

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: P1031146

Luminaire Tested: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031146
REPORT IS A COMBINATION OF REPORTS P994300 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_3000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

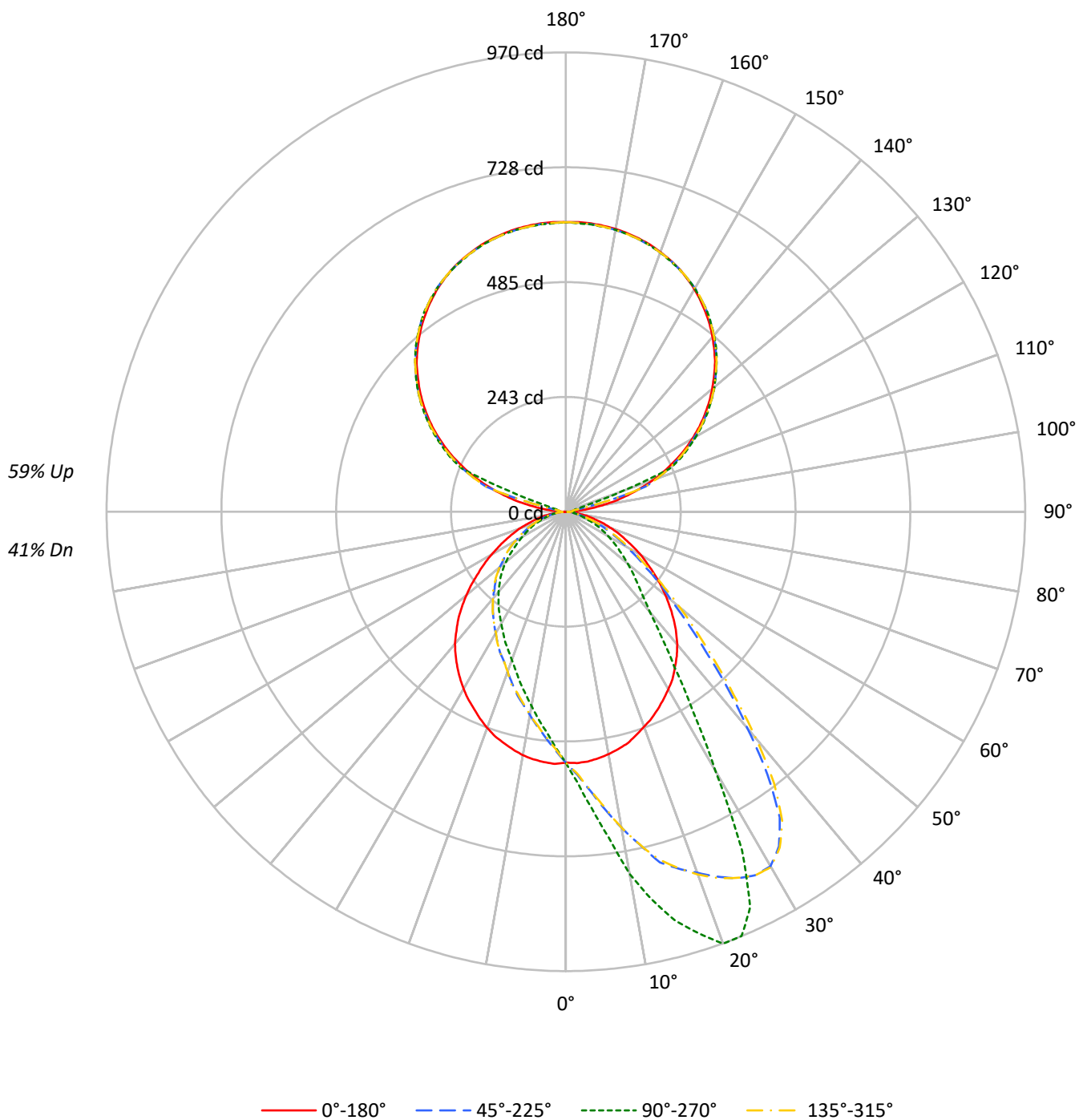
Lumens per Lamp: N/A
Luminaire Lumens: 3184.0 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
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°	5702	5702	5702	5702
5°	5707	6567	5721	4872
10°	5655	7927	5680	4255
15°	5598	8997	5598	3752
20°	5483	9704	5513	3329
25°	5399	9220	5389	3037
30°	5302	6389	5289	2753
35°	5184	4101	5159	2538
40°	5037	2896	5012	2324
45°	4782	2318	4775	2116
50°	4469	1939	4454	1872
55°	4117	1598	4084	1587
60°	3772	1321	3735	1349
65°	3365	1057	3387	1143
70°	2992	735	3072	925
75°	2537	546	2640	711
80°	2020	360	2193	533
85°	1441	171	1566	332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 7612 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	1.6
10°-20°	162.8	5.1
20°-30°	256.5	8.1
30°-40°	266.7	8.4
40°-50°	228.2	7.2
50°-60°	173.9	5.5
60°-70°	111.4	3.5
70°-80°	53.4	1.7
80°-90°	15.3	0.5
90°-100°	21.6	0.7
100°-110°	104.2	3.3
110°-120°	255.4	8.0
120°-130°	324.3	10.2
130°-140°	346.4	10.9
140°-150°	323.9	10.2
150°-160°	261.3	8.2
160°-170°	168.6	5.3
170°-180°	58.1	1.8
0°-30°	471.3	14.8
0°-40°	738.0	23.2
0°-60°	1140.1	35.8
0°-90°	1320.2	41.5
90°-120°	381.2	12.0
90°-150°	1375.8	43.2
90°-180°	1864.0	58.5
0°-180°	3184.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	530	530	530	530	530	
5°	529	629	531	467	529	50
15°	506	894	506	373	506	142
25°	460	921	459	303	460	212
35°	401	400	400	247	401	251
45°	322	213	322	195	322	248
55°	227	134	225	133	227	204
65°	139	77	140	83	139	139
75°	67	33	69	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°	135	20	135	20	135	144
115°	254	267	254	267	254	251
125°	358	365	358	365	358	320
135°	446	450	446	450	446	343
145°	514	519	514	519	514	322
155°	566	566	566	566	566	261
165°	597	596	597	596	597	169
175°	611	609	611	609	611	58
180°	611	611	611	611	611	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	531.1	534.7	537.4	539.2	543.8	546.5	548.8	552.8	552.8	553.7	555.6
5°	529.3	537.0	542.4	549.7	559.2	563.7	570.1	575.5	583.2	587.3	591.4
7.5°	525.2	536.1	547.4	558.3	572.3	581.4	587.8	601.8	611.8	624.0	633.6
10°	519.7	534.7	549.2	566.0	585.0	598.6	608.2	626.8	645.8	663.0	677.6
12.5°	512.9	531.1	551.9	572.3	599.1	612.7	628.1	651.2	678.5	700.2	719.7
15°	505.7	526.5	550.1	575.1	608.6	627.7	649.9	678.0	708.4	739.7	766.4
17.5°	494.3	520.6	546.9	583.2	622.7	634.0	653.1	691.6	729.3	757.4	790.0
20°	483.0	512.5	545.6	578.2	620.9	647.2	664.9	705.7	746.0	780.0	811.3
22.5°	472.6	503.4	537.9	579.1	619.0	645.4	667.6	710.2	756.9	795.0	833.6
25°	459.9	493.4	531.5	570.5	619.0	639.0	663.5	712.9	762.4	806.4	854.0
27.5°	446.3	480.3	517.9	557.8	602.3	631.7	655.8	708.8	769.2	816.3	865.3
30°	432.7	467.6	503.9	539.7	589.6	617.7	645.4	703.9	772.8	826.8	864.4
32.5°	419.5	449.0	484.8	519.7	569.2	600.0	631.3	698.9	774.2	819.5	837.6
35°	401.4	432.2	461.2	498.4	548.3	578.7	615.4	698.4	768.3	796.4	787.3
37.5°	384.6	410.4	438.1	471.2	522.5	561.9	600.0	686.6	748.8	750.6	699.3
40°	366.0	387.3	410.4	445.4	500.7	539.7	581.0	668.5	713.4	686.6	596.4
42.5°	344.7	363.7	381.9	415.9	476.2	519.7	564.2	645.8	662.1	600.5	506.6
45°	322.0	337.4	354.2	390.0	450.3	493.4	537.9	610.9	594.1	507.0	417.7
47.5°	298.4	311.6	327.9	360.5	422.7	466.7	508.8	561.0	518.4	424.9	350.1
50°	274.8	285.3	301.1	334.7	394.6	434.5	473.5	507.5	447.6	364.6	289.3
52.5°	251.7	259.9	276.2	304.8	362.8	400.9	429.0	442.2	381.4	301.1	251.2
55°	227.2	236.3	247.2	276.2	333.8	361.9	380.5	380.0	317.5	255.3	207.7
57.5°	203.6	211.8	221.3	250.3	297.1	316.1	332.0	324.3	264.9	209.1	178.2
60°	182.8	187.3	197.7	222.2	257.6	273.9	283.0	269.8	216.3	176.4	147.4
62.5°	160.1	164.6	173.2	196.4	218.1	226.8	234.5	217.7	178.7	143.8	126.1
65°	139.2	145.1	150.6	169.2	181.0	191.4	190.5	176.4	139.7	117.0	102.5
67.5°	121.1	123.4	127.9	139.2	144.7	152.4	152.8	137.0	112.5	95.2	86.6
70°	101.6	103.9	107.0	112.5	116.1	117.9	117.0	102.9	84.8	74.4	66.7
72.5°	84.8	84.4	86.6	86.6	90.2	89.8	87.1	76.2	64.4	55.8	51.2
75°	66.7	67.1	67.6	66.7	65.3	63.5	61.2	53.1	45.4	41.3	37.2
77.5°	52.2	51.2	51.7	48.5	46.7	44.9	41.7	37.6	31.3	30.4	28.6
80°	37.2	36.7	36.3	34.9	30.8	29.0	26.8	24.5	23.1	22.2	21.8
82.5°	24.9	24.9	24.0	21.3	19.0	17.7	17.2	16.3	15.0	15.0	14.5
85°	15.0	14.5	13.6	10.9	9.5	9.5	9.5	9.5	8.6	8.6	8.2
87.5°	5.9	5.4	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°	10.4	9.8	9.2	8.6	8.0	7.7	8.2	9.1	10.0	10.9	11.8
95°	27.7	23.6	19.4	15.3	11.2	9.1	9.7	10.8	11.9	13.0	14.1
97.5°	50.4	47.6	44.8	41.9	39.1	37.7	35.1	30.0	24.8	19.7	14.5
100°	76.8	78.8	80.8	82.8	84.8	85.8	77.9	62.2	46.5	30.7	15.0
102.5°	106.7	108.0	109.3	110.6	111.9	112.6	103.8	86.3	68.7	51.2	33.6
105°	135.4	136.5	137.6	138.7	139.8	140.3	135.8	126.7	117.6	108.6	99.5
