

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: P1030838

Luminaire Tested: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030838
REPORT IS A COMBINATION OF REPORTS P991392 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_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

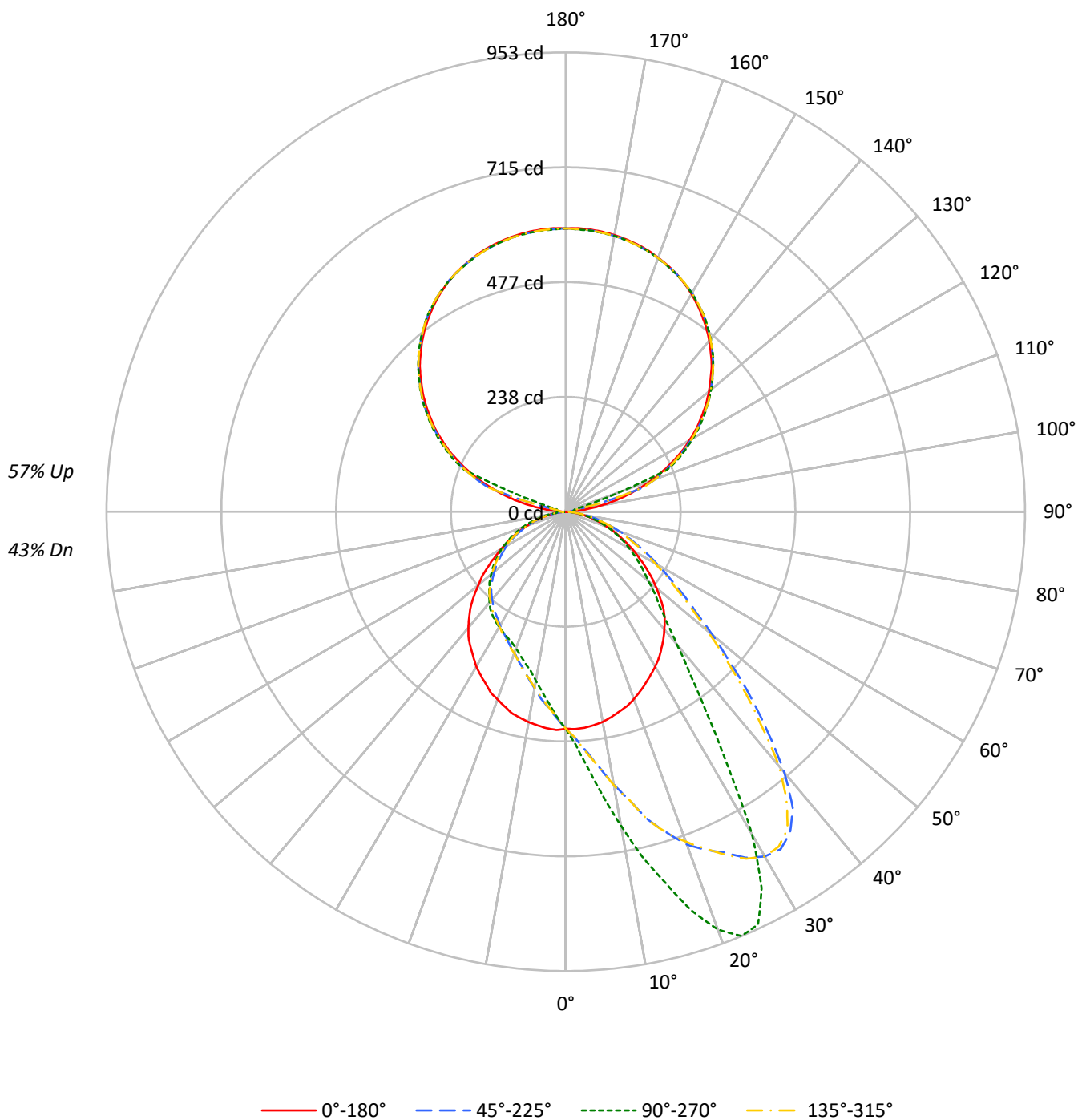
Lumens per Lamp: N/A
Luminaire Lumens: 3151.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	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°	4843	4843	4843	4843
5°	4846	5580	4860	4164
10°	4815	6753	4821	3637
15°	4749	8009	4788	3273
20°	4692	9220	4702	3013
25°	4607	9453	4617	2876
30°	4546	7809	4546	2787
35°	4471	5223	4443	2708
40°	4381	3770	4326	2587
45°	4267	2987	4143	2437
50°	3992	2537	3849	2290
55°	3689	2229	3539	2125
60°	3382	1941	3202	1952
65°	3046	1662	2898	1722
70°	2698	1379	2518	1451
75°	2305	1039	2157	1119
80°	1824	694	1683	736
85°	1258	319	1009	290

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.3	1.4
10°-20°	142.1	4.5
20°-30°	239.1	7.6
30°-40°	270.3	8.6
40°-50°	242.1	7.7
50°-60°	195.4	6.2
60°-70°	136.2	4.3
70°-80°	71.5	2.3
80°-90°	18.3	0.6
90°-100°	20.7	0.7
100°-110°	100.2	3.2
110°-120°	245.6	7.8
120°-130°	311.7	9.9
130°-140°	333.0	10.6
140°-150°	311.4	9.9
150°-160°	251.2	8.0
160°-170°	162.1	5.1
170°-180°	55.9	1.8
0°-30°	425.5	13.5
0°-40°	695.8	22.1
0°-60°	1133.2	36.0
0°-90°	1359.2	43.1
90°-120°	366.5	11.6
90°-150°	1322.6	42.0
90°-180°	1792.0	56.9
0°-180°	3151.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	450	450	450	450	450	
5°	450	534	451	399	450	43
15°	429	796	432	325	429	121
25°	392	944	393	287	392	181
35°	346	509	344	264	346	217
45°	287	275	279	224	287	220
55°	204	187	195	178	204	182
65°	126	121	120	126	126	125
75°	61	62	57	67	61	65
85°	13	14	10	13	13	15
90°	0	13	0	13	0	2
95°	27	17	27	17	27	32
105°	130	19	130	19	130	138
115°	244	257	244	257	244	241
125°	344	351	344	351	344	307
135°	428	433	428	433	428	330
145°	494	499	494	499	494	309
155°	544	544	544	544	544	251
165°	574	573	574	573	574	162
175°	588	586	588	586	588	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	451.3	454.7	456.5	459.1	461.7	465.6	466.9	469.1	468.3	470.0	470.9
5°	449.5	455.6	460.8	467.4	473.5	477.8	482.2	489.2	494.4	495.3	499.2
7.5°	446.5	455.2	464.3	473.5	485.3	492.2	500.1	509.7	517.5	530.2	535.0
10°	442.5	454.7	467.8	480.5	496.6	507.5	517.1	533.2	549.3	562.4	574.6
12.5°	436.4	451.7	468.7	487.4	508.4	521.0	534.1	555.5	579.9	599.9	613.0
15°	429.0	448.2	470.0	490.1	513.2	536.7	550.7	574.6	609.5	628.3	661.8
17.5°	422.9	442.5	464.3	495.7	527.1	550.7	560.7	604.7	628.7	660.1	698.0
20°	413.3	438.2	466.1	497.5	538.0	552.4	572.9	617.4	647.0	688.0	734.6
