

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: P1031147

Luminaire Tested: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031147
REPORT IS A COMBINATION OF REPORTS P994301 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

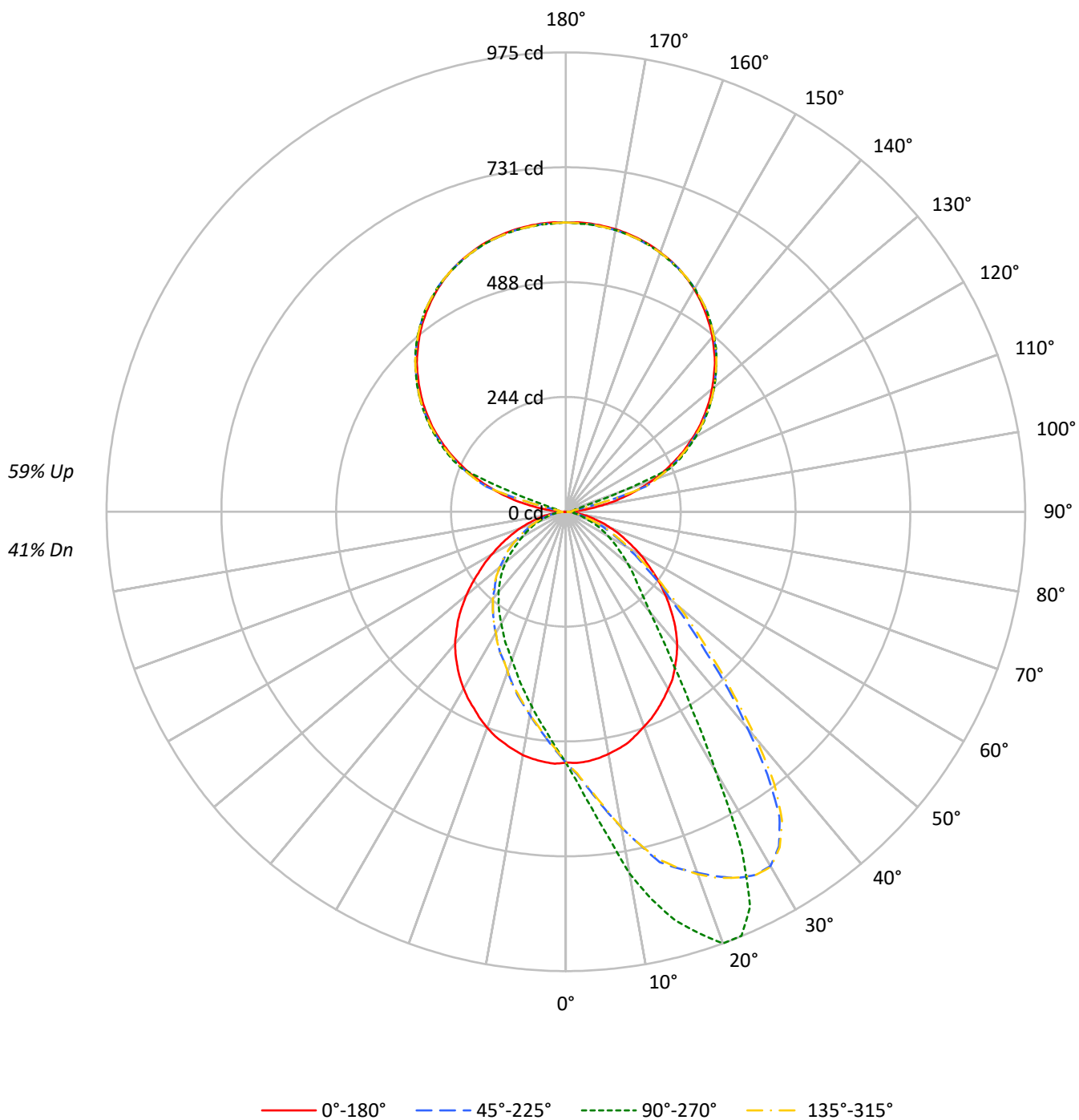
Lumens per Lamp: N/A
Luminaire Lumens: 3198.0 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 26.2
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: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1031147

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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48
1	96	92	89	85	88	84	81	78	70	67	65	56	55	53	43	43	42
2	88	81	75	70	80	74	69	65	62	58	55	50	47	45	39	37	36
3	81	72	65	59	73	66	60	55	55	50	47	44	41	39	35	33	31
4	74	64	56	50	67	59	52	47	49	44	40	40	36	34	31	29	27
5	68	57	49	43	62	52	46	41	44	39	35	36	32	29	28	26	24
6	63	51	43	38	57	47	40	35	40	34	31	33	29	26	26	23	21
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	24	21	19
8	54	42	35	29	49	39	32	28	33	28	24	27	23	21	22	19	17
9	50	38	31	26	46	36	29	25	30	25	22	25	21	19	20	18	16
10	47	35	28	24	43	33	26	22	28	23	20	23	19	17	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5727	5727	5727	5727
5°	5732	6597	5747	4894
10°	5681	7964	5707	4275
15°	5623	9037	5623	3769
20°	5508	9748	5538	3344
25°	5424	9262	5412	3051
30°	5325	6417	5314	2765
35°	5207	4120	5184	2549
40°	5061	2909	5034	2334
45°	4804	2328	4797	2125
50°	4490	1948	4475	1880
55°	4135	1605	4102	1594
60°	3788	1326	3751	1356
65°	3382	1061	3404	1149
70°	3004	738	3086	930
75°	2549	547	2651	714
80°	2030	362	2199	535
85°	1441	171	1575	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 7647 cd/sqm

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	1.6
10°-20°	163.6	5.1
20°-30°	257.6	8.1
30°-40°	267.9	8.4
40°-50°	229.2	7.2
50°-60°	174.7	5.5
60°-70°	111.9	3.5
70°-80°	53.6	1.7
80°-90°	15.3	0.5
90°-100°	21.7	0.7
100°-110°	104.7	3.3
110°-120°	256.5	8.0
120°-130°	325.6	10.2
130°-140°	347.9	10.9
140°-150°	325.3	10.2
150°-160°	262.4	8.2
160°-170°	169.3	5.3
170°-180°	58.4	1.8
0°-30°	473.5	14.8
0°-40°	741.4	23.2
0°-60°	1145.3	35.8
0°-90°	1326.2	41.5
90°-120°	382.9	12.0
90°-150°	1381.7	43.2
90°-180°	1872.0	58.5
0°-180°	3198.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	532	532	532	532	532	
5°	532	632	533	469	532	50
15°	508	898	508	374	508	143
25°	462	925	461	305	462	213
35°	403	401	401	248	403	252
45°	324	214	323	195	324	249
55°	228	134	226	134	228	205
65°	140	77	141	84	140	140
75°	67	33	70	43	67	72
85°	15	8	16	15	15	17
90°	0	14	0	14	0	2
95°	28	17	28	17	28	33
105°	136	20	136	20	136	144
115°	255	268	255	268	255	252
125°	359	367	359	367	359	321
135°	448	452	448	452	448	345
145°	516	521	516	521	516	323
155°	569	568	569	568	569	262
165°	600	598	600	598	600	169
175°	614	612	614	612	614	58
180°	614	614	614	614	614	

