

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: P1030909

Luminaire Tested: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030909
REPORT IS A COMBINATION OF REPORTS P991716 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-A1_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

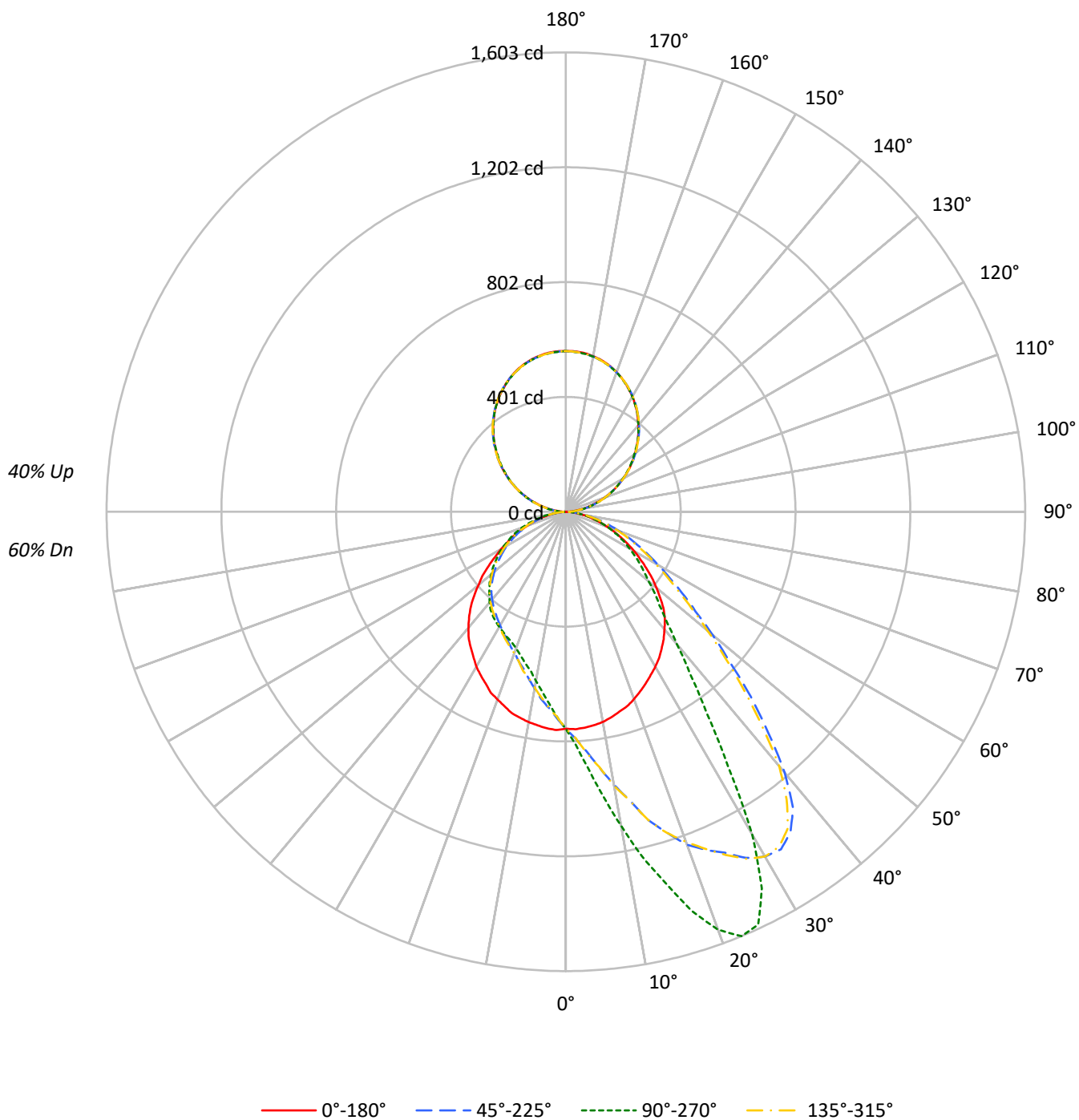
Lumens per Lamp: N/A
Luminaire Lumens: 3840.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	100	96	92	89	94	90	87	84	78	76	74	68	66	64	58	57	55
2	92	84	78	73	85	79	74	69	69	65	61	60	57	54	51	49	47
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	40
4	77	66	58	52	71	62	55	49	54	49	45	48	43	40	41	38	35
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	34	31
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	34	30	27
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	25	22
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20
10	49	37	29	24	46	35	28	23	31	25	22	27	23	20	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8149	8149	8149	8149
5°	8155	9389	8179	7008
10°	8103	11363	8110	6120
15°	7991	13475	8055	5509
20°	7895	15514	7911	5068
25°	7751	15905	7768	4839
30°	7649	13141	7649	4689
35°	7523	8788	7475	4556
40°	7370	6344	7279	4353
45°	7179	5026	6973	4100
50°	6716	4267	6477	3852
55°	6208	3750	5956	3575
60°	5691	3266	5390	3284
65°	5125	2795	4876	2897
70°	4538	2321	4235	2442
75°	3880	1750	3629	1885
80°	3067	1168	2828	1238
85°	2113	536	1691	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 13142 cd/sqm

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	1.9
10°-20°	239.1	6.2
20°-30°	402.4	10.5
30°-40°	454.7	11.8
40°-50°	407.3	10.6
50°-60°	328.8	8.6
60°-70°	229.1	6.0
70°-80°	120.2	3.1
80°-90°	30.0	0.8
90°-100°	36.1	0.9
100°-110°	109.3	2.8
110°-120°	186.0	4.8
120°-130°	244.7	6.4
130°-140°	275.1	7.2
140°-150°	270.4	7.0
150°-160°	227.7	5.9
160°-170°	151.6	3.9
170°-180°	53.1	1.4
0°-30°	716.0	18.6
0°-40°	1170.7	30.5
0°-60°	1906.8	49.7
0°-90°	2286.2	59.5
90°-120°	331.4	8.6
90°-150°	1121.5	29.2
90°-180°	1554.0	40.5
0°-180°	3840.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	757	757	757	757	757	
5°	756	899	759	671	756	72
15°	722	1339	728	547	722	204
25°	660	1589	662	483	660	305
35°	582	856	579	444	582	365
45°	483	462	470	377	483	370
55°	343	314	329	299	343	307
65°	212	204	202	211	212	211
75°	102	105	95	113	102	109
85°	22	24	18	22	22	25
90°	0	13	0	13	0	3
95°	26	34	26	34	26	29
105°	99	105	99	105	99	106
115°	187	188	187	188	187	185
125°	274	271	274	271	274	244
135°	356	355	356	355	356	274
145°	431	431	431	431	431	269
155°	494	493	494	493	494	227
165°	538	536	538	536	538	152
175°	560	557	560	557	560	53
180°	561	561	561	561	561	