22.5°	403.3	429.9	463.5	496.2	541.5	556.8	584.7	620.0	667.1	707.6	759.1
25°	392.4	421.2	455.2	494.0	538.4	560.7	586.8	630.4	681.5	732.5	780.0
27.5°	381.5	412.9	448.2	487.0	530.2	556.3	582.5	627.8	693.2	748.6	809.2
30°	371.0	402.4	437.7	477.4	522.8	548.0	572.9	629.6	702.4	764.7	825.8
32.5°	359.7	392.0	429.0	462.2	507.9	535.0	562.9	629.6	708.0	774.3	830.1
35°	346.2	379.3	411.1	444.3	489.6	519.7	551.1	625.2	713.3	777.4	811.8
37.5°	333.1	362.3	389.8	422.0	469.6	501.8	538.0	620.0	710.7	764.3	773.9
40°	318.3	347.5	369.7	399.8	449.9	487.4	524.1	613.0	699.3	733.3	705.4
42.5°	303.9	327.0	346.2	375.4	429.9	466.5	506.2	600.4	677.1	684.1	621.3
45°	287.3	303.9	320.9	354.0	408.1	445.6	489.6	582.0	641.3	621.3	541.9
47.5°	266.0	280.8	299.5	330.0	385.0	423.8	465.6	558.5	589.5	547.6	460.8
50°	245.5	258.1	275.5	305.2	360.6	398.5	443.0	521.4	536.7	470.9	397.2
52.5°	225.0	234.6	251.6	281.2	336.6	373.2	413.8	483.5	474.8	404.2	338.8
55°	203.6	211.9	228.0	257.2	308.7	343.6	382.4	436.9	414.2	347.0	294.7
57.5°	182.7	191.4	208.0	232.4	280.8	314.8	345.7	388.5	354.5	300.8	254.6
60°	163.9	171.3	184.0	208.0	252.0	279.5	307.8	337.0	308.7	256.8	221.5
62.5°	144.3	151.3	163.1	184.9	222.8	247.2	269.9	293.9	262.5	224.5	193.1
65°	126.0	131.7	142.6	162.6	193.6	213.6	231.9	248.5	223.2	188.3	164.8
67.5°	109.4	114.2	123.4	141.3	167.4	181.8	196.6	210.6	189.2	161.3	141.3
70°	91.6	95.5	103.8	116.8	137.8	152.6	163.5	174.0	154.8	132.5	119.0
72.5°	75.9	79.8	85.0	98.5	112.9	122.1	133.8	139.5	128.6	110.3	96.8
75°	60.6	63.7	68.5	77.2	90.7	96.8	104.2	108.6	98.5	86.3	78.0
77.5°	47.5	48.8	52.3	58.4	67.6	74.6	80.2	82.8	75.9	68.0	61.0
80°	33.6	35.3	37.9	43.2	50.1	52.3	55.8	58.9	54.5	47.5	43.2
82.5°	22.2	24.4	25.7	27.9	32.3	34.9	35.8	38.4	34.4	31.8	30.1
85°	13.1	14.0	14.4	15.7	17.9	19.2	20.5	20.9	20.1	19.6	17.9
87.5°	6.5	6.5	6.5	7.4	7.8	8.7	9.2	9.2	9.2	8.7	8.3
90°	0.4	1.4	2.4	3.3	4.3	4.8	5.4	6.7	8.0	9.2	10.5
92.5°	10.0	9.4	8.8	8.3	7.7	7.4	7.8	8.7	9.6	10.5	11.4
95°	26.6	22.6	18.6	14.7	10.7	8.7	9.2	10.3	11.4	12.4	13.5
97.5°	48.5	45.8	43.0	40.3	37.6	36.2	33.7	28.8	23.9	18.9	14.0
100°	73.8	75.7	77.7	79.6	81.5	82.5	74.9	59.8	44.7	29.5	14.4
102.5°	102.6	103.9	105.1	106.4	107.7	108.3	99.9	83.0	66.1	49.2	32.3
105°	130.1	131.2	132.2	133.3	134.4	134.9	130.5	121.8	113.1	104.3	95.6
107.5°	159.4	160.3	161.1	162.0	162.9	163.3	164.0	165.5	167.0	168.4	169.9
110°	188.6	189.4	190.2	190.9	191.7	192.1	192.6	193.7	194.8	195.8	196.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	216.6	217.3	217.9	218.6	219.3	219.6	220.1	221.2	222.3	223.3	224.4
115°	244.1	244.7	245.3	245.8	246.4	246.7	247.1	248.0	248.9	249.7	250.6
