

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: P1030837

Luminaire Tested: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030837
REPORT IS A COMBINATION OF REPORTS P991390 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

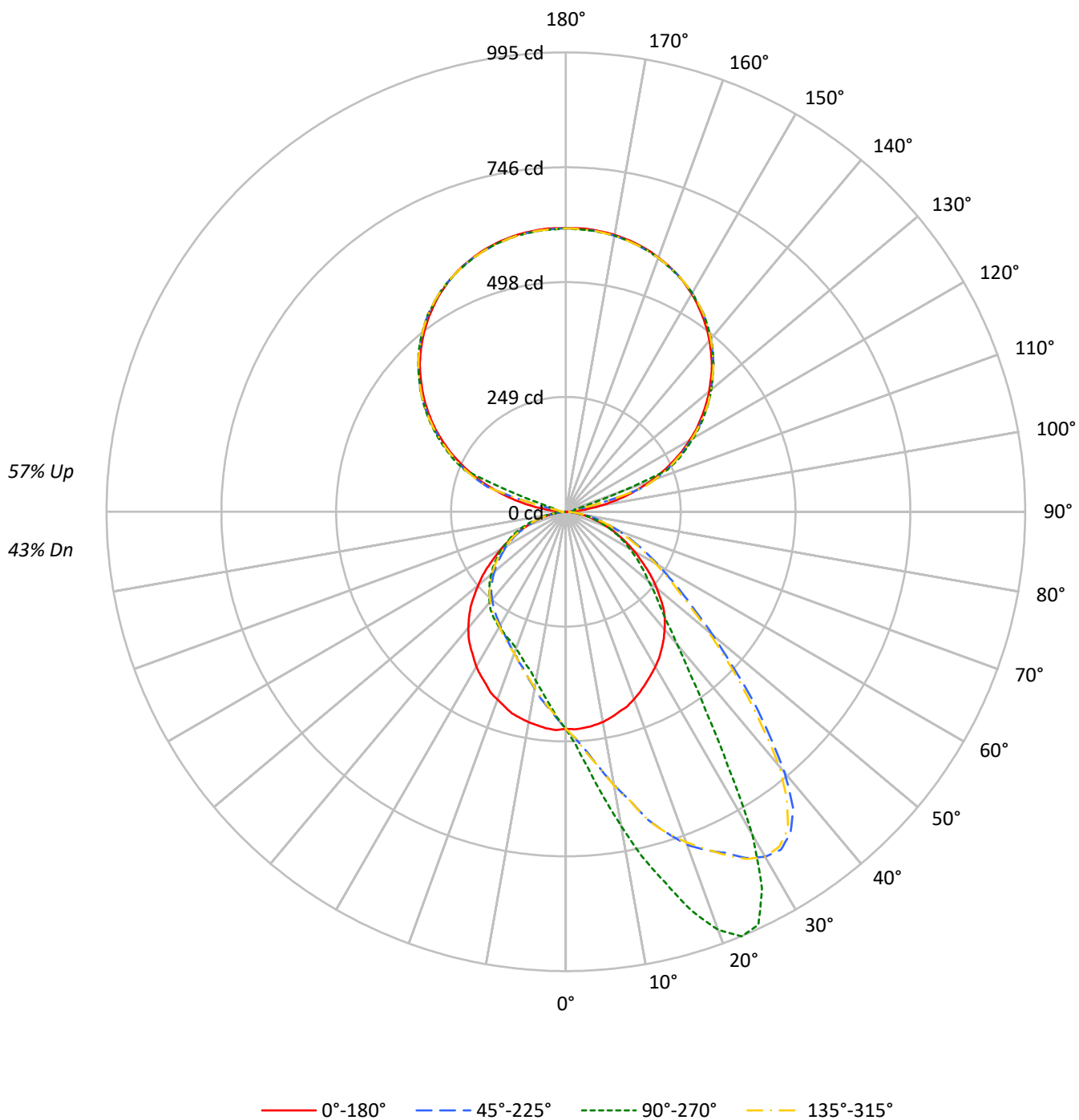
Lumens per Lamp: N/A
Luminaire Lumens: 3292.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50
1	96	92	89	85	88	85	81	78	70	68	66	57	55	54	44	43	43
2	88	81	75	70	80	74	69	65	62	58	55	50	47	45	39	38	36
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	74	63	55	50	67	58	51	46	49	43	40	40	36	33	31	29	27
5	68	56	48	42	62	52	45	40	43	38	34	36	32	29	28	26	23
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21
7	58	46	38	32	53	42	35	30	35	30	26	29	25	22	24	21	18
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	22	19	16
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5061	5061	5061	5061
5°	5064	5831	5079	4352
10°	5032	7056	5037	3800
15°	4962	8368	5002	3421
20°	4903	9634	4913	3148
25°	4813	9878	4824	3005
30°	4750	8161	4750	2912
35°	4671	5458	4641	2829
40°	4577	3940	4521	2703
45°	4458	3121	4331	2547
50°	4171	2650	4023	2392
55°	3856	2329	3698	2220
60°	3535	2028	3347	2040
65°	3184	1736	3029	1799
70°	2818	1441	2630	1516
75°	2408	1086	2252	1171
80°	1906	726	1754	768
85°	1316	332	1047	304

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 8162 cd/sqm

TEST NUMBER: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	1.4
10°-20°	148.5	4.5
20°-30°	249.9	7.6
30°-40°	282.4	8.6
40°-50°	252.9	7.7
50°-60°	204.2	6.2
60°-70°	142.3	4.3
70°-80°	74.7	2.3
80°-90°	19.1	0.6
90°-100°	21.7	0.7
100°-110°	104.7	3.2
110°-120°	256.5	7.8
120°-130°	325.6	9.9
130°-140°	347.9	10.6
140°-150°	325.3	9.9
150°-160°	262.4	8.0
160°-170°	169.3	5.1
170°-180°	58.4	1.8
0°-30°	444.6	13.5
0°-40°	727.0	22.1
0°-60°	1184.1	36.0
0°-90°	1420.2	43.1
90°-120°	382.9	11.6
90°-150°	1381.7	42.0
90°-180°	1872.0	56.9
0°-180°	3292.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	470	470	470	470	470	
5°	470	558	471	417	470	45
15°	448	831	452	340	448	127
25°	410	987	411	300	410	189
35°	362	532	359	276	362	226
45°	300	287	292	234	300	230
55°	213	195	204	186	213	191
65°	132	127	125	131	132	131
75°	63	65	59	70	63	68
85°	14	15	11	14	14	16
90°	0	14	0	14	0	3
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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	471.5	475.2	477.0	479.7	482.5	486.6	487.9	490.2	489.3	491.1	492.0
5°	469.7	476.1	481.5	488.4	494.8	499.3	503.9	511.2	516.6	517.5	521.6
7.5°	466.5	475.6	485.2	494.8	507.1	514.3	522.5	532.6	540.8	554.0	559.0
10°	462.4	475.2	488.8	502.0	518.9	530.3	540.3	557.2	574.0	587.7	600.4