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	759.3	765.2	768.1	772.5	776.9	783.5	785.7	789.4	787.9	790.8	792.3
5°	756.4	766.6	775.4	786.4	796.7	804.0	811.4	823.1	831.9	833.4	840.0
7.5°	751.2	765.9	781.3	796.7	816.5	828.2	841.4	857.6	870.8	892.1	900.1
10°	744.6	765.2	787.2	808.4	835.6	853.9	870.1	897.2	924.3	946.4	966.9
12.5°	734.3	760.0	788.6	820.2	855.4	876.7	898.7	934.6	975.7	1009.4	1031.5
15°	721.9	754.1	790.8	824.6	863.5	903.1	926.5	966.9	1025.6	1057.1	1113.6
17.5°	711.6	744.6	781.3	834.1	886.9	926.5	943.4	1017.5	1057.9	1110.7	1174.5
20°	695.5	737.3	784.2	837.0	905.3	929.5	964.0	1038.8	1088.7	1157.6	1236.1
22.5°	678.6	723.3	779.8	834.8	911.1	936.8	983.8	1043.2	1122.4	1190.6	1277.2
25°	660.2	708.7	765.9	831.2	906.0	943.4	987.4	1060.8	1146.6	1232.5	1312.4
27.5°	641.9	694.7	754.1	819.4	892.1	936.1	980.1	1056.4	1166.4	1259.6	1361.6
30°	624.3	677.1	736.5	803.3	879.6	922.1	964.0	1059.3	1181.8	1286.7	1389.5
32.5°	605.2	659.5	721.9	777.6	854.7	900.1	947.1	1059.3	1191.4	1302.9	1396.8
35°	582.5	638.2	691.8	747.5	823.8	874.5	927.3	1052.0	1200.2	1308.0	1366.0
37.5°	560.5	609.6	655.8	710.1	790.1	844.4	905.3	1043.2	1195.8	1286.0	1302.2
40°	535.5	584.7	622.1	672.7	757.1	820.2	881.8	1031.5	1176.7	1233.9	1187.0
42.5°	511.3	550.2	582.5	631.6	723.3	785.0	851.7	1010.2	1139.3	1151.0	1045.4
45°	483.4	511.3	539.9	595.7	686.7	749.7	823.8	979.4	1079.1	1045.4	911.9
47.5°	447.5	472.4	504.0	555.3	647.8	713.1	783.5	939.8	991.8	921.4	775.4
50°	413.0	434.3	463.6	513.5	606.7	670.5	745.3	877.4	903.1	792.3	668.3
52.5°	378.5	394.7	423.3	473.2	566.3	628.0	696.2	813.6	798.9	680.1	570.0
55°	342.6	356.5	383.7	432.8	519.4	578.1	643.4	735.1	696.9	584.0	495.9
57.5°	307.4	322.1	349.9	391.0	472.4	529.7	581.8	653.6	596.4	506.2	428.4
60°	275.8	288.3	309.6	349.9	424.0	470.2	517.9	567.1	519.4	432.1	372.7
62.5°	242.8	254.6	274.4	311.0	374.9	416.0	454.1	494.5	441.6	377.8	325.0
65°	212.0	221.5	239.9	273.6	325.7	359.5	390.3	418.2	375.6	316.9	277.3
67.5°	184.1	192.2	207.6	237.7	281.7	305.9	330.9	354.3	318.4	271.4	237.7
70°	154.1	160.7	174.6	196.6	231.8	256.8	275.1	292.7	260.4	223.0	200.3
72.5°	127.6	134.3	143.1	165.8	190.0	205.4	225.2	234.8	216.4	185.6	162.9
75°	102.0	107.1	115.2	129.8	152.6	162.9	175.3	182.7	165.8	145.3	131.3
77.5°	80.0	82.2	88.0	98.3	113.7	125.4	135.0	139.4	127.6	114.4	102.7
80°	56.5	59.4	63.8	72.6	84.4	88.0	93.9	99.0	91.7	80.0	72.6
82.5°	37.4	41.1	43.3	47.0	54.3	58.7	60.2	64.6	58.0	53.6	50.6
85°	22.0	23.5	24.2	26.4	30.1	32.3	34.5	35.2	33.7	33.0	30.1
87.5°	11.0	11.0	11.0	12.5	13.2	14.7	15.4	15.4	15.4	14.7	13.9
90°	0.4	1.4	2.4	3.3	4.3	4.8	5.4	6.7	8.0	9.3	10.6
92.5°	13.2	13.8	14.4	15.0	15.6	15.9	16.2	16.8	17.3	17.9	18.5
95°	26.0	26.7	27.4	28.1	28.8	29.1	29.5	30.3	31.0	31.8	32.6
97.5°	42.7	43.2	43.7	44.2	44.7	44.9	45.2	45.8	46.4	47.0	47.6
100°	59.9	60.5	61.1	61.7	62.3	62.6	62.8	63.3	63.8	64.3	64.8
102.5°	79.7	80.0	80.3	80.6	80.9	81.1	81.4	82.1	82.8	83.4	84.1
105°	99.1	99.3	99.5	99.7	99.9	100.0	100.4	101.3	102.2	103.1	104.0
107.5°	122.0	122.1	122.2	122.3	122.4	122.5	122.7	123.1	123.4	123.8	124.2
110°	143.2	143.4	143.6	143.7	143.9	144.0	144.1	144.3	144.5	144.7	144.9

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	165.2	165.3	165.4	165.5	165.6	165.6	165.6	165.6	165.6	165.6	165.6
115°	187.2	187.5	187.8	188.1	188.4	188.5	188.4	188.2	188.1	187.9	187.7
117.5°	209.7	209.8	209.9	210.0	210.1	210.1	210.0	209.8	209.6	209.4	209.2
120°	230.4	231.0	231.6	232.1	232.7	233.0	232.8	232.3	231.8	231.3	230.8
122.5°	252.0	252.4	252.8	253.1	253.5	253.7	253.6	253.4	253.3	253.1	252.9
125°	274.0	274.3	274.6	274.9	275.2	275.3	275.2	275.0	274.8	274.6	274.4
127.5°	294.3	294.9	295.5	296.0	296.6	296.9	296.8	296.6	296.4	296.2	296.0
130°	314.5	315.3	316.1	316.9	317.7	318.1	317.9	317.6	317.3	317.0	316.7
132.5°	334.8	335.6	336.4	337.1	337.9	338.3	338.2	338.0	337.8	337.6	337.4
135°	355.5	356.1	356.7	357.2	357.8	358.1	358.1	358.0	357.9	357.8	357.7
137.5°	374.4	374.9	375.4	375.9	376.4	376.6	376.8	377.1	377.4	377.7	378.0
140°	394.3	394.8	395.3	395.8	396.3	396.5	396.5	396.6	396.7	396.8	396.9
142.5°	412.3	412.8	413.3	413.8	414.3	414.5	414.6	414.8	415.0	415.2	415.4
145°	431.3	431.5	431.7	431.8	432.0	432.1	432.3	432.6	432.9	433.2	433.5
147.5°	447.6	448.0	448.4	448.7	449.1	449.3	449.4	449.7	450.0	450.3	450.6
150°	464.7	464.9	465.1	465.3	465.5	465.6	465.7	465.9	466.1	466.3	466.5
152.5°	478.8	479.1	479.4	479.7	480.0	480.2	480.2	480.3	480.4	480.5	480.6
155°	493.8	493.8	493.8	493.8	493.8	493.8	493.9	494.0	494.1	494.2	494.3
157.5°	506.6	506.5	506.4	506.3	506.2	506.2	506.2	506.3	506.4	506.5	506.6
160°	518.5	518.3	518.1	517.9	517.7	517.6	517.6	517.6	517.6	517.6	517.6
162.5°	529.1	528.8	528.5	528.2	527.9	527.7	527.8	527.9	528.0	528.1	528.2
165°	537.9	537.6	537.3	537.0	536.7	536.5	536.5	536.5	536.5	536.5	536.5
167.5°	545.4	545.0	544.6	544.2	543.8	543.6	543.6	543.7	543.8	543.9	544.0
170°	551.5	551.1	550.7	550.4	550.0	549.8	549.8	549.8	549.8	549.8	549.8
172.5°	556.4	556.0	555.6	555.2	554.8	554.6	554.6	554.6	554.6	554.6	554.6
175°	559.5	559.1	558.7	558.3	557.9	557.7	557.7	557.7	557.7	557.7	557.7
177.5°	561.2	560.8	560.4	560.1	559.7	559.5	559.5	559.5	559.5	559.5	559.5
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	797.4	798.9	804.0	807.7	815.0	814.3	814.3	813.6	811.4	815.0	817.2
5°	853.2	865.7	867.1	883.3	884.0	890.6	895.0	891.3	900.1	899.4	892.8
7.5°	922.1	939.0	947.1	962.5	980.1	975.7	992.6	995.5	994.0	1001.4	1006.5
10°	997.7	1027.1	1047.6	1076.2	1083.5	1087.9	1098.9	1108.5	1127.6	1112.9	1122.4
12.5°	1084.3	1105.5	1132.7	1178.2	1200.9	1215.6	1220.7	1227.3	1240.5	1232.5	1233.2
15°	1156.9	1185.5	1231.7	1288.2	1294.8	1313.2	1308.8	1348.4	1367.4	1338.8	1355.0
17.5°	1232.5	1270.6	1325.6	1374.8	1402.7	1415.1	1426.9	1465.0	1463.5	1459.1	1462.8
20°	1280.9	1343.2	1411.5	1476.8	1484.8	1494.4	1525.9	1542.0	1539.1	1551.6	1559.7
22.5°	1349.1	1415.1	1487.8	1531.0	1549.4	1560.4	1585.3	1595.6	1600.0	1602.9	1597.8
25°	1406.3	1476.8	1530.3	1568.5	1579.5	1585.3	1593.4	1596.3	1594.1	1589.0	1593.4
27.5°	1445.2	1501.7	1538.4	1556.0	1550.1	1540.6	1525.2	1514.9	1492.2	1481.2	1494.4
30°	1461.3	1486.3	1497.3	1467.9	1438.6	1415.1	1385.8	1331.5	1288.9	1301.4	1284.5
32.5°	1435.7	1419.5	1366.7	1291.2	1268.4	1230.3	1147.4	1083.5	1085.7	1052.0	1065.9
35°	1360.1	1286.7	1187.0	1072.5	1042.5	1021.9	930.9	917.0	887.7	856.1	864.9
37.5°	1226.6	1119.5	998.4	914.1	869.3	824.6	773.2	742.4	724.8	711.6	721.9
40°	1063.7	933.1	833.4	757.8	719.7	691.1	655.8	625.0	605.2	603.0	606.7
42.5°	903.8	793.8	702.1	630.2	617.7	584.0	561.2	537.0	531.1	521.6	526.7
45°	765.2	675.7	600.1	541.4	526.7	517.9	490.1	474.6	468.0	462.2	471.0
47.5°	664.6	570.7	515.7	480.5	465.8	451.2	435.8	425.5	420.4	421.1	420.4
50°	567.8	498.9	450.4	423.3	414.5	404.2	391.7	385.1	382.9	376.3	381.5
52.5°	488.6	438.7	405.0	379.3	372.7	365.3	355.1	351.4	346.3	344.8	344.8
55°	424.8	385.9	358.7	341.9	333.8	327.9	322.1	317.7	314.0	314.0	314.0
57.5°	374.9	341.1	321.3	306.6	303.7	297.8	291.2	291.2	286.1	285.4	287.6
60°	332.3	302.2	286.8	274.4	270.0	268.5	261.9	261.9	260.4	256.8	259.7
62.5°	289.0	267.0	253.8	244.3	239.9	239.9	234.8	231.1	231.1	231.8	230.4
65°	249.4	233.3	221.5	214.2	212.0	209.1	208.3	205.4	203.2	203.9	203.2
67.5°	214.2	201.7	193.7	187.8	184.1	182.7	180.5	180.5	179.0	179.7	176.1
70°	182.7	170.2	163.6	157.7	156.3	156.3	153.3	154.1	152.6	154.8	153.3
72.5°	150.4	140.9	135.7	133.5	132.0	131.3	129.8	128.4	127.6	129.1	128.4
75°	121.8	113.7	110.0	108.6	107.1	107.1	106.4	105.6	104.9	104.9	104.9
77.5°	94.6	89.5	85.1	86.6	84.4	85.1	82.9	82.9	83.6	82.9	82.9
80°	69.7	66.0	66.0	64.6	61.6	63.1	63.1	60.9	60.2	61.6	59.4
82.5°	46.2	45.5	44.0	43.3	41.8	42.5	41.8	41.1	40.3	41.8	40.3
85°	27.1	27.1	26.4	24.9	26.4	25.7	24.9	24.9	24.2	24.2	24.2
87.5°	13.9	12.5	12.5	11.7	12.5	11.0	11.7	11.0	10.3	11.0	10.3
90°	11.0	11.4	11.7	12.1	12.3	12.4	12.6	12.8	13.0	13.2	13.0
92.5°	18.8	19.1	19.4	19.7	19.8	19.7	19.5	19.3	19.1	18.9	19.1
95°	33.0	33.4	33.8	34.2	34.4	34.4	34.4	34.4	34.4	34.4	34.4
97.5°	48.1	48.6	49.1	49.6	49.8	49.7	49.6	49.5	49.4	49.3	49.4
100°	65.1	65.4	65.7	66.0	66.1	66.2	66.4	66.6	66.8	67.0	66.8
102.5°	84.4	84.7	85.0	85.3	85.5	85.4	85.3	85.2	85.1	85.0	85.1
105°	104.0	104.0	104.0	104.0	104.0	104.1	104.3	104.4	104.6	104.8	104.6
107.5°	124.5	124.8	125.1	125.4	125.5	125.5	125.4	125.3	125.2	125.1	125.2
110°	145.3	145.7	146.1	146.5	146.7	146.6	146.4	146.2	146.0	145.8	146.0

