

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: P1031194

Luminaire Tested: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031194
REPORT IS A COMBINATION OF REPORTS P994517 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

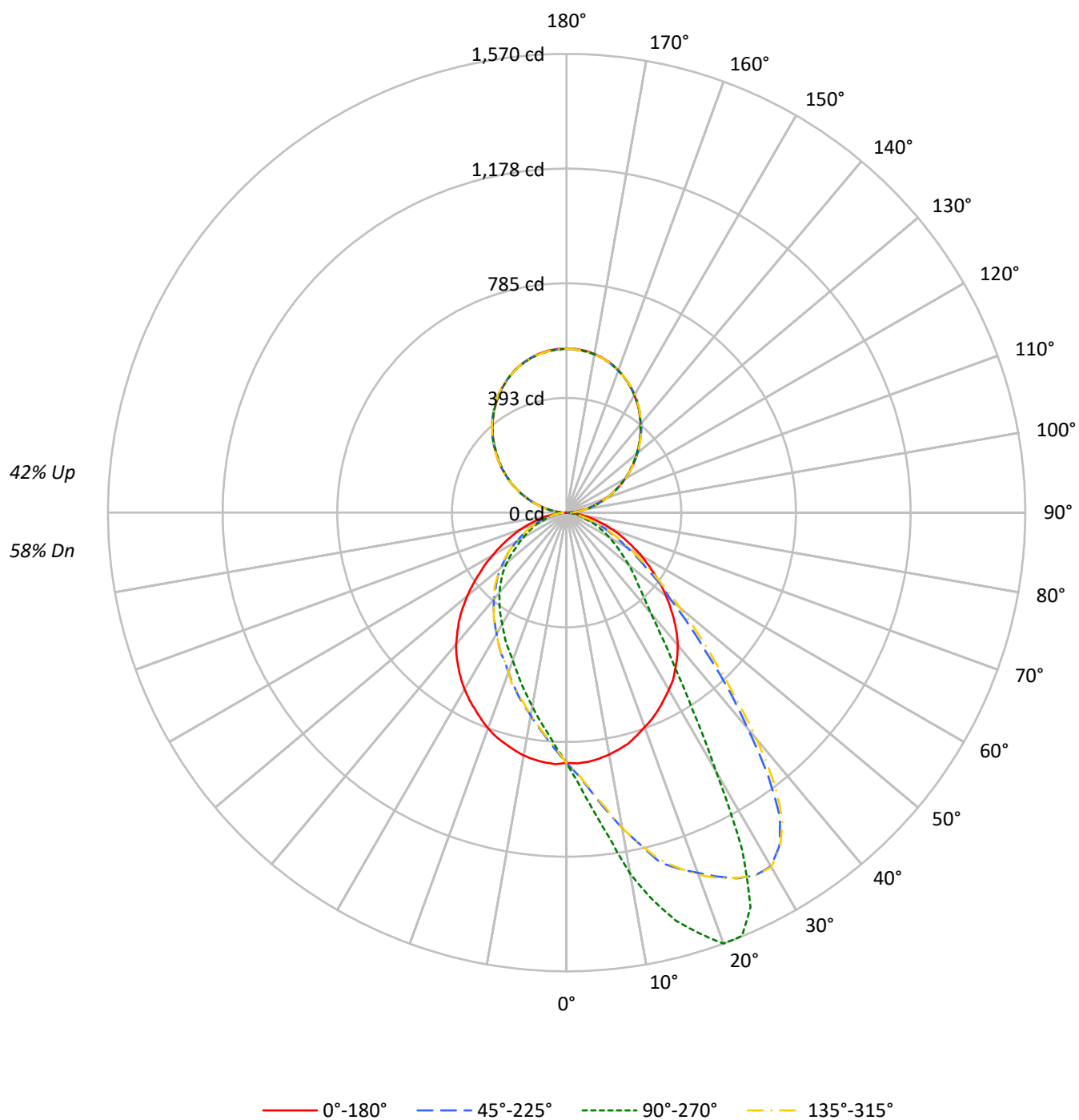
Lumens per Lamp: N/A
Luminaire Lumens: 3688.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

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	88	88	88	75	75	75	63	63	63
1	100	96	92	89	93	90	87	84	78	76	74	67	65	64	57	56	55
2	92	85	79	74	85	79	74	70	69	65	62	60	57	54	51	49	47
3	84	75	68	62	78	70	64	59	62	57	53	53	50	47	46	43	41
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	41	38	36
5	71	60	52	46	66	56	49	44	50	44	40	43	39	36	38	34	32
6	66	54	46	41	61	51	44	39	45	39	35	40	35	32	34	31	28
7	61	49	41	36	57	46	39	34	41	35	31	36	32	28	32	28	25
8	57	45	37	32	53	42	35	31	38	32	28	33	29	25	29	25	23
9	53	41	34	29	50	39	32	27	35	29	25	31	26	23	27	23	21
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9220	9220	9220	9220
5°	9228	10619	9252	7879
10°	9146	12819	9185	6881
15°	9052	14549	9052	6068
20°	8867	15693	8917	5382
25°	8731	14909	8713	4911
30°	8573	10330	8555	4451
35°	8383	6632	8344	4103
40°	8146	4684	8105	3758
45°	7733	3748	7723	3421
50°	7226	3135	7204	3028
55°	6657	2585	6605	2567
60°	6100	2135	6038	2182
65°	5444	1710	5478	1849
70°	4838	1187	4968	1495
75°	4101	881	4268	1149
80°	3263	584	3545	863
85°	2325	277	2536	536

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 12310 cd/sqm

TEST NUMBER: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	2.3
10°-20°	263.3	7.1
20°-30°	414.7	11.2
30°-40°	431.3	11.7
40°-50°	369.0	10.0
50°-60°	281.3	7.6
60°-70°	180.2	4.9
70°-80°	86.3	2.3
80°-90°	23.9	0.6
90°-100°	36.1	1.0
100°-110°	109.3	3.0
110°-120°	186.0	5.0
120°-130°	244.7	6.6
130°-140°	275.1	7.5
140°-150°	270.4	7.3
150°-160°	227.7	6.2
160°-170°	151.6	4.1
170°-180°	53.1	1.4
0°-30°	762.2	20.7
0°-40°	1193.5	32.4
0°-60°	1843.7	50.0
0°-90°	2134.2	57.9
90°-120°	331.4	9.0
90°-150°	1121.5	30.4
90°-180°	1554.0	42.1
0°-180°	3688.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	857	857	857	857	857	
5°	856	1017	858	755	856	81
15°	818	1446	818	603	818	230
25°	744	1490	742	491	744	343
35°	649	646	646	400	649	406
45°	521	345	520	315	521	401
55°	367	216	364	215	367	329
65°	225	125	227	135	225	225
75°	108	53	112	69	108	116
85°	24	12	26	24	24	27
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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	858.8	864.7	869.1	872.0	879.3	883.7	887.4	894.0	894.0	895.5	898.4
5°	855.9	868.3	877.1	888.9	904.3	911.6	921.9	930.7	943.1	949.7	956.3
7.5°	849.3	866.9	885.2	902.8	925.5	940.2	950.5	973.2	989.4	1009.2	1024.6