12.5°	456.0	472.0	489.7	509.3	531.2	544.4	558.1	580.4	605.9	626.9	640.5
15°	448.3	468.3	491.1	512.1	536.2	560.8	575.4	600.4	636.9	656.5	691.6
17.5°	441.9	462.4	485.2	518.0	550.8	575.4	585.9	631.9	656.9	689.7	729.4
20°	431.9	457.9	487.0	519.8	562.2	577.2	598.6	645.1	676.1	718.9	767.6
22.5°	421.4	449.2	484.3	518.4	565.8	581.8	610.9	647.8	697.0	739.4	793.2
25°	410.0	440.1	475.6	516.2	562.6	585.9	613.2	658.8	712.1	765.4	815.0
27.5°	398.6	431.4	468.3	508.9	554.0	581.3	608.6	656.0	724.4	782.2	845.5
30°	387.7	420.5	457.4	498.9	546.2	572.7	598.6	657.9	733.9	799.1	862.9
32.5°	375.8	409.6	448.3	482.9	530.7	559.0	588.1	657.9	739.9	809.1	867.4
35°	361.7	396.4	429.6	464.2	511.6	543.0	575.8	653.3	745.3	812.3	848.3
37.5°	348.1	378.6	407.3	441.0	490.7	524.4	562.2	647.8	742.6	798.6	808.6
40°	332.6	363.1	386.3	417.8	470.2	509.3	547.6	640.5	730.7	766.3	737.1
42.5°	317.5	341.7	361.7	392.3	449.2	487.5	528.9	627.3	707.5	714.8	649.2
45°	300.2	317.5	335.3	369.9	426.4	465.6	511.6	608.2	670.2	649.2	566.3
47.5°	277.9	293.4	313.0	344.9	402.3	442.8	486.6	583.6	615.9	572.2	481.5
50°	256.5	269.7	287.9	318.9	376.8	416.4	462.9	544.9	560.8	492.0	415.0
52.5°	235.1	245.1	262.9	293.8	351.7	390.0	432.3	505.2	496.1	422.3	354.0
55°	212.8	221.4	238.3	268.8	322.5	359.0	399.5	456.5	432.8	362.6	308.0
57.5°	190.9	200.0	217.3	242.8	293.4	328.9	361.3	405.9	370.4	314.3	266.1
60°	171.3	179.0	192.3	217.3	263.3	292.0	321.6	352.2	322.5	268.3	231.4
62.5°	150.8	158.1	170.4	193.2	232.8	258.3	282.0	307.1	274.3	234.6	201.8
65°	131.7	137.6	149.0	169.9	202.3	223.2	242.4	259.7	233.3	196.8	172.2
67.5°	114.3	119.4	128.9	147.6	174.9	190.0	205.5	220.0	197.7	168.6	147.6
70°	95.7	99.8	108.4	122.1	144.0	159.5	170.8	181.8	161.7	138.5	124.4
72.5°	79.3	83.4	88.8	103.0	118.0	127.6	139.9	145.8	134.4	115.3	101.1
75°	63.3	66.5	71.5	80.6	94.8	101.1	108.9	113.4	103.0	90.2	81.5
77.5°	49.7	51.0	54.7	61.0	70.6	77.9	83.8	86.6	79.3	71.1	63.8
80°	35.1	36.9	39.6	45.1	52.4	54.7	58.3	61.5	56.9	49.7	45.1
82.5°	23.2	25.5	26.9	29.2	33.7	36.4	37.4	40.1	36.0	33.3	31.4
85°	13.7	14.6	15.0	16.4	18.7	20.0	21.4	21.9	21.0	20.5	18.7
87.5°	6.8	6.8	6.8	7.7	8.2	9.1	9.6	9.6	9.6	9.1	8.7
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	495.2	496.1	499.3	501.6	506.1	505.7	505.7	505.2	503.9	506.1	507.5
5°	529.8	537.6	538.5	548.5	549.0	553.1	555.8	553.5	559.0	558.5	554.4
7.5°	572.7	583.1	588.1	597.7	608.6	605.9	616.4	618.2	617.3	621.9	625.0
10°	619.6	637.8	650.6	668.3	672.9	675.6	682.5	688.4	700.2	691.1	697.0
12.5°	673.3	686.6	703.4	731.7	745.8	754.9	758.1	762.2	770.4	765.4	765.8
15°	718.4	736.2	764.9	800.0	804.1	815.5	812.7	837.3	849.2	831.4	841.4