107.5°	165.8	166.7	167.6	168.5	169.4	169.9	170.7	172.2	173.7	175.2	176.7
110°	196.2	197.0	197.8	198.6	199.4	199.8	200.4	201.5	202.6	203.7	204.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	225.3	226.0	226.7	227.4	228.1	228.5	229.1	230.2	231.3	232.4	233.5
115°	253.9	254.5	255.1	255.7	256.3	256.6	257.1	258.0	258.9	259.8	260.7
117.5°	282.1	282.8	283.5	284.2	284.9	285.2	285.5	286.0	286.5	287.0	287.5
120°	308.0	308.9	309.8	310.7	311.6	312.0	312.2	312.5	312.8	313.1	313.4
122.5°	334.3	335.0	335.7	336.4	337.1	337.5	337.7	338.1	338.5	338.9	339.3
125°	357.9	358.7	359.5	360.3	361.1	361.5	361.7	362.1	362.6	363.0	363.4
127.5°	381.5	382.3	383.1	384.0	384.8	385.2	385.4	385.9	386.4	386.9	387.4
130°	403.3	404.1	404.9	405.8	406.6	407.0	407.2	407.6	408.0	408.4	408.8
132.5°	424.2	425.0	425.8	426.7	427.5	427.9	428.0	428.3	428.6	428.9	429.2
135°	445.6	446.2	446.8	447.4	448.0	448.3	448.5	448.9	449.3	449.7	450.1
137.5°	463.7	464.5	465.3	466.2	467.0	467.4	467.5	467.7	467.9	468.1	468.3
140°	481.9	482.5	483.1	483.7	484.3	484.6	484.8	485.1	485.4	485.7	486.0
142.5°	498.7	499.3	499.9	500.5	501.1	501.4	501.6	501.9	502.2	502.5	502.8
145°	514.2	514.9	515.6	516.3	517.0	517.3	517.4	517.6	517.8	518.0	518.2
147.5°	529.1	529.6	530.1	530.6	531.1	531.4	531.5	531.7	531.9	532.1	532.3
150°	542.8	543.1	543.4	543.7	544.0	544.1	544.2	544.4	544.6	544.8	545.0
152.5°	555.0	555.1	555.2	555.3	555.4	555.5	555.5	555.6	555.7	555.8	555.9
155°	566.4	566.2	566.0	565.8	565.6	565.5	565.5	565.6	565.7	565.8	565.9
157.5°	575.5	575.5	575.5	575.5	575.5	575.5	575.4	575.3	575.2	575.1	575.0
160°	583.7	583.6	583.5	583.4	583.3	583.2	583.1	583.0	582.9	582.8	582.7
162.5°	591.4	591.1	590.8	590.5	590.2	590.0	590.0	589.9	589.8	589.7	589.6
165°	597.3	597.0	596.7	596.4	596.1	595.9	595.9	595.8	595.7	595.6	595.5
167.5°	602.3	601.9	601.5	601.1	600.7	600.5	600.5	600.5	600.5	600.5	600.5
170°	606.4	606.0	605.6	605.1	604.7	604.5	604.5	604.5	604.5	604.5	604.5
172.5°	609.1	608.6	608.1	607.6	607.1	606.8	606.9	607.0	607.1	607.2	607.3
175°	611.4	610.9	610.4	609.9	609.4	609.1	609.1	609.2	609.3	609.4	609.5
177.5°	612.3	611.8	611.3	610.8	610.3	610.0	610.1	610.2	610.3	610.4	610.5
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	559.2	559.2	563.3	567.3	565.1	566.4	571.4	569.6	573.2	572.8	574.2
5°	601.4	606.4	610.4	619.0	620.4	619.0	627.7	629.9	634.0	629.0	631.3
7.5°	649.0	659.4	669.4	682.1	686.2	687.1	691.6	698.0	703.4	693.4	698.4
10°	695.2	711.1	731.5	742.9	752.8	756.5	760.1	764.2	770.5	776.4	771.9
12.5°	745.1	768.3	787.8	808.2	820.4	819.1	829.5	832.2	837.2	838.6	840.4
15°	785.9	818.6	830.8	861.2	863.9	873.0	884.8	895.2	896.6	893.9	893.9
17.5°	824.9	853.1	874.8	899.3	904.3	912.0	927.0	932.0	933.8	933.3	933.3
20°	856.7	875.3	912.0	932.4	940.6	950.6	961.0	967.4	968.7	970.5	967.8
22.5°	877.6	905.7	935.6	952.4	959.2	962.8	969.6	971.4	969.2	969.6	970.1
25°	893.9	921.5	939.7	944.2	943.8	939.2	934.2	925.6	924.7	921.1	913.8
27.5°	898.4	908.8	906.6	888.0	869.4	867.6	837.6	821.3	802.7	805.4	795.0
30°	873.9	860.3	828.1	781.0	761.5	729.7	696.1	661.2	647.6	632.7	660.3
32.5°	814.1	765.5	708.4	647.2	614.5	586.4	550.6	525.2	510.7	498.4	522.0
35°	723.8	648.1	572.3	514.3	487.5	462.1	428.6	415.9	397.7	399.5	401.8
37.5°	607.7	524.3	467.1	410.0	392.3	381.9	357.4	337.9	331.5	329.7	329.7
40°	498.9	430.4	379.6	334.7	321.1	312.5	293.0	283.9	277.1	275.3	277.6
42.5°	412.7	354.2	314.7	284.8	275.3	264.4	256.2	244.9	243.5	240.4	244.4
45°	346.5	295.7	266.2	244.4	236.3	232.2	223.1	216.3	213.6	213.2	216.3
47.5°	293.9	254.4	228.6	215.0	208.6	204.5	196.8	194.1	191.4	192.3	190.9
50°	246.7	217.2	200.5	188.2	184.1	180.0	175.1	172.3	171.0	171.0	170.5
52.5°	211.8	187.3	176.4	165.1	163.3	161.0	155.6	153.7	151.5	151.0	152.8
55°	181.4	164.6	153.7	146.9	145.1	140.6	138.3	136.1	134.7	133.8	134.2
57.5°	155.1	142.4	135.1	129.3	126.1	124.3	120.2	119.7	118.8	118.8	118.4
60°	133.3	124.3	115.6	112.0	109.8	107.5	107.0	104.3	102.9	103.9	103.4
62.5°	112.9	105.7	100.7	96.6	95.2	93.4	92.1	91.2	89.8	90.2	90.2
65°	94.3	88.4	84.8	81.2	80.7	78.9	78.5	77.6	77.6	77.1	78.0
67.5°	77.6	73.5	70.3	68.0	66.7	67.1	65.3	63.9	63.9	63.5	64.9
70°	61.7	59.4	56.2	53.5	51.7	51.7	49.4	49.0	49.0	49.0	48.5
72.5°	47.6	43.5	42.2	41.3	41.3	41.3	40.4	40.4	39.9	40.4	39.9
75°	35.4	34.9	34.0	33.6	33.6	33.1	32.7	32.7	32.7	32.7	32.7
77.5°	27.7	27.7	26.8	26.3	26.3	26.3	25.9	25.9	25.4	25.4	25.4
80°	20.4	20.4	19.5	19.5	19.5	19.0	19.0	19.0	19.5	19.0	19.0
82.5°	14.1	14.1	13.6	14.1	13.6	13.2	13.2	13.2	12.7	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	12.1	12.5	12.7	12.8	13.0	13.2	13.4	13.6	13.4
92.5°	12.5	13.2	13.9	14.6	15.0	15.0	15.1	15.2	15.3	15.4	15.3
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°	15.3	16.1	17.0	17.8	18.2	18.2	18.3	18.4	18.5	18.6	18.5
100°	15.8	16.6	17.4	18.2	18.6	18.7	18.8	18.9	19.0	19.1	19.0
102.5°	30.3	26.9	23.6	20.3	18.6	18.7	18.9	19.1	19.3	19.5	19.3
105°	81.6	63.8	45.9	28.0	19.1	19.2	19.4	19.6	19.8	20.0	19.8