10°	840.5	864.7	888.1	915.3	946.1	968.1	983.5	1013.6	1044.4	1072.2	1095.7
12.5°	829.5	858.8	892.5	925.5	968.8	990.8	1015.8	1053.2	1097.2	1132.4	1163.9
15°	817.7	851.5	889.6	929.9	984.2	1015.0	1051.0	1096.4	1145.6	1196.2	1239.4
17.5°	799.4	841.9	884.5	943.1	1007.0	1025.3	1056.1	1118.4	1179.3	1224.8	1277.6
20°	781.1	828.7	882.3	935.1	1004.0	1046.6	1075.2	1141.2	1206.4	1261.4	1312.0
22.5°	764.2	814.1	869.8	936.5	1001.1	1043.6	1079.6	1148.5	1224.0	1285.6	1348.0
25°	743.7	797.9	859.5	922.6	1001.1	1033.4	1073.0	1152.9	1232.8	1304.0	1381.0
27.5°	721.7	776.7	837.5	902.1	974.0	1021.6	1060.5	1146.3	1243.8	1320.1	1399.3
30°	699.7	756.1	814.8	872.7	953.4	998.9	1043.6	1138.2	1249.7	1337.0	1397.9
32.5°	678.4	726.1	784.0	840.5	920.4	970.3	1020.9	1130.2	1251.9	1325.2	1354.6
35°	649.1	698.9	745.9	806.0	886.7	935.8	995.2	1129.4	1242.4	1287.8	1273.2
37.5°	621.9	663.7	708.5	762.0	844.9	908.7	970.3	1110.4	1210.8	1213.8	1130.9
40°	591.9	626.3	663.7	720.2	809.7	872.7	939.5	1081.0	1153.6	1110.4	964.4
42.5°	557.4	588.2	617.5	672.5	770.1	840.5	912.3	1044.4	1070.8	971.0	819.2
45°	520.7	545.6	572.8	630.7	728.3	797.9	869.8	987.9	960.7	819.9	675.5
47.5°	482.6	503.8	530.2	583.1	683.5	754.7	822.9	907.2	838.3	687.2	566.2
50°	444.4	461.3	487.0	541.2	638.1	702.6	765.7	820.7	723.9	589.7	467.9
52.5°	407.0	420.2	446.6	492.8	586.7	648.3	693.8	715.1	616.8	487.0	406.3
55°	367.4	382.1	399.7	446.6	539.8	585.3	615.3	614.6	513.4	412.9	335.9
57.5°	329.3	342.5	357.9	404.8	480.4	511.2	536.8	524.4	428.3	338.1	288.2
60°	295.6	302.9	319.8	359.4	416.6	443.0	457.6	436.4	349.8	285.3	238.4
62.5°	258.9	266.2	280.2	317.6	352.8	366.7	379.2	352.0	289.0	232.5	203.9
65°	225.2	234.7	243.5	273.6	292.6	309.5	308.0	285.3	225.9	189.2	165.7
67.5°	195.8	199.5	206.8	225.2	234.0	246.4	247.2	221.5	181.9	154.0	140.1
70°	164.3	167.9	173.1	181.9	187.7	190.7	189.2	166.5	137.1	120.3	107.8
72.5°	137.1	136.4	140.1	140.1	145.9	145.2	140.8	123.2	104.1	90.2	82.9
75°	107.8	108.5	109.3	107.8	105.6	102.7	99.0	85.8	73.3	66.7	60.1
77.5°	84.3	82.9	83.6	78.5	75.5	72.6	67.5	60.9	50.6	49.1	46.2
80°	60.1	59.4	58.7	56.5	49.9	46.9	43.3	39.6	37.4	35.9	35.2
82.5°	40.3	40.3	38.9	34.5	30.8	28.6	27.9	26.4	24.2	24.2	23.5
85°	24.2	23.5	22.0	17.6	15.4	15.4	15.4	15.4	13.9	13.9	13.2
87.5°	9.5	8.8	6.6	6.6	5.9	5.9	5.9	5.1	5.1	4.4	4.4
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	904.3	904.3	910.9	917.5	913.8	916.0	924.1	921.1	927.0	926.3	928.5
5°	972.5	980.6	987.2	1001.1	1003.3	1001.1	1015.0	1018.7	1025.3	1017.2	1020.9
7.5°	1049.5	1066.4	1082.5	1103.0	1109.6	1111.1	1118.4	1128.7	1137.5	1121.4	1129.4
10°	1124.3	1150.0	1183.0	1201.3	1217.4	1223.3	1229.2	1235.8	1246.0	1255.6	1248.2