117.5°	271.2	271.9	272.5	273.2	273.9	274.2	274.4	274.9	275.4	275.9	276.4
120°	296.1	297.0	297.8	298.7	299.6	300.0	300.1	300.4	300.7	301.0	301.3
122.5°	321.4	322.1	322.7	323.4	324.1	324.4	324.6	325.0	325.4	325.8	326.2
125°	344.1	344.9	345.7	346.4	347.2	347.6	347.8	348.2	348.5	348.9	349.3
127.5°	366.8	367.6	368.4	369.1	369.9	370.3	370.5	371.0	371.5	372.0	372.5
130°	387.8	388.6	389.4	390.1	390.9	391.3	391.5	391.9	392.2	392.6	393.0
132.5°	407.8	408.6	409.4	410.1	410.9	411.3	411.5	411.8	412.1	412.4	412.7
135°	428.4	429.0	429.6	430.1	430.7	431.0	431.2	431.6	431.9	432.3	432.7
137.5°	445.8	446.6	447.4	448.1	448.9	449.3	449.4	449.6	449.8	450.0	450.2
140°	463.3	463.9	464.5	465.0	465.6	465.9	466.0	466.3	466.6	466.9	467.2
142.5°	479.5	480.1	480.7	481.2	481.8	482.1	482.2	482.5	482.8	483.1	483.4
145°	494.3	495.0	495.7	496.4	497.1	497.4	497.5	497.7	497.8	498.0	498.2
147.5°	508.7	509.2	509.7	510.2	510.7	510.9	511.0	511.2	511.4	511.6	511.8
150°	521.8	522.1	522.4	522.7	523.0	523.1	523.2	523.4	523.6	523.8	524.0
152.5°	533.6	533.7	533.8	533.9	534.0	534.0	534.1	534.2	534.3	534.4	534.5
155°	544.5	544.3	544.1	544.0	543.8	543.7	543.7	543.8	543.9	544.0	544.1
157.5°	553.3	553.3	553.3	553.3	553.3	553.3	553.2	553.1	553.0	552.9	552.8
160°	561.1	561.0	560.9	560.8	560.7	560.7	560.6	560.5	560.4	560.3	560.2
162.5°	568.5	568.2	567.9	567.6	567.3	567.2	567.2	567.1	567.0	566.9	566.8
165°	574.2	573.9	573.6	573.3	573.0	572.9	572.9	572.8	572.7	572.6	572.5
167.5°	579.0	578.6	578.2	577.9	577.5	577.3	577.3	577.3	577.3	577.3	577.3
170°	583.0	582.6	582.2	581.8	581.4	581.2	581.2	581.2	581.2	581.2	581.2
172.5°	585.6	585.1	584.6	584.1	583.6	583.4	583.4	583.5	583.6	583.7	583.8
175°	587.8	587.3	586.8	586.3	585.8	585.6	585.6	585.7	585.8	585.9	586.0
177.5°	588.6	588.1	587.6	587.1	586.6	586.4	586.5	586.6	586.7	586.8	586.9
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	473.9	474.8	477.8	480.0	484.4	484.0	484.0	483.5	482.2	484.4	485.7
5°	507.1	514.5	515.3	524.9	525.4	529.3	531.9	529.7	535.0	534.5	530.6
7.5°	548.0	558.1	562.9	572.0	582.5	579.9	589.9	591.6	590.8	595.1	598.2
10°	592.9	610.4	622.6	639.6	644.0	646.6	653.1	658.8	670.1	661.4	667.1
12.5°	644.4	657.0	673.2	700.2	713.7	722.4	725.5	729.4	737.3	732.5	732.9
15°	687.6	704.6	732.0	765.6	769.5	780.4	777.8	801.4	812.7	795.7	805.3
17.5°	732.5	755.1	787.8	817.0	833.6	841.0	848.0	870.7	869.8	867.2	869.4
20°	761.2	798.3	838.8	877.7	882.4	888.1	906.9	916.5	914.7	922.1	926.9
22.5°	801.8	841.0	884.2	909.9	920.8	927.4	942.2	948.3	950.9	952.6	949.6
25°	835.8	877.7	909.5	932.1	938.7	942.2	947.0	948.7	947.4	944.4	947.0
27.5°	858.9	892.5	914.3	924.7	921.2	915.6	906.4	900.3	886.8	880.3	888.1