17.5°	765.4	789.1	823.2	853.7	871.1	878.8	886.1	909.8	908.9	906.1	908.4
20°	795.4	834.2	876.5	917.1	922.1	928.0	947.6	957.6	955.8	963.5	968.6
22.5°	837.8	878.8	923.9	950.8	962.2	969.0	984.5	990.9	993.6	995.4	992.2
25°	873.3	917.1	950.3	974.0	980.9	984.5	989.5	991.3	990.0	986.8	989.5
27.5°	897.5	932.6	955.3	966.3	962.6	956.7	947.1	940.8	926.6	919.8	928.0
30°	907.5	923.0	929.8	911.6	893.4	878.8	860.6	826.9	800.4	808.2	797.7
32.5°	891.6	881.5	848.7	801.8	787.7	764.0	712.5	672.9	674.3	653.3	662.0
35°	844.6	799.1	737.1	666.1	647.4	634.6	578.1	569.5	551.2	531.7	537.1
37.5°	761.7	695.2	620.0	567.6	539.9	512.1	480.2	461.0	450.1	441.9	448.3
40°	660.6	579.5	517.5	470.6	446.9	429.2	407.3	388.2	375.8	374.5	376.8
42.5°	561.3	492.9	436.0	391.3	383.6	362.6	348.5	333.5	329.8	323.9	327.1
45°	475.2	419.6	372.7	336.2	327.1	321.6	304.3	294.8	290.7	287.0	292.5
47.5°	412.8	354.4	320.3	298.4	289.3	280.2	270.6	264.2	261.0	261.5	261.0
50°	352.6	309.8	279.7	262.9	257.4	251.0	243.3	239.2	237.8	233.7	236.9
52.5°	303.4	272.4	251.5	235.5	231.4	226.9	220.5	218.2	215.0	214.1	214.1
55°	263.8	239.6	222.8	212.3	207.3	203.6	200.0	197.3	195.0	195.0	195.0
57.5°	232.8	211.8	199.5	190.4	188.6	185.0	180.9	180.9	177.7	177.2	178.6
60°	206.4	187.7	178.1	170.4	167.7	166.7	162.6	162.6	161.7	159.5	161.3
62.5°	179.5	165.8	157.6	151.7	149.0	149.0	145.8	143.5	143.5	144.0	143.1
65°	154.9	144.9	137.6	133.0	131.7	129.8	129.4	127.6	126.2	126.6	126.2
67.5°	133.0	125.3	120.3	116.6	114.3	113.4	112.1	112.1	111.2	111.6	109.3
70°	113.4	105.7	101.6	97.9	97.0	97.0	95.2	95.7	94.8	96.1	95.2
72.5°	93.4	87.5	84.3	82.9	82.0	81.5	80.6	79.7	79.3	80.2	79.7
75°	75.6	70.6	68.3	67.4	66.5	66.5	66.1	65.6	65.1	65.1	65.1
77.5°	58.8	55.6	52.8	53.8	52.4	52.8	51.5	51.5	51.9	51.5	51.5
80°	43.3	41.0	41.0	40.1	38.3	39.2	39.2	37.8	37.4	38.3	36.9
82.5°	28.7	28.2	27.3	26.9	26.0	26.4	26.0	25.5	25.1	26.0	25.1
85°	16.9	16.9	16.4	15.5	16.4	15.9	15.5	15.5	15.0	15.0	15.0
87.5°	8.7	7.7	7.7	7.3	7.7	6.8	7.3	6.8	6.4	6.8	6.4
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	503.9	505.2	501.6	500.7	500.7	502.5	501.1	488.8	491.1	488.4	487.5
5°	559.4	556.7	553.1	551.2	549.0	542.6	542.1	528.0	525.3	516.2	512.1
7.5°	620.5	618.2	607.3	605.9	605.0	599.1	584.0	569.0	558.1	547.6	537.6
10°	690.2	683.4	678.4	668.3	663.3	655.1	635.5	621.4	602.7	586.8	565.8
12.5°	774.0	766.3	749.4	742.1	735.8	713.0	693.4	677.4	641.0	630.1	604.1
15°	835.5	819.1	817.3	801.4	800.4	775.4	738.0	720.7	692.5	652.4	625.5
17.5°	902.0	887.5	876.1	856.9	854.2	830.5	803.2	760.8	729.8	691.6	657.4
20°	950.8	943.0	923.5	915.7	899.8	879.7	851.5	799.1	761.3	723.0	681.1
