809.4	878.2	1041.6	1174.7	1186.8	1077.9
45°	498.5	527.2	556.7	614.2	708.0	773.0	849.4	1009.8	1112.7	1077.9	940.2
47.5°	461.4	487.1	519.6	572.6	667.9	735.2	807.8	969.0	1022.7	950.0	799.5
50°	425.9	447.8	478.0	529.5	625.5	691.4	768.5	904.7	931.1	816.9	689.1
52.5°	390.3	406.9	436.4	487.9	583.9	647.5	717.8	838.9	823.7	701.2	587.7
55°	353.2	367.6	395.6	446.3	535.5	596.0	663.4	757.9	718.6	602.1	511.3
57.5°	316.9	332.1	360.8	403.2	487.1	546.1	599.8	674.0	615.0	521.9	441.7
60°	284.4	297.3	319.2	360.8	437.2	484.9	534.0	584.7	535.5	445.5	384.3
62.5°	250.4	262.5	282.9	320.7	386.5	428.9	468.2	509.8	455.4	389.5	335.1
65°	218.6	228.4	247.3	282.1	335.8	370.6	402.4	431.1	387.3	326.8	285.9
67.5°	189.9	198.2	214.1	245.1	290.5	315.4	341.1	365.3	328.3	279.9	245.1
70°	158.8	165.7	180.0	202.7	239.0	264.7	283.7	301.8	268.5	229.9	206.5
72.5°	131.6	138.4	147.5	170.9	195.9	211.8	232.2	242.0	223.1	191.4	167.9
75°	105.1	110.4	118.8	133.9	157.3	167.9	180.8	188.3	170.9	149.8	135.4
77.5°	82.4	84.7	90.8	101.4	117.2	129.3	139.2	143.7	131.6	118.0	105.9
80°	58.2	61.3	65.8	74.9	87.0	90.8	96.8	102.1	94.6	82.4	74.9
82.5°	38.6	42.4	44.6	48.4	56.0	60.5	62.0	66.6	59.8	55.2	52.2
85°	22.7	24.2	25.0	27.2	31.0	33.3	35.6	36.3	34.8	34.0	31.0
87.5°	11.3	11.3	11.3	12.9	13.6	15.1	15.9	15.9	15.9	15.1	14.4
90°	0.5	1.5	2.5	3.5	4.5	5.0	5.6	6.9	8.2	9.5	10.8
92.5°	10.4	9.8	9.2	8.6	8.0	7.7	8.1	9.0	9.9	10.8	11.7
95°	27.5	23.4	19.3	15.2	11.1	9.0	9.6	10.7	11.8	12.9	14.0
97.5°	50.0	47.2	44.4	41.6	38.8	37.4	34.8	29.7	24.6	19.5	14.4
100°	76.1	78.1	80.1	82.1	84.1	85.1	77.3	61.7	46.1	30.5	14.9
102.5°	105.8	107.1	108.4	109.7	111.0	111.7	103.0	85.6	68.1	50.7	33.3
105°	134.2	135.3	136.4	137.5	138.6	139.1	134.6	125.6	116.6	107.6	98.6
107.5°	164.4	165.3	166.2	167.1	168.0	168.4	169.2	170.7	172.2	173.7	175.2
110°	194.5	195.3	196.1	196.9	197.7	198.1	198.7	199.8	200.9	202.0	203.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	223.4	224.1	224.8	225.5	226.2	226.5	227.1	228.2	229.3	230.4	231.5
115°	251.7	252.3	252.9	253.5	254.1	254.4	254.9	255.8	256.7	257.6	258.5
117.5°	279.6	280.3	281.0	281.7	282.4	282.8	283.0	283.5	284.0	284.5	285.0
120°	305.3	306.2	307.1	308.0	308.9	309.4	309.5	309.8	310.1	310.4	310.7
122.5°	331.4	332.1	332.8	333.5	334.2	334.6	334.8	335.2	335.6	336.0	336.4
125°	354.8	355.6	356.4	357.2	358.0	358.4	358.6	359.0	359.4	359.8	360.2
127.5°	378.3	379.1	379.9	380.7	381.5	381.9	382.1	382.6	383.1	383.6	384.1
130°	399.9	400.7	401.5	402.3	403.1	403.5	403.7	404.1	404.5	404.9	405.3
132.5°	420.6	421.4	422.2	423.0	423.8	424.2	424.3	424.6	424.9	425.2	425.5
135°	441.8	442.4	443.0	443.6	444.2	444.5	444.7	445.1	445.5	445.9	446.3
137.5°	459.8	460.6	461.4	462.2	463.0	463.4	463.5	463.7	463.9	464.1	464.3
140°	477.8	478.4	479.0	479.6	480.2	480.5	480.6	480.9	481.2	481.5	481.8
142.5°	494.4	495.0	495.6	496.2	496.8	497.1	497.3	497.6	497.9	498.2	498.5
145°	509.7	510.4	511.1	511.8	512.5	512.9	513.0	513.2	513.4	513.6	513.8
147.5°	524.6	525.1	525.6	526.1	526.6	526.9	527.0	527.2	527.4	527.6	527.8
150°	538.1	538.4	538.7	539.0	539.3	539.5	539.6	539.8	540.0	540.2	540.4
152.5°	550.3	550.4	550.5	550.6	550.7	550.7	550.8	550.9	551.0	551.1	551.2
155°	561.5	561.3	561.1	560.9	560.7	560.6	560.7	560.8	560.9	561.0	561.1
157.5°	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.4	570.3	570.2	570.1
160°	578.6	578.5	578.4	578.3	578.2	578.2	578.1	578.0	577.9	577.8	577.7
162.5°	586.3	586.0	585.7	585.4	585.1	584.9	584.9	584.8	584.7	584.6	584.5
165°	592.2	591.9	591.6	591.3	591.0	590.8	590.8	590.7	590.6	590.5	590.4
167.5°	597.1	596.7	596.3	595.9	595.5	595.3	595.3	595.3	595.3	595.3	595.3
170°	601.2	600.8	600.4	600.0	599.6	599.4	599.4	599.4	599.4	599.4	599.4
172.5°	603.9	603.4	602.9	602.4	601.9	601.6	601.7	601.8	601.9	602.0	602.1
175°	606.1	605.6	605.1	604.6	604.1	603.9	603.9	604.0	604.1	604.2	604.3
177.5°	607.0	606.5	606.0	605.5	605.0	604.8	604.8	604.9	605.0	605.1	605.2
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	822.2	823.7	829.0	832.8	840.4	839.6	839.6	838.9	836.6	840.4	842.6
5°	879.7	892.6	894.1	910.7	911.5	918.3	922.8	919.0	928.1	927.4	920.5
7.5°	950.8	968.2	976.5	992.4	1010.6	1006.0	1023.4	1026.4	1024.9	1032.5	1037.8
10°	1028.7	1059.0	1080.1	1109.6	1117.2	1121.7	1133.1	1142.9	1162.6	1147.5	1157.3
12.5°	1118.0	1139.9	1167.9	1214.8	1238.2	1253.4	1258.7	1265.5	1279.1	1270.8	1271.5
15°	1192.8	1222.3	1270.0	1328.2	1335.1	1354.0	1349.4	1390.3	1409.9	1380.4	1397.1
17.5°	1270.8	1310.1	1366.8	1417.5	1446.2	1459.1	1471.2	1510.5	1509.0	1504.5	1508.3
20°	1320.7	1385.0	1455.3	1522.6	1531.0	1540.8	1573.3	1590.0	1586.9	1599.8	1608.1
22.5°	1391.0	1459.1	1534.0	1578.6	1597.5	1608.9	1634.6	1645.2	1649.7	1652.7	1647.4