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	533.5	537.1	539.9	541.7	546.2	549.0	551.3	555.4	555.4	556.3	558.1
5°	531.7	539.4	544.9	552.2	561.7	566.3	572.7	578.1	585.9	590.0	594.1
7.5°	527.6	538.5	549.9	560.8	574.9	584.1	590.4	604.6	614.6	626.9	636.4
10°	522.1	537.1	551.7	568.6	587.7	601.4	610.9	629.6	648.7	666.1	680.6
12.5°	515.3	533.5	554.4	574.9	601.8	615.5	631.0	654.2	681.5	703.4	723.0
15°	508.0	528.9	552.6	577.7	611.4	630.5	652.8	681.1	711.6	743.0	769.9
17.5°	496.6	523.0	549.4	585.9	625.5	636.9	656.0	694.8	732.6	760.8	793.6
20°	485.2	514.8	548.1	580.9	623.7	650.1	667.9	708.9	749.4	783.6	815.0
22.5°	474.7	505.7	540.3	581.8	621.9	648.3	670.6	713.4	760.4	798.6	837.4
25°	462.0	495.7	533.9	573.1	621.9	641.9	666.5	716.2	765.8	810.0	857.9
27.5°	448.3	482.5	520.3	560.4	605.0	634.6	658.8	712.1	772.7	820.0	869.2
30°	434.6	469.7	506.1	542.1	592.3	620.5	648.3	707.1	776.3	830.5	868.3
32.5°	421.4	451.0	487.0	522.1	571.8	602.7	634.2	702.0	777.7	823.2	841.5
35°	403.2	434.2	463.3	500.7	550.8	581.3	618.2	701.6	771.8	800.0	790.9
37.5°	386.3	412.3	440.1	473.3	524.8	564.5	602.7	689.7	752.2	754.0	702.5
40°	367.7	389.1	412.3	447.4	503.0	542.1	583.6	671.5	716.6	689.7	599.1
42.5°	346.2	365.4	383.6	417.8	478.4	522.1	566.7	648.7	665.1	603.2	508.9
45°	323.5	339.0	355.8	391.8	452.4	495.7	540.3	613.7	596.8	509.3	419.6
47.5°	299.8	313.0	329.4	362.2	424.6	468.8	511.2	563.6	520.7	426.9	351.7
50°	276.1	286.6	302.5	336.2	396.4	436.4	475.6	509.8	449.7	366.3	290.7
52.5°	252.8	261.0	277.4	306.1	364.5	402.7	431.0	444.2	383.1	302.5	252.4
55°	228.2	237.4	248.3	277.4	335.3	363.6	382.2	381.8	318.9	256.5	208.7
57.5°	204.6	212.8	222.3	251.5	298.4	317.5	333.5	325.7	266.1	210.0	179.0
60°	183.6	188.2	198.6	223.2	258.8	275.2	284.3	271.1	217.3	177.2	148.1
62.5°	160.8	165.4	174.0	197.3	219.1	227.8	235.5	218.7	179.5	144.4	126.7
65°	139.9	145.8	151.3	169.9	181.8	192.3	191.3	177.2	140.3	117.5	103.0
67.5°	121.6	123.9	128.5	139.9	145.3	153.1	153.5	137.6	113.0	95.7	87.0
70°	102.0	104.3	107.5	113.0	116.6	118.5	117.5	103.4	85.2	74.7	67.0
72.5°	85.2	84.7	87.0	87.0	90.7	90.2	87.5	76.5	64.7	56.0	51.5
75°	67.0	67.4	67.9	67.0	65.6	63.8	61.5	53.3	45.6	41.5	37.4
77.5°	52.4	51.5	51.9	48.7	46.9	45.1	41.9	37.8	31.4	30.5	28.7
80°	37.4	36.9	36.4	35.1	31.0	29.2	26.9	24.6	23.2	22.3	21.9
82.5°	25.1	25.1	24.1	21.4	19.1	17.8	17.3	16.4	15.0	15.0	14.6
85°	15.0	14.6	13.7	10.9	9.6	9.6	9.6	9.6	8.7	8.7	8.2
87.5°	5.9	5.5	4.1	4.1	3.6	3.6	3.6	3.2	3.2	2.7	2.7
90°	0.5	1.5	2.5	3.5	4.5	5.0	5.7	7.0	8.3	9.6	10.9
92.5°	10.5	9.9	9.3	8.7	8.1	7.8	8.3	9.2	10.1	11.0	11.9
95°	27.8	23.6	19.5	15.3	11.2	9.1	9.7	10.8	11.9	13.0	14.1
97.5°	50.6	47.8	45.0	42.1	39.3	37.9	35.3	30.1	25.0	19.8	14.6
100°	77.1	79.1	81.1	83.2	85.2	86.2	78.3	62.5	46.7	30.9	15.1
102.5°	107.2	108.5	109.8	111.1	112.4	113.1	104.3	86.7	69.0	51.4	33.8
105°	135.9	137.0	138.2	139.3	140.4	141.0	136.4	127.3	118.2	109.0	99.9
107.5°	166.5	167.4	168.3	169.2	170.1	170.6	171.4	172.9	174.4	175.9	177.4
110°	197.1	197.9	198.7	199.5	200.3	200.7	201.3	202.4	203.5	204.6	205.7

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	226.3	227.0	227.7	228.4	229.1	229.4	230.0	231.1	232.2	233.4	234.5
115°	255.0	255.6	256.2	256.8	257.4	257.7	258.2	259.1	260.0	260.9	261.8
117.5°	283.3	284.0	284.7	285.4	286.1	286.5	286.7	287.2	287.7	288.2	288.7
120°	309.3	310.2	311.1	312.0	312.9	313.4	313.5	313.8	314.1	314.4	314.7
122.5°	335.7	336.4	337.1	337.8	338.5	338.9	339.1	339.5	339.9	340.3	340.7
125°	359.4	360.2	361.0	361.9	362.7	363.1	363.3	363.7	364.1	364.5	364.9
127.5°	383.2	384.0	384.8	385.6	386.4	386.8	387.1	387.6	388.1	388.6	389.1
130°	405.1	405.9	406.7	407.5	408.3	408.7	408.9	409.3	409.7	410.1	410.5
132.5°	426.0	426.8	427.6	428.5	429.3	429.7	429.9	430.2	430.5	430.8	431.1
135°	447.5	448.1	448.7	449.3	449.9	450.2	450.4	450.8	451.2	451.6	452.0
137.5°	465.7	466.5	467.3	468.2	469.0	469.4	469.5	469.7	469.9	470.1	470.3
140°	484.0	484.6	485.2	485.8	486.4	486.7	486.9	487.2	487.5	487.8	488.1
142.5°	500.9	501.5	502.1	502.7	503.3	503.6	503.8	504.1	504.4	504.7	505.0
145°	516.4	517.1	517.8	518.5	519.2	519.6	519.7	519.9	520.1	520.3	520.5
147.5°	531.4	531.9	532.4	532.9	533.4	533.7	533.8	534.0	534.2	534.4	534.6
150°	545.1	545.4	545.7	546.0	546.3	546.5	546.6	546.8	547.0	547.2	547.4
152.5°	557.4	557.5	557.6	557.7	557.8	557.9	557.9	558.0	558.1	558.2	558.3
155°	568.8	568.6	568.4	568.2	568.0	567.9	568.0	568.1	568.2	568.3	568.4
157.5°	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.8	577.7	577.6	577.5
160°	586.2	586.1	586.0	585.9	585.8	585.7	585.6	585.5	585.4	585.3	585.2
162.5°	593.9	593.6	593.3	593.0	592.7	592.5	592.5	592.4	592.3	592.2	592.1
165°	599.8	599.5	599.2	598.9	598.6	598.5	598.4	598.3	598.2	598.1	598.0
167.5°	604.9	604.5	604.1	603.6	603.2	603.0	603.0	603.0	603.0	603.0	603.0
170°	609.0	608.6	608.2	607.7	607.3	607.1	607.1	607.1	607.1	607.1	607.1
172.5°	611.7	611.2	610.7	610.2	609.7	609.4	609.5	609.6	609.7	609.8	609.9
175°	614.0	613.5	613.0	612.5	612.0	611.7	611.8	611.9	612.0	612.1	612.2
177.5°	614.9	614.4	613.9	613.4	612.9	612.6	612.7	612.8	612.9	613.0	613.1
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	561.7	561.7	565.8	569.9	567.7	569.0	574.0	572.2	575.9	575.4	576.8
5°	604.1	609.1	613.2	621.9	623.2	621.9	630.5	632.8	636.9	631.9	634.2
7.5°	651.9	662.4	672.4	685.2	689.3	690.2	694.8	701.1	706.6	696.6	701.6
10°	698.4	714.3	734.8	746.2	756.3	759.9	763.6	767.7	774.0	780.0	775.4
12.5°	748.5	771.8	791.3	811.8	824.1	822.8	833.3	836.0	841.0	842.4	844.2
15°	789.5	822.3	834.6	865.1	867.9	877.0	888.8	899.3	900.7	897.9	897.9
17.5°	828.7	856.9	878.8	903.4	908.4	916.2	931.2	936.2	938.0	937.6	937.6
20°	860.6	879.3	916.2	936.7	944.9	954.9	965.4	971.8	973.1	974.9	972.2
22.5°	881.5	909.8	939.9	956.7	963.6	967.2	974.0	975.9	973.6	974.0	974.5
25°	897.9	925.7	944.0	948.5	948.1	943.5	938.5	929.8	928.9	925.3	918.0
27.5°	902.5	913.0	910.7	892.0	873.3	871.5	841.5	825.1	806.4	809.1	798.6
30°	877.9	864.2	831.9	784.5	764.9	733.0	699.3	664.2	650.6	635.5	663.3
32.5°	817.8	769.0	711.6	650.1	617.3	589.1	553.1	527.6	513.0	500.7	524.4
35°	727.1	651.0	574.9	516.6	489.7	464.2	430.5	417.8	399.5	401.4	403.6
37.5°	610.5	526.6	469.2	411.8	394.1	383.6	359.0	339.4	333.0	331.2	331.2
40°	501.1	432.3	381.3	336.2	322.6	313.9	294.3	285.2	278.4	276.5	278.8
42.5°	414.6	355.8	316.2	286.1	276.5	265.6	257.4	246.0	244.6	241.5	245.6
45°	348.1	297.0	267.4	245.6	237.4	233.3	224.1	217.3	214.6	214.1	217.3
47.5°	295.2	255.6	229.6	215.9	209.6	205.5	197.7	195.0	192.3	193.2	191.8
50°	247.8	218.2	201.4	189.1	185.0	180.9	175.9	173.1	171.8	171.8	171.3
52.5°	212.8	188.2	177.2	165.8	164.0	161.7	156.3	154.4	152.2	151.7	153.5
55°	182.2	165.4	154.4	147.6	145.8	141.2	139.0	136.7	135.3	134.4	134.9
57.5°	155.8	143.1	135.8	129.8	126.7	124.8	120.7	120.3	119.4	119.4	118.9
60°	133.9	124.8	116.2	112.5	110.3	108.0	107.5	104.8	103.4	104.3	103.9
62.5°	113.4	106.1	101.1	97.0	95.7	93.8	92.5	91.6	90.2	90.7	90.7
65°	94.8	88.8	85.2	81.5	81.1	79.3	78.8	77.9	77.9	77.4	78.4
67.5°	77.9	73.8	70.6	68.3	67.0	67.4	65.6	64.2	64.2	63.8	65.1
70°	62.0	59.7	56.5	53.8	51.9	51.9	49.7	49.2	49.2	49.2	48.7
72.5°	47.8	43.7	42.4	41.5	41.5	41.5	40.5	40.5	40.1	40.5	40.1
75°	35.5	35.1	34.2	33.7	33.7	33.3	32.8	32.8	32.8	32.8	32.8
77.5°	27.8	27.8	26.9	26.4	26.4	26.4	26.0	26.0	25.5	25.5	25.5
80°	20.5	20.5	19.6	19.6	19.6	19.1	19.1	19.1	19.6	19.1	19.1
82.5°	14.1	14.1	13.7	14.1	13.7	13.2	13.2	13.2	12.8	13.2	13.2
85°	8.2	8.2	7.7	7.3	7.7	7.7	7.3	7.7	7.3	7.7	7.3
87.5°	3.2	2.7	2.7	2.7	2.3	2.7	2.3	2.3	2.7	2.3	2.7
90°	11.3	11.7	12.2	12.6	12.8	12.9	13.1	13.3	13.5	13.7	13.5
92.5°	12.6	13.3	14.0	14.7	15.1	15.1	15.2	15.3	15.4	15.5	15.4
95°	14.8	15.5	16.2	16.9	17.3	17.3	17.3	17.3	17.3	17.3	17.3
97.5°	15.4	16.2	17.0	17.8	18.2	18.3	18.4	18.5	18.6	18.7	18.6
100°	15.9	16.7	17.5	18.3	18.7	18.8	18.9	19.0	19.1	19.2	19.1
102.5°	30.4	27.1	23.7	20.4	18.7	18.8	19.0	19.2	19.4	19.6	19.4
105°	82.0	64.0	46.1	28.2	19.2	19.3	19.5	19.7	19.9	20.1	19.9
107.5°	161.8	146.2	130.6	115.0	107.2	100.6	87.3	74.0	60.7	47.4	60.7
110°	202.4	199.0	195.7	192.4	190.7	183.4	168.9	154.4	139.9	125.4	139.9