22.5°	989.5	981.8	966.3	955.8	946.7	920.7	887.0	842.4	790.4	740.3	697.0
25°	989.1	986.8	980.4	975.4	968.6	949.4	921.2	878.3	820.5	765.4	705.2
27.5°	933.0	939.4	950.3	955.8	954.4	951.7	935.8	899.8	847.8	782.2	714.8
30°	816.4	839.6	860.1	887.5	895.7	915.7	924.8	904.3	862.9	801.8	727.1
32.5°	677.0	710.7	755.3	770.4	796.3	835.1	878.3	886.1	860.1	813.2	734.8
35°	555.3	583.1	617.8	641.5	664.7	727.6	782.2	829.6	838.3	807.3	733.0
37.5°	459.7	479.3	509.8	529.8	551.2	605.0	681.5	743.0	786.3	787.2	728.0
40°	390.4	399.1	425.5	440.1	460.6	507.1	575.4	655.6	718.9	748.1	714.8
42.5°	330.7	342.1	364.0	374.9	388.2	428.7	473.8	549.9	628.2	690.7	690.2
45°	295.2	303.4	313.4	322.5	337.6	361.7	413.2	470.2	545.3	615.9	643.7
47.5°	263.8	271.5	281.5	284.3	294.3	317.1	348.5	398.2	468.3	538.5	590.9
50°	237.4	243.7	250.6	255.6	260.1	278.8	302.5	344.4	400.5	468.3	533.5
52.5°	216.9	221.4	227.3	230.1	234.2	247.8	266.1	297.0	343.0	405.0	468.3
55°	197.7	200.9	204.6	209.1	210.9	221.0	235.1	261.5	295.7	351.2	411.4
57.5°	180.0	181.3	183.6	186.3	188.6	197.3	209.6	227.3	257.4	300.2	357.2
60°	159.9	163.6	164.9	167.7	169.0	175.9	185.4	200.5	223.7	260.6	303.4
62.5°	143.1	145.3	147.6	149.0	152.2	154.4	162.2	175.9	195.0	222.3	261.0
65°	128.0	128.9	130.3	131.7	132.6	135.3	142.6	151.7	166.3	190.4	220.5
67.5°	110.7	111.6	113.4	113.9	114.8	118.4	122.5	130.3	142.6	160.8	185.4
70°	93.8	95.2	96.1	97.0	98.4	99.8	104.3	110.7	120.3	133.0	152.2
72.5°	79.3	80.6	80.6	81.5	81.1	82.9	87.5	92.0	98.4	108.9	125.7
75°	64.7	64.7	65.6	66.1	66.5	68.3	70.2	73.8	78.8	87.0	97.5
77.5°	51.0	50.6	51.5	51.5	51.5	52.8	54.7	56.5	59.7	65.6	73.8
80°	37.4	37.4	38.3	38.7	37.8	38.3	39.2	41.0	43.3	47.4	51.9
82.5°	24.6	26.4	26.0	26.4	26.0	26.9	27.3	27.8	28.7	30.5	33.7
85°	15.0	15.0	15.0	15.5	15.0	15.5	15.5	15.5	15.9	16.9	18.2
87.5°	6.4	6.4	6.4	6.8	6.4	6.4	6.8	6.4	6.8	6.8	7.3
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	482.9	481.5	481.5	480.6	477.9	472.9	472.4	473.3	470.6	467.9	463.8
5°	506.6	497.9	495.2	492.5	487.0	477.9	474.3	471.1	466.1	460.1	453.8
7.5°	526.6	514.3	510.7	505.7	494.8	482.0	473.8	467.0	460.1	451.9	444.2
10°	551.7	533.9	525.3	518.0	503.0	485.2	472.9	462.9	451.9	441.9	431.9
12.5°	579.9	551.2	548.5	530.7	513.4	487.0	472.0	457.4	442.8	430.5	420.0
15°	603.6	572.2	560.8	549.0	515.7	482.9	468.3	451.9	435.1	421.9	406.4
17.5°	618.7	592.7	568.6	552.6	518.0	488.8	460.6	441.9	424.1	405.9	393.2
20°	636.9	599.1	578.1	556.7	522.5	484.3	456.0	432.8	410.9	394.5	379.0
22.5°	655.1	604.1	586.8	563.5	523.5	479.7	447.8	424.6	399.5	383.1	366.3
25°	653.3	611.4	582.7	563.1	514.3	475.6	438.3	410.9	387.7	366.7	349.9