25°	1450.0	1522.6	1577.9	1617.2	1628.5	1634.6	1642.9	1645.9	1643.7	1638.4	1642.9
27.5°	1490.1	1548.4	1586.2	1604.3	1598.3	1588.4	1572.6	1562.0	1538.5	1527.2	1540.8
30°	1506.8	1532.5	1543.8	1513.6	1483.3	1459.1	1428.8	1372.9	1329.0	1341.9	1324.5
32.5°	1480.3	1463.6	1409.2	1331.3	1307.8	1268.5	1183.0	1117.2	1119.5	1084.7	1099.1
35°	1402.4	1326.7	1223.9	1105.9	1074.8	1053.7	959.9	945.5	915.2	882.7	891.8
37.5°	1264.7	1154.3	1029.5	942.5	896.3	850.2	797.2	765.5	747.3	733.7	744.3
40°	1096.8	962.1	859.3	781.4	742.0	712.5	676.2	644.5	624.0	621.8	625.5
42.5°	931.9	818.4	723.9	649.8	636.9	602.1	578.6	553.7	547.6	537.8	543.1
45°	788.9	696.6	618.7	558.2	543.1	534.0	505.3	489.4	482.6	476.5	485.6
47.5°	685.3	588.5	531.8	495.4	480.3	465.2	449.3	438.7	433.4	434.2	433.4
50°	585.5	514.4	464.4	436.4	427.4	416.8	403.9	397.1	394.8	388.0	393.3
52.5°	503.8	452.3	417.5	391.1	384.3	376.7	366.1	362.3	357.0	355.5	355.5
55°	438.0	397.9	369.9	352.5	344.2	338.1	332.1	327.5	323.7	323.7	323.7
57.5°	386.5	351.7	331.3	316.2	313.2	307.1	300.3	300.3	295.0	294.2	296.5
60°	342.7	311.6	295.8	282.9	278.4	276.8	270.0	270.0	268.5	264.7	267.8
62.5°	298.0	275.3	261.7	251.9	247.3	247.3	242.0	238.3	238.3	239.0	237.5
65°	257.2	240.5	228.4	220.9	218.6	215.6	214.8	211.8	209.5	210.3	209.5
67.5°	220.9	208.0	199.7	193.6	189.9	188.3	186.1	186.1	184.6	185.3	181.5
70°	188.3	175.5	168.7	162.6	161.1	161.1	158.1	158.8	157.3	159.6	158.1
72.5°	155.1	145.2	139.9	137.7	136.2	135.4	133.9	132.4	131.6	133.1	132.4
75°	125.6	117.2	113.5	111.9	110.4	110.4	109.7	108.9	108.2	108.2	108.2
77.5°	97.6	92.3	87.7	89.3	87.0	87.7	85.5	85.5	86.2	85.5	85.5
80°	71.9	68.1	68.1	66.6	63.5	65.1	65.1	62.8	62.0	63.5	61.3
82.5°	47.7	46.9	45.4	44.6	43.1	43.9	43.1	42.4	41.6	43.1	41.6
85°	28.0	28.0	27.2	25.7	27.2	26.5	25.7	25.7	25.0	25.0	25.0
87.5°	14.4	12.9	12.9	12.1	12.9	11.3	12.1	11.3	10.6	11.3	10.6
90°	11.2	11.6	12.0	12.4	12.6	12.7	12.9	13.1	13.3	13.5	13.3
92.5°	12.4	13.1	13.8	14.5	14.9	14.9	15.0	15.1	15.2	15.3	15.2
95°	14.7	15.4	16.1	16.8	17.1	17.1	17.1	17.1	17.1	17.1	17.1
97.5°	15.2	16.0	16.8	17.6	18.0	18.1	18.2	18.3	18.4	18.5	18.4
100°	15.7	16.5	17.3	18.1	18.5	18.5	18.6	18.7	18.8	18.9	18.8
102.5°	30.0	26.7	23.4	20.1	18.5	18.6	18.8	19.0	19.2	19.4	19.2
105°	80.9	63.2	45.5	27.8	18.9	19.0	19.2	19.4	19.6	19.8	19.6
107.5°	159.8	144.4	128.9	113.5	105.8	99.2	86.1	73.0	59.9	46.8	59.9
110°	199.8	196.5	193.2	189.9	188.2	181.0	166.7	152.4	138.1	123.8	138.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	232.4	233.3	234.2	235.1	235.5	235.4	235.2	235.0	234.8	234.6	234.8
115°	259.5	260.5	261.5	262.5	263.0	263.2	263.6	264.0	264.4	264.8	264.4
117.5°	285.8	286.6	287.4	288.2	288.6	288.7	288.8	288.9	289.0	289.1	289.0
120°	311.5	312.3	313.1	313.9	314.3	314.3	314.3	314.3	314.3	314.3	314.3
122.5°	336.9	337.4	337.9	338.4	338.6	338.7	338.8	338.9	339.0	339.1	339.0
125°	360.4	360.6	360.8	361.0	361.1	361.2	361.4	361.6	361.8	362.0	361.8
127.5°	384.4	384.7	385.0	385.3	385.5	385.4	385.2	385.0	384.8	384.6	384.8
130°	405.7	406.1	406.5	406.9	407.1	407.0	406.8	406.6	406.4	406.2	406.4
132.5°	425.9	426.3	426.7	427.1	427.3	427.2	426.9	426.6	426.3	426.0	426.3
135°	446.6	446.9	447.2	447.5	447.6	447.5	447.2	446.9	446.6	446.3	446.6
137.5°	464.8	465.3	465.8	466.3	466.5	466.4	466.2	466.0	465.8	465.6	465.8
140°	482.2	482.6	483.0	483.4	483.6	483.5	483.3	483.1	482.9	482.7	482.9
142.5°	498.8	499.1	499.4	499.7	499.8	499.7	499.4	499.1	498.8	498.5	498.8
145°	514.0	514.2	514.4	514.6	514.7	514.7	514.7	514.7	514.7	514.7	514.7
147.5°	528.0	528.2	528.4	528.6	528.7	528.4	527.9	527.4	526.9	526.4	526.9
150°	540.6	540.8	541.0	541.2	541.3	541.1	540.8	540.5	540.2	539.9	540.2
152.5°	551.6	552.0	552.4	552.8	553.0	552.7	552.2	551.7	551.2	550.7	551.2
155°	561.6	562.1	562.6	563.1	563.3	563.0	562.4	561.8	561.2	560.6	561.2
157.5°	570.7	571.3	571.9	572.5	572.8	572.4	571.6	570.8	570.0	569.2	570.0
160°	578.3	578.9	579.5	580.1	580.4	580.1	579.4	578.7	578.0	577.3	578.0
162.5°	585.2	585.9	586.6	587.3	587.7	587.4	586.8	586.1	585.5	584.9	585.5
165°	591.2	592.0	592.8	593.6	594.0	593.6	592.9	592.2	591.5	590.8	591.5
167.5°	596.1	596.9	597.7	598.5	598.9	598.5	597.7	596.9	596.1	595.3	596.1
170°	600.2	601.0	601.8	602.6	603.0	602.6	601.8	601.0	600.2	599.4	600.2
172.5°	602.9	603.7	604.5	605.3	605.7	605.2	604.3	603.4	602.5	601.6	602.5
175°	605.0	605.7	606.4	607.1	607.5	607.1	606.3	605.5	604.7	603.9	604.7
177.5°	606.0	606.8	607.6	608.4	608.8	608.3	607.3	606.3	605.3	604.3	605.3
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	836.6	838.9	832.8	831.3	831.3	834.3	832.0	811.6	815.4	810.9	809.4