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	235.4	236.3	237.2	238.1	238.6	238.5	238.3	238.1	237.9	237.7	237.9
115°	262.8	263.8	264.9	265.9	266.4	266.6	267.0	267.4	267.8	268.2	267.8
117.5°	289.5	290.3	291.2	292.0	292.4	292.4	292.5	292.6	292.7	292.8	292.7
120°	315.5	316.3	317.2	318.0	318.4	318.4	318.4	318.4	318.4	318.4	318.4
122.5°	341.2	341.7	342.2	342.7	343.0	343.1	343.2	343.3	343.4	343.5	343.4
125°	365.1	365.3	365.5	365.7	365.8	365.9	366.1	366.3	366.5	366.7	366.5
127.5°	389.4	389.7	390.0	390.3	390.5	390.4	390.2	390.0	389.8	389.6	389.8
130°	410.9	411.3	411.8	412.2	412.4	412.3	412.1	411.8	411.6	411.4	411.6
132.5°	431.5	431.9	432.3	432.7	432.9	432.7	432.4	432.1	431.8	431.5	431.8
135°	452.3	452.6	452.9	453.2	453.4	453.2	452.9	452.6	452.3	452.0	452.3
137.5°	470.8	471.3	471.8	472.3	472.6	472.5	472.3	472.1	471.9	471.7	471.9
140°	488.5	488.9	489.3	489.7	489.9	489.8	489.6	489.4	489.2	489.0	489.2
142.5°	505.3	505.6	505.9	506.2	506.3	506.2	505.9	505.6	505.3	505.0	505.3
145°	520.7	520.9	521.1	521.3	521.4	521.4	521.4	521.4	521.4	521.4	521.4
147.5°	534.8	535.0	535.2	535.4	535.5	535.2	534.7	534.2	533.7	533.2	533.7
150°	547.6	547.8	548.0	548.2	548.3	548.1	547.8	547.5	547.2	546.9	547.2
152.5°	558.7	559.1	559.6	560.0	560.2	559.9	559.4	558.9	558.4	557.9	558.4
155°	568.9	569.4	569.9	570.4	570.6	570.3	569.7	569.1	568.5	567.9	568.5
157.5°	578.1	578.7	579.3	579.9	580.2	579.8	579.0	578.2	577.4	576.6	577.4
160°	585.8	586.4	587.1	587.7	588.0	587.6	586.9	586.2	585.5	584.8	585.5
162.5°	592.8	593.5	594.2	594.9	595.3	595.0	594.4	593.7	593.1	592.5	593.1
165°	598.8	599.6	600.5	601.3	601.7	601.3	600.6	599.9	599.2	598.5	599.2
167.5°	603.8	604.6	605.5	606.3	606.7	606.3	605.5	604.6	603.8	603.0	603.8
170°	607.9	608.7	609.6	610.4	610.8	610.4	609.6	608.7	607.9	607.1	607.9
172.5°	610.7	611.5	612.3	613.1	613.5	613.0	612.1	611.2	610.3	609.4	610.3
175°	612.9	613.6	614.3	615.0	615.3	614.9	614.1	613.3	612.5	611.7	612.5
177.5°	613.9	614.7	615.5	616.3	616.7	616.2	615.2	614.2	613.2	612.2	613.2
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	574.5	571.8	569.9	568.6	567.2	571.3	565.8	559.9	555.8	553.1	552.2
5°	634.6	628.7	623.7	619.6	620.5	620.5	610.9	600.5	591.3	586.3	580.9
7.5°	704.3	697.9	687.9	685.6	683.8	672.4	662.9	643.7	632.3	621.0	610.9
10°	773.6	765.4	755.8	752.6	748.1	733.9	719.4	694.8	680.6	659.7	646.5
12.5°	838.3	828.2	818.7	816.4	809.6	797.3	772.2	746.7	722.5	700.2	677.0
15°	892.5	889.7	875.2	866.1	851.0	834.2	828.7	794.1	763.6	740.3	698.4
17.5°	938.0	925.3	911.6	905.7	899.8	880.2	860.6	825.1	792.3	758.1	731.2
20°	974.5	960.4	950.8	942.1	939.4	917.1	886.1	854.7	818.7	780.4	745.3
22.5°	976.3	974.5	968.1	963.1	957.6	943.0	918.4	879.3	841.0	799.1	753.1
25°	938.5	935.8	954.0	949.4	953.1	947.6	934.4	901.6	856.9	807.7	761.3
27.5°	824.6	852.4	881.1	891.1	897.9	917.5	923.9	905.7	869.7	817.3	765.4
30°	669.7	706.6	753.1	778.1	797.3	833.7	881.1	887.0	870.2	828.2	764.5
32.5°	525.7	559.5	596.8	626.4	651.9	726.6	790.4	836.4	844.6	822.8	766.7
35°	423.7	438.3	473.8	502.0	536.7	600.5	675.6	749.9	800.0	802.7	759.9
37.5°	349.4	357.2	388.2	404.1	424.6	480.6	550.8	647.8	725.7	762.6	740.8
40°	289.3	307.1	324.8	333.9	348.5	387.2	454.7	530.7	627.3	695.7	711.2
42.5°	251.0	258.8	270.2	282.9	292.0	325.7	370.8	440.5	527.6	622.8	665.6
45°	221.4	224.1	236.0	244.2	253.8	277.4	309.3	367.7	444.2	538.0	610.9
47.5°	196.8	202.3	208.7	213.7	220.0	238.3	265.6	308.0	375.4	459.2	537.6
50°	174.9	178.1	186.3	188.6	193.2	205.9	226.9	259.2	314.8	381.8	462.9
52.5°	154.4	160.4	163.6	166.7	170.8	181.3	195.0	221.4	263.3	326.2	395.0
55°	138.5	140.3	144.9	147.6	150.8	158.1	169.9	189.5	222.3	272.4	337.6
57.5°	123.0	123.0	127.6	129.8	133.0	138.5	149.0	164.0	187.7	225.1	284.7
60°	106.6	107.1	110.7	113.4	114.4	119.8	128.5	140.3	158.5	185.9	234.6
62.5°	92.0	94.3	96.1	97.0	100.2	103.4	110.7	118.9	131.7	155.8	190.4
65°	79.7	80.2	81.5	82.5	83.8	87.5	92.9	98.4	109.3	127.1	155.4
67.5°	65.6	67.4	69.2	69.2	70.6	72.4	77.9	82.5	90.7	101.1	120.3
70°	49.2	50.1	52.8	54.2	56.0	59.2	62.0	64.7	71.1	78.8	93.4
72.5°	41.0	41.0	41.9	42.4	42.4	44.6	48.7	51.5	54.7	60.1	70.2
75°	32.8	32.8	34.2	33.7	34.6	35.5	36.0	37.8	39.6	43.7	49.7
77.5°	26.0	26.4	26.4	26.9	26.9	27.3	27.8	28.7	29.6	31.9	34.6
80°	19.1	19.6	19.6	20.0	20.0	20.5	21.0	21.4	22.3	23.2	24.6
82.5°	13.2	13.7	13.7	14.1	13.7	14.1	14.6	14.6	15.0	15.9	16.4
85°	7.7	7.7	8.2	7.7	7.7	7.7	8.2	8.2	8.7	10.0	10.0
87.5°	2.3	2.7	2.3	2.7	2.7	2.7	2.7	3.2	3.2	3.6	4.1
90°	13.3	13.1	12.9	12.8	12.6	12.2	11.7	11.3	10.9	9.6	8.3
92.5°	15.3	15.2	15.1	15.1	14.7	14.0	13.3	12.6	11.9	11.0	10.1
95°	17.3	17.3	17.3	17.3	16.9	16.2	15.5	14.8	14.1	13.0	11.9
97.5°	18.5	18.4	18.3	18.2	17.8	17.0	16.2	15.4	14.6	19.8	25.0
100°	19.0	18.9	18.8	18.7	18.3	17.5	16.7	15.9	15.1	30.9	46.7
102.5°	19.2	19.0	18.8	18.7	20.4	23.7	27.1	30.4	33.8	51.4	69.0
105°	19.7	19.5	19.3	19.2	28.2	46.1	64.0	82.0	99.9	109.0	118.2
107.5°	74.0	87.3	100.6	107.2	115.0	130.6	146.2	161.8	177.4	175.9	174.4
110°	154.4	168.9	183.4	190.7	192.4	195.7	199.0	202.4	205.7	204.6	203.5