12.5°	1205.0	1242.4	1273.9	1306.9	1326.7	1324.5	1341.4	1345.8	1353.9	1356.1	1359.0
15°	1271.0	1323.8	1343.6	1392.7	1397.1	1411.8	1430.9	1447.7	1449.9	1445.5	1445.5
17.5°	1334.0	1379.5	1414.7	1454.3	1462.4	1474.9	1499.1	1507.1	1510.1	1509.3	1509.3
20°	1385.4	1415.5	1474.9	1507.9	1521.1	1537.2	1554.1	1564.3	1566.5	1569.5	1565.1
22.5°	1419.1	1464.6	1513.0	1540.1	1551.1	1557.0	1568.0	1570.9	1567.3	1568.0	1568.7
25°	1445.5	1490.3	1519.6	1526.9	1526.2	1518.9	1510.8	1496.9	1495.4	1489.5	1477.8
27.5°	1452.9	1469.7	1466.1	1436.0	1405.9	1403.0	1354.6	1328.2	1298.1	1302.5	1285.6
30°	1413.3	1391.3	1339.2	1262.9	1231.4	1180.0	1125.8	1069.3	1047.3	1023.1	1067.8
32.5°	1316.4	1238.0	1145.6	1046.6	993.8	948.3	890.3	849.3	825.8	806.0	844.1
35°	1170.5	1048.0	925.5	831.7	788.4	747.3	693.1	672.5	643.2	646.1	649.8
37.5°	982.8	847.8	755.4	663.0	634.4	617.5	577.9	546.4	536.1	533.2	533.2
40°	806.7	696.0	613.9	541.2	519.2	505.3	473.8	459.1	448.1	445.2	448.8
42.5°	667.4	572.8	509.0	460.6	445.2	427.6	414.4	396.0	393.8	388.7	395.3
45°	560.3	478.2	430.5	395.3	382.1	375.5	360.8	349.8	345.4	344.7	349.8
47.5°	475.2	411.4	369.6	347.6	337.4	330.8	318.3	313.9	309.5	311.0	308.8
50°	399.0	351.3	324.2	304.4	297.8	291.2	283.1	278.7	276.5	276.5	275.8
52.5°	342.5	302.9	285.3	267.0	264.0	260.4	251.6	248.6	245.0	244.2	247.2
55°	293.4	266.2	248.6	237.6	234.7	227.4	223.7	220.0	217.8	216.4	217.1
57.5°	250.8	230.3	218.6	209.0	203.9	201.0	194.4	193.6	192.1	192.1	191.4
60°	215.6	201.0	187.0	181.1	177.5	173.8	173.1	168.7	166.5	167.9	167.2
62.5°	182.6	170.9	162.8	156.2	154.0	151.1	148.9	147.4	145.2	145.9	145.9
65°	152.5	143.0	137.1	131.3	130.5	127.6	126.9	125.4	125.4	124.7	126.1
67.5°	125.4	118.8	113.7	110.0	107.8	108.5	105.6	103.4	103.4	102.7	104.9
70°	99.7	96.1	90.9	86.5	83.6	83.6	79.9	79.2	79.2	79.2	78.5
72.5°	77.0	70.4	68.2	66.7	66.7	66.7	65.3	65.3	64.5	65.3	64.5
75°	57.2	56.5	55.0	54.3	54.3	53.5	52.8	52.8	52.8	52.8	52.8
77.5°	44.7	44.7	43.3	42.5	42.5	42.5	41.8	41.8	41.1	41.1	41.1
80°	33.0	33.0	31.5	31.5	31.5	30.8	30.8	30.8	31.5	30.8	30.8
82.5°	22.7	22.7	22.0	22.7	22.0	21.3	21.3	21.3	20.5	21.3	21.3
85°	13.2	13.2	12.5	11.7	12.5	12.5	11.7	12.5	11.7	12.5	11.7
87.5°	5.1	4.4	4.4	4.4	3.7	4.4	3.7	3.7	4.4	3.7	4.4
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	924.8	920.4	917.5	915.3	913.1	919.7	910.9	901.3	894.7	890.3	888.9
5°	1021.6	1012.1	1004.0	997.4	998.9	998.9	983.5	966.6	951.9	943.9	935.1
7.5°	1133.8	1123.6	1107.4	1103.8	1100.8	1082.5	1067.1	1036.3	1018.0	999.6	983.5
10°	1245.3	1232.1	1216.7	1211.6	1204.2	1181.5	1158.0	1118.4	1095.7	1062.0	1040.7
12.5°	1349.5	1333.3	1317.9	1314.2	1303.2	1283.4	1243.1	1202.0	1163.2	1127.2	1089.8
15°	1436.7	1432.3	1408.9	1394.2	1370.0	1342.8	1334.0	1278.3	1229.2	1191.8	1124.3