30°	868.5	883.3	889.9	872.4	855.0	841.0	823.6	791.3	766.0	773.4	763.4
32.5°	853.2	843.6	812.3	767.3	753.8	731.2	681.9	644.0	645.3	625.2	633.5
35°	808.3	764.7	705.4	637.4	619.5	607.3	553.3	545.0	527.5	508.8	514.0
37.5°	729.0	665.3	593.4	543.2	516.6	490.1	459.5	441.2	430.8	422.9	429.0
40°	632.2	554.6	495.3	450.4	427.7	410.7	389.8	371.5	359.7	358.4	360.6
42.5°	537.1	471.7	417.2	374.5	367.1	347.0	333.5	319.1	315.7	310.0	313.0
45°	454.7	401.5	356.6	321.8	313.0	307.8	291.2	282.1	278.2	274.7	279.9
47.5°	395.0	339.2	306.5	285.6	276.9	268.1	259.0	252.9	249.8	250.3	249.8
50°	337.5	296.5	267.7	251.6	246.3	240.2	232.8	228.9	227.6	223.7	226.7
52.5°	290.4	260.7	240.7	225.4	221.5	217.1	211.0	208.8	205.8	204.9	204.9
55°	252.4	229.3	213.2	203.2	198.4	194.9	191.4	188.8	186.6	186.6	186.6
57.5°	222.8	202.7	191.0	182.2	180.5	177.0	173.1	173.1	170.0	169.6	170.9
60°	197.5	179.6	170.5	163.1	160.4	159.6	155.6	155.6	154.8	152.6	154.3
62.5°	171.8	158.7	150.9	145.2	142.6	142.6	139.5	137.3	137.3	137.8	136.9
65°	148.2	138.6	131.7	127.3	126.0	124.3	123.8	122.1	120.8	121.2	120.8
67.5°	127.3	119.9	115.1	111.6	109.4	108.6	107.3	107.3	106.4	106.8	104.6
70°	108.6	101.1	97.2	93.7	92.9	92.9	91.1	91.6	90.7	92.0	91.1
72.5°	89.4	83.7	80.7	79.4	78.5	78.0	77.2	76.3	75.9	76.7	76.3
75°	72.4	67.6	65.4	64.5	63.7	63.7	63.2	62.8	62.3	62.3	62.3
77.5°	56.2	53.2	50.6	51.4	50.1	50.6	49.3	49.3	49.7	49.3	49.3
80°	41.4	39.2	39.2	38.4	36.6	37.5	37.5	36.2	35.8	36.6	35.3
82.5°	27.5	27.0	26.2	25.7	24.9	25.3	24.9	24.4	24.0	24.9	24.0
85°	16.1	16.1	15.7	14.8	15.7	15.3	14.8	14.8	14.4	14.4	14.4
87.5°	8.3	7.4	7.4	7.0	7.4	6.5	7.0	6.5	6.1	6.5	6.1
90°	10.9	11.3	11.6	12.0	12.2	12.3	12.5	12.7	12.9	13.1	12.9
92.5°	12.1	12.7	13.4	14.1	14.4	14.4	14.5	14.6	14.7	14.8	14.7
95°	14.2	14.9	15.6	16.3	16.6	16.6	16.6	16.6	16.6	16.6	16.6
97.5°	14.8	15.6	16.3	17.1	17.5	17.5	17.6	17.7	17.8	17.9	17.8
100°	15.2	16.0	16.7	17.5	17.9	17.9	18.0	18.1	18.2	18.3	18.2
102.5°	29.1	25.9	22.7	19.5	17.9	18.0	18.2	18.4	18.6	18.8	18.6
105°	78.4	61.2	44.1	26.9	18.3	18.4	18.6	18.8	19.0	19.2	19.0
107.5°	154.9	140.0	125.0	110.1	102.6	96.2	83.5	70.8	58.1	45.4	58.1
110°	193.7	190.5	187.3	184.1	182.5	175.6	161.7	147.8	134.0	120.1	134.0

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	225.3	226.2	227.1	228.0	228.4	228.3	228.1	227.9	227.7	227.5	227.7
115°	251.6	252.6	253.5	254.5	255.0	255.2	255.6	256.0	256.4	256.8	256.4
117.5°	277.2	278.0	278.7	279.5	279.9	279.9	280.0	280.1	280.2	280.3	280.2
120°	302.1	302.9	303.6	304.4	304.8	304.8	304.8	304.8	304.8	304.8	304.8
122.5°	326.7	327.2	327.7	328.2	328.4	328.4	328.5	328.6	328.7	328.8	328.7
125°	349.5	349.7	349.9	350.1	350.2	350.3	350.5	350.7	350.9	351.1	350.9