5°	928.9	924.3	918.3	915.2	911.5	900.9	900.1	876.7	872.1	857.0	850.2
7.5°	1030.2	1026.4	1008.3	1006.0	1004.5	994.7	969.7	944.7	926.6	909.2	892.6
10°	1146.0	1134.6	1126.3	1109.6	1101.3	1087.7	1055.2	1031.7	1000.7	974.2	939.5
12.5°	1285.1	1272.3	1244.3	1232.2	1221.6	1183.8	1151.2	1124.8	1064.3	1046.1	1003.0
15°	1387.2	1360.0	1357.0	1330.5	1329.0	1287.4	1225.4	1196.6	1149.7	1083.2	1038.5
17.5°	1497.7	1473.5	1454.6	1422.8	1418.3	1378.9	1333.5	1263.2	1211.8	1148.2	1091.5
20°	1578.6	1565.8	1533.2	1520.4	1493.9	1460.6	1413.7	1326.7	1263.9	1200.4	1130.8
22.5°	1642.9	1630.0	1604.3	1586.9	1571.8	1528.7	1472.7	1398.6	1312.4	1229.2	1157.3
25°	1642.2	1638.4	1627.8	1619.5	1608.1	1576.3	1529.4	1458.3	1362.3	1270.8	1170.9
27.5°	1549.1	1559.7	1577.9	1586.9	1584.7	1580.1	1553.7	1493.9	1407.7	1298.7	1186.8
30°	1355.5	1394.1	1428.1	1473.5	1487.1	1520.4	1535.5	1501.5	1432.6	1331.3	1207.2
32.5°	1124.0	1180.0	1254.1	1279.1	1322.2	1386.5	1458.3	1471.2	1428.1	1350.2	1220.1
35°	922.1	968.2	1025.7	1065.0	1103.6	1208.0	1298.7	1377.4	1391.8	1340.3	1217.1
37.5°	763.2	795.7	846.4	879.7	915.2	1004.5	1131.6	1233.7	1305.6	1307.1	1208.7
40°	648.2	662.6	706.5	730.7	764.7	841.9	955.3	1088.5	1193.6	1242.0	1186.8
42.5°	549.1	568.1	604.4	622.5	644.5	711.8	786.7	913.0	1043.1	1146.7	1146.0
45°	490.1	503.8	520.4	535.5	560.5	600.6	686.1	780.6	905.4	1022.7	1068.8
47.5°	438.0	450.8	467.5	472.0	488.6	526.5	578.6	661.1	777.6	894.1	981.1
50°	394.1	404.7	416.0	424.3	431.9	462.9	502.3	571.8	664.9	777.6	885.7
52.5°	360.0	367.6	377.4	382.0	388.8	411.5	441.7	493.2	569.6	672.4	777.6
55°	328.3	333.6	339.6	347.2	350.2	366.9	390.3	434.2	490.9	583.2	683.0
57.5°	298.8	301.0	304.8	309.4	313.2	327.5	347.9	377.4	427.4	498.5	593.0
60°	265.5	271.5	273.8	278.4	280.6	292.0	307.9	332.8	371.4	432.7	503.8
62.5°	237.5	241.3	245.1	247.3	252.6	256.4	269.3	292.0	323.7	369.1	433.4
65°	212.5	214.1	216.3	218.6	220.1	224.7	236.8	251.9	276.1	316.2	366.1
67.5°	183.8	185.3	188.3	189.1	190.6	196.7	203.5	216.3	236.8	267.0	307.9
70°	155.8	158.1	159.6	161.1	163.4	165.7	173.2	183.8	199.7	220.9	252.6
72.5°	131.6	133.9	133.9	135.4	134.6	137.7	145.2	152.8	163.4	180.8	208.8
75°	107.4	107.4	108.9	109.7	110.4	113.5	116.5	122.5	130.9	144.5	161.9
77.5°	84.7	84.0	85.5	85.5	85.5	87.7	90.8	93.8	99.1	108.9	122.5
80°	62.0	62.0	63.5	64.3	62.8	63.5	65.1	68.1	71.9	78.7	86.2
82.5°	40.8	43.9	43.1	43.9	43.1	44.6	45.4	46.1	47.7	50.7	56.0
85°	25.0	25.0	25.0	25.7	25.0	25.7	25.7	25.7	26.5	28.0	30.3
87.5°	10.6	10.6	10.6	11.3	10.6	10.6	11.3	10.6	11.3	11.3	12.1
90°	13.1	12.9	12.7	12.6	12.4	12.0	11.6	11.2	10.8	9.5	8.2
92.5°	15.1	15.0	14.9	14.9	14.5	13.8	13.1	12.4	11.7	10.8	9.9
95°	17.1	17.1	17.1	17.1	16.8	16.1	15.4	14.7	14.0	12.9	11.8
97.5°	18.3	18.2	18.1	18.0	17.6	16.8	16.0	15.2	14.4	19.5	24.6
100°	18.7	18.6	18.5	18.5	18.1	17.3	16.5	15.7	14.9	30.5	46.1
102.5°	19.0	18.8	18.6	18.5	20.1	23.4	26.7	30.0	33.3	50.7	68.1
105°	19.4	19.2	19.0	18.9	27.8	45.5	63.2	80.9	98.6	107.6	116.6
107.5°	73.0	86.1	99.2	105.8	113.5	128.9	144.4	159.8	175.2	173.7	172.2
110°	152.4	166.7	181.0	188.2	189.9	193.2	196.5	199.8	203.1	202.0	200.9

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	235.0	235.2	235.4	235.5	235.1	234.2	233.3	232.4	231.5	230.4	229.3
115°	264.0	263.6	263.2	263.0	262.5	261.5	260.5	259.5	258.5	257.6	256.7
117.5°	288.9	288.8	288.7	288.6	288.2	287.4	286.6	285.8	285.0	284.5	284.0
120°	314.3	314.3	314.3	314.3	313.9	313.1	312.3	311.5	310.7	310.4	310.1
122.5°	338.9	338.8	338.7	338.6	338.4	337.9	337.4	336.9	336.4	336.0	335.6
125°	361.6	361.4	361.2	361.1	361.0	360.8	360.6	360.4	360.2	359.8	359.4
127.5°	385.0	385.2	385.4	385.5	385.3	385.0	384.7	384.4	384.1	383.6	383.1
130°	406.6	406.8	407.0	407.1	406.9	406.5	406.1	405.7	405.3	404.9	404.5
132.5°	426.6	426.9	427.2	427.3	427.1	426.7	426.3	425.9	425.5	425.2	424.9
135°	446.9	447.2	447.5	447.6	447.5	447.2	446.9	446.6	446.3	445.9	445.5
137.5°	466.0	466.2	466.4	466.5	466.3	465.8	465.3	464.8	464.3	464.1	463.9
140°	483.1	483.3	483.5	483.6	483.4	483.0	482.6	482.2	481.8	481.5	481.2
142.5°	499.1	499.4	499.7	499.8	499.7	499.4	499.1	498.8	498.5	498.2	497.9
145°	514.7	514.7	514.7	514.7	514.6	514.4	514.2	514.0	513.8	513.6	513.4
147.5°	527.4	527.9	528.4	528.7	528.6	528.4	528.2	528.0	527.8	527.6	527.4
150°	540.5	540.8	541.1	541.3	541.2	541.0	540.8	540.6	540.4	540.2	540.0
152.5°	551.7	552.2	552.7	553.0	552.8	552.4	552.0	551.6	551.2	551.1	551.0
155°	561.8	562.4	563.0	563.3	563.1	562.6	562.1	561.6	561.1	561.0	560.9
157.5°	570.8	571.6	572.4	572.8	572.5	571.9	571.3	570.7	570.1	570.2	570.3
160°	578.7	579.4	580.1	580.4	580.1	579.5	578.9	578.3	577.7	577.8	577.9
162.5°	586.1	586.8	587.4	587.7	587.3	586.6	585.9	585.2	584.5	584.6	584.7