107.5°	161.1	145.6	130.0	114.5	106.7	100.1	86.9	73.6	60.4	47.2	60.4
110°	201.5	198.2	194.9	191.6	189.9	182.7	168.2	153.8	139.3	124.9	139.3



TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	234.4	235.3	236.2	237.1	237.5	237.4	237.2	237.0	236.8	236.6	236.8
115°	261.7	262.7	263.8	264.8	265.3	265.5	265.9	266.3	266.7	267.1	266.7
117.5°	288.3	289.1	289.9	290.7	291.1	291.2	291.3	291.4	291.5	291.6	291.5
120°	314.2	315.0	315.8	316.6	317.0	317.0	317.0	317.0	317.0	317.0	317.0
122.5°	339.8	340.3	340.8	341.3	341.6	341.6	341.7	341.8	341.9	342.0	341.9
125°	363.6	363.8	364.0	364.2	364.3	364.4	364.6	364.8	365.0	365.2	365.0
127.5°	387.7	388.0	388.3	388.6	388.8	388.7	388.5	388.3	388.1	387.9	388.1
130°	409.2	409.6	410.0	410.4	410.6	410.5	410.3	410.1	409.9	409.7	409.9
132.5°	429.6	430.0	430.4	430.8	431.0	430.9	430.6	430.3	430.0	429.7	430.0
135°	450.4	450.7	451.0	451.3	451.5	451.3	451.0	450.7	450.4	450.1	450.4
137.5°	468.8	469.3	469.8	470.3	470.6	470.5	470.3	470.0	469.8	469.6	469.8
140°	486.4	486.8	487.2	487.6	487.8	487.7	487.5	487.3	487.1	486.9	487.1
142.5°	503.1	503.4	503.7	504.0	504.2	504.0	503.7	503.4	503.1	502.8	503.1
145°	518.4	518.6	518.9	519.1	519.2	519.2	519.2	519.2	519.2	519.2	519.2
147.5°	532.5	532.7	532.9	533.1	533.2	533.0	532.5	532.0	531.5	531.0	531.5
150°	545.2	545.4	545.7	545.9	546.0	545.8	545.5	545.2	544.9	544.6	544.9
152.5°	556.3	556.7	557.2	557.6	557.8	557.5	557.0	556.5	556.0	555.5	556.0
155°	566.4	566.9	567.4	567.9	568.2	567.9	567.3	566.7	566.1	565.5	566.1
157.5°	575.6	576.2	576.8	577.4	577.7	577.3	576.5	575.7	574.9	574.1	574.9
160°	583.3	583.9	584.6	585.2	585.5	585.1	584.4	583.7	583.0	582.3	583.0
162.5°	590.3	591.0	591.7	592.4	592.7	592.4	591.8	591.2	590.6	590.0	590.6
165°	596.3	597.1	597.9	598.7	599.1	598.7	598.0	597.3	596.6	595.9	596.6
167.5°	601.3	602.1	602.9	603.7	604.1	603.7	602.9	602.1	601.3	600.5	601.3
170°	605.3	606.1	607.0	607.8	608.2	607.8	607.0	606.1	605.3	604.5	605.3
172.5°	608.1	608.9	609.7	610.5	610.9	610.4	609.5	608.6	607.7	606.8	607.7
175°	610.2	610.9	611.6	612.3	612.7	612.3	611.5	610.7	609.9	609.1	609.9
177.5°	611.3	612.1	612.9	613.7	614.1	613.6	612.6	611.5	610.5	609.5	610.5
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	571.9	569.2	567.3	566.0	564.6	568.7	563.3	557.4	553.3	550.6	549.7
5°	631.7	625.9	620.9	616.8	617.7	617.7	608.2	597.7	588.7	583.7	578.2
7.5°	701.1	694.8	684.8	682.5	680.7	669.4	659.9	640.8	629.5	618.1	608.2
10°	770.1	761.9	752.4	749.2	744.7	730.6	716.1	691.6	677.6	656.7	643.5
12.5°	834.5	824.5	815.0	812.7	805.9	793.7	768.7	743.3	719.3	697.1	673.9
15°	888.4	885.7	871.2	862.1	847.2	830.4	824.9	790.5	760.1	737.0	695.2
17.5°	933.8	921.1	907.5	901.6	895.7	876.2	856.7	821.3	788.7	754.7	727.9
20°	970.1	956.0	946.5	937.9	935.2	912.9	882.1	850.8	815.0	776.9	742.0
22.5°	971.9	970.1	963.7	958.7	953.3	938.8	914.3	875.3	837.2	795.5	749.7
25°	934.2	931.5	949.7	945.1	948.8	943.3	930.2	897.5	853.1	804.1	757.8
27.5°	820.9	848.5	877.1	887.1	893.9	913.4	919.7	901.6	865.8	813.6	761.9
30°	666.7	703.4	749.7	774.6	793.7	829.9	877.1	883.0	866.2	824.5	761.0
32.5°	523.4	556.9	594.1	623.6	649.0	723.4	786.9	832.7	840.8	819.1	763.3
35°	421.8	436.3	471.7	499.8	534.2	597.7	672.6	746.5	796.4	799.1	756.5
37.5°	347.8	355.6	386.4	402.3	422.7	478.5	548.3	644.9	722.5	759.2	737.4
40°	288.0	305.7	323.4	332.4	346.9	385.5	452.6	528.3	624.5	692.5	707.9
42.5°	249.9	257.6	268.9	281.6	290.7	324.3	369.2	438.6	525.2	620.0	662.6
45°	220.4	223.1	234.9	243.1	252.6	276.2	307.9	366.0	442.2	535.6	608.2
47.5°	195.9	201.4	207.7	212.7	219.0	237.2	264.4	306.6	373.7	457.1	535.1
50°	174.2	177.3	185.5	187.8	192.3	205.0	225.9	258.1	313.4	380.0	460.8
52.5°	153.7	159.6	162.8	166.0	170.1	180.5	194.1	220.4	262.1	324.7	393.2
55°	137.9	139.7	144.2	146.9	150.1	157.4	169.2	188.7	221.3	271.2	336.1
57.5°	122.4	122.4	127.0	129.3	132.4	137.9	148.3	163.3	186.8	224.0	283.4
60°	106.1	106.6	110.2	112.9	113.8	119.3	127.9	139.7	157.8	185.0	233.6
62.5°	91.6	93.9	95.7	96.6	99.8	102.9	110.2	118.4	131.1	155.1	189.6
65°	79.4	79.8	81.2	82.1	83.4	87.1	92.5	98.0	108.8	126.5	154.6
67.5°	65.3	67.1	68.9	68.9	70.3	72.1	77.6	82.1	90.2	100.7	119.7
70°	49.0	49.9	52.6	54.0	55.8	59.0	61.7	64.4	70.7	78.5	93.0
72.5°	40.8	40.8	41.7	42.2	42.2	44.4	48.5	51.2	54.4	59.9	69.8
75°	32.7	32.7	34.0	33.6	34.5	35.4	35.8	37.6	39.5	43.5	49.4
77.5°	25.9	26.3	26.3	26.8	26.8	27.2	27.7	28.6	29.5	31.7	34.5
80°	19.0	19.5	19.5	20.0	20.0	20.4	20.9	21.3	22.2	23.1	24.5
82.5°	13.2	13.6	13.6	14.1	13.6	14.1	14.5	14.5	15.0	15.9	16.3
85°	7.7	7.7	8.2	7.7	7.7	7.7	8.2	8.2	8.6	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°	13.2	13.0	12.8	12.7	12.5	12.1	11.7	11.3	10.9	9.6	8.3
92.5°	15.2	15.1	15.0	15.0	14.6	13.9	13.2	12.5	11.8	10.9	10.0
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°	18.4	18.3	18.2	18.2	17.8	17.0	16.1	15.3	14.5	19.7	24.8
100°	18.9	18.8	18.7	18.6	18.2	17.4	16.6	15.8	15.0	30.7	46.5
102.5°	19.1	18.9	18.7	18.6	20.3	23.6	26.9	30.3	33.6	51.2	68.7