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	238.1	238.3	238.5	238.6	238.1	237.2	236.3	235.4	234.5	233.4	232.2
115°	267.4	267.0	266.6	266.4	265.9	264.9	263.8	262.8	261.8	260.9	260.0
117.5°	292.6	292.5	292.4	292.4	292.0	291.2	290.3	289.5	288.7	288.2	287.7
120°	318.4	318.4	318.4	318.4	318.0	317.2	316.3	315.5	314.7	314.4	314.1
122.5°	343.3	343.2	343.1	343.0	342.7	342.2	341.7	341.2	340.7	340.3	339.9
125°	366.3	366.1	365.9	365.8	365.7	365.5	365.3	365.1	364.9	364.5	364.1
127.5°	390.0	390.2	390.4	390.5	390.3	390.0	389.7	389.4	389.1	388.6	388.1
130°	411.8	412.1	412.3	412.4	412.2	411.8	411.3	410.9	410.5	410.1	409.7
132.5°	432.1	432.4	432.7	432.9	432.7	432.3	431.9	431.5	431.1	430.8	430.5
135°	452.6	452.9	453.2	453.4	453.2	452.9	452.6	452.3	452.0	451.6	451.2
137.5°	472.1	472.3	472.5	472.6	472.3	471.8	471.3	470.8	470.3	470.1	469.9
140°	489.4	489.6	489.8	489.9	489.7	489.3	488.9	488.5	488.1	487.8	487.5
142.5°	505.6	505.9	506.2	506.3	506.2	505.9	505.6	505.3	505.0	504.7	504.4
145°	521.4	521.4	521.4	521.4	521.3	521.1	520.9	520.7	520.5	520.3	520.1
147.5°	534.2	534.7	535.2	535.5	535.4	535.2	535.0	534.8	534.6	534.4	534.2
150°	547.5	547.8	548.1	548.3	548.2	548.0	547.8	547.6	547.4	547.2	547.0
152.5°	558.9	559.4	559.9	560.2	560.0	559.6	559.1	558.7	558.3	558.2	558.1
155°	569.1	569.7	570.3	570.6	570.4	569.9	569.4	568.9	568.4	568.3	568.2
157.5°	578.2	579.0	579.8	580.2	579.9	579.3	578.7	578.1	577.5	577.6	577.7
160°	586.2	586.9	587.6	588.0	587.7	587.1	586.4	585.8	585.2	585.3	585.4
162.5°	593.7	594.4	595.0	595.3	594.9	594.2	593.5	592.8	592.1	592.2	592.3
165°	599.9	600.6	601.3	601.7	601.3	600.5	599.6	598.8	598.0	598.1	598.2
167.5°	604.6	605.5	606.3	606.7	606.3	605.5	604.6	603.8	603.0	603.0	603.0
170°	608.7	609.6	610.4	610.8	610.4	609.6	608.7	607.9	607.1	607.1	607.1
172.5°	611.2	612.1	613.0	613.5	613.1	612.3	611.5	610.7	609.9	609.8	609.7
175°	613.3	614.1	614.9	615.3	615.0	614.3	613.6	612.9	612.2	612.1	612.0
177.5°	614.2	615.2	616.2	616.7	616.3	615.5	614.7	613.9	613.1	613.0	612.9
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	550.8	548.5	546.2	546.2	541.2	536.7	534.4	535.3	532.6	528.9	525.3
5°	574.9	565.8	564.0	559.0	552.2	542.6	537.6	533.0	527.6	520.3	513.4
7.5°	597.3	585.4	579.0	574.0	560.8	547.6	536.7	529.4	519.8	508.9	500.7
10°	626.4	604.6	597.7	586.3	567.7	549.0	536.2	524.4	511.2	498.4	487.5
12.5°	649.7	624.6	611.8	600.5	576.3	552.6	531.2	516.6	500.7	486.6	472.4
15°	676.1	647.8	625.5	611.8	581.3	552.6	528.5	508.0	490.2	472.9	460.6
17.5°	688.8	653.3	643.3	623.7	579.5	550.8	521.2	499.3	477.9	457.9	443.3
20°	708.9	667.4	642.4	629.2	590.0	547.6	513.0	487.9	465.6	444.2	428.7
22.5°	710.2	665.1	648.7	623.7	575.4	538.0	505.7	475.2	449.2	429.2	413.2
25°	707.1	661.0	638.3	618.2	578.1	532.6	491.1	461.0	435.5	412.3	393.6
27.5°	705.7	649.2	627.8	607.7	562.6	516.6	482.5	448.3	419.1	398.6	379.5
30°	703.9	636.4	610.5	587.2	545.8	504.3	463.3	433.7	405.9	380.0	360.8
32.5°	692.0	619.1	592.7	568.1	523.5	482.0	449.7	418.2	388.2	364.0	346.7
35°	688.4	603.2	568.6	542.1	498.4	461.5	427.3	401.4	373.1	349.0	328.5
37.5°	677.9	586.8	549.4	515.7	470.2	435.1	410.0	384.1	356.7	330.8	314.3
40°	659.7	567.7	525.3	490.7	443.7	408.2	385.0	365.8	339.0	315.7	295.7
42.5°	632.8	548.1	502.5	466.1	414.1	380.9	361.7	343.5	320.7	296.6	280.2
45°	601.8	522.1	479.7	439.2	386.3	354.0	333.9	323.0	302.0	281.5	262.4
47.5°	559.5	495.2	453.3	411.4	357.6	326.2	310.2	299.3	284.7	262.4	246.9
50°	506.1	460.6	421.0	383.6	329.4	299.3	283.4	275.2	262.9	246.9	231.9
52.5°	446.9	420.5	387.7	353.1	300.7	272.4	257.9	251.5	242.4	227.3	214.6
55°	387.2	375.9	353.5	319.4	270.6	247.4	234.6	226.4	219.6	208.7	197.7
57.5°	333.9	328.5	313.0	286.6	245.6	221.4	210.5	205.0	199.5	191.3	180.4
60°	278.8	284.7	268.8	255.6	218.2	197.3	187.7	181.8	179.0	171.8	164.9
62.5°	231.0	236.4	227.3	217.3	190.9	172.2	166.3	160.8	159.0	152.6	145.8
65°	187.7	194.5	187.7	182.2	166.3	150.8	143.5	140.8	139.0	134.9	129.4
67.5°	149.4	156.3	153.1	146.2	141.2	128.5	124.4	121.6	120.7	117.5	113.0
70°	112.5	122.1	123.0	118.9	114.4	108.4	105.7	104.8	102.5	99.8	97.0
72.5°	81.1	92.0	92.5	92.5	89.7	89.7	87.0	85.6	85.6	82.9	79.7
75°	59.7	67.0	67.9	68.8	70.2	71.5	69.7	69.7	69.2	66.5	65.1
77.5°	39.6	46.0	48.3	51.5	53.3	53.3	54.2	55.1	54.2	52.8	51.9
80°	25.5	30.1	32.8	34.6	37.4	38.7	40.1	40.5	39.6	39.2	37.8
82.5°	16.9	18.2	19.6	21.9	25.1	27.3	27.3	26.9	27.8	27.3	26.9
85°	9.6	10.5	10.9	11.4	13.2	15.5	15.9	16.4	17.3	16.4	15.5
87.5°	3.6	4.1	4.1	4.1	5.0	5.5	6.8	8.7	8.2	7.3	7.3
90°	7.0	5.7	5.0	4.5	3.5	2.5	1.5	0.5	1.5	2.5	3.5
92.5°	9.2	8.3	7.8	8.1	8.7	9.3	9.9	10.5	9.9	9.3	8.7
95°	10.8	9.7	9.1	11.2	15.3	19.5	23.6	27.8	23.6	19.5	15.3
97.5°	30.1	35.3	37.9	39.3	42.1	45.0	47.8	50.6	47.8	45.0	42.1
100°	62.5	78.3	86.2	85.2	83.2	81.1	79.1	77.1	79.1	81.1	83.2
102.5°	86.7	104.3	113.1	112.4	111.1	109.8	108.5	107.2	108.5	109.8	111.1
105°	127.3	136.4	141.0	140.4	139.3	138.2	137.0	135.9	137.0	138.2	139.3
107.5°	172.9	171.4	170.6	170.1	169.2	168.3	167.4	166.5	167.4	168.3	169.2
110°	202.4	201.3	200.7	200.3	199.5	198.7	197.9	197.1	197.9	198.7	199.5