165°	592.2	592.9	593.6	594.0	593.6	592.8	592.0	591.2	590.4	590.5	590.6
167.5°	596.9	597.7	598.5	598.9	598.5	597.7	596.9	596.1	595.3	595.3	595.3
170°	601.0	601.8	602.6	603.0	602.6	601.8	601.0	600.2	599.4	599.4	599.4
172.5°	603.4	604.3	605.2	605.7	605.3	604.5	603.7	602.9	602.1	602.0	601.9
175°	605.5	606.3	607.1	607.5	607.1	606.4	605.7	605.0	604.3	604.2	604.1
177.5°	606.3	607.3	608.3	608.8	608.4	607.6	606.8	606.0	605.2	605.1	605.0
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	801.8	799.5	799.5	798.0	793.5	785.1	784.4	785.9	781.4	776.8	770.0
5°	841.1	826.7	822.2	817.7	808.6	793.5	787.4	782.1	773.8	764.0	753.4
7.5°	874.4	854.0	847.9	839.6	821.5	800.3	786.7	775.3	764.0	750.4	737.5
10°	916.0	886.5	872.1	860.0	835.1	805.6	785.1	768.5	750.4	733.7	717.1
12.5°	962.9	915.2	910.7	881.2	852.5	808.6	783.6	759.4	735.2	714.8	697.4
15°	1002.2	950.0	931.1	911.5	856.2	801.8	777.6	750.4	722.4	700.4	674.7
17.5°	1027.2	984.1	944.0	917.5	860.0	811.6	764.7	733.7	704.2	674.0	652.8
20°	1057.5	994.7	959.9	924.3	867.6	804.1	757.2	718.6	682.3	655.0	629.3
22.5°	1087.7	1003.0	974.2	935.7	869.1	796.5	743.5	705.0	663.4	636.1	608.1
25°	1084.7	1015.1	967.4	934.9	854.0	789.7	727.7	682.3	643.7	608.9	580.9
27.5°	1087.0	1001.5	953.1	915.2	843.4	779.9	711.0	663.4	623.3	587.0	557.5
30°	1087.7	981.1	938.7	893.3	823.7	756.4	692.1	643.7	601.3	562.0	535.5
32.5°	1085.4	964.4	911.5	870.6	792.7	733.7	670.2	618.7	575.6	539.3	514.4
35°	1080.1	944.7	883.5	832.0	760.9	701.2	649.8	596.8	550.7	517.4	488.6
37.5°	1065.8	923.6	854.0	803.3	723.9	663.4	618.0	574.1	529.5	490.1	465.9
40°	1055.2	894.8	824.5	769.3	683.8	624.8	587.0	545.4	501.5	465.9	442.5
42.5°	1031.0	867.6	794.2	728.4	644.5	583.9	548.4	515.1	477.3	442.5	421.3
45°	991.6	838.1	757.2	690.6	601.3	543.9	511.3	484.1	450.8	417.5	396.4
47.5°	936.4	795.7	717.8	651.3	559.0	500.7	468.2	447.8	421.3	393.3	375.2
50°	876.7	749.6	677.7	611.9	518.1	461.4	429.6	410.7	393.3	367.6	350.2
52.5°	798.8	700.4	631.6	568.8	474.3	419.8	391.8	378.2	360.0	341.9	326.8
55°	723.1	636.9	580.2	520.4	431.1	380.5	353.2	338.9	328.3	313.2	301.0
57.5°	635.4	577.9	525.7	471.2	391.1	344.9	319.2	301.8	295.0	288.2	276.8
60°	554.4	510.6	468.2	422.8	349.5	307.9	282.9	269.3	262.5	257.9	250.4
62.5°	480.3	446.3	410.0	373.7	307.1	269.3	250.4	236.8	230.7	229.9	223.1
65°	409.2	385.0	355.5	320.0	267.8	234.5	216.3	208.0	201.2	201.2	195.9
67.5°	338.1	321.5	298.0	273.1	232.2	201.2	184.6	177.0	173.2	173.2	169.4
70°	281.4	270.0	248.9	226.9	191.4	167.9	155.1	148.3	146.0	146.7	143.7
72.5°	228.4	216.3	198.9	183.0	156.6	139.2	130.1	122.5	118.8	119.5	118.8
75°	177.0	170.9	155.8	143.7	122.5	110.4	102.1	98.3	95.3	96.1	94.6
77.5°	133.1	124.1	115.7	107.4	94.6	84.7	77.9	74.1	71.9	71.9	71.9
80°	90.8	89.3	82.4	77.9	67.3	59.8	54.5	53.7	51.4	51.4	51.4
82.5°	59.0	55.2	51.4	48.4	42.4	37.8	35.6	34.0	33.3	32.5	34.0
85°	32.5	30.3	28.7	25.7	23.4	21.2	18.9	18.2	17.4	18.2	17.4
87.5°	12.9	10.6	10.6	9.8	9.1	8.3	8.3	6.8	6.8	6.1	6.1
90°	6.9	5.6	5.0	4.5	3.5	2.5	1.5	0.5	1.5	2.5	3.5
92.5°	9.0	8.1	7.7	8.0	8.6	9.2	9.8	10.4	9.8	9.2	8.6
95°	10.7	9.6	9.0	11.1	15.2	19.3	23.4	27.5	23.4	19.3	15.2
97.5°	29.7	34.8	37.4	38.8	41.6	44.4	47.2	50.0	47.2	44.4	41.6
100°	61.7	77.3	85.1	84.1	82.1	80.1	78.1	76.1	78.1	80.1	82.1
102.5°	85.6	103.0	111.7	111.0	109.7	108.4	107.1	105.8	107.1	108.4	109.7
105°	125.6	134.6	139.1	138.6	137.5	136.4	135.3	134.2	135.3	136.4	137.5
107.5°	170.7	169.2	168.4	168.0	167.1	166.2	165.3	164.4	165.3	166.2	167.1
110°	199.8	198.7	198.1	197.7	196.9	196.1	195.3	194.5	195.3	196.1	196.9

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	228.2	227.1	226.5	226.2	225.5	224.8	224.1	223.4	224.1	224.8	225.5
115°	255.8	254.9	254.4	254.1	253.5	252.9	252.3	251.7	252.3	252.9	253.5
117.5°	283.5	283.0	282.8	282.4	281.7	281.0	280.3	279.6	280.3	281.0	281.7
120°	309.8	309.5	309.4	308.9	308.0	307.1	306.2	305.3	306.2	307.1	308.0
122.5°	335.2	334.8	334.6	334.2	333.5	332.8	332.1	331.4	332.1	332.8	333.5
125°	359.0	358.6	358.4	358.0	357.2	356.4	355.6	354.8	355.6	356.4	357.2
127.5°	382.6	382.1	381.9	381.5	380.7	379.9	379.1	378.3	379.1	379.9	380.7
130°	404.1	403.7	403.5	403.1	402.3	401.5	400.7	399.9	400.7	401.5	402.3
132.5°	424.6	424.3	424.2	423.8	423.0	422.2	421.4	420.6	421.4	422.2	423.0
135°	445.1	444.7	444.5	444.2	443.6	443.0	442.4	441.8	442.4	443.0	443.6
137.5°	463.7	463.5	463.4	463.0	462.2	461.4	460.6	459.8	460.6	461.4	462.2
140°	480.9	480.6	480.5	480.2	479.6	479.0	478.4	477.8	478.4	479.0	479.6
142.5°	497.6	497.3	497.1	496.8	496.2	495.6	495.0	494.4	495.0	495.6	496.2
145°	513.2	513.0	512.9	512.5	511.8	511.1	510.4	509.7	510.4	511.1	511.8