27.5°	654.7	603.2	574.0	551.2	508.0	469.7	428.2	399.5	375.4	353.5	335.8
30°	655.1	590.9	565.4	538.0	496.1	455.6	416.9	387.7	362.2	338.5	322.5
32.5°	653.8	580.9	549.0	524.4	477.4	441.9	403.6	372.7	346.7	324.8	309.8
35°	650.6	569.0	532.1	501.1	458.3	422.3	391.3	359.4	331.7	311.6	294.3
37.5°	641.9	556.3	514.3	483.8	436.0	399.5	372.2	345.8	318.9	295.2	280.6
40°	635.5	538.9	496.6	463.3	411.8	376.3	353.5	328.5	302.0	280.6	266.5
42.5°	620.9	522.5	478.4	438.7	388.2	351.7	330.3	310.2	287.5	266.5	253.8
45°	597.3	504.8	456.0	415.9	362.2	327.6	308.0	291.6	271.5	251.5	238.7
47.5°	564.0	479.3	432.3	392.3	336.7	301.6	282.0	269.7	253.8	236.9	226.0
50°	528.0	451.5	408.2	368.6	312.1	277.9	258.8	247.4	236.9	221.4	210.9
52.5°	481.1	421.9	380.4	342.6	285.6	252.8	236.0	227.8	216.9	205.9	196.8
55°	435.5	383.6	349.4	313.4	259.7	229.2	212.8	204.1	197.7	188.6	181.3
57.5°	382.7	348.1	316.6	283.8	235.5	207.7	192.3	181.8	177.7	173.6	166.7
60°	333.9	307.5	282.0	254.7	210.5	185.4	170.4	162.2	158.1	155.4	150.8
62.5°	289.3	268.8	246.9	225.1	185.0	162.2	150.8	142.6	139.0	138.5	134.4
65°	246.5	231.9	214.1	192.7	161.3	141.2	130.3	125.3	121.2	121.2	118.0
67.5°	203.6	193.6	179.5	164.5	139.9	121.2	111.2	106.6	104.3	104.3	102.0
70°	169.5	162.6	149.9	136.7	115.3	101.1	93.4	89.3	87.9	88.4	86.6
72.5°	137.6	130.3	119.8	110.2	94.3	83.8	78.4	73.8	71.5	72.0	71.5
75°	106.6	103.0	93.8	86.6	73.8	66.5	61.5	59.2	57.4	57.9	56.9
77.5°	80.2	74.7	69.7	64.7	56.9	51.0	46.9	44.6	43.3	43.3	43.3
80°	54.7	53.8	49.7	46.9	40.5	36.0	32.8	32.3	31.0	31.0	31.0
82.5°	35.5	33.3	31.0	29.2	25.5	22.8	21.4	20.5	20.0	19.6	20.5
85°	19.6	18.2	17.3	15.5	14.1	12.8	11.4	10.9	10.5	10.9	10.5
87.5°	7.7	6.4	6.4	5.9	5.5	5.0	5.0	4.1	4.1	3.6	3.6
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	462.9	462.4	463.3	460.6	456.0	453.8	447.4	446.0	445.6	446.0	446.5
5°	450.1	449.7	448.3	443.7	438.3	434.2	426.4	426.0	423.2	420.5	421.9
7.5°	437.8	436.0	433.3	427.3	420.0	415.5	409.1	404.6	400.9	398.6	396.8
10°	425.5	422.8	420.0	412.3	403.2	396.4	388.6	385.0	380.9	379.0	377.2
12.5°	409.6	406.8	401.8	392.7	387.2	378.6	370.8	367.2	364.9	361.3	359.0
15°	396.8	391.3	388.6	379.0	367.6	366.7	352.6	351.7	347.1	347.1	343.5
17.5°	382.2	378.1	373.1	363.5	355.3	347.1	339.9	337.1	333.0	332.1	330.3
20°	368.1	362.6	360.8	351.2	342.6	332.6	324.8	322.1	320.3	318.4	319.8
22.5°	353.5	349.0	344.4	335.8	329.4	319.4	314.8	312.1	309.3	308.4	308.9
25°	339.4	335.3	330.7	322.1	315.3	307.1	303.0	301.6	300.2	300.2	299.8
27.5°	325.7	321.6	317.5	309.8	303.0	297.0	293.8	292.5	291.1	292.0	292.9
30°	311.6	308.0	304.3	297.5	292.0	286.6	284.7	283.8	283.4	285.6	285.6