127.5°	372.8	373.1	373.4	373.7	373.8	373.7	373.5	373.3	373.1	372.9	373.1
130°	393.4	393.8	394.1	394.5	394.7	394.6	394.4	394.3	394.1	393.9	394.1
132.5°	413.1	413.5	413.8	414.2	414.4	414.3	414.0	413.7	413.4	413.1	413.4
135°	433.0	433.3	433.6	433.9	434.0	433.9	433.6	433.3	433.0	432.7	433.0
137.5°	450.7	451.2	451.7	452.2	452.4	452.3	452.1	451.9	451.7	451.5	451.7
140°	467.6	468.0	468.4	468.8	469.0	468.9	468.7	468.5	468.3	468.1	468.3
142.5°	483.7	484.0	484.3	484.6	484.7	484.6	484.3	484.0	483.7	483.4	483.7
145°	498.4	498.6	498.8	499.0	499.1	499.1	499.1	499.1	499.1	499.1	499.1
147.5°	512.0	512.2	512.3	512.5	512.6	512.4	511.9	511.4	511.0	510.5	511.0
150°	524.2	524.4	524.6	524.8	524.9	524.8	524.5	524.2	523.9	523.6	523.9
152.5°	534.9	535.3	535.6	536.0	536.2	536.0	535.5	535.0	534.5	534.0	534.5
155°	544.6	545.1	545.6	546.1	546.3	546.0	545.4	544.9	544.3	543.7	544.3
157.5°	553.4	554.0	554.5	555.1	555.4	555.0	554.2	553.5	552.7	551.9	552.7
160°	560.8	561.4	562.0	562.6	562.9	562.6	561.9	561.2	560.5	559.8	560.5
162.5°	567.5	568.2	568.9	569.6	569.9	569.6	569.0	568.4	567.8	567.2	567.8
165°	573.3	574.1	574.8	575.6	576.0	575.7	575.0	574.3	573.6	572.9	573.6
167.5°	578.1	578.9	579.6	580.4	580.8	580.4	579.6	578.9	578.1	577.3	578.1
170°	582.0	582.8	583.5	584.3	584.7	584.3	583.5	582.8	582.0	581.2	582.0
172.5°	584.6	585.4	586.1	586.9	587.3	586.9	586.0	585.1	584.3	583.4	584.3
175°	586.7	587.4	588.1	588.8	589.1	588.7	587.9	587.2	586.4	585.6	586.4
177.5°	587.7	588.5	589.2	590.0	590.4	589.9	588.9	588.0	587.0	586.0	587.0
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	482.2	483.5	480.0	479.2	479.2	480.9	479.6	467.8	470.0	467.4	466.5
5°	535.4	532.8	529.3	527.5	525.4	519.3	518.8	505.3	502.7	494.0	490.1
7.5°	593.8	591.6	581.2	579.9	579.0	573.3	558.9	544.6	534.1	524.1	514.5
10°	660.5	654.0	649.2	639.6	634.8	627.0	608.2	594.7	576.8	561.6	541.5
12.5°	740.7	733.3	717.2	710.2	704.1	682.3	663.6	648.3	613.4	603.0	578.1
15°	799.6	783.9	782.2	766.9	766.0	742.1	706.3	689.7	662.7	624.3	598.6
17.5°	863.3	849.3	838.4	820.1	817.5	794.8	768.7	728.1	698.5	661.8	629.1
20°	909.9	902.5	883.8	876.3	861.1	841.9	814.9	764.7	728.5	691.9	651.8
22.5°	947.0	939.6	924.7	914.7	906.0	881.1	848.9	806.1	756.4	708.5	667.1
25°	946.5	944.4	938.3	933.5	926.9	908.6	881.6	840.6	785.2	732.5	674.9
27.5°	892.9	899.0	909.5	914.7	913.4	910.8	895.5	861.1	811.4	748.6	684.1
30°	781.3	803.5	823.2	849.3	857.2	876.3	885.1	865.4	825.8	767.3	695.8
32.5°	647.9	680.1	722.9	737.3	762.1	799.2	840.6	848.0	823.2	778.2	703.3
35°	531.5	558.1	591.2	613.9	636.1	696.3	748.6	793.9	802.2	772.6	701.5