17.5°	1510.1	1489.5	1467.5	1458.0	1448.5	1416.9	1385.4	1328.2	1275.4	1220.4	1177.1
20°	1568.7	1546.0	1530.6	1516.7	1512.3	1476.3	1426.5	1375.9	1317.9	1256.3	1199.8
22.5°	1571.7	1568.7	1558.5	1550.4	1541.6	1518.1	1478.5	1415.5	1353.9	1286.4	1212.3
25°	1510.8	1506.4	1535.7	1528.4	1534.3	1525.5	1504.2	1451.4	1379.5	1300.3	1225.5
27.5°	1327.4	1372.2	1418.4	1434.5	1445.5	1477.1	1487.3	1458.0	1400.1	1315.7	1232.1
30°	1078.1	1137.5	1212.3	1252.6	1283.4	1342.1	1418.4	1427.9	1400.8	1333.3	1230.6
32.5°	846.3	900.6	960.7	1008.4	1049.5	1169.8	1272.4	1346.5	1359.7	1324.5	1234.3
35°	682.1	705.5	762.7	808.2	863.9	966.6	1087.6	1207.2	1287.8	1292.2	1223.3
37.5°	562.5	575.0	624.9	650.5	683.5	773.7	886.7	1042.9	1168.3	1227.7	1192.5
40°	465.7	494.3	522.9	537.6	561.0	623.4	731.9	854.4	1009.9	1119.9	1144.8
42.5°	404.1	416.6	434.9	455.4	470.1	524.4	597.0	709.2	849.3	1002.6	1071.5
45°	356.4	360.8	379.9	393.1	408.5	446.6	498.0	591.9	715.1	866.1	983.5
47.5°	316.8	325.6	335.9	344.0	354.2	383.6	427.6	495.8	604.3	739.3	865.4
50°	281.6	286.8	300.0	303.6	311.0	331.5	365.2	417.3	506.8	614.6	745.1
52.5°	248.6	258.2	263.3	268.4	275.0	291.9	313.9	356.4	423.9	525.1	635.9
55°	223.0	225.9	233.2	237.6	242.8	254.5	273.6	305.1	357.9	438.6	543.4
57.5°	198.0	198.0	205.4	209.0	214.2	223.0	239.8	264.0	302.2	362.3	458.4
60°	171.6	172.3	178.2	182.6	184.1	192.9	206.8	225.9	255.2	299.2	377.7
62.5°	148.1	151.8	154.7	156.2	161.3	166.5	178.2	191.4	212.0	250.8	306.6
65°	128.3	129.1	131.3	132.7	134.9	140.8	149.6	158.4	176.0	204.6	250.1
67.5°	105.6	108.5	111.5	111.5	113.7	116.6	125.4	132.7	145.9	162.8	193.6
70°	79.2	80.7	85.1	87.3	90.2	95.3	99.7	104.1	114.4	126.9	150.3
72.5°	66.0	66.0	67.5	68.2	68.2	71.9	78.5	82.9	88.0	96.8	112.9
75°	52.8	52.8	55.0	54.3	55.7	57.2	57.9	60.9	63.8	70.4	79.9
77.5°	41.8	42.5	42.5	43.3	43.3	44.0	44.7	46.2	47.7	51.3	55.7
80°	30.8	31.5	31.5	32.3	32.3	33.0	33.7	34.5	35.9	37.4	39.6
82.5°	21.3	22.0	22.0	22.7	22.0	22.7	23.5	23.5	24.2	25.7	26.4
85°	12.5	12.5	13.2	12.5	12.5	12.5	13.2	13.2	13.9	16.1	16.1
87.5°	3.7	4.4	3.7	4.4	4.4	4.4	4.4	5.1	5.1	5.9	6.6
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	886.7	883.0	879.3	879.3	871.3	863.9	860.3	861.7	857.3	851.5	845.6
5°	925.5	910.9	907.9	899.9	888.9	873.5	865.4	858.1	849.3	837.5	826.5
7.5°	961.5	942.4	932.1	924.1	902.8	881.5	863.9	852.2	836.8	819.2	806.0
10°	1008.4	973.2	962.2	943.9	913.8	883.7	863.2	844.1	822.9	802.3	784.7
12.5°	1045.8	1005.5	985.0	966.6	927.7	889.6	855.1	831.7	806.0	783.3	760.5
15°	1088.4	1042.9	1007.0	985.0	935.8	889.6	850.7	817.7	789.1	761.3	741.5
17.5°	1108.9	1051.7	1035.6	1004.0	932.9	886.7	839.0	803.8	769.3	737.1	713.6
20°	1141.2	1074.4	1034.1	1012.8	949.7	881.5	825.8	785.5	749.5	715.1	690.1