32.5°	298.9	295.7	292.9	286.6	281.1	276.5	275.2	275.6	276.1	277.4	278.4
35°	285.6	283.4	280.6	275.2	270.6	266.5	267.0	267.0	267.9	270.2	272.0
37.5°	273.8	270.6	268.3	263.8	260.1	256.5	257.9	259.2	260.1	262.9	263.8
40°	259.7	258.3	256.5	251.9	248.7	248.3	248.7	249.7	251.5	252.8	254.2
42.5°	248.3	246.5	244.2	240.5	237.8	238.3	238.7	239.6	240.5	242.8	244.2
45°	235.5	234.2	232.3	229.2	226.9	227.3	227.8	227.8	228.7	231.4	232.3
47.5°	221.4	221.9	219.6	216.4	215.0	215.0	215.0	215.9	218.2	219.1	219.6
50°	207.7	206.8	206.4	203.2	202.3	201.8	202.3	202.7	205.9	205.5	206.8
52.5°	193.2	193.2	192.7	190.9	189.5	189.5	188.6	190.9	191.8	192.7	194.1
55°	179.0	177.7	177.2	176.3	174.5	174.0	174.9	177.7	178.6	179.5	180.9
57.5°	163.6	163.6	162.6	161.3	161.3	161.3	161.3	163.1	164.5	165.4	168.1
60°	149.4	147.6	146.2	146.2	146.2	145.8	148.5	148.5	151.3	151.7	152.6
62.5°	132.6	131.7	130.8	131.2	130.8	131.7	132.6	134.4	134.9	136.2	137.6
65°	116.6	116.6	115.7	118.4	116.6	116.6	118.9	118.9	119.8	121.2	123.0
67.5°	101.1	101.6	100.7	100.7	101.6	102.0	102.5	104.3	104.8	106.6	108.9
70°	85.2	86.1	86.6	85.6	86.6	87.5	88.4	88.8	90.7	91.6	92.9
72.5°	71.1	72.0	70.6	71.1	71.5	72.4	72.9	73.8	74.7	77.4	78.4
75°	56.9	56.5	56.0	57.9	56.9	58.8	59.2	59.2	60.1	62.4	63.3
77.5°	43.7	43.7	44.2	43.3	44.6	44.2	44.6	46.0	47.4	47.4	51.0
80°	30.5	31.4	31.4	31.4	31.9	32.3	31.4	33.7	34.2	34.2	35.5
82.5°	19.6	20.0	19.6	20.5	20.5	21.4	21.0	21.4	22.3	23.2	23.7
85°	10.5	10.5	11.4	11.4	10.9	11.4	10.9	11.4	12.3	12.3	12.8
87.5°	3.6	3.6	3.6	3.6	4.1	3.6	4.1	4.1	3.6	3.6	5.0
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	446.0	446.5	444.6	443.3	446.9	444.6	444.6	445.1	444.2	445.6	445.1
5°	421.0	421.4	418.2	419.1	417.3	416.9	416.4	419.1	418.7	418.2	419.1
7.5°	396.4	396.4	395.0	394.1	394.1	392.7	394.5	394.1	395.0	395.0	396.4
10°	375.8	376.8	374.5	372.2	371.7	372.2	372.2	372.7	373.1	376.3	375.8
12.5°	359.0	357.6	357.2	355.8	353.5	352.6	351.7	356.7	355.3	355.3	355.3
15°	340.3	343.5	343.0	338.9	338.0	339.9	338.9	338.9	343.5	343.0	342.6
17.5°	330.3	329.4	328.5	326.2	326.6	326.2	326.6	326.6	329.4	329.4	329.4
20°	318.9	317.1	317.1	316.2	316.2	314.8	316.6	317.1	318.9	318.9	319.4
22.5°	308.9	307.5	307.5	307.1	308.0	306.1	308.0	308.4	308.4	309.8	309.8
25°	300.2	299.3	299.3	300.2	300.2	300.2	300.2	302.0	300.7	301.1	300.7
27.5°	292.5	292.9	293.4	293.8	293.4	293.8	294.3	295.2	295.7	295.2	294.3
30°	285.2	286.6	287.0	287.0	287.9	288.4	288.8	288.8	289.3	287.9	288.8
32.5°	279.7	279.7	280.6	281.1	282.0	282.5	282.5	283.4	282.9	281.5	282.0
35°	272.0	272.0	273.8	274.7	276.1	275.6	276.1	276.1	276.5	275.6	274.3
37.5°	264.2	265.1	265.1	267.0	267.4	267.9	267.4	268.3	267.9	267.0	266.5