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	166.1	166.6	167.1	167.6	167.8	167.8	167.8	167.8	167.8	167.8	167.8
115°	187.8	187.9	188.0	188.1	188.1	188.1	188.0	187.9	187.8	187.7	187.8
117.5°	209.2	209.2	209.2	209.2	209.2	209.1	208.8	208.5	208.2	207.9	208.2
120°	230.7	230.6	230.5	230.4	230.4	230.3	230.1	229.9	229.7	229.5	229.7
122.5°	252.6	252.3	252.0	251.7	251.5	251.4	251.1	250.8	250.5	250.2	250.5
125°	274.0	273.6	273.3	272.9	272.7	272.5	272.1	271.7	271.3	270.9	271.3
127.5°	295.4	294.8	294.3	293.7	293.4	293.2	292.8	292.4	292.0	291.6	292.0
130°	316.3	315.9	315.6	315.2	315.0	314.7	314.0	313.3	312.6	311.9	312.6
132.5°	336.9	336.4	335.9	335.4	335.2	335.0	334.5	334.0	333.5	333.0	333.5
135°	357.3	356.9	356.5	356.1	355.9	355.8	355.6	355.5	355.3	355.1	355.3
137.5°	377.5	377.0	376.5	376.0	375.8	375.6	375.3	375.0	374.7	374.4	374.7
140°	396.8	396.7	396.6	396.5	396.5	396.2	395.5	394.8	394.1	393.4	394.1
142.5°	415.3	415.2	415.1	415.0	415.0	414.8	414.3	413.8	413.3	412.8	413.3
145°	433.4	433.3	433.2	433.1	433.0	432.8	432.4	432.1	431.7	431.3	431.7
147.5°	450.6	450.6	450.6	450.6	450.6	450.3	449.7	449.2	448.6	448.0	448.6
150°	466.5	466.5	466.5	466.5	466.5	466.2	465.6	465.1	464.5	463.9	464.5
152.5°	480.8	481.0	481.2	481.4	481.5	481.3	480.8	480.3	479.8	479.3	479.8
155°	494.7	495.1	495.4	495.8	496.0	495.7	495.0	494.3	493.6	492.9	493.6
157.5°	507.0	507.4	507.8	508.2	508.4	508.1	507.5	506.9	506.3	505.7	506.3
160°	518.1	518.6	519.1	519.6	519.8	519.6	519.2	518.8	518.4	518.0	518.4
162.5°	528.7	529.2	529.7	530.2	530.4	530.1	529.4	528.7	528.0	527.3	528.0
165°	537.1	537.7	538.3	538.9	539.2	538.9	538.2	537.5	536.8	536.1	536.8
167.5°	544.6	545.2	545.8	546.4	546.7	546.4	545.8	545.2	544.6	544.0	544.6
170°	550.5	551.1	551.8	552.5	552.8	552.5	551.8	551.1	550.5	549.8	550.5
172.5°	555.2	555.8	556.4	557.0	557.3	557.0	556.3	555.6	554.9	554.2	554.9
175°	558.3	558.9	559.4	560.0	560.3	560.0	559.3	558.6	558.0	557.3	558.0
177.5°	560.1	560.7	561.2	561.8	562.1	561.8	561.1	560.4	559.7	559.0	559.7
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	811.4	813.6	807.7	806.2	806.2	809.2	807.0	787.2	790.8	786.4	785.0
5°	900.9	896.5	890.6	887.7	884.0	873.7	873.0	850.3	845.9	831.2	824.6
7.5°	999.2	995.5	977.9	975.7	974.2	964.7	940.5	916.3	898.7	881.8	865.7
10°	1111.4	1100.4	1092.3	1076.2	1068.1	1054.9	1023.4	1000.6	970.6	944.9	911.1
12.5°	1246.4	1233.9	1206.8	1195.0	1184.8	1148.1	1116.6	1090.9	1032.2	1014.6	972.8
15°	1345.4	1319.0	1316.1	1290.4	1288.9	1248.6	1188.4	1160.6	1115.1	1050.5	1007.2
17.5°	1452.5	1429.1	1410.7	1379.9	1375.5	1337.4	1293.4	1225.1	1175.2	1113.6	1058.6
20°	1531.0	1518.6	1487.0	1474.6	1448.9	1416.6	1371.1	1286.7	1225.9	1164.2	1096.7
22.5°	1593.4	1580.9	1556.0	1539.1	1524.4	1482.6	1428.3	1356.4	1272.8	1192.1	1122.4
25°	1592.7	1589.0	1578.7	1570.7	1559.7	1528.8	1483.4	1414.4	1321.2	1232.5	1135.6
27.5°	1502.4	1512.7	1530.3	1539.1	1536.9	1532.5	1506.8	1448.9	1365.2	1259.6	1151.0
30°	1314.6	1352.0	1385.1	1429.1	1442.3	1474.6	1489.2	1456.2	1389.5	1291.2	1170.8
32.5°	1090.1	1144.4	1216.3	1240.5	1282.3	1344.7	1414.4	1426.9	1385.1	1309.5	1183.3
35°	894.3	939.0	994.8	1032.9	1070.3	1171.6	1259.6	1335.9	1349.8	1300.0	1180.4
37.5°	740.2	771.8	820.9	853.2	887.7	974.2	1097.5	1196.5	1266.2	1267.7	1172.3
40°	628.7	642.6	685.2	708.7	741.7	816.5	926.5	1055.7	1157.6	1204.6	1151.0
42.5°	532.6	550.9	586.2	603.8	625.0	690.3	763.0	885.5	1011.6	1112.1	1111.4
45°	475.4	488.6	504.7	519.4	543.6	582.5	665.4	757.1	878.1	991.8	1036.6
47.5°	424.8	437.2	453.4	457.8	473.9	510.6	561.2	641.2	754.1	867.1	951.5
50°	382.2	392.5	403.5	411.6	418.9	449.0	487.1	554.6	644.8	754.1	859.1
52.5°	349.2	356.5	366.1	370.5	377.1	399.1	428.4	478.3	552.4	652.2	754.1
55°	318.4	323.5	329.4	336.7	339.7	355.8	378.5	421.1	476.1	565.6	662.4
57.5°	289.8	292.0	295.6	300.0	303.7	317.7	337.5	366.1	414.5	483.4	575.1
60°	257.5	263.4	265.6	270.0	272.2	283.2	298.6	322.8	360.2	419.6	488.6
62.5°	230.4	234.0	237.7	239.9	245.0	248.7	261.2	283.2	314.0	358.0	420.4
65°	206.1	207.6	209.8	212.0	213.5	217.9	229.6	244.3	267.8	306.6	355.1
67.5°	178.3	179.7	182.7	183.4	184.9	190.7	197.3	209.8	229.6	259.0	298.6
70°	151.1	153.3	154.8	156.3	158.5	160.7	168.0	178.3	193.7	214.2	245.0
72.5°	127.6	129.8	129.8	131.3	130.6	133.5	140.9	148.2	158.5	175.3	202.5
75°	104.2	104.2	105.6	106.4	107.1	110.0	113.0	118.8	126.9	140.1	157.0
77.5°	82.2	81.4	82.9	82.9	82.9	85.1	88.0	91.0	96.1	105.6	118.8
80°	60.2	60.2	61.6	62.4	60.9	61.6	63.1	66.0	69.7	76.3	83.6
82.5°	39.6	42.5	41.8	42.5	41.8	43.3	44.0	44.8	46.2	49.2	54.3
85°	24.2	24.2	24.2	24.9	24.2	24.9	24.9	24.9	25.7	27.1	29.3
87.5°	10.3	10.3	10.3	11.0	10.3	10.3	11.0	10.3	11.0	11.0	11.7
90°	12.8	12.6	12.4	12.3	12.1	11.7	11.4	11.0	10.6	9.3	8.0
92.5°	19.3	19.5	19.7	19.8	19.7	19.4	19.1	18.8	18.5	17.9	17.3
95°	34.4	34.4	34.4	34.4	34.2	33.8	33.4	33.0	32.6	31.8	31.0
97.5°	49.5	49.6	49.7	49.8	49.6	49.1	48.6	48.1	47.6	47.0	46.4
100°	66.6	66.4	66.2	66.1	66.0	65.7	65.4	65.1	64.8	64.3	63.8
102.5°	85.2	85.3	85.4	85.5	85.3	85.0	84.7	84.4	84.1	83.4	82.8
105°	104.4	104.3	104.1	104.0	104.0	104.0	104.0	104.0	104.0	103.1	102.2
107.5°	125.3	125.4	125.5	125.5	125.4	125.1	124.8	124.5	124.2	123.8	123.4
110°	146.2	146.4	146.6	146.7	146.5	146.1	145.7	145.3	144.9	144.7	144.5