105°	19.6	19.4	19.2	19.1	28.0	45.9	63.8	81.6	99.5	108.6	117.6
107.5°	73.6	86.9	100.1	106.7	114.5	130.0	145.6	161.1	176.7	175.2	173.7
110°	153.8	168.2	182.7	189.9	191.6	194.9	198.2	201.5	204.8	203.7	202.6

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	237.0	237.2	237.4	237.5	237.1	236.2	235.3	234.4	233.5	232.4	231.3
115°	266.3	265.9	265.5	265.3	264.8	263.8	262.7	261.7	260.7	259.8	258.9
117.5°	291.4	291.3	291.2	291.1	290.7	289.9	289.1	288.3	287.5	287.0	286.5
120°	317.0	317.0	317.0	317.0	316.6	315.8	315.0	314.2	313.4	313.1	312.8
122.5°	341.8	341.7	341.6	341.6	341.3	340.8	340.3	339.8	339.3	338.9	338.5
125°	364.8	364.6	364.4	364.3	364.2	364.0	363.8	363.6	363.4	363.0	362.6
127.5°	388.3	388.5	388.7	388.8	388.6	388.3	388.0	387.7	387.4	386.9	386.4
130°	410.1	410.3	410.5	410.6	410.4	410.0	409.6	409.2	408.8	408.4	408.0
132.5°	430.3	430.6	430.9	431.0	430.8	430.4	430.0	429.6	429.2	428.9	428.6
135°	450.7	451.0	451.3	451.5	451.3	451.0	450.7	450.4	450.1	449.7	449.3
137.5°	470.0	470.3	470.5	470.6	470.3	469.8	469.3	468.8	468.3	468.1	467.9
140°	487.3	487.5	487.7	487.8	487.6	487.2	486.8	486.4	486.0	485.7	485.4
142.5°	503.4	503.7	504.0	504.2	504.0	503.7	503.4	503.1	502.8	502.5	502.2
145°	519.2	519.2	519.2	519.2	519.1	518.9	518.6	518.4	518.2	518.0	517.8
147.5°	532.0	532.5	533.0	533.2	533.1	532.9	532.7	532.5	532.3	532.1	531.9
150°	545.2	545.5	545.8	546.0	545.9	545.7	545.4	545.2	545.0	544.8	544.6
152.5°	556.5	557.0	557.5	557.8	557.6	557.2	556.7	556.3	555.9	555.8	555.7
155°	566.7	567.3	567.9	568.2	567.9	567.4	566.9	566.4	565.9	565.8	565.7
157.5°	575.7	576.5	577.3	577.7	577.4	576.8	576.2	575.6	575.0	575.1	575.2
160°	583.7	584.4	585.1	585.5	585.2	584.6	583.9	583.3	582.7	582.8	582.9
162.5°	591.2	591.8	592.4	592.7	592.4	591.7	591.0	590.3	589.6	589.7	589.8
165°	597.3	598.0	598.7	599.1	598.7	597.9	597.1	596.3	595.5	595.6	595.7
167.5°	602.1	602.9	603.7	604.1	603.7	602.9	602.1	601.3	600.5	600.5	600.5
170°	606.1	607.0	607.8	608.2	607.8	607.0	606.1	605.3	604.5	604.5	604.5
172.5°	608.6	609.5	610.4	610.9	610.5	609.7	608.9	608.1	607.3	607.2	607.1
175°	610.7	611.5	612.3	612.7	612.3	611.6	610.9	610.2	609.5	609.4	609.3
177.5°	611.5	612.6	613.6	614.1	613.7	612.9	612.1	611.3	610.5	610.4	610.3
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	548.3	546.0	543.8	543.8	538.8	534.2	532.0	532.9	530.2	526.5	522.9
5°	572.3	563.3	561.5	556.5	549.7	540.1	535.1	530.6	525.2	517.9	511.1
7.5°	594.6	582.8	576.4	571.4	558.3	545.1	534.2	527.0	517.5	506.6	498.4
10°	623.6	601.8	595.0	583.7	565.1	546.5	533.8	522.0	508.8	496.1	485.3
12.5°	646.7	621.8	609.1	597.7	573.7	550.1	528.8	514.3	498.4	484.4	470.3
15°	673.0	644.9	622.7	609.1	578.7	550.1	526.1	505.7	488.0	470.7	458.5
17.5°	685.7	650.3	640.4	620.9	576.9	548.3	518.8	497.1	475.7	455.8	441.3
20°	705.7	664.4	639.5	626.3	587.3	545.1	510.7	485.7	463.5	442.2	426.8
22.5°	707.0	662.1	645.8	620.9	572.8	535.6	503.4	473.0	447.2	427.2	411.3
25°	703.9	658.1	635.4	615.4	575.5	530.2	488.9	459.0	433.6	410.4	391.8
27.5°	702.5	646.3	624.9	605.0	560.1	514.3	480.3	446.3	417.2	396.8	377.8
30°	700.7	633.6	607.7	584.6	543.3	502.0	461.2	431.7	404.1	378.2	359.2
32.5°	688.9	616.3	590.0	565.5	521.1	479.8	447.6	416.3	386.4	362.4	345.1
35°	685.3	600.5	566.0	539.7	496.1	459.4	425.4	399.5	371.4	347.4	327.0
37.5°	674.8	584.1	546.9	513.4	468.0	433.1	408.2	382.3	355.1	329.3	312.9
40°	656.7	565.1	522.9	488.4	441.7	406.4	383.2	364.2	337.4	314.3	294.3
42.5°	629.9	545.6	500.2	463.9	412.2	379.1	360.1	342.0	319.3	295.2	278.9
45°	599.1	519.7	477.6	437.2	384.6	352.4	332.4	321.5	300.7	280.3	261.2
47.5°	556.9	493.0	451.2	409.5	356.0	324.7	308.8	298.0	283.4	261.2	245.8
50°	503.9	458.5	419.0	381.9	327.9	298.0	282.1	273.9	261.7	245.8	230.8
52.5°	444.9	418.6	385.9	351.5	299.3	271.2	256.7	250.3	241.3	226.3	213.6
55°	385.5	374.2	351.9	317.9	269.4	246.3	233.6	225.4	218.6	207.7	196.8
57.5°	332.4	327.0	311.6	285.3	244.4	220.4	209.5	204.1	198.6	190.5	179.6
60°	277.6	283.4	267.6	254.4	217.2	196.4	186.8	181.0	178.2	171.0	164.2
62.5°	229.9	235.4	226.3	216.3	190.0	171.4	165.5	160.1	158.3	151.9	145.1
65°	186.8	193.7	186.8	181.4	165.5	150.1	142.9	140.1	138.3	134.2	128.8
67.5°	148.8	155.6	152.4	145.6	140.6	127.9	123.8	121.1	120.2	117.0	112.5
70°	112.0	121.5	122.4	118.4	113.8	107.9	105.2	104.3	102.0	99.3	96.6
72.5°	80.7	91.6	92.1	92.1	89.3	89.3	86.6	85.3	85.3	82.5	79.4
75°	59.4	66.7	67.6	68.5	69.8	71.2	69.4	69.4	68.9	66.2	64.9
77.5°	39.5	45.8	48.1	51.2	53.1	53.1	54.0	54.9	54.0	52.6	51.7
80°	25.4	29.9	32.7	34.5	37.2	38.5	39.9	40.4	39.5	39.0	37.6
82.5°	16.8	18.1	19.5	21.8	24.9	27.2	27.2	26.8	27.7	27.2	26.8
85°	9.5	10.4	10.9	11.3	13.2	15.4	15.9	16.3	17.2	16.3	15.4
87.5°	3.6	4.1	4.1	4.1	5.0	5.4	6.8	8.6	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°	9.1	8.2	7.7	8.0	8.6	9.2	9.8	10.4	9.8	9.2	8.6
95°	10.8	9.7	9.1	11.2	15.3	19.4	23.6	27.7	23.6	19.4	15.3
97.5°	30.0	35.1	37.7	39.1	41.9	44.8	47.6	50.4	47.6	44.8	41.9
100°	62.2	77.9	85.8	84.8	82.8	80.8	78.8	76.8	78.8	80.8	82.8