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	231.1	230.0	229.4	229.1	228.4	227.7	227.0	226.3	227.0	227.7	228.4
115°	259.1	258.2	257.7	257.4	256.8	256.2	255.6	255.0	255.6	256.2	256.8
117.5°	287.2	286.7	286.5	286.1	285.4	284.7	284.0	283.3	284.0	284.7	285.4
120°	313.8	313.5	313.4	312.9	312.0	311.1	310.2	309.3	310.2	311.1	312.0
122.5°	339.5	339.1	338.9	338.5	337.8	337.1	336.4	335.7	336.4	337.1	337.8
125°	363.7	363.3	363.1	362.7	361.9	361.0	360.2	359.4	360.2	361.0	361.9
127.5°	387.6	387.1	386.8	386.4	385.6	384.8	384.0	383.2	384.0	384.8	385.6
130°	409.3	408.9	408.7	408.3	407.5	406.7	405.9	405.1	405.9	406.7	407.5
132.5°	430.2	429.9	429.7	429.3	428.5	427.6	426.8	426.0	426.8	427.6	428.5
135°	450.8	450.4	450.2	449.9	449.3	448.7	448.1	447.5	448.1	448.7	449.3
137.5°	469.7	469.5	469.4	469.0	468.2	467.3	466.5	465.7	466.5	467.3	468.2
140°	487.2	486.9	486.7	486.4	485.8	485.2	484.6	484.0	484.6	485.2	485.8
142.5°	504.1	503.8	503.6	503.3	502.7	502.1	501.5	500.9	501.5	502.1	502.7
145°	519.9	519.7	519.6	519.2	518.5	517.8	517.1	516.4	517.1	517.8	518.5
147.5°	534.0	533.8	533.7	533.4	532.9	532.4	531.9	531.4	531.9	532.4	532.9
150°	546.8	546.6	546.5	546.3	546.0	545.7	545.4	545.1	545.4	545.7	546.0
152.5°	558.0	557.9	557.9	557.8	557.7	557.6	557.5	557.4	557.5	557.6	557.7
155°	568.1	568.0	567.9	568.0	568.2	568.4	568.6	568.8	568.6	568.4	568.2
157.5°	577.8	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9	577.9
160°	585.5	585.6	585.7	585.8	585.9	586.0	586.1	586.2	586.1	586.0	585.9
162.5°	592.4	592.5	592.5	592.7	593.0	593.3	593.6	593.9	593.6	593.3	593.0
165°	598.3	598.4	598.5	598.6	598.9	599.2	599.5	599.8	599.5	599.2	598.9
167.5°	603.0	603.0	603.0	603.2	603.6	604.1	604.5	604.9	604.5	604.1	603.6
170°	607.1	607.1	607.1	607.3	607.7	608.2	608.6	609.0	608.6	608.2	607.7
172.5°	609.6	609.5	609.4	609.7	610.2	610.7	611.2	611.7	611.2	610.7	610.2
175°	611.9	611.8	611.7	612.0	612.5	613.0	613.5	614.0	613.5	613.0	612.5
177.5°	612.8	612.7	612.6	612.9	613.4	613.9	614.4	614.9	614.4	613.9	613.4
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	525.3	523.0	522.1	519.8	514.3	510.7	506.6	503.9	504.3	502.0	503.4
5°	508.9	508.4	505.2	500.7	492.9	488.8	481.5	477.9	476.1	476.5	473.8
7.5°	495.2	491.1	488.8	481.5	474.3	465.6	459.7	456.5	453.8	451.0	449.2
10°	479.7	476.1	472.4	464.7	454.7	446.5	438.3	435.1	431.0	429.2	427.8
12.5°	463.3	461.0	456.5	447.4	436.0	428.2	418.7	416.9	411.4	407.7	406.8
15°	448.3	446.9	438.7	428.2	416.9	409.1	400.9	395.4	386.3	388.2	385.0
17.5°	432.3	426.4	421.4	407.3	401.8	390.0	380.4	377.7	371.3	367.2	363.1
20°	414.6	410.9	404.6	395.4	382.2	368.6	361.3	356.7	353.1	346.7	344.9
22.5°	397.7	393.2	387.7	375.9	364.5	353.1	343.1	339.0	334.4	329.8	327.1
25°	384.5	377.7	371.8	357.2	345.8	336.2	329.8	323.0	316.6	313.9	313.0
27.5°	364.0	359.9	354.0	340.3	329.8	319.4	313.4	308.9	302.0	298.9	296.1
30°	350.8	342.6	335.8	324.8	314.3	303.0	297.5	292.0	287.9	283.8	280.6
32.5°	333.0	326.7	321.2	310.2	299.8	289.3	283.4	275.2	272.9	269.7	266.1
35°	315.7	311.6	305.7	293.8	282.5	275.2	268.8	261.0	258.3	256.0	252.8
37.5°	299.3	293.4	289.3	277.9	267.9	259.2	254.2	247.8	246.0	243.3	241.0
40°	285.2	279.3	275.2	263.8	253.3	244.2	241.0	234.6	231.9	228.7	227.3
42.5°	269.2	264.2	258.8	250.6	239.6	230.5	224.1	220.5	216.9	215.5	212.8
45°	252.4	247.8	243.7	234.6	223.2	216.9	211.4	206.4	203.6	201.4	199.5
47.5°	237.8	233.7	228.2	218.2	209.1	203.2	197.7	192.7	190.0	187.2	185.0
50°	221.0	218.7	212.8	203.2	194.5	187.7	182.7	178.1	176.3	173.1	169.5
52.5°	205.9	201.8	196.8	189.1	181.3	173.1	166.3	163.6	160.4	158.5	155.4
55°	188.2	185.4	180.0	173.1	164.9	158.1	153.1	149.4	145.3	143.5	139.4
57.5°	173.1	168.1	165.4	156.7	149.0	142.1	138.5	134.9	130.3	127.6	125.7
60°	156.7	152.2	148.1	140.8	135.3	128.0	122.6	119.4	116.2	112.5	110.7
62.5°	140.8	137.1	132.1	126.2	119.4	113.4	109.3	104.8	103.0	99.3	97.9
65°	123.5	120.7	116.6	109.8	104.3	99.3	95.2	91.6	89.7	88.4	87.5
67.5°	108.0	104.3	101.6	95.7	89.7	85.6	83.4	81.1	78.8	77.4	76.1
70°	92.0	89.3	86.6	81.1	77.0	73.3	71.5	69.7	68.3	67.0	65.6
72.5°	75.6	74.3	71.5	67.9	64.7	62.0	60.6	58.3	56.9	54.7	53.8
75°	62.4	60.1	58.8	55.6	52.8	50.6	48.7	46.0	44.2	43.3	42.8
77.5°	49.2	48.3	46.5	43.7	42.4	40.1	37.4	36.4	35.5	35.5	35.1
80°	36.9	35.5	34.2	31.9	30.5	28.7	28.7	28.7	28.2	28.7	28.2
82.5°	25.1	24.1	23.2	21.9	21.4	21.4	21.9	21.9	21.9	21.9	21.9
85°	14.6	14.6	14.6	15.0	14.6	14.6	15.0	15.5	15.0	15.0	14.6
87.5°	6.8	6.8	7.3	7.3	7.7	7.7	7.7	7.7	7.7	7.7	8.2
90°	4.5	5.0	5.7	7.0	8.3	9.6	10.9	11.3	11.7	12.2	12.6
92.5°	8.1	7.8	8.3	9.2	10.1	11.0	11.9	12.6	13.3	14.0	14.7
95°	11.2	9.1	9.7	10.8	11.9	13.0	14.1	14.8	15.5	16.2	16.9
97.5°	39.3	37.9	35.3	30.1	25.0	19.8	14.6	15.4	16.2	17.0	17.8
100°	85.2	86.2	78.3	62.5	46.7	30.9	15.1	15.9	16.7	17.5	18.3
102.5°	112.4	113.1	104.3	86.7	69.0	51.4	33.8	30.4	27.1	23.7	20.4
105°	140.4	141.0	136.4	127.3	118.2	109.0	99.9	82.0	64.0	46.1	28.2
107.5°	170.1	170.6	171.4	172.9	174.4	175.9	177.4	161.8	146.2	130.6	115.0
110°	200.3	200.7	201.3	202.4	203.5	204.6	205.7	202.4	199.0	195.7	192.4