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	167.8	167.8	167.8	167.8	167.6	167.1	166.6	166.1	165.6	165.6	165.6
115°	187.9	188.0	188.1	188.1	188.1	188.0	187.9	187.8	187.7	187.9	188.1
117.5°	208.5	208.8	209.1	209.2	209.2	209.2	209.2	209.2	209.2	209.4	209.6
120°	229.9	230.1	230.3	230.4	230.4	230.5	230.6	230.7	230.8	231.3	231.8
122.5°	250.8	251.1	251.4	251.5	251.7	252.0	252.3	252.6	252.9	253.1	253.3
125°	271.7	272.1	272.5	272.7	272.9	273.3	273.6	274.0	274.4	274.6	274.8
127.5°	292.4	292.8	293.2	293.4	293.7	294.3	294.8	295.4	296.0	296.2	296.4
130°	313.3	314.0	314.7	315.0	315.2	315.6	315.9	316.3	316.7	317.0	317.3
132.5°	334.0	334.5	335.0	335.2	335.4	335.9	336.4	336.9	337.4	337.6	337.8
135°	355.5	355.6	355.8	355.9	356.1	356.5	356.9	357.3	357.7	357.8	357.9
137.5°	375.0	375.3	375.6	375.8	376.0	376.5	377.0	377.5	378.0	377.7	377.4
140°	394.8	395.5	396.2	396.5	396.5	396.6	396.7	396.8	396.9	396.8	396.7
142.5°	413.8	414.3	414.8	415.0	415.0	415.1	415.2	415.3	415.4	415.2	415.0
145°	432.1	432.4	432.8	433.0	433.1	433.2	433.3	433.4	433.5	433.2	432.9
147.5°	449.2	449.7	450.3	450.6	450.6	450.6	450.6	450.6	450.6	450.3	450.0
150°	465.1	465.6	466.2	466.5	466.5	466.5	466.5	466.5	466.5	466.3	466.1
152.5°	480.3	480.8	481.3	481.5	481.4	481.2	481.0	480.8	480.6	480.5	480.4
155°	494.3	495.0	495.7	496.0	495.8	495.4	495.1	494.7	494.3	494.2	494.1
157.5°	506.9	507.5	508.1	508.4	508.2	507.8	507.4	507.0	506.6	506.5	506.4
160°	518.8	519.2	519.6	519.8	519.6	519.1	518.6	518.1	517.6	517.6	517.6
162.5°	528.7	529.4	530.1	530.4	530.2	529.7	529.2	528.7	528.2	528.1	528.0
165°	537.5	538.2	538.9	539.2	538.9	538.3	537.7	537.1	536.5	536.5	536.5
167.5°	545.2	545.8	546.4	546.7	546.4	545.8	545.2	544.6	544.0	543.9	543.8
170°	551.1	551.8	552.5	552.8	552.5	551.8	551.1	550.5	549.8	549.8	549.8
172.5°	555.6	556.3	557.0	557.3	557.0	556.4	555.8	555.2	554.6	554.6	554.6
175°	558.6	559.3	560.0	560.3	560.0	559.4	558.9	558.3	557.7	557.7	557.7
177.5°	560.4	561.1	561.8	562.1	561.8	561.2	560.7	560.1	559.5	559.5	559.5
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	777.6	775.4	775.4	774.0	769.6	761.5	760.8	762.2	757.8	753.4	746.8
5°	815.8	801.8	797.4	793.0	784.2	769.6	763.7	758.6	750.5	740.9	730.7
7.5°	848.1	828.2	822.4	814.3	796.7	776.2	763.0	751.9	740.9	727.7	715.3
10°	888.4	859.8	845.9	834.1	809.9	781.3	761.5	745.3	727.7	711.6	695.5
12.5°	933.9	887.7	883.3	854.7	826.8	784.2	760.0	736.5	713.1	693.3	676.4
15°	972.0	921.4	903.1	884.0	830.4	777.6	754.1	727.7	700.6	679.3	654.4
17.5°	996.2	954.4	915.5	889.9	834.1	787.2	741.7	711.6	683.0	653.6	633.1
20°	1025.6	964.7	930.9	896.5	841.4	779.8	734.3	696.9	661.7	635.3	610.4
22.5°	1054.9	972.8	944.9	907.5	842.9	772.5	721.1	683.7	643.4	617.0	589.8
25°	1052.0	984.5	938.3	906.7	828.2	765.9	705.7	661.7	624.3	590.6	563.4
27.5°	1054.2	971.3	924.3	887.7	818.0	756.4	689.6	643.4	604.5	569.3	540.7
30°	1054.9	951.5	910.4	866.4	798.9	733.6	671.3	624.3	583.2	545.1	519.4
32.5°	1052.7	935.4	884.0	844.4	768.8	711.6	650.0	600.1	558.3	523.1	498.9
35°	1047.6	916.3	856.9	807.0	738.0	680.1	630.2	578.8	534.1	501.8	473.9
37.5°	1033.7	895.7	828.2	779.1	702.1	643.4	599.4	556.8	513.5	475.4	451.9
40°	1023.4	867.9	799.6	746.1	663.2	606.0	569.3	528.9	486.4	451.9	429.2
42.5°	999.9	841.4	770.3	706.5	625.0	566.3	531.9	499.6	462.9	429.2	408.6
45°	961.8	812.8	734.3	669.8	583.2	527.5	495.9	469.5	437.2	405.0	384.4
47.5°	908.2	771.8	696.2	631.6	542.1	485.6	454.1	434.3	408.6	381.5	363.9
50°	850.3	727.0	657.3	593.5	502.5	447.5	416.7	398.3	381.5	356.5	339.7
52.5°	774.7	679.3	612.6	551.7	460.0	407.2	380.0	366.8	349.2	331.6	316.9
55°	701.3	617.7	562.7	504.7	418.2	369.0	342.6	328.7	318.4	303.7	292.0
57.5°	616.2	560.5	509.9	457.0	379.3	334.5	309.6	292.7	286.1	279.5	268.5
60°	537.7	495.2	454.1	410.1	338.9	298.6	274.4	261.2	254.6	250.2	242.8
62.5°	465.8	432.8	397.6	362.4	297.8	261.2	242.8	229.6	223.8	223.0	216.4
65°	396.9	373.4	344.8	310.3	259.7	227.4	209.8	201.7	195.1	195.1	190.0
67.5°	327.9	311.8	289.0	264.8	225.2	195.1	179.0	171.7	168.0	168.0	164.3
70°	272.9	261.9	241.4	220.1	185.6	162.9	150.4	143.8	141.6	142.3	139.4
72.5°	221.5	209.8	192.9	177.5	151.9	135.0	126.2	118.8	115.2	115.9	115.2
75°	171.7	165.8	151.1	139.4	118.8	107.1	99.0	95.4	92.4	93.2	91.7
77.5°	129.1	120.3	112.2	104.2	91.7	82.2	75.6	71.9	69.7	69.7	69.7
80°	88.0	86.6	80.0	75.6	65.3	58.0	52.8	52.1	49.9	49.9	49.9
82.5°	57.2	53.6	49.9	47.0	41.1	36.7	34.5	33.0	32.3	31.5	33.0
85°	31.5	29.3	27.9	24.9	22.7	20.5	18.3	17.6	16.9	17.6	16.9
87.5°	12.5	10.3	10.3	9.5	8.8	8.1	8.1	6.6	6.6	5.9	5.9
90°	6.7	5.4	4.8	4.3	3.3	2.4	1.4	0.4	1.4	2.4	3.3
92.5°	16.8	16.2	15.9	15.6	15.0	14.4	13.8	13.2	13.8	14.4	15.0
95°	30.3	29.5	29.1	28.8	28.1	27.4	26.7	26.0	26.7	27.4	28.1
97.5°	45.8	45.2	44.9	44.7	44.2	43.7	43.2	42.7	43.2	43.7	44.2
100°	63.3	62.8	62.6	62.3	61.7	61.1	60.5	59.9	60.5	61.1	61.7
102.5°	82.1	81.4	81.1	80.9	80.6	80.3	80.0	79.7	80.0	80.3	80.6
105°	101.3	100.4	100.0	99.9	99.7	99.5	99.3	99.1	99.3	99.5	99.7
107.5°	123.1	122.7	122.5	122.4	122.3	122.2	122.1	122.0	122.1	122.2	122.3
110°	144.3	144.1	144.0	143.9	143.7	143.6	143.4	143.2	143.4	143.6	143.7