147.5°	527.2	527.0	526.9	526.6	526.1	525.6	525.1	524.6	525.1	525.6	526.1
150°	539.8	539.6	539.5	539.3	539.0	538.7	538.4	538.1	538.4	538.7	539.0
152.5°	550.9	550.8	550.7	550.7	550.6	550.5	550.4	550.3	550.4	550.5	550.6
155°	560.8	560.7	560.6	560.7	560.9	561.1	561.3	561.5	561.3	561.1	560.9
157.5°	570.4	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5	570.5
160°	578.0	578.1	578.2	578.2	578.3	578.4	578.5	578.6	578.5	578.4	578.3
162.5°	584.8	584.9	584.9	585.1	585.4	585.7	586.0	586.3	586.0	585.7	585.4
165°	590.7	590.8	590.8	591.0	591.3	591.6	591.9	592.2	591.9	591.6	591.3
167.5°	595.3	595.3	595.3	595.5	595.9	596.3	596.7	597.1	596.7	596.3	595.9
170°	599.4	599.4	599.4	599.6	600.0	600.4	600.8	601.2	600.8	600.4	600.0
172.5°	601.8	601.7	601.6	601.9	602.4	602.9	603.4	603.9	603.4	602.9	602.4
175°	604.0	603.9	603.9	604.1	604.6	605.1	605.6	606.1	605.6	605.1	604.6
177.5°	604.9	604.8	604.8	605.0	605.5	606.0	606.5	607.0	606.5	606.0	605.5
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	768.5	767.7	769.3	764.7	757.2	753.4	742.8	740.5	739.8	740.5	741.3
5°	747.3	746.6	744.3	736.7	727.7	720.9	708.0	707.2	702.7	698.2	700.4
7.5°	726.9	723.9	719.3	709.5	697.4	689.8	679.2	671.7	665.6	661.9	658.8
10°	706.5	701.9	697.4	684.5	669.4	658.1	645.2	639.2	632.4	629.3	626.3
12.5°	680.0	675.5	667.1	652.0	642.9	628.6	615.7	609.7	605.9	599.8	596.0
15°	658.8	649.8	645.2	629.3	610.4	608.9	585.5	583.9	576.4	576.4	570.3
17.5°	634.6	627.8	619.5	603.6	590.0	576.4	564.3	559.7	552.9	551.4	548.4
20°	611.2	602.1	599.1	583.2	568.8	552.2	539.3	534.8	531.8	528.7	531.0
22.5°	587.0	579.4	571.8	557.5	546.9	530.2	522.7	518.1	513.6	512.1	512.8
25°	563.5	556.7	549.1	534.8	523.4	509.8	503.0	500.7	498.5	498.5	497.7
27.5°	540.8	534.0	527.2	514.4	503.0	493.2	487.9	485.6	483.3	484.9	486.4
30°	517.4	511.3	505.3	493.9	484.9	475.8	472.8	471.2	470.5	474.3	474.3
32.5°	496.2	490.9	486.4	475.8	466.7	459.1	456.9	457.6	458.4	460.6	462.2
35°	474.3	470.5	465.9	456.9	449.3	442.5	443.3	443.3	444.8	448.5	451.6
37.5°	454.6	449.3	445.5	438.0	431.9	425.9	428.1	430.4	431.9	436.4	438.0
40°	431.1	428.9	425.9	418.3	413.0	412.2	413.0	414.5	417.5	419.8	422.1
42.5°	412.2	409.2	405.4	399.4	394.8	395.6	396.4	397.9	399.4	403.2	405.4
45°	391.1	388.8	385.8	380.5	376.7	377.4	378.2	378.2	379.7	384.3	385.8
47.5°	367.6	368.4	364.6	359.3	357.0	357.0	357.0	358.5	362.3	363.8	364.6
50°	344.9	343.4	342.7	337.4	335.8	335.1	335.8	336.6	341.9	341.1	343.4
52.5°	320.7	320.7	320.0	316.9	314.7	314.7	313.2	316.9	318.4	320.0	322.2
55°	297.3	295.0	294.2	292.7	289.7	288.9	290.5	295.0	296.5	298.0	300.3
57.5°	271.5	271.5	270.0	267.8	267.8	267.8	267.8	270.8	273.1	274.6	279.1
60°	248.1	245.1	242.8	242.8	242.8	242.0	246.6	246.6	251.1	251.9	253.4
62.5°	220.1	218.6	217.1	217.8	217.1	218.6	220.1	223.1	223.9	226.2	228.4
65°	193.6	193.6	192.1	196.7	193.6	193.6	197.4	197.4	198.9	201.2	204.2
67.5°	167.9	168.7	167.2	167.2	168.7	169.4	170.2	173.2	174.0	177.0	180.8
70°	141.4	143.0	143.7	142.2	143.7	145.2	146.7	147.5	150.5	152.0	154.3
72.5°	118.0	119.5	117.2	118.0	118.8	120.3	121.0	122.5	124.1	128.6	130.1
75°	94.6	93.8	93.0	96.1	94.6	97.6	98.3	98.3	99.8	103.6	105.1
77.5°	72.6	72.6	73.4	71.9	74.1	73.4	74.1	76.4	78.7	78.7	84.7
80°	50.7	52.2	52.2	52.2	52.9	53.7	52.2	56.0	56.7	56.7	59.0
82.5°	32.5	33.3	32.5	34.0	34.0	35.6	34.8	35.6	37.1	38.6	39.3
85°	17.4	17.4	18.9	18.9	18.2	18.9	18.2	18.9	20.4	20.4	21.2
87.5°	6.1	6.1	6.1	6.1	6.8	6.1	6.8	6.8	6.1	6.1	8.3
90°	4.5	5.0	5.6	6.9	8.2	9.5	10.8	11.2	11.6	12.0	12.4
92.5°	8.0	7.7	8.1	9.0	9.9	10.8	11.7	12.4	13.1	13.8	14.5
95°	11.1	9.0	9.6	10.7	11.8	12.9	14.0	14.7	15.4	16.1	16.8
97.5°	38.8	37.4	34.8	29.7	24.6	19.5	14.4	15.2	16.0	16.8	17.6
100°	84.1	85.1	77.3	61.7	46.1	30.5	14.9	15.7	16.5	17.3	18.1
102.5°	111.0	111.7	103.0	85.6	68.1	50.7	33.3	30.0	26.7	23.4	20.1
105°	138.6	139.1	134.6	125.6	116.6	107.6	98.6	80.9	63.2	45.5	27.8
107.5°	168.0	168.4	169.2	170.7	172.2	173.7	175.2	159.8	144.4	128.9	113.5
110°	197.7	198.1	198.7	199.8	200.9	202.0	203.1	199.8	196.5	193.2	189.9

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	226.2	226.5	227.1	228.2	229.3	230.4	231.5	232.4	233.3	234.2	235.1
115°	254.1	254.4	254.9	255.8	256.7	257.6	258.5	259.5	260.5	261.5	262.5
117.5°	282.4	282.8	283.0	283.5	284.0	284.5	285.0	285.8	286.6	287.4	288.2
120°	308.9	309.4	309.5	309.8	310.1	310.4	310.7	311.5	312.3	313.1	313.9
122.5°	334.2	334.6	334.8	335.2	335.6	336.0	336.4	336.9	337.4	337.9	338.4
125°	358.0	358.4	358.6	359.0	359.4	359.8	360.2	360.4	360.6	360.8	361.0
127.5°	381.5	381.9	382.1	382.6	383.1	383.6	384.1	384.4	384.7	385.0	385.3
130°	403.1	403.5	403.7	404.1	404.5	404.9	405.3	405.7	406.1	406.5	406.9