40°	255.1	254.7	255.1	256.5	256.9	256.9	256.9	257.9	257.9	257.9	257.4
42.5°	243.7	245.1	244.6	246.0	245.6	245.6	246.5	247.4	247.8	246.5	246.9
45°	232.8	232.8	233.7	233.7	234.2	234.2	236.0	235.1	236.0	235.1	235.5
47.5°	221.0	221.4	221.4	221.9	222.8	223.7	222.8	223.2	223.2	223.7	222.8
50°	207.7	207.7	208.7	210.0	211.8	210.9	210.5	212.3	210.9	210.9	210.0
52.5°	194.1	195.4	195.9	197.3	198.6	199.1	199.5	198.6	199.1	197.7	198.2
55°	180.9	181.3	183.1	184.5	185.9	185.9	185.4	185.9	186.3	184.5	184.5
57.5°	167.7	169.0	170.8	170.8	172.7	172.7	172.2	172.2	172.7	171.3	170.8
60°	153.5	154.9	157.2	157.2	159.9	160.4	159.5	158.5	158.5	157.2	157.6
62.5°	138.5	139.9	141.2	143.5	145.3	144.4	146.2	144.4	144.9	142.1	142.1
65°	125.3	125.7	128.0	130.3	130.3	131.2	130.3	130.8	129.4	129.4	127.6
67.5°	109.8	109.8	112.1	114.3	116.6	116.6	116.6	115.3	115.3	113.9	113.9
70°	96.1	95.7	97.9	99.3	100.7	101.1	100.2	99.8	98.9	97.5	97.0
72.5°	79.3	80.2	82.5	83.4	85.6	85.2	87.5	84.7	84.7	82.5	82.0
75°	64.2	65.1	67.4	68.8	70.2	70.2	71.5	70.2	68.3	67.4	67.0
77.5°	51.0	50.6	52.4	54.7	55.1	54.7	55.6	55.1	53.3	53.3	52.4
80°	36.4	37.8	39.6	39.2	41.0	40.5	40.5	39.6	39.6	38.3	39.2
82.5°	24.1	25.5	26.0	25.5	26.0	26.9	27.3	26.9	26.9	26.0	26.4
85°	12.8	12.8	13.7	14.1	13.7	13.7	14.1	15.5	14.6	13.7	14.6
87.5°	4.1	3.6	3.6	4.1	3.6	3.6	4.1	4.1	4.6	4.6	4.6
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2	470.2
2.5°	446.5	447.4	447.8	446.0	444.6	446.9	450.1	452.4	454.2	456.5	457.9
5°	420.0	423.2	423.2	424.1	425.5	427.8	433.7	437.8	441.5	444.2	446.5
7.5°	397.7	400.0	401.4	403.6	405.9	409.1	415.9	421.9	427.3	430.5	434.2
10°	377.7	379.5	381.8	383.1	387.2	391.8	400.5	405.5	411.8	416.9	421.4
12.5°	358.5	364.9	366.3	365.8	369.5	374.5	383.1	390.9	397.7	402.7	407.7
15°	344.9	347.1	349.9	349.4	357.2	358.5	365.8	374.9	384.1	387.2	391.8
17.5°	329.8	333.5	336.2	337.6	339.9	344.9	351.7	358.5	370.4	370.8	382.7
20°	318.0	321.6	323.5	325.3	326.6	332.6	338.5	346.2	355.8	360.8	367.2
22.5°	310.2	312.1	313.4	314.8	316.6	319.8	327.1	335.8	342.1	347.6	351.7
25°	301.1	303.0	304.8	305.7	307.1	308.9	314.3	321.2	330.3	333.9	338.0
27.5°	294.8	294.8	295.7	295.7	297.5	299.3	303.4	309.8	317.1	321.6	327.1
30°	287.9	287.5	287.9	287.5	287.0	289.7	293.4	298.9	303.9	309.3	313.0
32.5°	281.1	280.6	280.6	281.1	279.3	280.6	282.5	287.5	292.9	295.7	299.8
35°	273.8	272.9	272.9	272.9	272.0	271.1	272.9	277.4	281.1	284.7	287.9
37.5°	266.5	265.1	265.1	264.2	263.3	262.0	262.0	265.6	270.6	272.0	276.1
40°	256.5	256.5	255.6	255.1	254.2	253.3	251.9	255.1	259.7	261.0	264.2
42.5°	246.5	245.1	244.6	244.6	244.6	243.3	242.4	244.6	247.4	249.7	251.5