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	165.6	165.6	165.6	165.6	165.5	165.4	165.3	165.2	165.3	165.4	165.5
115°	188.2	188.4	188.5	188.4	188.1	187.8	187.5	187.2	187.5	187.8	188.1
117.5°	209.8	210.0	210.1	210.1	210.0	209.9	209.8	209.7	209.8	209.9	210.0
120°	232.3	232.8	233.0	232.7	232.1	231.6	231.0	230.4	231.0	231.6	232.1
122.5°	253.4	253.6	253.7	253.5	253.1	252.8	252.4	252.0	252.4	252.8	253.1
125°	275.0	275.2	275.3	275.2	274.9	274.6	274.3	274.0	274.3	274.6	274.9
127.5°	296.6	296.8	296.9	296.6	296.0	295.5	294.9	294.3	294.9	295.5	296.0
130°	317.6	317.9	318.1	317.7	316.9	316.1	315.3	314.5	315.3	316.1	316.9
132.5°	338.0	338.2	338.3	337.9	337.1	336.4	335.6	334.8	335.6	336.4	337.1
135°	358.0	358.1	358.1	357.8	357.2	356.7	356.1	355.5	356.1	356.7	357.2
137.5°	377.1	376.8	376.6	376.4	375.9	375.4	374.9	374.4	374.9	375.4	375.9
140°	396.6	396.5	396.5	396.3	395.8	395.3	394.8	394.3	394.8	395.3	395.8
142.5°	414.8	414.6	414.5	414.3	413.8	413.3	412.8	412.3	412.8	413.3	413.8
145°	432.6	432.3	432.1	432.0	431.8	431.7	431.5	431.3	431.5	431.7	431.8
147.5°	449.7	449.4	449.3	449.1	448.7	448.4	448.0	447.6	448.0	448.4	448.7
150°	465.9	465.7	465.6	465.5	465.3	465.1	464.9	464.7	464.9	465.1	465.3
152.5°	480.3	480.2	480.2	480.0	479.7	479.4	479.1	478.8	479.1	479.4	479.7
155°	494.0	493.9	493.8	493.8	493.8	493.8	493.8	493.8	493.8	493.8	493.8
157.5°	506.3	506.2	506.2	506.2	506.3	506.4	506.5	506.6	506.5	506.4	506.3
160°	517.6	517.6	517.6	517.7	517.9	518.1	518.3	518.5	518.3	518.1	517.9
162.5°	527.9	527.8	527.7	527.9	528.2	528.5	528.8	529.1	528.8	528.5	528.2
165°	536.5	536.5	536.5	536.7	537.0	537.3	537.6	537.9	537.6	537.3	537.0
167.5°	543.7	543.6	543.6	543.8	544.2	544.6	545.0	545.4	545.0	544.6	544.2
170°	549.8	549.8	549.8	550.0	550.4	550.7	551.1	551.5	551.1	550.7	550.4
172.5°	554.6	554.6	554.6	554.8	555.2	555.6	556.0	556.4	556.0	555.6	555.2
175°	557.7	557.7	557.7	557.9	558.3	558.7	559.1	559.5	559.1	558.7	558.3
177.5°	559.5	559.5	559.5	559.7	560.1	560.4	560.8	561.2	560.8	560.4	560.1
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	745.3	744.6	746.1	741.7	734.3	730.7	720.4	718.2	717.5	718.2	718.9
5°	724.8	724.1	721.9	714.5	705.7	699.1	686.7	685.9	681.5	677.1	679.3
7.5°	705.0	702.1	697.7	688.1	676.4	669.1	658.8	651.4	645.6	641.9	639.0
10°	685.2	680.8	676.4	663.9	649.2	638.2	625.8	619.9	613.3	610.4	607.4
12.5°	659.5	655.1	647.0	632.4	623.6	609.6	597.2	591.3	587.6	581.8	578.1
15°	639.0	630.2	625.8	610.4	592.0	590.6	567.8	566.3	559.0	559.0	553.1
17.5°	615.5	608.9	600.8	585.4	572.2	559.0	547.3	542.9	536.3	534.8	531.9
20°	592.8	584.0	581.0	565.6	551.7	535.5	523.1	518.7	515.7	512.8	515.0
22.5°	569.3	561.9	554.6	540.7	530.4	514.3	506.9	502.5	498.1	496.7	497.4
25°	546.5	539.9	532.6	518.7	507.7	494.5	487.8	485.6	483.4	483.4	482.7
27.5°	524.5	517.9	511.3	498.9	487.8	478.3	473.2	471.0	468.8	470.2	471.7
30°	501.8	495.9	490.1	479.0	470.2	461.4	458.5	457.0	456.3	460.0	460.0
32.5°	481.2	476.1	471.7	461.4	452.6	445.3	443.1	443.8	444.6	446.8	448.2
35°	460.0	456.3	451.9	443.1	435.8	429.2	429.9	429.9	431.4	435.0	438.0
37.5°	440.9	435.8	432.1	424.8	418.9	413.0	415.2	417.4	418.9	423.3	424.8
40°	418.2	416.0	413.0	405.7	400.6	399.8	400.6	402.0	405.0	407.2	409.4
42.5°	399.8	396.9	393.2	387.3	382.9	383.7	384.4	385.9	387.3	391.0	393.2
45°	379.3	377.1	374.1	369.0	365.3	366.1	366.8	366.8	368.3	372.7	374.1
47.5°	356.5	357.3	353.6	348.5	346.3	346.3	346.3	347.7	351.4	352.9	353.6
50°	334.5	333.1	332.3	327.2	325.7	325.0	325.7	326.5	331.6	330.9	333.1
52.5°	311.0	311.0	310.3	307.4	305.2	305.2	303.7	307.4	308.8	310.3	312.5
55°	288.3	286.1	285.4	283.9	281.0	280.2	281.7	286.1	287.6	289.0	291.2
57.5°	263.4	263.4	261.9	259.7	259.7	259.7	259.7	262.6	264.8	266.3	270.7
60°	240.6	237.7	235.5	235.5	235.5	234.8	239.2	239.2	243.6	244.3	245.8
62.5°	213.5	212.0	210.5	211.3	210.5	212.0	213.5	216.4	217.1	219.3	221.5
65°	187.8	187.8	186.3	190.7	187.8	187.8	191.5	191.5	192.9	195.1	198.1
67.5°	162.9	163.6	162.1	162.1	163.6	164.3	165.1	168.0	168.7	171.7	175.3
70°	137.2	138.7	139.4	137.9	139.4	140.9	142.3	143.1	146.0	147.5	149.7
72.5°	114.4	115.9	113.7	114.4	115.2	116.6	117.4	118.8	120.3	124.7	126.2
75°	91.7	91.0	90.2	93.2	91.7	94.6	95.4	95.4	96.8	100.5	102.0
77.5°	70.4	70.4	71.2	69.7	71.9	71.2	71.9	74.1	76.3	76.3	82.2
80°	49.2	50.6	50.6	50.6	51.4	52.1	50.6	54.3	55.0	55.0	57.2
82.5°	31.5	32.3	31.5	33.0	33.0	34.5	33.7	34.5	35.9	37.4	38.1
85°	16.9	16.9	18.3	18.3	17.6	18.3	17.6	18.3	19.8	19.8	20.5
87.5°	5.9	5.9	5.9	5.9	6.6	5.9	6.6	6.6	5.9	5.9	8.1
90°	4.3	4.8	5.4	6.7	8.0	9.3	10.6	11.0	11.4	11.7	12.1
92.5°	15.6	15.9	16.2	16.8	17.3	17.9	18.5	18.8	19.1	19.4	19.7
95°	28.8	29.1	29.5	30.3	31.0	31.8	32.6	33.0	33.4	33.8	34.2
97.5°	44.7	44.9	45.2	45.8	46.4	47.0	47.6	48.1	48.6	49.1	49.6
100°	62.3	62.6	62.8	63.3	63.8	64.3	64.8	65.1	65.4	65.7	66.0
102.5°	80.9	81.1	81.4	82.1	82.8	83.4	84.1	84.4	84.7	85.0	85.3
105°	99.9	100.0	100.4	101.3	102.2	103.1	104.0	104.0	104.0	104.0	104.0
107.5°	122.4	122.5	122.7	123.1	123.4	123.8	124.2	124.5	124.8	125.1	125.4
110°	143.9	144.0	144.1	144.3	144.5	144.7	144.9	145.3	145.7	146.1	146.5