22.5°	1143.4	1070.8	1044.4	1004.0	926.3	866.1	814.1	764.9	723.1	690.9	665.2
25°	1138.2	1064.2	1027.5	995.2	930.7	857.3	790.6	742.2	701.1	663.7	633.7
27.5°	1136.0	1045.1	1010.6	978.4	905.7	831.7	776.7	721.7	674.7	641.7	610.9
30°	1133.1	1024.6	982.8	945.3	878.6	811.9	745.9	698.2	653.5	611.7	580.9
32.5°	1114.0	996.7	954.1	914.5	842.7	775.9	723.9	673.3	624.9	586.0	558.1
35°	1108.2	971.0	915.3	872.7	802.3	742.9	687.9	646.1	600.7	561.8	528.8
37.5°	1091.3	944.6	884.5	830.2	756.9	700.4	660.1	618.3	574.2	532.4	506.0
40°	1062.0	913.8	845.6	789.9	714.3	657.1	619.7	588.9	545.6	508.2	476.0
42.5°	1018.7	882.3	808.9	750.3	666.7	613.1	582.3	553.0	516.3	477.4	451.0
45°	968.8	840.5	772.3	707.0	621.9	569.8	537.6	520.0	486.2	453.2	422.4
47.5°	900.6	797.2	729.7	662.3	575.7	525.1	499.4	481.8	458.4	422.4	397.5
50°	814.8	741.5	677.7	617.5	530.2	481.8	456.2	443.0	423.2	397.5	373.3
52.5°	719.5	676.9	624.1	568.4	484.0	438.6	415.1	404.8	390.2	366.0	345.4
55°	623.4	605.1	569.1	514.1	435.6	398.2	377.7	364.5	353.5	335.9	318.3
57.5°	537.6	528.8	503.8	461.3	395.3	356.4	338.8	330.0	321.2	308.0	290.4
60°	448.8	458.4	432.7	411.4	351.3	317.6	302.2	292.6	288.2	276.5	265.5
62.5°	371.8	380.6	366.0	349.8	307.3	277.2	267.7	258.9	256.0	245.7	234.7
65°	302.2	313.2	302.2	293.4	267.7	242.8	231.0	226.6	223.7	217.1	208.3
67.5°	240.6	251.6	246.4	235.4	227.4	206.8	200.2	195.8	194.4	189.2	181.9
70°	181.1	196.6	198.0	191.4	184.1	174.5	170.1	168.7	165.0	160.6	156.2
72.5°	130.5	148.1	148.9	148.9	144.5	144.5	140.1	137.9	137.9	133.5	128.3
75°	96.1	107.8	109.3	110.7	112.9	115.1	112.2	112.2	111.5	107.1	104.9
77.5°	63.8	74.1	77.7	82.9	85.8	85.8	87.3	88.7	87.3	85.1	83.6
80°	41.1	48.4	52.8	55.7	60.1	62.3	64.5	65.3	63.8	63.1	60.9
82.5°	27.1	29.3	31.5	35.2	40.3	44.0	44.0	43.3	44.7	44.0	43.3
85°	15.4	16.9	17.6	18.3	21.3	24.9	25.7	26.4	27.9	26.4	24.9
87.5°	5.9	6.6	6.6	6.6	8.1	8.8	11.0	13.9	13.2	11.7	11.7
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	845.6	841.9	840.5	836.8	828.0	822.1	815.5	811.1	811.9	808.2	810.4
5°	819.2	818.5	813.3	806.0	793.5	786.9	775.2	769.3	766.4	767.1	762.7
7.5°	797.2	790.6	786.9	775.2	763.5	749.5	740.0	734.9	730.5	726.1	723.1
10°	772.3	766.4	760.5	748.1	731.9	718.7	705.5	700.4	693.8	690.9	688.7
12.5°	745.9	742.2	734.9	720.2	701.9	689.4	674.0	671.1	662.3	656.4	654.9
15°	721.7	719.5	706.3	689.4	671.1	658.6	645.4	636.6	621.9	624.9	619.7
17.5°	696.0	686.5	678.4	655.7	646.9	627.8	612.4	608.0	597.7	591.1	584.5
20°	667.4	661.5	651.3	636.6	615.3	593.3	581.6	574.2	568.4	558.1	555.2
22.5°	640.3	632.9	624.1	605.1	586.7	568.4	552.2	545.6	538.3	531.0	526.6
25°	619.0	608.0	598.5	575.0	556.6	541.2	531.0	520.0	509.7	505.3	503.8