132.5°	423.8	424.2	424.3	424.6	424.9	425.2	425.5	425.9	426.3	426.7	427.1
135°	444.2	444.5	444.7	445.1	445.5	445.9	446.3	446.6	446.9	447.2	447.5
137.5°	463.0	463.4	463.5	463.7	463.9	464.1	464.3	464.8	465.3	465.8	466.3
140°	480.2	480.5	480.6	480.9	481.2	481.5	481.8	482.2	482.6	483.0	483.4
142.5°	496.8	497.1	497.3	497.6	497.9	498.2	498.5	498.8	499.1	499.4	499.7
145°	512.5	512.9	513.0	513.2	513.4	513.6	513.8	514.0	514.2	514.4	514.6
147.5°	526.6	526.9	527.0	527.2	527.4	527.6	527.8	528.0	528.2	528.4	528.6
150°	539.3	539.5	539.6	539.8	540.0	540.2	540.4	540.6	540.8	541.0	541.2
152.5°	550.7	550.7	550.8	550.9	551.0	551.1	551.2	551.6	552.0	552.4	552.8
155°	560.7	560.6	560.7	560.8	560.9	561.0	561.1	561.6	562.1	562.6	563.1
157.5°	570.5	570.5	570.5	570.4	570.3	570.2	570.1	570.7	571.3	571.9	572.5
160°	578.2	578.2	578.1	578.0	577.9	577.8	577.7	578.3	578.9	579.5	580.1
162.5°	585.1	584.9	584.9	584.8	584.7	584.6	584.5	585.2	585.9	586.6	587.3
165°	591.0	590.8	590.8	590.7	590.6	590.5	590.4	591.2	592.0	592.8	593.6
167.5°	595.5	595.3	595.3	595.3	595.3	595.3	595.3	596.1	596.9	597.7	598.5
170°	599.6	599.4	599.4	599.4	599.4	599.4	599.4	600.2	601.0	601.8	602.6
172.5°	601.9	601.6	601.7	601.8	601.9	602.0	602.1	602.9	603.7	604.5	605.3
175°	604.1	603.9	603.9	604.0	604.1	604.2	604.3	605.0	605.7	606.4	607.1
177.5°	605.0	604.8	604.8	604.9	605.0	605.1	605.2	606.0	606.8	607.6	608.4
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	740.5	741.3	738.2	736.0	742.0	738.2	738.2	739.0	737.5	739.8	739.0
5°	698.9	699.7	694.4	695.9	692.9	692.1	691.4	695.9	695.1	694.4	695.9
7.5°	658.1	658.1	655.8	654.3	654.3	652.0	655.0	654.3	655.8	655.8	658.1
10°	624.0	625.5	621.8	618.0	617.2	618.0	618.0	618.7	619.5	624.8	624.0
12.5°	596.0	593.8	593.0	590.8	587.0	585.5	583.9	592.3	590.0	590.0	590.0
15°	565.0	570.3	569.6	562.8	561.3	564.3	562.8	562.8	570.3	569.6	568.8
17.5°	548.4	546.9	545.4	541.6	542.3	541.6	542.3	542.3	546.9	546.9	546.9
20°	529.5	526.5	526.5	524.9	524.9	522.7	525.7	526.5	529.5	529.5	530.2
22.5°	512.8	510.6	510.6	509.8	511.3	508.3	511.3	512.1	512.1	514.4	514.4
25°	498.5	497.0	497.0	498.5	498.5	498.5	498.5	501.5	499.2	500.0	499.2
27.5°	485.6	486.4	487.1	487.9	487.1	487.9	488.6	490.1	490.9	490.1	488.6
30°	473.5	475.8	476.5	476.5	478.0	478.8	479.6	479.6	480.3	478.0	479.6
32.5°	464.4	464.4	465.9	466.7	468.2	469.0	469.0	470.5	469.7	467.5	468.2
35°	451.6	451.6	454.6	456.1	458.4	457.6	458.4	458.4	459.1	457.6	455.4
37.5°	438.7	440.2	440.2	443.3	444.0	444.8	444.0	445.5	444.8	443.3	442.5
40°	423.6	422.8	423.6	425.9	426.6	426.6	426.6	428.1	428.1	428.1	427.4
42.5°	404.7	406.9	406.2	408.5	407.7	407.7	409.2	410.7	411.5	409.2	410.0
45°	386.5	386.5	388.0	388.0	388.8	388.8	391.8	390.3	391.8	390.3	391.1
47.5°	366.9	367.6	367.6	368.4	369.9	371.4	369.9	370.6	370.6	371.4	369.9
50°	344.9	344.9	346.4	348.7	351.7	350.2	349.5	352.5	350.2	350.2	348.7
52.5°	322.2	324.5	325.3	327.5	329.8	330.5	331.3	329.8	330.5	328.3	329.0
55°	300.3	301.0	304.1	306.3	308.6	308.6	307.9	308.6	309.4	306.3	306.3
57.5°	278.4	280.6	283.7	283.7	286.7	286.7	285.9	285.9	286.7	284.4	283.7
60°	254.9	257.2	261.0	261.0	265.5	266.3	264.7	263.2	263.2	261.0	261.7
62.5°	229.9	232.2	234.5	238.3	241.3	239.8	242.8	239.8	240.5	236.0	236.0
65°	208.0	208.8	212.5	216.3	216.3	217.8	216.3	217.1	214.8	214.8	211.8
67.5°	182.3	182.3	186.1	189.9	193.6	193.6	193.6	191.4	191.4	189.1	189.1
70°	159.6	158.8	162.6	164.9	167.2	167.9	166.4	165.7	164.1	161.9	161.1
72.5°	131.6	133.1	136.9	138.4	142.2	141.4	145.2	140.7	140.7	136.9	136.2
75°	106.7	108.2	111.9	114.2	116.5	116.5	118.8	116.5	113.5	111.9	111.2
77.5°	84.7	84.0	87.0	90.8	91.5	90.8	92.3	91.5	88.5	88.5	87.0
80°	60.5	62.8	65.8	65.1	68.1	67.3	67.3	65.8	65.8	63.5	65.1
82.5°	40.1	42.4	43.1	42.4	43.1	44.6	45.4	44.6	44.6	43.1	43.9
85°	21.2	21.2	22.7	23.4	22.7	22.7	23.4	25.7	24.2	22.7	24.2
87.5°	6.8	6.1	6.1	6.8	6.1	6.1	6.8	6.8	7.6	7.6	7.6
90°	12.6	12.7	12.9	13.1	13.3	13.5	13.3	13.1	12.9	12.7	12.6
92.5°	14.9	14.9	15.0	15.1	15.2	15.3	15.2	15.1	15.0	14.9	14.9
95°	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1
97.5°	18.0	18.1	18.2	18.3	18.4	18.5	18.4	18.3	18.2	18.1	18.0
100°	18.5	18.5	18.6	18.7	18.8	18.9	18.8	18.7	18.6	18.5	18.5
102.5°	18.5	18.6	18.8	19.0	19.2	19.4	19.2	19.0	18.8	18.6	18.5
105°	18.9	19.0	19.2	19.4	19.6	19.8	19.6	19.4	19.2	19.0	18.9
107.5°	105.8	99.2	86.1	73.0	59.9	46.8	59.9	73.0	86.1	99.2	105.8
110°	188.2	181.0	166.7	152.4	138.1	123.8	138.1	152.4	166.7	181.0	188.2

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	235.5	235.4	235.2	235.0	234.8	234.6	234.8	235.0	235.2	235.4	235.5
115°	263.0	263.2	263.6	264.0	264.4	264.8	264.4	264.0	263.6	263.2	263.0