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	165.6	165.6	165.6	165.6	165.6	165.6	165.6	166.1	166.6	167.1	167.6
115°	188.4	188.5	188.4	188.2	188.1	187.9	187.7	187.8	187.9	188.0	188.1
117.5°	210.1	210.1	210.0	209.8	209.6	209.4	209.2	209.2	209.2	209.2	209.2
120°	232.7	233.0	232.8	232.3	231.8	231.3	230.8	230.7	230.6	230.5	230.4
122.5°	253.5	253.7	253.6	253.4	253.3	253.1	252.9	252.6	252.3	252.0	251.7
125°	275.2	275.3	275.2	275.0	274.8	274.6	274.4	274.0	273.6	273.3	272.9
127.5°	296.6	296.9	296.8	296.6	296.4	296.2	296.0	295.4	294.8	294.3	293.7
130°	317.7	318.1	317.9	317.6	317.3	317.0	316.7	316.3	315.9	315.6	315.2
132.5°	337.9	338.3	338.2	338.0	337.8	337.6	337.4	336.9	336.4	335.9	335.4
135°	357.8	358.1	358.1	358.0	357.9	357.8	357.7	357.3	356.9	356.5	356.1
137.5°	376.4	376.6	376.8	377.1	377.4	377.7	378.0	377.5	377.0	376.5	376.0
140°	396.3	396.5	396.5	396.6	396.7	396.8	396.9	396.8	396.7	396.6	396.5
142.5°	414.3	414.5	414.6	414.8	415.0	415.2	415.4	415.3	415.2	415.1	415.0
145°	432.0	432.1	432.3	432.6	432.9	433.2	433.5	433.4	433.3	433.2	433.1
147.5°	449.1	449.3	449.4	449.7	450.0	450.3	450.6	450.6	450.6	450.6	450.6
150°	465.5	465.6	465.7	465.9	466.1	466.3	466.5	466.5	466.5	466.5	466.5
152.5°	480.0	480.2	480.2	480.3	480.4	480.5	480.6	480.8	481.0	481.2	481.4
155°	493.8	493.8	493.9	494.0	494.1	494.2	494.3	494.7	495.1	495.4	495.8
157.5°	506.2	506.2	506.2	506.3	506.4	506.5	506.6	507.0	507.4	507.8	508.2
160°	517.7	517.6	517.6	517.6	517.6	517.6	517.6	518.1	518.6	519.1	519.6
162.5°	527.9	527.7	527.8	527.9	528.0	528.1	528.2	528.7	529.2	529.7	530.2
165°	536.7	536.5	536.5	536.5	536.5	536.5	536.5	537.1	537.7	538.3	538.9
167.5°	543.8	543.6	543.6	543.7	543.8	543.9	544.0	544.6	545.2	545.8	546.4
170°	550.0	549.8	549.8	549.8	549.8	549.8	549.8	550.5	551.1	551.8	552.5
172.5°	554.8	554.6	554.6	554.6	554.6	554.6	554.6	555.2	555.8	556.4	557.0
175°	557.9	557.7	557.7	557.7	557.7	557.7	557.7	558.3	558.9	559.4	560.0
177.5°	559.7	559.5	559.5	559.5	559.5	559.5	559.5	560.1	560.7	561.2	561.8
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	718.2	718.9	716.0	713.8	719.7	716.0	716.0	716.7	715.3	717.5	716.7
5°	677.9	678.6	673.5	674.9	672.0	671.3	670.5	674.9	674.2	673.5	674.9
7.5°	638.2	638.2	636.0	634.6	634.6	632.4	635.3	634.6	636.0	636.0	638.2
10°	605.2	606.7	603.0	599.4	598.6	599.4	599.4	600.1	600.8	606.0	605.2
12.5°	578.1	575.9	575.1	572.9	569.3	567.8	566.3	574.4	572.2	572.2	572.2
15°	548.0	553.1	552.4	545.8	544.3	547.3	545.8	545.8	553.1	552.4	551.7
17.5°	531.9	530.4	528.9	525.3	526.0	525.3	526.0	526.0	530.4	530.4	530.4
20°	513.5	510.6	510.6	509.1	509.1	506.9	509.9	510.6	513.5	513.5	514.3
22.5°	497.4	495.2	495.2	494.5	495.9	493.0	495.9	496.7	496.7	498.9	498.9
25°	483.4	482.0	482.0	483.4	483.4	483.4	483.4	486.4	484.2	484.9	484.2
27.5°	471.0	471.7	472.4	473.2	472.4	473.2	473.9	475.4	476.1	475.4	473.9
30°	459.2	461.4	462.2	462.2	463.6	464.4	465.1	465.1	465.8	463.6	465.1
32.5°	450.4	450.4	451.9	452.6	454.1	454.8	454.8	456.3	455.6	453.4	454.1
35°	438.0	438.0	440.9	442.4	444.6	443.8	444.6	444.6	445.3	443.8	441.6
37.5°	425.5	427.0	427.0	429.9	430.6	431.4	430.6	432.1	431.4	429.9	429.2
40°	410.8	410.1	410.8	413.0	413.8	413.8	413.8	415.2	415.2	415.2	414.5
42.5°	392.5	394.7	393.9	396.1	395.4	395.4	396.9	398.3	399.1	396.9	397.6
45°	374.9	374.9	376.3	376.3	377.1	377.1	380.0	378.5	380.0	378.5	379.3
47.5°	355.8	356.5	356.5	357.3	358.7	360.2	358.7	359.5	359.5	360.2	358.7
50°	334.5	334.5	336.0	338.2	341.1	339.7	338.9	341.9	339.7	339.7	338.2
52.5°	312.5	314.7	315.5	317.7	319.9	320.6	321.3	319.9	320.6	318.4	319.1
55°	291.2	292.0	294.9	297.1	299.3	299.3	298.6	299.3	300.0	297.1	297.1
57.5°	270.0	272.2	275.1	275.1	278.0	278.0	277.3	277.3	278.0	275.8	275.1
60°	247.2	249.4	253.1	253.1	257.5	258.2	256.8	255.3	255.3	253.1	253.8
62.5°	223.0	225.2	227.4	231.1	234.0	232.6	235.5	232.6	233.3	228.9	228.9
65°	201.7	202.5	206.1	209.8	209.8	211.3	209.8	210.5	208.3	208.3	205.4
67.5°	176.8	176.8	180.5	184.1	187.8	187.8	187.8	185.6	185.6	183.4	183.4
70°	154.8	154.1	157.7	159.9	162.1	162.9	161.4	160.7	159.2	157.0	156.3
72.5°	127.6	129.1	132.8	134.3	137.9	137.2	140.9	136.5	136.5	132.8	132.0
75°	103.4	104.9	108.6	110.8	113.0	113.0	115.2	113.0	110.0	108.6	107.8
77.5°	82.2	81.4	84.4	88.0	88.8	88.0	89.5	88.8	85.8	85.8	84.4
80°	58.7	60.9	63.8	63.1	66.0	65.3	65.3	63.8	63.8	61.6	63.1
82.5°	38.9	41.1	41.8	41.1	41.8	43.3	44.0	43.3	43.3	41.8	42.5
85°	20.5	20.5	22.0	22.7	22.0	22.0	22.7	24.9	23.5	22.0	23.5
87.5°	6.6	5.9	5.9	6.6	5.9	5.9	6.6	6.6	7.3	7.3	7.3
90°	12.3	12.4	12.6	12.8	13.0	13.2	13.0	12.8	12.6	12.4	12.3
92.5°	19.8	19.7	19.5	19.3	19.1	18.9	19.1	19.3	19.5	19.7	19.8
95°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
97.5°	49.8	49.7	49.6	49.5	49.4	49.3	49.4	49.5	49.6	49.7	49.8
100°	66.1	66.2	66.4	66.6	66.8	67.0	66.8	66.6	66.4	66.2	66.1
102.5°	85.5	85.4	85.3	85.2	85.1	85.0	85.1	85.2	85.3	85.4	85.5
105°	104.0	104.1	104.3	104.4	104.6	104.8	104.6	104.4	104.3	104.1	104.0
107.5°	125.5	125.5	125.4	125.3	125.2	125.1	125.2	125.3	125.4	125.5	125.5
110°	146.7	146.6	146.4	146.2	146.0	145.8	146.0	146.2	146.4	146.6	146.7