45°	235.1	234.2	234.6	234.2	233.3	232.8	232.3	233.3	236.4	237.4	239.6
47.5°	222.8	222.3	222.3	221.9	221.4	221.9	220.0	222.3	223.2	224.1	226.0
50°	210.0	209.6	209.1	208.7	208.7	209.1	208.7	208.7	210.5	211.4	213.2
52.5°	197.3	195.9	195.9	195.4	195.4	194.5	195.4	195.9	196.8	197.7	198.6
55°	183.6	183.6	182.2	182.2	181.3	181.3	181.8	181.3	183.1	184.1	184.1
57.5°	170.4	168.6	169.0	168.1	167.2	166.7	166.7	167.7	168.6	168.6	169.5
60°	156.3	154.4	154.0	152.2	153.1	151.7	152.2	152.2	154.0	153.1	154.0
62.5°	142.1	139.9	138.5	137.6	137.6	138.0	137.1	136.7	137.6	138.5	140.3
65°	127.1	125.7	124.4	123.0	123.0	122.5	123.5	122.1	121.6	122.1	123.0
67.5°	111.6	110.2	108.9	107.5	108.0	106.6	105.7	107.1	106.1	106.6	107.5
70°	96.6	95.7	92.9	92.0	91.6	92.0	91.6	90.7	92.0	91.6	92.0
72.5°	81.5	80.6	79.3	77.0	77.0	76.5	76.1	76.1	75.6	75.6	75.6
75°	67.0	65.1	63.8	63.3	62.4	62.0	61.5	60.6	61.0	61.5	60.6
77.5°	51.9	49.7	49.2	49.2	47.8	47.8	48.3	47.8	47.4	47.4	47.4
80°	38.3	36.4	36.4	35.5	34.6	34.6	34.6	34.6	34.2	33.7	34.2
82.5°	24.6	24.1	23.7	23.7	24.6	22.8	23.7	23.2	22.8	22.8	22.3
85°	13.7	14.1	13.7	14.1	13.2	13.7	13.7	13.7	13.2	13.7	12.8
87.5°	5.0	5.0	5.0	5.5	5.5	5.5	5.5	5.5	5.9	5.5	5.5
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: P1030837

CATALOG NUMBER: S123DIW-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: P1030837

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_3500K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	470.2	470.2	470.2	470.2
2.5°	460.1	461.5	466.1	471.5
5°	451.0	454.7	461.0	469.7
7.5°	441.0	446.5	455.6	466.5
10°	429.6	437.4	448.7	462.4
12.5°	417.3	427.3	441.9	456.0
15°	409.6	419.6	432.8	448.3
17.5°	394.5	406.4	420.0	441.9
20°	379.0	392.3	410.0	431.9
22.5°	367.2	381.3	398.2	421.4
25°	353.1	367.6	385.9	410.0
27.5°	338.0	352.6	373.1	398.6
30°	326.6	340.8	360.4	387.7
32.5°	313.0	326.6	347.1	375.8
35°	297.5	313.0	332.6	361.7
37.5°	285.6	299.8	320.3	348.1
40°	272.9	285.2	305.2	332.6
42.5°	259.2	272.9	290.2	317.5
45°	246.5	256.5	274.3	300.2
47.5°	232.8	244.2	257.9	277.9
50°	218.2	227.8	242.8	256.5
52.5°	204.1	211.8	224.6	235.1
55°	189.1	196.8	206.4	212.8
57.5°	174.9	180.4	186.8	190.9
60°	157.6	163.1	167.2	171.3
62.5°	142.1	146.2	148.5	150.8
65°	126.2	128.5	129.8	131.7
67.5°	108.9	111.2	111.6	114.3
70°	92.9	93.4	94.3	95.7
72.5°	77.9	78.8	78.4	79.3
75°	62.4	63.3	62.4	63.3
77.5°	47.4	48.3	48.3	49.7
80°	34.2	34.6	35.1	35.1
82.5°	22.3	23.7	22.8	23.2
85°	12.8	13.2	13.2	13.7
87.5°	5.9	6.4	5.9	6.8
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: P1030837

CATALOG NUMBER: S123DIW-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)