102.5°	86.3	103.8	112.6	111.9	110.6	109.3	108.0	106.7	108.0	109.3	110.6
105°	126.7	135.8	140.3	139.8	138.7	137.6	136.5	135.4	136.5	137.6	138.7
107.5°	172.2	170.7	169.9	169.4	168.5	167.6	166.7	165.8	166.7	167.6	168.5
110°	201.5	200.4	199.8	199.4	198.6	197.8	197.0	196.2	197.0	197.8	198.6

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	230.2	229.1	228.5	228.1	227.4	226.7	226.0	225.3	226.0	226.7	227.4
115°	258.0	257.1	256.6	256.3	255.7	255.1	254.5	253.9	254.5	255.1	255.7
117.5°	286.0	285.5	285.2	284.9	284.2	283.5	282.8	282.1	282.8	283.5	284.2
120°	312.5	312.2	312.0	311.6	310.7	309.8	308.9	308.0	308.9	309.8	310.7
122.5°	338.1	337.7	337.5	337.1	336.4	335.7	335.0	334.3	335.0	335.7	336.4
125°	362.1	361.7	361.5	361.1	360.3	359.5	358.7	357.9	358.7	359.5	360.3
127.5°	385.9	385.4	385.2	384.8	384.0	383.1	382.3	381.5	382.3	383.1	384.0
130°	407.6	407.2	407.0	406.6	405.8	404.9	404.1	403.3	404.1	404.9	405.8
132.5°	428.3	428.0	427.9	427.5	426.7	425.8	425.0	424.2	425.0	425.8	426.7
135°	448.9	448.5	448.3	448.0	447.4	446.8	446.2	445.6	446.2	446.8	447.4
137.5°	467.7	467.5	467.4	467.0	466.2	465.3	464.5	463.7	464.5	465.3	466.2
140°	485.1	484.8	484.6	484.3	483.7	483.1	482.5	481.9	482.5	483.1	483.7
142.5°	501.9	501.6	501.4	501.1	500.5	499.9	499.3	498.7	499.3	499.9	500.5
145°	517.6	517.4	517.3	517.0	516.3	515.6	514.9	514.2	514.9	515.6	516.3
147.5°	531.7	531.5	531.4	531.1	530.6	530.1	529.6	529.1	529.6	530.1	530.6
150°	544.4	544.2	544.1	544.0	543.7	543.4	543.1	542.8	543.1	543.4	543.7
152.5°	555.6	555.5	555.5	555.4	555.3	555.2	555.1	555.0	555.1	555.2	555.3
155°	565.6	565.5	565.5	565.6	565.8	566.0	566.2	566.4	566.2	566.0	565.8
157.5°	575.3	575.4	575.5	575.5	575.5	575.5	575.5	575.5	575.5	575.5	575.5
160°	583.0	583.1	583.2	583.3	583.4	583.5	583.6	583.7	583.6	583.5	583.4
162.5°	589.9	590.0	590.0	590.2	590.5	590.8	591.1	591.4	591.1	590.8	590.5
165°	595.8	595.9	595.9	596.1	596.4	596.7	597.0	597.3	597.0	596.7	596.4
167.5°	600.5	600.5	600.5	600.7	601.1	601.5	601.9	602.3	601.9	601.5	601.1
170°	604.5	604.5	604.5	604.7	605.1	605.6	606.0	606.4	606.0	605.6	605.1
172.5°	607.0	606.9	606.8	607.1	607.6	608.1	608.6	609.1	608.6	608.1	607.6
175°	609.2	609.1	609.1	609.4	609.9	610.4	610.9	611.4	610.9	610.4	609.9
177.5°	610.2	610.1	610.0	610.3	610.8	611.3	611.8	612.3	611.8	611.3	610.8
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	522.9	520.6	519.7	517.5	512.0	508.4	504.3	501.6	502.0	499.8	501.1
5°	506.6	506.1	502.9	498.4	490.7	486.6	479.4	475.7	473.9	474.4	471.7
7.5°	493.0	488.9	486.6	479.4	472.1	463.5	457.6	454.4	451.7	449.0	447.2
10°	477.6	473.9	470.3	462.6	452.6	444.4	436.3	433.1	429.0	427.2	425.9
12.5°	461.2	459.0	454.4	445.4	434.0	426.3	416.8	415.0	409.5	405.9	405.0
15°	446.3	444.9	436.7	426.3	415.0	407.3	399.1	393.7	384.6	386.4	383.2
17.5°	430.4	424.5	419.5	405.4	400.0	388.2	378.7	376.0	369.6	365.5	361.5
20°	412.7	409.1	402.7	393.7	380.5	366.9	359.6	355.1	351.5	345.1	343.3
22.5°	395.9	391.4	385.9	374.2	362.8	351.5	341.5	337.4	332.9	328.3	325.6
25°	382.8	376.0	370.1	355.6	344.2	334.7	328.3	321.5	315.2	312.5	311.6
27.5°	362.4	358.3	352.4	338.8	328.3	317.9	312.0	307.5	300.7	297.5	294.8
30°	349.2	341.0	334.2	323.4	312.9	301.6	296.1	290.7	286.6	282.5	279.4
32.5°	331.5	325.2	319.7	308.8	298.4	288.0	282.1	273.9	271.7	268.5	264.9
35°	314.3	310.2	304.3	292.5	281.2	273.9	267.6	259.9	257.1	254.9	251.7
37.5°	298.0	292.1	288.0	276.6	266.7	258.1	253.1	246.7	244.9	242.2	239.9
40°	283.9	278.0	273.9	262.6	252.2	243.1	239.9	233.6	230.8	227.7	226.3
42.5°	268.0	263.0	257.6	249.4	238.5	229.5	223.1	219.5	215.9	214.5	211.8
45°	251.2	246.7	242.6	233.6	222.2	215.9	210.4	205.4	202.7	200.5	198.6
47.5°	236.7	232.7	227.2	217.2	208.2	202.3	196.8	191.8	189.1	186.4	184.1
50°	220.0	217.7	211.8	202.3	193.7	186.8	181.9	177.3	175.5	172.3	168.7
52.5°	205.0	200.9	195.9	188.2	180.5	172.3	165.5	162.8	159.6	157.8	154.6
55°	187.3	184.6	179.1	172.3	164.2	157.4	152.4	148.8	144.7	142.9	138.8
57.5°	172.3	167.3	164.6	156.0	148.3	141.5	137.9	134.2	129.7	127.0	125.2
60°	156.0	151.5	147.4	140.1	134.7	127.4	122.0	118.8	115.6	112.0	110.2
62.5°	140.1	136.5	131.5	125.6	118.8	112.9	108.8	104.3	102.5	98.9	97.5
65°	122.9	120.2	116.1	109.3	103.9	98.9	94.8	91.2	89.3	88.0	87.1
67.5°	107.5	103.9	101.1	95.2	89.3	85.3	83.0	80.7	78.5	77.1	75.7
70°	91.6	88.9	86.2	80.7	76.6	73.0	71.2	69.4	68.0	66.7	65.3
72.5°	75.3	73.9	71.2	67.6	64.4	61.7	60.3	58.1	56.7	54.4	53.5
75°	62.1	59.9	58.5	55.3	52.6	50.3	48.5	45.8	44.0	43.1	42.6
77.5°	49.0	48.1	46.3	43.5	42.2	39.9	37.2	36.3	35.4	35.4	34.9
80°	36.7	35.4	34.0	31.7	30.4	28.6	28.6	28.6	28.1	28.6	28.1
82.5°	24.9	24.0	23.1	21.8	21.3	21.3	21.8	21.8	21.8	21.8	21.8
85°	14.5	14.5	14.5	15.0	14.5	14.5	15.0	15.4	15.0	15.0	14.5
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	12.1	12.5
92.5°	8.0	7.7	8.2	9.1	10.0	10.9	11.8	12.5	13.2	13.9	14.6
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°	39.1	37.7	35.1	30.0	24.8	19.7	14.5	15.3	16.1	17.0	17.8