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	229.1	229.4	230.0	231.1	232.2	233.4	234.5	235.4	236.3	237.2	238.1
115°	257.4	257.7	258.2	259.1	260.0	260.9	261.8	262.8	263.8	264.9	265.9
117.5°	286.1	286.5	286.7	287.2	287.7	288.2	288.7	289.5	290.3	291.2	292.0
120°	312.9	313.4	313.5	313.8	314.1	314.4	314.7	315.5	316.3	317.2	318.0
122.5°	338.5	338.9	339.1	339.5	339.9	340.3	340.7	341.2	341.7	342.2	342.7
125°	362.7	363.1	363.3	363.7	364.1	364.5	364.9	365.1	365.3	365.5	365.7
127.5°	386.4	386.8	387.1	387.6	388.1	388.6	389.1	389.4	389.7	390.0	390.3
130°	408.3	408.7	408.9	409.3	409.7	410.1	410.5	410.9	411.3	411.8	412.2
132.5°	429.3	429.7	429.9	430.2	430.5	430.8	431.1	431.5	431.9	432.3	432.7
135°	449.9	450.2	450.4	450.8	451.2	451.6	452.0	452.3	452.6	452.9	453.2
137.5°	469.0	469.4	469.5	469.7	469.9	470.1	470.3	470.8	471.3	471.8	472.3
140°	486.4	486.7	486.9	487.2	487.5	487.8	488.1	488.5	488.9	489.3	489.7
142.5°	503.3	503.6	503.8	504.1	504.4	504.7	505.0	505.3	505.6	505.9	506.2
145°	519.2	519.6	519.7	519.9	520.1	520.3	520.5	520.7	520.9	521.1	521.3
147.5°	533.4	533.7	533.8	534.0	534.2	534.4	534.6	534.8	535.0	535.2	535.4
150°	546.3	546.5	546.6	546.8	547.0	547.2	547.4	547.6	547.8	548.0	548.2
152.5°	557.8	557.9	557.9	558.0	558.1	558.2	558.3	558.7	559.1	559.6	560.0
155°	568.0	567.9	568.0	568.1	568.2	568.3	568.4	568.9	569.4	569.9	570.4
157.5°	577.9	577.9	577.9	577.8	577.7	577.6	577.5	578.1	578.7	579.3	579.9
160°	585.8	585.7	585.6	585.5	585.4	585.3	585.2	585.8	586.4	587.1	587.7
162.5°	592.7	592.5	592.5	592.4	592.3	592.2	592.1	592.8	593.5	594.2	594.9
165°	598.6	598.5	598.4	598.3	598.2	598.1	598.0	598.8	599.6	600.5	601.3
167.5°	603.2	603.0	603.0	603.0	603.0	603.0	603.0	603.8	604.6	605.5	606.3
170°	607.3	607.1	607.1	607.1	607.1	607.1	607.1	607.9	608.7	609.6	610.4
172.5°	609.7	609.4	609.5	609.6	609.7	609.8	609.9	610.7	611.5	612.3	613.1
175°	612.0	611.7	611.8	611.9	612.0	612.1	612.2	612.9	613.6	614.3	615.0
177.5°	612.9	612.6	612.7	612.8	612.9	613.0	613.1	613.9	614.7	615.5	616.3
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	503.0	503.4	502.0	499.3	498.9	499.8	502.5	501.6	499.3	503.4	499.8
5°	475.2	472.9	472.0	472.9	470.2	468.8	471.5	470.2	471.5	472.0	473.3
7.5°	448.3	448.7	446.0	446.5	442.8	443.7	443.7	443.7	445.1	446.0	447.8
10°	425.1	426.0	422.8	423.2	420.5	418.7	420.0	422.8	422.8	422.8	423.7
12.5°	406.4	402.3	400.0	399.5	396.4	395.4	398.2	399.1	401.4	401.4	402.7
15°	383.1	382.2	380.4	380.4	372.7	374.5	375.4	378.6	383.1	379.5	380.4
17.5°	362.2	359.9	357.6	356.7	355.8	353.1	356.7	356.3	359.0	359.5	360.8
20°	343.5	341.7	337.1	337.6	338.5	334.4	336.7	336.7	339.4	342.1	345.3
22.5°	325.3	323.5	321.2	322.1	319.4	318.4	318.4	320.7	323.9	326.2	325.7
25°	311.2	308.0	306.6	305.2	303.9	304.8	303.4	305.7	308.0	309.3	308.0
27.5°	295.2	293.8	291.1	289.7	287.5	288.4	289.3	291.1	292.5	292.5	293.8
30°	279.7	277.9	277.0	275.6	275.6	273.8	274.3	276.1	277.4	278.8	280.6
32.5°	264.7	263.3	262.0	262.0	261.0	260.6	260.1	262.9	262.9	265.6	265.6
35°	252.4	250.1	250.1	247.8	248.7	248.3	247.4	249.2	249.7	251.5	251.0
37.5°	238.7	238.7	237.8	235.5	233.7	234.2	236.4	236.4	237.8	237.4	238.7
40°	225.1	224.1	224.1	222.8	222.3	221.9	222.3	222.8	225.1	224.6	225.1
42.5°	211.4	211.8	209.6	209.6	209.6	208.2	208.7	209.1	210.0	210.9	212.3
45°	198.2	197.3	196.8	195.9	195.0	195.4	195.0	196.8	196.4	197.3	198.6
47.5°	184.1	182.7	182.2	180.4	180.4	181.3	180.9	182.2	182.7	184.1	183.1
50°	170.4	168.6	167.2	167.7	164.9	165.8	165.8	167.2	168.6	169.0	169.9
52.5°	154.4	154.0	153.5	151.3	150.8	150.3	150.8	151.3	153.1	154.4	154.9
55°	139.0	138.5	135.8	134.9	133.5	133.5	134.4	134.9	138.0	138.5	140.3
57.5°	124.8	123.5	120.3	119.8	119.8	119.8	118.5	120.3	121.2	123.5	123.5
60°	109.3	109.3	106.6	106.6	107.1	106.6	106.6	107.1	107.1	108.9	109.8
62.5°	97.0	96.6	96.6	95.7	95.2	95.7	95.2	95.2	95.7	97.0	98.4
65°	86.1	85.6	85.2	84.7	83.8	83.8	84.3	85.2	85.2	86.1	86.6
67.5°	75.6	75.6	74.7	74.7	74.3	73.8	74.3	73.8	75.6	75.6	76.1
70°	65.1	64.7	63.3	62.9	61.5	62.0	62.0	63.3	63.8	64.7	65.6
72.5°	52.4	52.4	51.5	50.6	51.0	50.1	50.1	50.6	50.6	51.9	52.4
75°	43.3	42.4	41.9	42.4	41.9	42.8	41.9	41.9	42.8	42.8	42.8
77.5°	35.5	35.5	35.1	35.1	35.5	35.1	35.5	35.5	35.5	35.1	35.5
80°	29.2	28.7	28.7	28.7	28.2	28.2	28.2	28.2	28.2	28.2	28.2
82.5°	21.9	21.9	21.4	21.9	21.9	21.4	21.9	21.4	21.4	21.9	21.9
85°	14.6	15.5	14.6	14.6	15.0	15.0	15.5	15.0	15.5	14.6	15.0
87.5°	7.7	8.2	8.2	7.7	7.7	8.2	8.2	8.2	8.7	7.7	8.2
90°	12.8	12.9	13.1	13.3	13.5	13.7	13.5	13.3	13.1	12.9	12.8
92.5°	15.1	15.1	15.2	15.3	15.4	15.5	15.4	15.3	15.2	15.1	15.1
95°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
97.5°	18.2	18.3	18.4	18.5	18.6	18.7	18.6	18.5	18.4	18.3	18.2
100°	18.7	18.8	18.9	19.0	19.1	19.2	19.1	19.0	18.9	18.8	18.7
102.5°	18.7	18.8	19.0	19.2	19.4	19.6	19.4	19.2	19.0	18.8	18.7
105°	19.2	19.3	19.5	19.7	19.9	20.1	19.9	19.7	19.5	19.3	19.2
107.5°	107.2	100.6	87.3	74.0	60.7	47.4	60.7	74.0	87.3	100.6	107.2
110°	190.7	183.4	168.9	154.4	139.9	125.4	139.9	154.4	168.9	183.4	190.7