27.5°	586.0	579.4	569.8	547.8	531.0	514.1	504.6	497.2	486.2	481.1	476.7
30°	564.7	551.5	540.5	522.9	506.0	487.7	478.9	470.1	463.5	456.9	451.8
32.5°	536.1	525.8	517.0	499.4	482.6	465.7	456.2	443.0	439.3	434.2	428.3
35°	508.2	501.6	492.1	473.0	454.7	443.0	432.7	420.2	415.8	412.2	407.0
37.5°	481.8	472.3	465.7	447.4	431.2	417.3	409.2	399.0	396.0	391.6	388.0
40°	459.1	449.6	443.0	424.6	407.8	393.1	388.0	377.7	373.3	368.2	366.0
42.5°	433.4	425.4	416.6	403.4	385.8	371.1	360.8	355.0	349.1	346.9	342.5
45°	406.3	399.0	392.4	377.7	359.4	349.1	340.3	332.2	327.8	324.2	321.2
47.5°	382.8	376.2	367.4	351.3	336.6	327.1	318.3	310.2	305.8	301.4	297.8
50°	355.7	352.0	342.5	327.1	313.2	302.2	294.1	286.8	283.8	278.7	272.8
52.5°	331.5	324.9	316.8	304.4	291.9	278.7	267.7	263.3	258.2	255.2	250.1
55°	302.9	298.5	289.7	278.7	265.5	254.5	246.4	240.6	234.0	231.0	224.4
57.5°	278.7	270.6	266.2	252.3	239.8	228.8	223.0	217.1	209.8	205.4	202.4
60°	252.3	245.0	238.4	226.6	217.8	206.1	197.3	192.1	187.0	181.1	178.2
62.5°	226.6	220.8	212.7	203.2	192.1	182.6	176.0	168.7	165.7	159.9	157.7
65°	198.8	194.4	187.7	176.7	167.9	159.9	153.3	147.4	144.5	142.3	140.8
67.5°	173.8	167.9	163.5	154.0	144.5	137.9	134.2	130.5	126.9	124.7	122.5
70°	148.1	143.7	139.3	130.5	123.9	118.1	115.1	112.2	110.0	107.8	105.6
72.5°	121.7	119.5	115.1	109.3	104.1	99.7	97.5	93.9	91.7	88.0	86.5
75°	100.5	96.8	94.6	89.5	85.1	81.4	78.5	74.1	71.1	69.7	68.9
77.5°	79.2	77.7	74.8	70.4	68.2	64.5	60.1	58.7	57.2	57.2	56.5
80°	59.4	57.2	55.0	51.3	49.1	46.2	46.2	46.2	45.5	46.2	45.5
82.5°	40.3	38.9	37.4	35.2	34.5	34.5	35.2	35.2	35.2	35.2	35.2
85°	23.5	23.5	23.5	24.2	23.5	23.5	24.2	24.9	24.2	24.2	23.5
87.5°	11.0	11.0	11.7	11.7	12.5	12.5	12.5	12.5	12.5	12.5	13.2
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	809.7	810.4	808.2	803.8	803.1	804.5	808.9	807.5	803.8	810.4	804.5
5°	764.9	761.3	759.8	761.3	756.9	754.7	759.1	756.9	759.1	759.8	762.0
7.5°	721.7	722.4	718.0	718.7	712.9	714.3	714.3	714.3	716.5	718.0	720.9
10°	684.3	685.7	680.6	681.3	676.9	674.0	676.2	680.6	680.6	680.6	682.1
12.5°	654.2	647.6	643.9	643.2	638.1	636.6	641.0	642.5	646.1	646.1	648.3
15°	616.8	615.3	612.4	612.4	599.9	602.9	604.3	609.5	616.8	610.9	612.4
17.5°	583.1	579.4	575.7	574.2	572.8	568.4	574.2	573.5	577.9	578.7	580.9
20°	553.0	550.0	542.7	543.4	544.9	538.3	542.0	542.0	546.4	550.8	555.9
22.5°	523.6	520.7	517.0	518.5	514.1	512.6	512.6	516.3	521.4	525.1	524.4
25°	500.9	495.8	493.6	491.4	489.2	490.6	488.4	492.1	495.8	498.0	495.8
27.5°	475.2	473.0	468.6	466.4	462.8	464.2	465.7	468.6	470.8	470.8	473.0
30°	450.3	447.4	445.9	443.7	443.7	440.8	441.5	444.4	446.6	448.8	451.8
32.5°	426.1	423.9	421.7	421.7	420.2	419.5	418.8	423.2	423.2	427.6	427.6