100°	84.8	85.8	77.9	62.2	46.5	30.7	15.0	15.8	16.6	17.4	18.2
102.5°	111.9	112.6	103.8	86.3	68.7	51.2	33.6	30.3	26.9	23.6	20.3
105°	139.8	140.3	135.8	126.7	117.6	108.6	99.5	81.6	63.8	45.9	28.0
107.5°	169.4	169.9	170.7	172.2	173.7	175.2	176.7	161.1	145.6	130.0	114.5
110°	199.4	199.8	200.4	201.5	202.6	203.7	204.8	201.5	198.2	194.9	191.6

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	228.1	228.5	229.1	230.2	231.3	232.4	233.5	234.4	235.3	236.2	237.1
115°	256.3	256.6	257.1	258.0	258.9	259.8	260.7	261.7	262.7	263.8	264.8
117.5°	284.9	285.2	285.5	286.0	286.5	287.0	287.5	288.3	289.1	289.9	290.7
120°	311.6	312.0	312.2	312.5	312.8	313.1	313.4	314.2	315.0	315.8	316.6
122.5°	337.1	337.5	337.7	338.1	338.5	338.9	339.3	339.8	340.3	340.8	341.3
125°	361.1	361.5	361.7	362.1	362.6	363.0	363.4	363.6	363.8	364.0	364.2
127.5°	384.8	385.2	385.4	385.9	386.4	386.9	387.4	387.7	388.0	388.3	388.6
130°	406.6	407.0	407.2	407.6	408.0	408.4	408.8	409.2	409.6	410.0	410.4
132.5°	427.5	427.9	428.0	428.3	428.6	428.9	429.2	429.6	430.0	430.4	430.8
135°	448.0	448.3	448.5	448.9	449.3	449.7	450.1	450.4	450.7	451.0	451.3
137.5°	467.0	467.4	467.5	467.7	467.9	468.1	468.3	468.8	469.3	469.8	470.3
140°	484.3	484.6	484.8	485.1	485.4	485.7	486.0	486.4	486.8	487.2	487.6
142.5°	501.1	501.4	501.6	501.9	502.2	502.5	502.8	503.1	503.4	503.7	504.0
145°	517.0	517.3	517.4	517.6	517.8	518.0	518.2	518.4	518.6	518.9	519.1
147.5°	531.1	531.4	531.5	531.7	531.9	532.1	532.3	532.5	532.7	532.9	533.1
150°	544.0	544.1	544.2	544.4	544.6	544.8	545.0	545.2	545.4	545.7	545.9
152.5°	555.4	555.5	555.5	555.6	555.7	555.8	555.9	556.3	556.7	557.2	557.6
155°	565.6	565.5	565.5	565.6	565.7	565.8	565.9	566.4	566.9	567.4	567.9
157.5°	575.5	575.5	575.4	575.3	575.2	575.1	575.0	575.6	576.2	576.8	577.4
160°	583.3	583.2	583.1	583.0	582.9	582.8	582.7	583.3	583.9	584.6	585.2
162.5°	590.2	590.0	590.0	589.9	589.8	589.7	589.6	590.3	591.0	591.7	592.4
165°	596.1	595.9	595.9	595.8	595.7	595.6	595.5	596.3	597.1	597.9	598.7
167.5°	600.7	600.5	600.5	600.5	600.5	600.5	600.5	601.3	602.1	602.9	603.7
170°	604.7	604.5	604.5	604.5	604.5	604.5	604.5	605.3	606.1	607.0	607.8
172.5°	607.1	606.8	606.9	607.0	607.1	607.2	607.3	608.1	608.9	609.7	610.5
175°	609.4	609.1	609.1	609.2	609.3	609.4	609.5	610.2	610.9	611.6	612.3
177.5°	610.3	610.0	610.1	610.2	610.3	610.4	610.5	611.3	612.1	612.9	613.7
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	500.7	501.1	499.8	497.1	496.6	497.5	500.2	499.3	497.1	501.1	497.5
5°	473.0	470.7	469.8	470.7	468.0	466.7	469.4	468.0	469.4	469.8	471.2
7.5°	446.3	446.7	444.0	444.4	440.8	441.7	441.7	441.7	443.1	444.0	445.8
10°	423.1	424.0	420.9	421.3	418.6	416.8	418.1	420.9	420.9	420.9	421.8
12.5°	404.5	400.5	398.2	397.7	394.6	393.7	396.4	397.3	399.5	399.5	400.9
15°	381.4	380.5	378.7	378.7	371.0	372.8	373.7	376.9	381.4	377.8	378.7
17.5°	360.5	358.3	356.0	355.1	354.2	351.5	355.1	354.6	357.4	357.8	359.2
20°	342.0	340.1	335.6	336.1	337.0	332.9	335.1	335.1	337.9	340.6	343.8
22.5°	323.8	322.0	319.7	320.6	317.9	317.0	317.0	319.3	322.5	324.7	324.3
25°	309.8	306.6	305.2	303.9	302.5	303.4	302.0	304.3	306.6	307.9	306.6
27.5°	293.9	292.5	289.8	288.4	286.2	287.1	288.0	289.8	291.2	291.2	292.5
30°	278.5	276.6	275.7	274.4	274.4	272.6	273.0	274.8	276.2	277.6	279.4
32.5°	263.5	262.1	260.8	260.8	259.9	259.4	259.0	261.7	261.7	264.4	264.4
35°	251.2	249.0	249.0	246.7	247.6	247.2	246.3	248.1	248.5	250.3	249.9
37.5°	237.6	237.6	236.7	234.5	232.7	233.1	235.4	235.4	236.7	236.3	237.6
40°	224.0	223.1	223.1	221.8	221.3	220.9	221.3	221.8	224.0	223.6	224.0
42.5°	210.4	210.9	208.6	208.6	208.6	207.3	207.7	208.2	209.1	210.0	211.3
45°	197.3	196.4	195.9	195.0	194.1	194.6	194.1	195.9	195.5	196.4	197.7
47.5°	183.2	181.9	181.4	179.6	179.6	180.5	180.0	181.4	181.9	183.2	182.3
50°	169.6	167.8	166.4	166.9	164.2	165.1	165.1	166.4	167.8	168.3	169.2
52.5°	153.7	153.3	152.8	150.6	150.1	149.7	150.1	150.6	152.4	153.7	154.2
55°	138.3	137.9	135.1	134.2	132.9	132.9	133.8	134.2	137.4	137.9	139.7
57.5°	124.3	122.9	119.7	119.3	119.3	119.3	117.9	119.7	120.6	122.9	122.9
60°	108.8	108.8	106.1	106.1	106.6	106.1	106.1	106.6	106.6	108.4	109.3
62.5°	96.6	96.1	96.1	95.2	94.8	95.2	94.8	94.8	95.2	96.6	98.0
65°	85.7	85.3	84.8	84.4	83.4	83.4	83.9	84.8	84.8	85.7	86.2
67.5°	75.3	75.3	74.4	74.4	73.9	73.5	73.9	73.5	75.3	75.3	75.7
70°	64.9	64.4	63.0	62.6	61.2	61.7	61.7	63.0	63.5	64.4	65.3
72.5°	52.2	52.2	51.2	50.3	50.8	49.9	49.9	50.3	50.3	51.7	52.2
75°	43.1	42.2	41.7	42.2	41.7	42.6	41.7	41.7	42.6	42.6	42.6
77.5°	35.4	35.4	34.9	34.9	35.4	34.9	35.4	35.4	35.4	34.9	35.4
80°	29.0	28.6	28.6	28.6	28.1	28.1	28.1	28.1	28.1	28.1	28.1
82.5°	21.8	21.8	21.3	21.8	21.8	21.3	21.8	21.3	21.3	21.8	21.8
85°	14.5	15.4	14.5	14.5	15.0	15.0	15.4	15.0	15.4	14.5	15.0
87.5°	7.7	8.2	8.2	7.7	7.7	8.2	8.2	8.2	8.6	7.7	8.2
90°	12.7	12.8	13.0	13.2	13.4	13.6	13.4	13.2	13.0	12.8	12.7
92.5°	15.0	15.0	15.1	15.2	15.3	15.4	15.3	15.2	15.1	15.0	15.0
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	18.2	18.3	18.4	18.5	18.6	18.5	18.4	18.3	18.2	18.2