117.5°	288.6	288.7	288.8	288.9	289.0	289.1	289.0	288.9	288.8	288.7	288.6
120°	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3
122.5°	338.6	338.7	338.8	338.9	339.0	339.1	339.0	338.9	338.8	338.7	338.6
125°	361.1	361.2	361.4	361.6	361.8	362.0	361.8	361.6	361.4	361.2	361.1
127.5°	385.5	385.4	385.2	385.0	384.8	384.6	384.8	385.0	385.2	385.4	385.5
130°	407.1	407.0	406.8	406.6	406.4	406.2	406.4	406.6	406.8	407.0	407.1
132.5°	427.3	427.2	426.9	426.6	426.3	426.0	426.3	426.6	426.9	427.2	427.3
135°	447.6	447.5	447.2	446.9	446.6	446.3	446.6	446.9	447.2	447.5	447.6
137.5°	466.5	466.4	466.2	466.0	465.8	465.6	465.8	466.0	466.2	466.4	466.5
140°	483.6	483.5	483.3	483.1	482.9	482.7	482.9	483.1	483.3	483.5	483.6
142.5°	499.8	499.7	499.4	499.1	498.8	498.5	498.8	499.1	499.4	499.7	499.8
145°	514.7	514.7	514.7	514.7	514.7	514.7	514.7	514.7	514.7	514.7	514.7
147.5°	528.7	528.4	527.9	527.4	526.9	526.4	526.9	527.4	527.9	528.4	528.7
150°	541.3	541.1	540.8	540.5	540.2	539.9	540.2	540.5	540.8	541.1	541.3
152.5°	553.0	552.7	552.2	551.7	551.2	550.7	551.2	551.7	552.2	552.7	553.0
155°	563.3	563.0	562.4	561.8	561.2	560.6	561.2	561.8	562.4	563.0	563.3
157.5°	572.8	572.4	571.6	570.8	570.0	569.2	570.0	570.8	571.6	572.4	572.8
160°	580.4	580.1	579.4	578.7	578.0	577.3	578.0	578.7	579.4	580.1	580.4
162.5°	587.7	587.4	586.8	586.1	585.5	584.9	585.5	586.1	586.8	587.4	587.7
165°	594.0	593.6	592.9	592.2	591.5	590.8	591.5	592.2	592.9	593.6	594.0
167.5°	598.9	598.5	597.7	596.9	596.1	595.3	596.1	596.9	597.7	598.5	598.9
170°	603.0	602.6	601.8	601.0	600.2	599.4	600.2	601.0	601.8	602.6	603.0
172.5°	605.7	605.2	604.3	603.4	602.5	601.6	602.5	603.4	604.3	605.2	605.7
175°	607.5	607.1	606.3	605.5	604.7	603.9	604.7	605.5	606.3	607.1	607.5
177.5°	608.8	608.3	607.3	606.3	605.3	604.3	605.3	606.3	607.3	608.3	608.8
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6	780.6
2.5°	741.3	742.8	743.5	740.5	738.2	742.0	747.3	751.1	754.1	757.9	760.2
5°	697.4	702.7	702.7	704.2	706.5	710.3	720.1	726.9	733.0	737.5	741.3
7.5°	660.3	664.1	666.4	670.2	674.0	679.2	690.6	700.4	709.5	714.8	720.9
10°	627.1	630.1	633.9	636.1	642.9	650.5	664.9	673.2	683.8	692.1	699.7
12.5°	595.3	605.9	608.1	607.4	613.4	621.8	636.1	649.0	660.3	668.7	677.0
15°	572.6	576.4	580.9	580.2	593.0	595.3	607.4	622.5	637.6	642.9	650.5
17.5°	547.6	553.7	558.2	560.5	564.3	572.6	583.9	595.3	615.0	615.7	635.4
20°	528.0	534.0	537.0	540.1	542.3	552.2	562.0	574.9	590.8	599.1	609.7
22.5°	515.1	518.1	520.4	522.7	525.7	531.0	543.1	557.5	568.1	577.1	583.9
25°	500.0	503.0	506.0	507.5	509.8	512.8	521.9	533.3	548.4	554.4	561.3
27.5°	489.4	489.4	490.9	490.9	493.9	497.0	503.8	514.4	526.5	534.0	543.1
30°	478.0	477.3	478.0	477.3	476.5	481.1	487.1	496.2	504.5	513.6	519.6
32.5°	466.7	465.9	465.9	466.7	463.7	465.9	469.0	477.3	486.4	490.9	497.7
35°	454.6	453.1	453.1	453.1	451.6	450.1	453.1	460.6	466.7	472.8	478.0
37.5°	442.5	440.2	440.2	438.7	437.2	434.9	434.9	441.0	449.3	451.6	458.4
40°	425.9	425.9	424.3	423.6	422.1	420.6	418.3	423.6	431.1	433.4	438.7
42.5°	409.2	406.9	406.2	406.2	406.2	403.9	402.4	406.2	410.7	414.5	417.5
45°	390.3	388.8	389.5	388.8	387.3	386.5	385.8	387.3	392.6	394.1	397.9
47.5°	369.9	369.1	369.1	368.4	367.6	368.4	365.3	369.1	370.6	372.2	375.2
50°	348.7	347.9	347.2	346.4	346.4	347.2	346.4	346.4	349.5	351.0	354.0
52.5°	327.5	325.3	325.3	324.5	324.5	323.0	324.5	325.3	326.8	328.3	329.8
55°	304.8	304.8	302.6	302.6	301.0	301.0	301.8	301.0	304.1	305.6	305.6
57.5°	282.9	279.9	280.6	279.1	277.6	276.8	276.8	278.4	279.9	279.9	281.4
60°	259.4	256.4	255.7	252.6	254.2	251.9	252.6	252.6	255.7	254.2	255.7
62.5°	236.0	232.2	229.9	228.4	228.4	229.2	227.7	226.9	228.4	229.9	233.0
65°	211.0	208.8	206.5	204.2	204.2	203.5	205.0	202.7	202.0	202.7	204.2
67.5°	185.3	183.0	180.8	178.5	179.3	177.0	175.5	177.8	176.2	177.0	178.5
70°	160.4	158.8	154.3	152.8	152.0	152.8	152.0	150.5	152.8	152.0	152.8
72.5°	135.4	133.9	131.6	127.8	127.8	127.1	126.3	126.3	125.6	125.6	125.6
75°	111.2	108.2	105.9	105.1	103.6	102.9	102.1	100.6	101.4	102.1	100.6
77.5°	86.2	82.4	81.7	81.7	79.4	79.4	80.2	79.4	78.7	78.7	78.7
80°	63.5	60.5	60.5	59.0	57.5	57.5	57.5	57.5	56.7	56.0	56.7
82.5°	40.8	40.1	39.3	39.3	40.8	37.8	39.3	38.6	37.8	37.8	37.1
85°	22.7	23.4	22.7	23.4	21.9	22.7	22.7	22.7	21.9	22.7	21.2
87.5°	8.3	8.3	8.3	9.1	9.1	9.1	9.1	9.1	9.8	9.1	9.1
90°	12.4	12.0	11.6	11.2	10.8	9.5	8.2	6.9	5.6	5.0	4.5
92.5°	14.5	13.8	13.1	12.4	11.7	10.8	9.9	9.0	8.1	7.7	8.0
95°	16.8	16.1	15.4	14.7	14.0	12.9	11.8	10.7	9.6	9.0	11.1
97.5°	17.6	16.8	16.0	15.2	14.4	19.5	24.6	29.7	34.8	37.4	38.8
100°	18.1	17.3	16.5	15.7	14.9	30.5	46.1	61.7	77.3	85.1	84.1