35°	406.3	402.6	402.6	399.0	400.4	399.7	398.2	401.2	401.9	404.8	404.1
37.5°	384.3	384.3	382.8	379.2	376.2	377.0	380.6	380.6	382.8	382.1	384.3
40°	362.3	360.8	360.8	358.6	357.9	357.2	357.9	358.6	362.3	361.6	362.3
42.5°	340.3	341.0	337.4	337.4	337.4	335.2	335.9	336.6	338.1	339.6	341.8
45°	319.0	317.6	316.8	315.4	313.9	314.6	313.9	316.8	316.1	317.6	319.8
47.5°	296.3	294.1	293.4	290.4	290.4	291.9	291.2	293.4	294.1	296.3	294.8
50°	274.3	271.4	269.2	269.9	265.5	267.0	267.0	269.2	271.4	272.1	273.6
52.5°	248.6	247.9	247.2	243.5	242.8	242.0	242.8	243.5	246.4	248.6	249.4
55°	223.7	223.0	218.6	217.1	214.9	214.9	216.4	217.1	222.2	223.0	225.9
57.5°	201.0	198.8	193.6	192.9	192.9	192.9	190.7	193.6	195.1	198.8	198.8
60°	176.0	176.0	171.6	171.6	172.3	171.6	171.6	172.3	172.3	175.3	176.7
62.5°	156.2	155.5	155.5	154.0	153.3	154.0	153.3	153.3	154.0	156.2	158.4
65°	138.6	137.9	137.1	136.4	134.9	134.9	135.7	137.1	137.1	138.6	139.3
67.5°	121.7	121.7	120.3	120.3	119.5	118.8	119.5	118.8	121.7	121.7	122.5
70°	104.9	104.1	101.9	101.2	99.0	99.7	99.7	101.9	102.7	104.1	105.6
72.5°	84.3	84.3	82.9	81.4	82.1	80.7	80.7	81.4	81.4	83.6	84.3
75°	69.7	68.2	67.5	68.2	67.5	68.9	67.5	67.5	68.9	68.9	68.9
77.5°	57.2	57.2	56.5	56.5	57.2	56.5	57.2	57.2	57.2	56.5	57.2
80°	46.9	46.2	46.2	46.2	45.5	45.5	45.5	45.5	45.5	45.5	45.5
82.5°	35.2	35.2	34.5	35.2	35.2	34.5	35.2	34.5	34.5	35.2	35.2
85°	23.5	24.9	23.5	23.5	24.2	24.2	24.9	24.2	24.9	23.5	24.2
87.5°	12.5	13.2	13.2	12.5	12.5	13.2	13.2	13.2	13.9	12.5	13.2
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
2.5°	810.4	813.3	810.4	804.5	810.4	814.1	817.7	823.6	826.5	826.5	830.9
5°	764.2	770.1	767.9	766.4	772.3	775.9	781.8	789.1	797.2	802.3	808.2
7.5°	723.1	726.8	730.5	730.5	736.3	744.4	753.2	762.0	772.3	779.6	784.0
10°	687.2	690.1	692.3	695.3	704.1	712.9	724.6	735.6	744.4	752.5	759.8
12.5°	652.7	657.1	662.3	664.5	671.1	682.1	693.1	706.3	720.2	728.3	735.6
15°	619.7	621.9	627.8	634.4	640.3	652.0	665.9	679.9	691.6	704.1	710.7
17.5°	586.0	586.7	602.1	598.5	617.5	628.5	635.9	649.1	668.1	678.4	688.7
20°	553.0	560.3	566.9	570.6	580.9	593.3	614.6	624.9	640.3	649.8	658.6
22.5°	527.3	538.3	538.3	547.1	552.2	564.0	579.4	599.2	616.1	622.7	635.1
25°	504.6	509.7	518.5	521.4	531.0	541.2	551.5	572.8	591.1	599.9	608.7
27.5°	475.2	481.8	493.6	493.6	506.0	517.0	529.5	543.4	561.8	574.2	583.8
30°	452.5	459.1	464.2	472.3	477.4	487.7	509.7	520.0	536.1	547.1	558.8
32.5°	431.2	436.4	440.8	449.6	455.4	467.2	478.9	497.2	511.2	521.4	533.9
35°	407.8	412.9	418.8	425.4	434.2	445.2	456.2	471.6	485.5	495.0	505.3
37.5°	385.8	389.4	398.2	402.6	410.0	420.2	434.2	450.3	462.8	470.1	480.4
40°	364.5	367.4	374.0	382.1	387.2	395.3	410.0	423.9	439.3	448.1	456.2