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	238.6	238.5	238.3	238.1	237.9	237.7	237.9	238.1	238.3	238.5	238.6
115°	266.4	266.6	267.0	267.4	267.8	268.2	267.8	267.4	267.0	266.6	266.4
117.5°	292.4	292.4	292.5	292.6	292.7	292.8	292.7	292.6	292.5	292.4	292.4
120°	318.4	318.4	318.4	318.4	318.4	318.4	318.4	318.4	318.4	318.4	318.4
122.5°	343.0	343.1	343.2	343.3	343.4	343.5	343.4	343.3	343.2	343.1	343.0
125°	365.8	365.9	366.1	366.3	366.5	366.7	366.5	366.3	366.1	365.9	365.8
127.5°	390.5	390.4	390.2	390.0	389.8	389.6	389.8	390.0	390.2	390.4	390.5
130°	412.4	412.3	412.1	411.8	411.6	411.4	411.6	411.8	412.1	412.3	412.4
132.5°	432.9	432.7	432.4	432.1	431.8	431.5	431.8	432.1	432.4	432.7	432.9
135°	453.4	453.2	452.9	452.6	452.3	452.0	452.3	452.6	452.9	453.2	453.4
137.5°	472.6	472.5	472.3	472.1	471.9	471.7	471.9	472.1	472.3	472.5	472.6
140°	489.9	489.8	489.6	489.4	489.2	489.0	489.2	489.4	489.6	489.8	489.9
142.5°	506.3	506.2	505.9	505.6	505.3	505.0	505.3	505.6	505.9	506.2	506.3
145°	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4	521.4
147.5°	535.5	535.2	534.7	534.2	533.7	533.2	533.7	534.2	534.7	535.2	535.5
150°	548.3	548.1	547.8	547.5	547.2	546.9	547.2	547.5	547.8	548.1	548.3
152.5°	560.2	559.9	559.4	558.9	558.4	557.9	558.4	558.9	559.4	559.9	560.2
155°	570.6	570.3	569.7	569.1	568.5	567.9	568.5	569.1	569.7	570.3	570.6
157.5°	580.2	579.8	579.0	578.2	577.4	576.6	577.4	578.2	579.0	579.8	580.2
160°	588.0	587.6	586.9	586.2	585.5	584.8	585.5	586.2	586.9	587.6	588.0
162.5°	595.3	595.0	594.4	593.7	593.1	592.5	593.1	593.7	594.4	595.0	595.3
165°	601.7	601.3	600.6	599.9	599.2	598.5	599.2	599.9	600.6	601.3	601.7
167.5°	606.7	606.3	605.5	604.6	603.8	603.0	603.8	604.6	605.5	606.3	606.7
170°	610.8	610.4	609.6	608.7	607.9	607.1	607.9	608.7	609.6	610.4	610.8
172.5°	613.5	613.0	612.1	611.2	610.3	609.4	610.3	611.2	612.1	613.0	613.5
175°	615.3	614.9	614.1	613.3	612.5	611.7	612.5	613.3	614.1	614.9	615.3
177.5°	616.7	616.2	615.2	614.2	613.2	612.2	613.2	614.2	615.2	616.2	616.7
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1	532.1
2.5°	503.4	505.2	503.4	499.8	503.4	505.7	508.0	511.6	513.4	513.4	516.2
5°	474.7	478.4	477.0	476.1	479.7	482.0	485.6	490.2	495.2	498.4	502.0
7.5°	449.2	451.5	453.8	453.8	457.4	462.4	467.9	473.3	479.7	484.3	487.0
10°	426.9	428.7	430.1	431.9	437.4	442.8	450.1	456.9	462.4	467.4	472.0
12.5°	405.5	408.2	411.4	412.8	416.9	423.7	430.5	438.7	447.4	452.4	456.9
15°	385.0	386.3	390.0	394.1	397.7	405.0	413.7	422.3	429.6	437.4	441.5
17.5°	364.0	364.5	374.0	371.8	383.6	390.4	395.0	403.2	415.0	421.4	427.8
20°	343.5	348.1	352.2	354.4	360.8	368.6	381.8	388.2	397.7	403.6	409.1
22.5°	327.6	334.4	334.4	339.9	343.1	350.3	359.9	372.2	382.7	386.8	394.5
25°	313.4	316.6	322.1	323.9	329.8	336.2	342.6	355.8	367.2	372.7	378.1
27.5°	295.2	299.3	306.6	306.6	314.3	321.2	328.9	337.6	349.0	356.7	362.6
30°	281.1	285.2	288.4	293.4	296.6	303.0	316.6	323.0	333.0	339.9	347.2
32.5°	267.9	271.1	273.8	279.3	282.9	290.2	297.5	308.9	317.5	323.9	331.7
35°	253.3	256.5	260.1	264.2	269.7	276.5	283.4	292.9	301.6	307.5	313.9
37.5°	239.6	241.9	247.4	250.1	254.7	261.0	269.7	279.7	287.5	292.0	298.4
40°	226.4	228.2	232.3	237.4	240.5	245.6	254.7	263.3	272.9	278.4	283.4
42.5°	212.3	214.6	218.2	223.2	228.2	233.7	238.7	248.7	257.4	262.0	267.4
45°	200.0	201.4	204.1	209.1	214.1	218.2	226.0	235.1	243.3	246.9	252.8
47.5°	185.4	186.8	190.9	193.2	198.6	204.1	211.8	221.0	228.2	231.9	237.4
50°	170.4	171.8	174.5	179.5	183.1	189.1	195.9	203.6	212.8	217.8	221.0
52.5°	155.8	158.5	160.8	164.9	169.5	175.4	181.8	189.1	196.8	201.8	205.5
55°	141.2	143.5	146.2	148.5	154.0	159.5	166.7	173.6	180.4	185.0	189.1
57.5°	124.8	128.0	130.8	135.3	139.4	144.0	152.2	157.6	165.8	169.0	172.7
60°	110.7	113.9	116.2	119.8	123.5	129.4	134.9	141.7	148.5	152.6	157.2
62.5°	98.9	100.2	101.6	105.2	108.9	114.4	119.8	126.7	133.9	136.2	139.9
65°	87.0	88.4	90.7	93.8	96.6	99.8	105.7	111.2	118.0	121.6	123.0
67.5°	77.0	78.4	78.8	81.1	83.4	87.0	90.2	95.7	102.0	104.3	107.1
70°	65.6	67.9	68.3	70.2	71.1	73.3	77.0	81.1	86.1	90.2	92.5
72.5°	52.4	55.6	56.5	59.2	60.6	62.9	65.6	68.8	72.0	73.8	75.6
75°	42.8	43.7	44.2	46.5	48.7	51.9	53.3	55.1	57.9	60.1	62.0
77.5°	35.5	36.0	36.4	36.4	36.9	38.7	41.5	43.7	45.6	46.5	47.8
80°	28.7	28.2	28.2	28.7	28.7	28.7	29.6	32.8	33.7	36.0	35.5
82.5°	22.3	21.4	21.9	21.4	21.4	21.4	21.4	21.9	21.9	23.2	24.1
85°	14.6	15.0	14.6	14.6	14.1	14.6	14.1	14.1	13.7	13.7	13.2
87.5°	7.7	8.2	7.7	7.7	7.3	7.7	7.3	7.3	6.8	6.8	5.9
90°	12.6	12.2	11.7	11.3	10.9	9.6	8.3	7.0	5.7	5.0	4.5
92.5°	14.7	14.0	13.3	12.6	11.9	11.0	10.1	9.2	8.3	7.8	8.1
95°	16.9	16.2	15.5	14.8	14.1	13.0	11.9	10.8	9.7	9.1	11.2
97.5°	17.8	17.0	16.2	15.4	14.6	19.8	25.0	30.1	35.3	37.9	39.3
100°	18.3	17.5	16.7	15.9	15.1	30.9	46.7	62.5	78.3	86.2	85.2
102.5°	20.4	23.7	27.1	30.4	33.8	51.4	69.0	86.7	104.3	113.1	112.4
105°	28.2	46.1	64.0	82.0	99.9	109.0	118.2	127.3	136.4	141.0	140.4
107.5°	115.0	130.6	146.2	161.8	177.4	175.9	174.4	172.9	171.4	170.6	170.1
110°	192.4	195.7	199.0	202.4	205.7	204.6	203.5	202.4	201.3	200.7	200.3