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	167.8	167.8	167.8	167.8	167.8	167.8	167.8	167.8	167.8	167.8	167.8
115°	188.1	188.1	188.0	187.9	187.8	187.7	187.8	187.9	188.0	188.1	188.1
117.5°	209.2	209.1	208.8	208.5	208.2	207.9	208.2	208.5	208.8	209.1	209.2
120°	230.4	230.3	230.1	229.9	229.7	229.5	229.7	229.9	230.1	230.3	230.4
122.5°	251.5	251.4	251.1	250.8	250.5	250.2	250.5	250.8	251.1	251.4	251.5
125°	272.7	272.5	272.1	271.7	271.3	270.9	271.3	271.7	272.1	272.5	272.7
127.5°	293.4	293.2	292.8	292.4	292.0	291.6	292.0	292.4	292.8	293.2	293.4
130°	315.0	314.7	314.0	313.3	312.6	311.9	312.6	313.3	314.0	314.7	315.0
132.5°	335.2	335.0	334.5	334.0	333.5	333.0	333.5	334.0	334.5	335.0	335.2
135°	355.9	355.8	355.6	355.5	355.3	355.1	355.3	355.5	355.6	355.8	355.9
137.5°	375.8	375.6	375.3	375.0	374.7	374.4	374.7	375.0	375.3	375.6	375.8
140°	396.5	396.2	395.5	394.8	394.1	393.4	394.1	394.8	395.5	396.2	396.5
142.5°	415.0	414.8	414.3	413.8	413.3	412.8	413.3	413.8	414.3	414.8	415.0
145°	433.0	432.8	432.4	432.1	431.7	431.3	431.7	432.1	432.4	432.8	433.0
147.5°	450.6	450.3	449.7	449.2	448.6	448.0	448.6	449.2	449.7	450.3	450.6
150°	466.5	466.2	465.6	465.1	464.5	463.9	464.5	465.1	465.6	466.2	466.5
152.5°	481.5	481.3	480.8	480.3	479.8	479.3	479.8	480.3	480.8	481.3	481.5
155°	496.0	495.7	495.0	494.3	493.6	492.9	493.6	494.3	495.0	495.7	496.0
157.5°	508.4	508.1	507.5	506.9	506.3	505.7	506.3	506.9	507.5	508.1	508.4
160°	519.8	519.6	519.2	518.8	518.4	518.0	518.4	518.8	519.2	519.6	519.8
162.5°	530.4	530.1	529.4	528.7	528.0	527.3	528.0	528.7	529.4	530.1	530.4
165°	539.2	538.9	538.2	537.5	536.8	536.1	536.8	537.5	538.2	538.9	539.2
167.5°	546.7	546.4	545.8	545.2	544.6	544.0	544.6	545.2	545.8	546.4	546.7
170°	552.8	552.5	551.8	551.1	550.5	549.8	550.5	551.1	551.8	552.5	552.8
172.5°	557.3	557.0	556.3	555.6	554.9	554.2	554.9	555.6	556.3	557.0	557.3
175°	560.3	560.0	559.3	558.6	558.0	557.3	558.0	558.6	559.3	560.0	560.3
177.5°	562.1	561.8	561.1	560.4	559.7	559.0	559.7	560.4	561.1	561.8	562.1
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1	757.1
2.5°	718.9	720.4	721.1	718.2	716.0	719.7	724.8	728.5	731.4	735.1	737.3
5°	676.4	681.5	681.5	683.0	685.2	688.9	698.4	705.0	710.9	715.3	718.9
7.5°	640.4	644.1	646.3	650.0	653.6	658.8	669.8	679.3	688.1	693.3	699.1
10°	608.2	611.1	614.8	617.0	623.6	630.9	644.8	652.9	663.2	671.3	678.6
12.5°	577.3	587.6	589.8	589.1	595.0	603.0	617.0	629.4	640.4	648.5	656.6
15°	555.3	559.0	563.4	562.7	575.1	577.3	589.1	603.8	618.4	623.6	630.9
17.5°	531.1	537.0	541.4	543.6	547.3	555.3	566.3	577.3	596.4	597.2	616.2
20°	512.1	517.9	520.9	523.8	526.0	535.5	545.1	557.5	572.9	581.0	591.3
22.5°	499.6	502.5	504.7	506.9	509.9	515.0	526.7	540.7	550.9	559.7	566.3
25°	484.9	487.8	490.8	492.3	494.5	497.4	506.2	517.2	531.9	537.7	544.3
27.5°	474.6	474.6	476.1	476.1	479.0	482.0	488.6	498.9	510.6	517.9	526.7
30°	463.6	462.9	463.6	462.9	462.2	466.6	472.4	481.2	489.3	498.1	504.0
32.5°	452.6	451.9	451.9	452.6	449.7	451.9	454.8	462.9	471.7	476.1	482.7
35°	440.9	439.4	439.4	439.4	438.0	436.5	439.4	446.8	452.6	458.5	463.6
37.5°	429.2	427.0	427.0	425.5	424.0	421.8	421.8	427.7	435.8	438.0	444.6
40°	413.0	413.0	411.6	410.8	409.4	407.9	405.7	410.8	418.2	420.4	425.5
42.5°	396.9	394.7	393.9	393.9	393.9	391.7	390.3	393.9	398.3	402.0	405.0
45°	378.5	377.1	377.8	377.1	375.6	374.9	374.1	375.6	380.7	382.2	385.9
47.5°	358.7	358.0	358.0	357.3	356.5	357.3	354.3	358.0	359.5	360.9	363.9
50°	338.2	337.5	336.7	336.0	336.0	336.7	336.0	336.0	338.9	340.4	343.3
52.5°	317.7	315.5	315.5	314.7	314.7	313.3	314.7	315.5	316.9	318.4	319.9
55°	295.6	295.6	293.4	293.4	292.0	292.0	292.7	292.0	294.9	296.4	296.4
57.5°	274.4	271.4	272.2	270.7	269.2	268.5	268.5	270.0	271.4	271.4	272.9
60°	251.6	248.7	248.0	245.0	246.5	244.3	245.0	245.0	248.0	246.5	248.0
62.5°	228.9	225.2	223.0	221.5	221.5	222.3	220.8	220.1	221.5	223.0	226.0
65°	204.7	202.5	200.3	198.1	198.1	197.3	198.8	196.6	195.9	196.6	198.1
67.5°	179.7	177.5	175.3	173.1	173.9	171.7	170.2	172.4	170.9	171.7	173.1
70°	155.5	154.1	149.7	148.2	147.5	148.2	147.5	146.0	148.2	147.5	148.2
72.5°	131.3	129.8	127.6	124.0	124.0	123.2	122.5	122.5	121.8	121.8	121.8
75°	107.8	104.9	102.7	102.0	100.5	99.8	99.0	97.6	98.3	99.0	97.6
77.5°	83.6	80.0	79.2	79.2	77.0	77.0	77.8	77.0	76.3	76.3	76.3
80°	61.6	58.7	58.7	57.2	55.8	55.8	55.8	55.8	55.0	54.3	55.0
82.5°	39.6	38.9	38.1	38.1	39.6	36.7	38.1	37.4	36.7	36.7	35.9
85°	22.0	22.7	22.0	22.7	21.3	22.0	22.0	22.0	21.3	22.0	20.5
87.5°	8.1	8.1	8.1	8.8	8.8	8.8	8.8	8.8	9.5	8.8	8.8
90°	12.1	11.7	11.4	11.0	10.6	9.3	8.0	6.7	5.4	4.8	4.3
92.5°	19.7	19.4	19.1	18.8	18.5	17.9	17.3	16.8	16.2	15.9	15.6
95°	34.2	33.8	33.4	33.0	32.6	31.8	31.0	30.3	29.5	29.1	28.8
97.5°	49.6	49.1	48.6	48.1	47.6	47.0	46.4	45.8	45.2	44.9	44.7
100°	66.0	65.7	65.4	65.1	64.8	64.3	63.8	63.3	62.8	62.6	62.3
102.5°	85.3	85.0	84.7	84.4	84.1	83.4	82.8	82.1	81.4	81.1	80.9
105°	104.0	104.0	104.0	104.0	104.0	103.1	102.2	101.3	100.4	100.0	99.9
107.5°	125.4	125.1	124.8	124.5	124.2	123.8	123.4	123.1	122.7	122.5	122.4
110°	146.5	146.1	145.7	145.3	144.9	144.7	144.5	144.3	144.1	144.0	143.9



TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	167.6	167.1	166.6	166.1	165.6	165.6	165.6	165.6	165.6	165.6	165.6
115°	188.1	188.0	187.9	187.8	187.7	187.9	188.1	188.2	188.4	188.5	188.4
117.5°	209.2	209.2	209.2	209.2	209.2	209.4	209.6	209.8	210.0	210.1	210.1
120°	230.4	230.5	230.6	230.7	230.8	231.3	231.8	232.3	232.8	233.0	232.7
122.5°	251.7	252.0	252.3	252.6	252.9	253.1	253.3	253.4	253.6	253.7	253.5
125°	272.9	273.3	273.6	274.0	274.4	274.6	274.8	275.0	275.2	275.3	275.2
127.5°	293.7	294.3	294.8	295.4	296.0	296.2	296.4	296.6	296.8	296.9	296.6
130°	315.2	315.6	315.9	316.3	316.7	317.0	317.3	317.6	317.9	318.1	317.7
132.5°	335.4	335.9	336.4	336.9	337.4	337.6	337.8	338.0	338.2	338.3	337.9
135°	356.1	356.5	356.9	357.3	357.7	357.8	357.9	358.0	358.1	358.1	357.8
137.5°	376.0	376.5	377.0	377.5	378.0	377.7	377.4	377.1	376.8	376.6	376.4
140°	396.5	396.6	396.7	396.8	396.9	396.8	396.7	396.6	396.5	396.5	396.3
142.5°	415.0	415.1	415.2	415.3	415.4	415.2	415.0	414.8	414.6	414.5	414.3
145°	433.1	433.2	433.3	433.4	433.5	433.2	432.9	432.6	432.3	432.1	432.0
147.5°	450.6	450.6	450.6	450.6	450.6	450.3	450.0	449.7	449.4	449.3	449.1
150°	466.5	466.5	466.5	466.5	466.5	466.3	466.1	465.9	465.7	465.6	465.5
152.5°	481.4	481.2	481.0	480.8	480.6	480.5	480.4	480.3	480.2	480.2	480.0
155°	495.8	495.4	495.1	494.7	494.3	494.2	494.1	494.0	493.9	493.8	493.8
157.5°	508.2	507.8	507.4	507.0	506.6	506.5	506.4	506.3	506.2	506.2	506.2
160°	519.6	519.1	518.6	518.1	517.6	517.6	517.6	517.6	517.6	517.6	517.7
162.5°	530.2	529.7	529.2	528.7	528.2	528.1	528.0	527.9	527.8	527.7	527.9
165°	538.9	538.3	537.7	537.1	536.5	536.5	536.5	536.5	536.5	536.5	536.7
167.5°	546.4	545.8	545.2	544.6	544.0	543.9	543.8	543.7	543.6	543.6	543.8
170°	552.5	551.8	551.1	550.5	549.8	549.8	549.8	549.8	549.8	549.8	550.0
172.5°	557.0	556.4	555.8	555.2	554.6	554.6	554.6	554.6	554.6	554.6	554.8
175°	560.0	559.4	558.9	558.3	557.7	557.7	557.7	557.7	557.7	557.7	557.9
177.5°	561.8	561.2	560.7	560.1	559.5	559.5	559.5	559.5	559.5	559.5	559.7
180°	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8	560.8

TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	757.1	757.1	757.1	757.1
2.5°	740.9	743.1	750.5	759.3
5°	726.3	732.1	742.4	756.4
7.5°	710.1	718.9	733.6	751.2
10°	691.8	704.3	722.6	744.6
12.5°	672.0	688.1	711.6	734.3
15°	659.5	675.7	696.9	721.9
17.5°	635.3	654.4	676.4	711.6
20°	610.4	631.6	660.2	695.5
22.5°	591.3	614.0	641.2	678.6
25°	568.5	592.0	621.4	660.2
27.5°	544.3	567.8	600.8	641.9
30°	526.0	548.7	580.3	624.3
32.5°	504.0	526.0	559.0	605.2
35°	479.0	504.0	535.5	582.5
37.5°	460.0	482.7	515.7	560.5
40°	439.4	459.2	491.5	535.5
42.5°	417.4	439.4	467.3	511.3
45°	396.9	413.0	441.6	483.4
47.5°	374.9	393.2	415.2	447.5
50°	351.4	366.8	391.0	413.0
52.5°	328.7	341.1	361.7	378.5
55°	304.4	316.9	332.3	342.6
57.5°	281.7	290.5	300.8	307.4
60°	253.8	262.6	269.2	275.8
62.5°	228.9	235.5	239.2	242.8
65°	203.2	206.9	209.1	212.0
67.5°	175.3	179.0	179.7	184.1
70°	149.7	150.4	151.9	154.1
72.5°	125.4	126.9	126.2	127.6
75°	100.5	102.0	100.5	102.0
77.5°	76.3	77.8	77.8	80.0
80°	55.0	55.8	56.5	56.5
82.5°	35.9	38.1	36.7	37.4
85°	20.5	21.3	21.3	22.0
87.5°	9.5	10.3	9.5	11.0
90°	3.3	2.4	1.4	0.4
92.5°	15.0	14.4	13.8	13.2
95°	28.1	27.4	26.7	26.0
97.5°	44.2	43.7	43.2	42.7
100°	61.7	61.1	60.5	59.9
102.5°	80.6	80.3	80.0	79.7
105°	99.7	99.5	99.3	99.1
107.5°	122.3	122.2	122.1	122.0
110°	143.7	143.6	143.4	143.2



TEST NUMBER: P1030909

CATALOG NUMBER: S123DIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	165.5	165.4	165.3	165.2
115°	188.1	187.8	187.5	187.2
117.5°	210.0	209.9	209.8	209.7
120°	232.1	231.6	231.0	230.4
122.5°	253.1	252.8	252.4	252.0
125°	274.9	274.6	274.3	274.0
127.5°	296.0	295.5	294.9	294.3
130°	316.9	316.1	315.3	314.5
132.5°	337.1	336.4	335.6	334.8
135°	357.2	356.7	356.1	355.5
137.5°	375.9	375.4	374.9	374.4
140°	395.8	395.3	394.8	394.3
142.5°	413.8	413.3	412.8	412.3
145°	431.8	431.7	431.5	431.3
147.5°	448.7	448.4	448.0	447.6
150°	465.3	465.1	464.9	464.7
152.5°	479.7	479.4	479.1	478.8
155°	493.8	493.8	493.8	493.8
157.5°	506.3	506.4	506.5	506.6
160°	517.9	518.1	518.3	518.5
162.5°	528.2	528.5	528.8	529.1
165°	537.0	537.3	537.6	537.9
167.5°	544.2	544.6	545.0	545.4
170°	550.4	550.7	551.1	551.5
172.5°	555.2	555.6	556.0	556.4
175°	558.3	558.7	559.1	559.5
177.5°	560.1	560.4	560.8	561.2
180°	560.8	560.8	560.8	560.8

(END OF REPORT)