42.5°	341.8	345.4	351.3	359.4	367.4	376.2	384.3	400.4	414.4	421.7	430.5
45°	322.0	324.2	328.6	336.6	344.7	351.3	363.8	378.4	391.6	397.5	407.0
47.5°	298.5	300.7	307.3	311.0	319.8	328.6	341.0	355.7	367.4	373.3	382.1
50°	274.3	276.5	280.9	289.0	294.8	304.4	315.4	327.8	342.5	350.6	355.7
52.5°	250.8	255.2	258.9	265.5	272.8	282.4	292.6	304.4	316.8	324.9	330.8
55°	227.4	231.0	235.4	239.1	247.9	256.7	268.4	279.4	290.4	297.8	304.4
57.5°	201.0	206.1	210.5	217.8	224.4	231.8	245.0	253.8	267.0	272.1	278.0
60°	178.2	183.3	187.0	192.9	198.8	208.3	217.1	228.1	239.1	245.7	253.0
62.5°	159.1	161.3	163.5	169.4	175.3	184.1	192.9	203.9	215.6	219.3	225.2
65°	140.1	142.3	145.9	151.1	155.5	160.6	170.1	178.9	189.9	195.8	198.0
67.5°	123.9	126.1	126.9	130.5	134.2	140.1	145.2	154.0	164.3	167.9	172.3
70°	105.6	109.3	110.0	112.9	114.4	118.1	123.9	130.5	138.6	145.2	148.9
72.5°	84.3	89.5	90.9	95.3	97.5	101.2	105.6	110.7	115.9	118.8	121.7
75°	68.9	70.4	71.1	74.8	78.5	83.6	85.8	88.7	93.1	96.8	99.7
77.5°	57.2	57.9	58.7	58.7	59.4	62.3	66.7	70.4	73.3	74.8	77.0
80°	46.2	45.5	45.5	46.2	46.2	46.2	47.7	52.8	54.3	57.9	57.2
82.5°	35.9	34.5	35.2	34.5	34.5	34.5	34.5	35.2	35.2	37.4	38.9
85°	23.5	24.2	23.5	23.5	22.7	23.5	22.7	22.7	22.0	22.0	21.3
87.5°	12.5	13.2	12.5	12.5	11.7	12.5	11.7	11.7	11.0	11.0	9.5
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: P1031194

CATALOG NUMBER: S123RDIW-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: P1031194

CATALOG NUMBER: S123RDIW-B560D460UB2750-4F0-XX-W2A-A1_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	856.6	856.6	856.6	856.6
2.5°	834.6	839.7	850.0	858.8
5°	817.0	825.1	840.5	855.9
7.5°	795.7	808.2	828.0	849.3
10°	775.2	791.3	815.5	840.5
12.5°	754.7	771.5	797.2	829.5
15°	730.5	748.1	778.9	817.7
17.5°	709.2	732.7	760.5	799.4
20°	686.5	704.1	740.0	781.1
22.5°	657.9	687.2	720.9	764.2
25°	635.1	660.8	694.5	743.7
27.5°	607.3	637.3	678.4	721.7
30°	584.5	609.5	647.6	699.7
32.5°	558.1	587.5	627.1	678.4
35°	534.6	559.6	597.0	649.1
37.5°	506.8	533.9	575.7	621.9
40°	482.6	509.0	548.6	591.9
42.5°	453.2	481.1	520.7	557.4
45°	429.8	455.4	487.0	520.7
47.5°	401.2	428.3	459.1	482.6
50°	375.5	400.4	424.6	444.4
52.5°	347.6	370.4	392.4	407.0
55°	322.0	339.6	357.2	367.4
57.5°	291.9	308.8	323.4	329.3
60°	265.5	279.4	289.0	295.6
62.5°	237.6	247.9	255.2	258.9
65°	210.5	217.8	221.5	225.2
67.5°	182.6	189.2	191.4	195.8
70°	153.3	160.6	162.1	164.3
72.5°	131.3	131.3	134.2	137.1
75°	104.9	106.3	107.8	107.8
77.5°	82.1	82.1	83.6	84.3
80°	60.1	60.9	60.9	60.1
82.5°	41.1	42.5	41.1	40.3
85°	22.7	25.7	24.2	24.2
87.5°	9.5	9.5	11.0	9.5
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: P1031194

CATALOG NUMBER: S123RDIW-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)