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	238.1	237.2	236.3	235.4	234.5	233.4	232.2	231.1	230.0	229.4	229.1
115°	265.9	264.9	263.8	262.8	261.8	260.9	260.0	259.1	258.2	257.7	257.4
117.5°	292.0	291.2	290.3	289.5	288.7	288.2	287.7	287.2	286.7	286.5	286.1
120°	318.0	317.2	316.3	315.5	314.7	314.4	314.1	313.8	313.5	313.4	312.9
122.5°	342.7	342.2	341.7	341.2	340.7	340.3	339.9	339.5	339.1	338.9	338.5
125°	365.7	365.5	365.3	365.1	364.9	364.5	364.1	363.7	363.3	363.1	362.7
127.5°	390.3	390.0	389.7	389.4	389.1	388.6	388.1	387.6	387.1	386.8	386.4
130°	412.2	411.8	411.3	410.9	410.5	410.1	409.7	409.3	408.9	408.7	408.3
132.5°	432.7	432.3	431.9	431.5	431.1	430.8	430.5	430.2	429.9	429.7	429.3
135°	453.2	452.9	452.6	452.3	452.0	451.6	451.2	450.8	450.4	450.2	449.9
137.5°	472.3	471.8	471.3	470.8	470.3	470.1	469.9	469.7	469.5	469.4	469.0
140°	489.7	489.3	488.9	488.5	488.1	487.8	487.5	487.2	486.9	486.7	486.4
142.5°	506.2	505.9	505.6	505.3	505.0	504.7	504.4	504.1	503.8	503.6	503.3
145°	521.3	521.1	520.9	520.7	520.5	520.3	520.1	519.9	519.7	519.6	519.2
147.5°	535.4	535.2	535.0	534.8	534.6	534.4	534.2	534.0	533.8	533.7	533.4
150°	548.2	548.0	547.8	547.6	547.4	547.2	547.0	546.8	546.6	546.5	546.3
152.5°	560.0	559.6	559.1	558.7	558.3	558.2	558.1	558.0	557.9	557.9	557.8
155°	570.4	569.9	569.4	568.9	568.4	568.3	568.2	568.1	568.0	567.9	568.0
157.5°	579.9	579.3	578.7	578.1	577.5	577.6	577.7	577.8	577.9	577.9	577.9
160°	587.7	587.1	586.4	585.8	585.2	585.3	585.4	585.5	585.6	585.7	585.8
162.5°	594.9	594.2	593.5	592.8	592.1	592.2	592.3	592.4	592.5	592.5	592.7
165°	601.3	600.5	599.6	598.8	598.0	598.1	598.2	598.3	598.4	598.5	598.6
167.5°	606.3	605.5	604.6	603.8	603.0	603.0	603.0	603.0	603.0	603.0	603.2
170°	610.4	609.6	608.7	607.9	607.1	607.1	607.1	607.1	607.1	607.1	607.3
172.5°	613.1	612.3	611.5	610.7	609.9	609.8	609.7	609.6	609.5	609.4	609.7
175°	615.0	614.3	613.6	612.9	612.2	612.1	612.0	611.9	611.8	611.7	612.0
177.5°	616.3	615.5	614.7	613.9	613.1	613.0	612.9	612.8	612.7	612.6	612.9
180°	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0	614.0

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	532.1	532.1	532.1	532.1
2.5°	518.4	521.6	528.0	533.5
5°	507.5	512.5	522.1	531.7
7.5°	494.3	502.0	514.3	527.6
10°	481.5	491.6	506.6	522.1
12.5°	468.8	479.3	495.2	515.3
15°	453.8	464.7	483.8	508.0
17.5°	440.5	455.1	472.4	496.6
20°	426.4	437.4	459.7	485.2
22.5°	408.7	426.9	447.8	474.7
25°	394.5	410.5	431.4	462.0
27.5°	377.2	395.9	421.4	448.3
30°	363.1	378.6	402.3	434.6
32.5°	346.7	364.9	389.5	421.4
35°	332.1	347.6	370.8	403.2
37.5°	314.8	331.7	357.6	386.3
40°	299.8	316.2	340.8	367.7
42.5°	281.5	298.9	323.5	346.2
45°	267.0	282.9	302.5	323.5
47.5°	249.2	266.1	285.2	299.8
50°	233.3	248.7	263.8	276.1
52.5°	215.9	230.1	243.7	252.8
55°	200.0	210.9	221.9	228.2
57.5°	181.3	191.8	200.9	204.6
60°	164.9	173.6	179.5	183.6
62.5°	147.6	154.0	158.5	160.8
65°	130.8	135.3	137.6	139.9
67.5°	113.4	117.5	118.9	121.6
70°	95.2	99.8	100.7	102.0
72.5°	81.5	81.5	83.4	85.2
75°	65.1	66.1	67.0	67.0
77.5°	51.0	51.0	51.9	52.4
80°	37.4	37.8	37.8	37.4
82.5°	25.5	26.4	25.5	25.1
85°	14.1	15.9	15.0	15.0
87.5°	5.9	5.9	6.8	5.9
90°	3.5	2.5	1.5	0.5
92.5°	8.7	9.3	9.9	10.5
95°	15.3	19.5	23.6	27.8
97.5°	42.1	45.0	47.8	50.6
100°	83.2	81.1	79.1	77.1
102.5°	111.1	109.8	108.5	107.2
105°	139.3	138.2	137.0	135.9
107.5°	169.2	168.3	167.4	166.5
110°	199.5	198.7	197.9	197.1

TEST NUMBER: P1031147

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	228.4	227.7	227.0	226.3
115°	256.8	256.2	255.6	255.0
117.5°	285.4	284.7	284.0	283.3
120°	312.0	311.1	310.2	309.3
122.5°	337.8	337.1	336.4	335.7
125°	361.9	361.0	360.2	359.4
127.5°	385.6	384.8	384.0	383.2
130°	407.5	406.7	405.9	405.1
132.5°	428.5	427.6	426.8	426.0
135°	449.3	448.7	448.1	447.5
137.5°	468.2	467.3	466.5	465.7
140°	485.8	485.2	484.6	484.0
142.5°	502.7	502.1	501.5	500.9
145°	518.5	517.8	517.1	516.4
147.5°	532.9	532.4	531.9	531.4
150°	546.0	545.7	545.4	545.1
152.5°	557.7	557.6	557.5	557.4
155°	568.2	568.4	568.6	568.8
157.5°	577.9	577.9	577.9	577.9
160°	585.9	586.0	586.1	586.2
162.5°	593.0	593.3	593.6	593.9
165°	598.9	599.2	599.5	599.8
167.5°	603.6	604.1	604.5	604.9
170°	607.7	608.2	608.6	609.0
172.5°	610.2	610.7	611.2	611.7
175°	612.5	613.0	613.5	614.0
177.5°	613.4	613.9	614.4	614.9
180°	614.0	614.0	614.0	614.0

(END OF REPORT)