100°	18.6	18.7	18.8	18.9	19.0	19.1	19.0	18.9	18.8	18.7	18.6
102.5°	18.6	18.7	18.9	19.1	19.3	19.5	19.3	19.1	18.9	18.7	18.6
105°	19.1	19.2	19.4	19.6	19.8	20.0	19.8	19.6	19.4	19.2	19.1
107.5°	106.7	100.1	86.9	73.6	60.4	47.2	60.4	73.6	86.9	100.1	106.7
110°	189.9	182.7	168.2	153.8	139.3	124.9	139.3	153.8	168.2	182.7	189.9

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	237.5	237.4	237.2	237.0	236.8	236.6	236.8	237.0	237.2	237.4	237.5
115°	265.3	265.5	265.9	266.3	266.7	267.1	266.7	266.3	265.9	265.5	265.3
117.5°	291.1	291.2	291.3	291.4	291.5	291.6	291.5	291.4	291.3	291.2	291.1
120°	317.0	317.0	317.0	317.0	317.0	317.0	317.0	317.0	317.0	317.0	317.0
122.5°	341.6	341.6	341.7	341.8	341.9	342.0	341.9	341.8	341.7	341.6	341.6
125°	364.3	364.4	364.6	364.8	365.0	365.2	365.0	364.8	364.6	364.4	364.3
127.5°	388.8	388.7	388.5	388.3	388.1	387.9	388.1	388.3	388.5	388.7	388.8
130°	410.6	410.5	410.3	410.1	409.9	409.7	409.9	410.1	410.3	410.5	410.6
132.5°	431.0	430.9	430.6	430.3	430.0	429.7	430.0	430.3	430.6	430.9	431.0
135°	451.5	451.3	451.0	450.7	450.4	450.1	450.4	450.7	451.0	451.3	451.5
137.5°	470.6	470.5	470.3	470.0	469.8	469.6	469.8	470.0	470.3	470.5	470.6
140°	487.8	487.7	487.5	487.3	487.1	486.9	487.1	487.3	487.5	487.7	487.8
142.5°	504.2	504.0	503.7	503.4	503.1	502.8	503.1	503.4	503.7	504.0	504.2
145°	519.2	519.2	519.2	519.2	519.2	519.2	519.2	519.2	519.2	519.2	519.2
147.5°	533.2	533.0	532.5	532.0	531.5	531.0	531.5	532.0	532.5	533.0	533.2
150°	546.0	545.8	545.5	545.2	544.9	544.6	544.9	545.2	545.5	545.8	546.0
152.5°	557.8	557.5	557.0	556.5	556.0	555.5	556.0	556.5	557.0	557.5	557.8
155°	568.2	567.9	567.3	566.7	566.1	565.5	566.1	566.7	567.3	567.9	568.2
157.5°	577.7	577.3	576.5	575.7	574.9	574.1	574.9	575.7	576.5	577.3	577.7
160°	585.5	585.1	584.4	583.7	583.0	582.3	583.0	583.7	584.4	585.1	585.5
162.5°	592.7	592.4	591.8	591.2	590.6	590.0	590.6	591.2	591.8	592.4	592.7
165°	599.1	598.7	598.0	597.3	596.6	595.9	596.6	597.3	598.0	598.7	599.1
167.5°	604.1	603.7	602.9	602.1	601.3	600.5	601.3	602.1	602.9	603.7	604.1
170°	608.2	607.8	607.0	606.1	605.3	604.5	605.3	606.1	607.0	607.8	608.2
172.5°	610.9	610.4	609.5	608.6	607.7	606.8	607.7	608.6	609.5	610.4	610.9
175°	612.7	612.3	611.5	610.7	609.9	609.1	609.9	610.7	611.5	612.3	612.7
177.5°	614.1	613.6	612.6	611.5	610.5	609.5	610.5	611.5	612.6	613.6	614.1
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

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CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7	529.7
2.5°	501.1	502.9	501.1	497.5	501.1	503.4	505.7	509.3	511.1	511.1	513.8
5°	472.6	476.2	474.8	473.9	477.6	479.8	483.4	488.0	493.0	496.1	499.8
7.5°	447.2	449.4	451.7	451.7	455.3	460.3	465.8	471.2	477.6	482.1	484.8
10°	424.9	426.8	428.1	429.9	435.4	440.8	448.1	454.9	460.3	465.3	469.8
12.5°	403.6	406.4	409.5	410.9	415.0	421.8	428.6	436.7	445.4	450.3	454.9
15°	383.2	384.6	388.2	392.3	395.9	403.2	411.8	420.4	427.7	435.4	439.5
17.5°	362.4	362.8	372.3	370.1	381.9	388.7	393.2	401.4	413.2	419.5	425.9
20°	342.0	346.5	350.6	352.8	359.2	366.9	380.0	386.4	395.9	401.8	407.3
22.5°	326.1	332.9	332.9	338.3	341.5	348.8	358.3	370.5	381.0	385.0	392.7
25°	312.0	315.2	320.6	322.5	328.3	334.7	341.0	354.2	365.5	371.0	376.4
27.5°	293.9	298.0	305.2	305.2	312.9	319.7	327.4	336.1	347.4	355.1	361.0
30°	279.8	283.9	287.1	292.1	295.2	301.6	315.2	321.5	331.5	338.3	345.6
32.5°	266.7	269.8	272.6	278.0	281.6	288.9	296.1	307.5	316.1	322.5	330.2
35°	252.2	255.3	259.0	263.0	268.5	275.3	282.1	291.6	300.2	306.1	312.5
37.5°	238.5	240.8	246.3	249.0	253.5	259.9	268.5	278.5	286.2	290.7	297.1
40°	225.4	227.2	231.3	236.3	239.5	244.4	253.5	262.1	271.7	277.1	282.1
42.5°	211.3	213.6	217.2	222.2	227.2	232.7	237.6	247.6	256.2	260.8	266.2
45°	199.1	200.5	203.2	208.2	213.2	217.2	224.9	234.0	242.2	245.8	251.7
47.5°	184.6	185.9	190.0	192.3	197.7	203.2	210.9	220.0	227.2	230.8	236.3
50°	169.6	171.0	173.7	178.7	182.3	188.2	195.0	202.7	211.8	216.8	220.0
52.5°	155.1	157.8	160.1	164.2	168.7	174.6	181.0	188.2	195.9	200.9	204.5
55°	140.6	142.9	145.6	147.8	153.3	158.7	166.0	172.8	179.6	184.1	188.2
57.5°	124.3	127.4	130.2	134.7	138.8	143.3	151.5	156.9	165.1	168.3	171.9
60°	110.2	113.4	115.6	119.3	122.9	128.8	134.2	141.0	147.8	151.9	156.5
62.5°	98.4	99.8	101.1	104.8	108.4	113.8	119.3	126.1	133.3	135.6	139.2
65°	86.6	88.0	90.2	93.4	96.1	99.3	105.2	110.7	117.5	121.1	122.4
67.5°	76.6	78.0	78.5	80.7	83.0	86.6	89.8	95.2	101.6	103.9	106.6
70°	65.3	67.6	68.0	69.8	70.7	73.0	76.6	80.7	85.7	89.8	92.1
72.5°	52.2	55.3	56.2	59.0	60.3	62.6	65.3	68.5	71.7	73.5	75.3
75°	42.6	43.5	44.0	46.3	48.5	51.7	53.1	54.9	57.6	59.9	61.7
77.5°	35.4	35.8	36.3	36.3	36.7	38.5	41.3	43.5	45.4	46.3	47.6
80°	28.6	28.1	28.1	28.6	28.6	28.6	29.5	32.7	33.6	35.8	35.4
82.5°	22.2	21.3	21.8	21.3	21.3	21.3	21.3	21.8	21.8	23.1	24.0
85°	14.5	15.0	14.5	14.5	14.1	14.5	14.1	14.1	13.6	13.6	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°	12.5	12.1	11.7	11.3	10.9	9.6	8.3	7.0	5.7	5.0	4.5