37.5°	439.9	458.7	487.9	507.1	527.5	579.0	652.2	711.1	752.5	753.4	696.7
40°	373.6	381.9	407.2	421.2	440.8	485.3	550.7	627.4	688.0	715.9	684.1
42.5°	316.5	327.4	348.4	358.8	371.5	410.3	453.4	526.2	601.2	661.0	660.5
45°	282.5	290.4	300.0	308.7	323.1	346.2	395.4	449.9	521.9	589.5	616.1
47.5°	252.4	259.9	269.4	272.1	281.7	303.4	333.5	381.1	448.2	515.3	565.5
50°	227.2	233.3	239.8	244.6	249.0	266.8	289.5	329.6	383.2	448.2	510.5
52.5°	207.5	211.9	217.6	220.2	224.1	237.2	254.6	284.3	328.3	387.6	448.2
55°	189.2	192.3	195.8	200.1	201.9	211.5	225.0	250.3	283.0	336.1	393.7
57.5°	172.2	173.5	175.7	178.3	180.5	188.8	200.6	217.6	246.3	287.3	341.8
60°	153.0	156.5	157.8	160.4	161.8	168.3	177.4	191.8	214.1	249.4	290.4
62.5°	136.9	139.1	141.3	142.6	145.6	147.8	155.2	168.3	186.6	212.8	249.8
65°	122.5	123.4	124.7	126.0	126.9	129.5	136.5	145.2	159.1	182.2	211.0
67.5°	105.9	106.8	108.6	109.0	109.9	113.4	117.3	124.7	136.5	153.9	177.4
70°	89.8	91.1	92.0	92.9	94.2	95.5	99.8	105.9	115.1	127.3	145.6
72.5°	75.9	77.2	77.2	78.0	77.6	79.4	83.7	88.1	94.2	104.2	120.3
75°	61.9	61.9	62.8	63.2	63.7	65.4	67.1	70.6	75.4	83.3	93.3
77.5°	48.8	48.4	49.3	49.3	49.3	50.6	52.3	54.1	57.1	62.8	70.6
80°	35.8	35.8	36.6	37.1	36.2	36.6	37.5	39.2	41.4	45.3	49.7
82.5°	23.5	25.3	24.9	25.3	24.9	25.7	26.2	26.6	27.5	29.2	32.3
85°	14.4	14.4	14.4	14.8	14.4	14.8	14.8	14.8	15.3	16.1	17.4
87.5°	6.1	6.1	6.1	6.5	6.1	6.1	6.5	6.1	6.5	6.5	7.0
90°	12.7	12.5	12.3	12.2	12.0	11.6	11.3	10.9	10.5	9.2	8.0
92.5°	14.6	14.5	14.4	14.4	14.1	13.4	12.7	12.1	11.4	10.5	9.6
95°	16.6	16.6	16.6	16.6	16.3	15.6	14.9	14.2	13.5	12.4	11.4
97.5°	17.7	17.6	17.5	17.5	17.1	16.3	15.6	14.8	14.0	18.9	23.9
100°	18.1	18.0	17.9	17.9	17.5	16.7	16.0	15.2	14.4	29.5	44.7
102.5°	18.4	18.2	18.0	17.9	19.5	22.7	25.9	29.1	32.3	49.2	66.1
105°	18.8	18.6	18.4	18.3	26.9	44.1	61.2	78.4	95.6	104.3	113.1
107.5°	70.8	83.5	96.2	102.6	110.1	125.0	140.0	154.9	169.9	168.4	167.0
110°	147.8	161.7	175.6	182.5	184.1	187.3	190.5	193.7	196.9	195.8	194.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	227.9	228.1	228.3	228.4	228.0	227.1	226.2	225.3	224.4	223.3	222.3
115°	256.0	255.6	255.2	255.0	254.5	253.5	252.6	251.6	250.6	249.7	248.9
117.5°	280.1	280.0	279.9	279.9	279.5	278.7	278.0	277.2	276.4	275.9	275.4
120°	304.8	304.8	304.8	304.8	304.4	303.6	302.9	302.1	301.3	301.0	300.7
122.5°	328.6	328.5	328.4	328.4	328.2	327.7	327.2	326.7	326.2	325.8	325.4
125°	350.7	350.5	350.3	350.2	350.1	349.9	349.7	349.5	349.3	348.9	348.5
127.5°	373.3	373.5	373.7	373.8	373.7	373.4	373.1	372.8	372.5	372.0	371.5
130°	394.3	394.4	394.6	394.7	394.5	394.1	393.8	393.4	393.0	392.6	392.2
132.5°	413.7	414.0	414.3	414.4	414.2	413.8	413.5	413.1	412.7	412.4	412.1