102.5°	20.1	23.4	26.7	30.0	33.3	50.7	68.1	85.6	103.0	111.7	111.0
105°	27.8	45.5	63.2	80.9	98.6	107.6	116.6	125.6	134.6	139.1	138.6
107.5°	113.5	128.9	144.4	159.8	175.2	173.7	172.2	170.7	169.2	168.4	168.0
110°	189.9	193.2	196.5	199.8	203.1	202.0	200.9	199.8	198.7	198.1	197.7

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	235.1	234.2	233.3	232.4	231.5	230.4	229.3	228.2	227.1	226.5	226.2
115°	262.5	261.5	260.5	259.5	258.5	257.6	256.7	255.8	254.9	254.4	254.1
117.5°	288.2	287.4	286.6	285.8	285.0	284.5	284.0	283.5	283.0	282.8	282.4
120°	313.9	313.1	312.3	311.5	310.7	310.4	310.1	309.8	309.5	309.4	308.9
122.5°	338.4	337.9	337.4	336.9	336.4	336.0	335.6	335.2	334.8	334.6	334.2
125°	361.0	360.8	360.6	360.4	360.2	359.8	359.4	359.0	358.6	358.4	358.0
127.5°	385.3	385.0	384.7	384.4	384.1	383.6	383.1	382.6	382.1	381.9	381.5
130°	406.9	406.5	406.1	405.7	405.3	404.9	404.5	404.1	403.7	403.5	403.1
132.5°	427.1	426.7	426.3	425.9	425.5	425.2	424.9	424.6	424.3	424.2	423.8
135°	447.5	447.2	446.9	446.6	446.3	445.9	445.5	445.1	444.7	444.5	444.2
137.5°	466.3	465.8	465.3	464.8	464.3	464.1	463.9	463.7	463.5	463.4	463.0
140°	483.4	483.0	482.6	482.2	481.8	481.5	481.2	480.9	480.6	480.5	480.2
142.5°	499.7	499.4	499.1	498.8	498.5	498.2	497.9	497.6	497.3	497.1	496.8
145°	514.6	514.4	514.2	514.0	513.8	513.6	513.4	513.2	513.0	512.9	512.5
147.5°	528.6	528.4	528.2	528.0	527.8	527.6	527.4	527.2	527.0	526.9	526.6
150°	541.2	541.0	540.8	540.6	540.4	540.2	540.0	539.8	539.6	539.5	539.3
152.5°	552.8	552.4	552.0	551.6	551.2	551.1	551.0	550.9	550.8	550.7	550.7
155°	563.1	562.6	562.1	561.6	561.1	561.0	560.9	560.8	560.7	560.6	560.7
157.5°	572.5	571.9	571.3	570.7	570.1	570.2	570.3	570.4	570.5	570.5	570.5
160°	580.1	579.5	578.9	578.3	577.7	577.8	577.9	578.0	578.1	578.2	578.2
162.5°	587.3	586.6	585.9	585.2	584.5	584.6	584.7	584.8	584.9	584.9	585.1
165°	593.6	592.8	592.0	591.2	590.4	590.5	590.6	590.7	590.8	590.8	591.0
167.5°	598.5	597.7	596.9	596.1	595.3	595.3	595.3	595.3	595.3	595.3	595.5
170°	602.6	601.8	601.0	600.2	599.4	599.4	599.4	599.4	599.4	599.4	599.6
172.5°	605.3	604.5	603.7	602.9	602.1	602.0	601.9	601.8	601.7	601.6	601.9
175°	607.1	606.4	605.7	605.0	604.3	604.2	604.1	604.0	603.9	603.9	604.1
177.5°	608.4	607.6	606.8	606.0	605.2	605.1	605.0	604.9	604.8	604.8	605.0
180°	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1	606.1

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	780.6	780.6	780.6	780.6
2.5°	764.0	766.2	773.8	782.9
5°	748.8	754.9	765.5	779.9
7.5°	732.2	741.3	756.4	774.6
10°	713.3	726.1	745.1	767.7
12.5°	692.9	709.5	733.7	757.2
15°	680.0	696.6	718.6	744.3
17.5°	655.0	674.7	697.4	733.7
20°	629.3	651.3	680.8	717.1
22.5°	609.7	633.1	661.1	699.7
25°	586.2	610.4	640.7	680.8
27.5°	561.3	585.5	619.5	661.9
30°	542.3	565.8	598.3	643.7
32.5°	519.6	542.3	576.4	624.0
35°	493.9	519.6	552.2	600.6
37.5°	474.3	497.7	531.8	577.9
40°	453.1	473.5	506.8	552.2
42.5°	430.4	453.1	481.8	527.2
45°	409.2	425.9	455.4	498.5
47.5°	386.5	405.4	428.1	461.4
50°	362.3	378.2	403.2	425.9
52.5°	338.9	351.7	372.9	390.3
55°	313.9	326.8	342.7	353.2
57.5°	290.5	299.5	310.1	316.9
60°	261.7	270.8	277.6	284.4
62.5°	236.0	242.8	246.6	250.4
65°	209.5	213.3	215.6	218.6
67.5°	180.8	184.6	185.3	189.9
70°	154.3	155.1	156.6	158.8
72.5°	129.3	130.9	130.1	131.6
75°	103.6	105.1	103.6	105.1
77.5°	78.7	80.2	80.2	82.4
80°	56.7	57.5	58.2	58.2
82.5°	37.1	39.3	37.8	38.6
85°	21.2	21.9	21.9	22.7
87.5°	9.8	10.6	9.8	11.3
90°	3.5	2.5	1.5	0.5
92.5°	8.6	9.2	9.8	10.4
95°	15.2	19.3	23.4	27.5
97.5°	41.6	44.4	47.2	50.0
100°	82.1	80.1	78.1	76.1
102.5°	109.7	108.4	107.1	105.8
105°	137.5	136.4	135.3	134.2
107.5°	167.1	166.2	165.3	164.4
110°	196.9	196.1	195.3	194.5

TEST NUMBER: P1030910

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	225.5	224.8	224.1	223.4
115°	253.5	252.9	252.3	251.7
117.5°	281.7	281.0	280.3	279.6
120°	308.0	307.1	306.2	305.3
122.5°	333.5	332.8	332.1	331.4
125°	357.2	356.4	355.6	354.8
127.5°	380.7	379.9	379.1	378.3
130°	402.3	401.5	400.7	399.9
132.5°	423.0	422.2	421.4	420.6
135°	443.6	443.0	442.4	441.8
137.5°	462.2	461.4	460.6	459.8
140°	479.6	479.0	478.4	477.8
142.5°	496.2	495.6	495.0	494.4
145°	511.8	511.1	510.4	509.7
147.5°	526.1	525.6	525.1	524.6
150°	539.0	538.7	538.4	538.1
152.5°	550.6	550.5	550.4	550.3
155°	560.9	561.1	561.3	561.5
157.5°	570.5	570.5	570.5	570.5
160°	578.3	578.4	578.5	578.6
162.5°	585.4	585.7	586.0	586.3
165°	591.3	591.6	591.9	592.2
167.5°	595.9	596.3	596.7	597.1
170°	600.0	600.4	600.8	601.2
172.5°	602.4	602.9	603.4	603.9
175°	604.6	605.1	605.6	606.1
177.5°	605.5	606.0	606.5	607.0
180°	606.1	606.1	606.1	606.1

(END OF REPORT)