92.5°	14.6	13.9	13.2	12.5	11.8	10.9	10.0	9.1	8.2	7.7	8.0
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	16.1	15.3	14.5	19.7	24.8	30.0	35.1	37.7	39.1
100°	18.2	17.4	16.6	15.8	15.0	30.7	46.5	62.2	77.9	85.8	84.8
102.5°	20.3	23.6	26.9	30.3	33.6	51.2	68.7	86.3	103.8	112.6	111.9
105°	28.0	45.9	63.8	81.6	99.5	108.6	117.6	126.7	135.8	140.3	139.8
107.5°	114.5	130.0	145.6	161.1	176.7	175.2	173.7	172.2	170.7	169.9	169.4
110°	191.6	194.9	198.2	201.5	204.8	203.7	202.6	201.5	200.4	199.8	199.4

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CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	237.1	236.2	235.3	234.4	233.5	232.4	231.3	230.2	229.1	228.5	228.1
115°	264.8	263.8	262.7	261.7	260.7	259.8	258.9	258.0	257.1	256.6	256.3
117.5°	290.7	289.9	289.1	288.3	287.5	287.0	286.5	286.0	285.5	285.2	284.9
120°	316.6	315.8	315.0	314.2	313.4	313.1	312.8	312.5	312.2	312.0	311.6
122.5°	341.3	340.8	340.3	339.8	339.3	338.9	338.5	338.1	337.7	337.5	337.1
125°	364.2	364.0	363.8	363.6	363.4	363.0	362.6	362.1	361.7	361.5	361.1
127.5°	388.6	388.3	388.0	387.7	387.4	386.9	386.4	385.9	385.4	385.2	384.8
130°	410.4	410.0	409.6	409.2	408.8	408.4	408.0	407.6	407.2	407.0	406.6
132.5°	430.8	430.4	430.0	429.6	429.2	428.9	428.6	428.3	428.0	427.9	427.5
135°	451.3	451.0	450.7	450.4	450.1	449.7	449.3	448.9	448.5	448.3	448.0
137.5°	470.3	469.8	469.3	468.8	468.3	468.1	467.9	467.7	467.5	467.4	467.0
140°	487.6	487.2	486.8	486.4	486.0	485.7	485.4	485.1	484.8	484.6	484.3
142.5°	504.0	503.7	503.4	503.1	502.8	502.5	502.2	501.9	501.6	501.4	501.1
145°	519.1	518.9	518.6	518.4	518.2	518.0	517.8	517.6	517.4	517.3	517.0
147.5°	533.1	532.9	532.7	532.5	532.3	532.1	531.9	531.7	531.5	531.4	531.1
150°	545.9	545.7	545.4	545.2	545.0	544.8	544.6	544.4	544.2	544.1	544.0
152.5°	557.6	557.2	556.7	556.3	555.9	555.8	555.7	555.6	555.5	555.5	555.4
155°	567.9	567.4	566.9	566.4	565.9	565.8	565.7	565.6	565.5	565.5	565.6
157.5°	577.4	576.8	576.2	575.6	575.0	575.1	575.2	575.3	575.4	575.5	575.5
160°	585.2	584.6	583.9	583.3	582.7	582.8	582.9	583.0	583.1	583.2	583.3
162.5°	592.4	591.7	591.0	590.3	589.6	589.7	589.8	589.9	590.0	590.0	590.2
165°	598.7	597.9	597.1	596.3	595.5	595.6	595.7	595.8	595.9	595.9	596.1
167.5°	603.7	602.9	602.1	601.3	600.5	600.5	600.5	600.5	600.5	600.5	600.7
170°	607.8	607.0	606.1	605.3	604.5	604.5	604.5	604.5	604.5	604.5	604.7
172.5°	610.5	609.7	608.9	608.1	607.3	607.2	607.1	607.0	606.9	606.8	607.1
175°	612.3	611.6	610.9	610.2	609.5	609.4	609.3	609.2	609.1	609.1	609.4
177.5°	613.7	612.9	612.1	611.3	610.5	610.4	610.3	610.2	610.1	610.0	610.3
180°	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4	611.4

TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	529.7	529.7	529.7	529.7
2.5°	516.1	519.3	525.6	531.1
5°	505.2	510.2	519.7	529.3
7.5°	492.1	499.8	512.0	525.2
10°	479.4	489.3	504.3	519.7
12.5°	466.7	477.1	493.0	512.9
15°	451.7	462.6	481.6	505.7
17.5°	438.6	453.1	470.3	494.3
20°	424.5	435.4	457.6	483.0
22.5°	406.8	424.9	445.8	472.6
25°	392.7	408.6	429.5	459.9
27.5°	375.5	394.1	419.5	446.3
30°	361.5	376.9	400.5	432.7
32.5°	345.1	363.3	387.8	419.5
35°	330.6	346.0	369.2	401.4
37.5°	313.4	330.2	356.0	384.6
40°	298.4	314.7	339.2	366.0
42.5°	280.3	297.5	322.0	344.7
45°	265.8	281.6	301.1	322.0
47.5°	248.1	264.9	283.9	298.4
50°	232.2	247.6	262.6	274.8
52.5°	215.0	229.0	242.6	251.7
55°	199.1	210.0	220.9	227.2
57.5°	180.5	190.9	200.0	203.6
60°	164.2	172.8	178.7	182.8
62.5°	146.9	153.3	157.8	160.1
65°	130.2	134.7	137.0	139.2
67.5°	112.9	117.0	118.4	121.1
70°	94.8	99.3	100.2	101.6
72.5°	81.2	81.2	83.0	84.8
75°	64.9	65.8	66.7	66.7
77.5°	50.8	50.8	51.7	52.2
80°	37.2	37.6	37.6	37.2
82.5°	25.4	26.3	25.4	24.9
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°	8.6	9.2	9.8	10.4
95°	15.3	19.4	23.6	27.7
97.5°	41.9	44.8	47.6	50.4
100°	82.8	80.8	78.8	76.8
102.5°	110.6	109.3	108.0	106.7
105°	138.7	137.6	136.5	135.4
107.5°	168.5	167.6	166.7	165.8
110°	198.6	197.8	197.0	196.2



TEST NUMBER: P1031146

CATALOG NUMBER: S123RDIW-B340D460UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	227.4	226.7	226.0	225.3
115°	255.7	255.1	254.5	253.9
117.5°	284.2	283.5	282.8	282.1
120°	310.7	309.8	308.9	308.0
122.5°	336.4	335.7	335.0	334.3
125°	360.3	359.5	358.7	357.9
127.5°	384.0	383.1	382.3	381.5
130°	405.8	404.9	404.1	403.3
132.5°	426.7	425.8	425.0	424.2
135°	447.4	446.8	446.2	445.6
137.5°	466.2	465.3	464.5	463.7
140°	483.7	483.1	482.5	481.9
142.5°	500.5	499.9	499.3	498.7
145°	516.3	515.6	514.9	514.2
147.5°	530.6	530.1	529.6	529.1
150°	543.7	543.4	543.1	542.8
152.5°	555.3	555.2	555.1	555.0
155°	565.8	566.0	566.2	566.4
157.5°	575.5	575.5	575.5	575.5
160°	583.4	583.5	583.6	583.7
162.5°	590.5	590.8	591.1	591.4
165°	596.4	596.7	597.0	597.3
167.5°	601.1	601.5	601.9	602.3
170°	605.1	605.6	606.0	606.4
172.5°	607.6	608.1	608.6	609.1
175°	609.9	610.4	610.9	611.4
177.5°	610.8	611.3	611.8	612.3
180°	611.4	611.4	611.4	611.4

(END OF REPORT)