135°	433.3	433.6	433.9	434.0	433.9	433.6	433.3	433.0	432.7	432.3	431.9
137.5°	451.9	452.1	452.3	452.4	452.2	451.7	451.2	450.7	450.2	450.0	449.8
140°	468.5	468.7	468.9	469.0	468.8	468.4	468.0	467.6	467.2	466.9	466.6
142.5°	484.0	484.3	484.6	484.7	484.6	484.3	484.0	483.7	483.4	483.1	482.8
145°	499.1	499.1	499.1	499.1	499.0	498.8	498.6	498.4	498.2	498.0	497.8
147.5°	511.4	511.9	512.4	512.6	512.5	512.3	512.2	512.0	511.8	511.6	511.4
150°	524.2	524.5	524.8	524.9	524.8	524.6	524.4	524.2	524.0	523.8	523.6
152.5°	535.0	535.5	536.0	536.2	536.0	535.6	535.3	534.9	534.5	534.4	534.3
155°	544.9	545.4	546.0	546.3	546.1	545.6	545.1	544.6	544.1	544.0	543.9
157.5°	553.5	554.2	555.0	555.4	555.1	554.5	554.0	553.4	552.8	552.9	553.0
160°	561.2	561.9	562.6	562.9	562.6	562.0	561.4	560.8	560.2	560.3	560.4
162.5°	568.4	569.0	569.6	569.9	569.6	568.9	568.2	567.5	566.8	566.9	567.0
165°	574.3	575.0	575.7	576.0	575.6	574.8	574.1	573.3	572.5	572.6	572.7
167.5°	578.9	579.6	580.4	580.8	580.4	579.6	578.9	578.1	577.3	577.3	577.3
170°	582.8	583.5	584.3	584.7	584.3	583.5	582.8	582.0	581.2	581.2	581.2
172.5°	585.1	586.0	586.9	587.3	586.9	586.1	585.4	584.6	583.8	583.7	583.6
175°	587.2	587.9	588.7	589.1	588.8	588.1	587.4	586.7	586.0	585.9	585.8
177.5°	588.0	588.9	589.9	590.4	590.0	589.2	588.5	587.7	586.9	586.8	586.7
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	462.2	460.8	460.8	460.0	457.4	452.6	452.1	453.0	450.4	447.8	443.8
5°	484.8	476.5	473.9	471.3	466.1	457.4	453.9	450.8	446.0	440.4	434.2
7.5°	504.0	492.2	488.7	484.0	473.5	461.3	453.4	446.9	440.4	432.5	425.1
10°	528.0	511.0	502.7	495.7	481.3	464.3	452.6	443.0	432.5	422.9	413.3
12.5°	555.0	527.5	524.9	507.9	491.4	466.1	451.7	437.7	423.8	412.0	402.0
15°	577.7	547.6	536.7	525.4	493.5	462.2	448.2	432.5	416.4	403.7	388.9
17.5°	592.1	567.2	544.1	528.9	495.7	467.8	440.8	422.9	405.9	388.5	376.3
20°	609.5	573.3	553.3	532.8	500.1	463.5	436.4	414.2	393.3	377.6	362.7
22.5°	627.0	578.1	561.6	539.3	501.0	459.1	428.6	406.3	382.4	366.7	350.5
25°	625.2	585.1	557.6	538.9	492.2	455.2	419.4	393.3	371.0	351.0	334.8
27.5°	626.5	577.3	549.3	527.5	486.1	449.5	409.8	382.4	359.3	338.3	321.3
30°	627.0	565.5	541.1	514.9	474.8	436.0	398.9	371.0	346.6	323.9	308.7
32.5°	625.6	555.9	525.4	501.8	456.9	422.9	386.3	356.6	331.8	310.9	296.5
35°	622.6	544.6	509.2	479.6	438.6	404.2	374.5	344.0	317.4	298.2	281.7
37.5°	614.3	532.3	492.2	463.0	417.2	382.4	356.2	330.9	305.2	282.5	268.6
40°	608.2	515.8	475.2	443.4	394.1	360.1	338.3	314.3	289.1	268.6	255.1
42.5°	594.3	500.1	457.8	419.9	371.5	336.6	316.1	296.9	275.1	255.1	242.8
45°	571.6	483.1	436.4	398.1	346.6	313.5	294.7	279.0	259.9	240.7	228.5
47.5°	539.8	458.7	413.8	375.4	322.2	288.6	269.9	258.1	242.8	226.7	216.3
50°	505.3	432.1	390.6	352.7	298.7	266.0	247.6	236.7	226.7	211.9	201.9
52.5°	460.4	403.7	364.1	327.9	273.4	242.0	225.8	218.0	207.5	197.1	188.3
55°	416.8	367.1	334.4	300.0	248.5	219.3	203.6	195.3	189.2	180.5	173.5
57.5°	366.2	333.1	303.0	271.6	225.4	198.8	184.0	174.0	170.0	166.1	159.6
60°	319.6	294.3	269.9	243.7	201.4	177.4	163.1	155.2	151.3	148.7	144.3
62.5°	276.9	257.2	236.3	215.4	177.0	155.2	144.3	136.5	133.0	132.5	128.6
65°	235.9	221.9	204.9	184.4	154.3	135.2	124.7	119.9	116.0	116.0	112.9
67.5°	194.9	185.3	171.8	157.4	133.8	116.0	106.4	102.0	99.8	99.8	97.7
70°	162.2	155.6	143.4	130.8	110.3	96.8	89.4	85.5	84.1	84.6	82.8
72.5°	131.7	124.7	114.7	105.5	90.3	80.2	75.0	70.6	68.5	68.9	68.5
75°	102.0	98.5	89.8	82.8	70.6	63.7	58.9	56.7	54.9	55.4	54.5
77.5°	76.7	71.5	66.7	61.9	54.5	48.8	44.9	42.7	41.4	41.4	41.4
80°	52.3	51.4	47.5	44.9	38.8	34.4	31.4	31.0	29.6	29.6	29.6
82.5°	34.0	31.8	29.6	27.9	24.4	21.8	20.5	19.6	19.2	18.7	19.6
85°	18.7	17.4	16.6	14.8	13.5	12.2	10.9	10.5	10.0	10.5	10.0
87.5°	7.4	6.1	6.1	5.7	5.2	4.8	4.8	3.9	3.9	3.5	3.5
90°	6.7	5.4	4.8	4.3	3.3	2.4	1.4	0.4	1.4	2.4	3.3
92.5°	8.7	7.8	7.4	7.7	8.3	8.8	9.4	10.0	9.4	8.8	8.3
95°	10.3	9.2	8.7	10.7	14.7	18.6	22.6	26.6	22.6	18.6	14.7
97.5°	28.8	33.7	36.2	37.6	40.3	43.0	45.8	48.5	45.8	43.0	40.3
100°	59.8	74.9	82.5	81.5	79.6	77.7	75.7	73.8	75.7	77.7	79.6
102.5°	83.0	99.9	108.3	107.7	106.4	105.1	103.9	102.6	103.9	105.1	106.4
105°	121.8	130.5	134.9	134.4	133.3	132.2	131.2	130.1	131.2	132.2	133.3
107.5°	165.5	164.0	163.3	162.9	162.0	161.1	160.3	159.4	160.3	161.1	162.0
110°	193.7	192.6	192.1	191.7	190.9	190.2	189.4	188.6	189.4	190.2	190.9

TEST NUMBER: P1030838

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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	221.2	220.1	219.6	219.3	218.6	217.9	217.3	216.6	217.3	217.9	218.6
115°	248.0	247.1	246.7	246.4	245.8	245.3	244.7	244.1	244.7	245.3	245.8
117.5°	274.9	274.4	274.2	273.9	273.2	272.5	271.9	271.2	271.9	272.5	273.2
120°	300.4	300.1	300.0	299.6	298.7	297.8	297.0	296.1	297.0	297.8	298.7
122.5°	325.0	324.6	324.4	324.1	323.4	322.7	322.1	321.4	322.1	322.7	323.4
125°	348.2	347.8	347.6	347.2	346.4	345.7	344.9	344.1	344.9	345.7	346.4
127.5°	371.0	370.5	370.3	369.9	369.1	368.4	367.6	366.8	367.6	368.4	369.1
130°	391.9	391.5	391.3	390.9	390.1	389.4	388.6	387.8	388.6	389.4	390.1
132.5°	411.8	411.5	411.3	410.9	410.1	409.4	408.6	407.8	408.6	409.4	410.1
135°	431.6	431.2	431.0	430.7	430.1	429.6	429.0	428.4	429.0	429.6	430.1
137.5°	449.6	449.4	449.3	448.9	448.1	447.4	446.6	445.8	446.6	447.4	448.1
140°	466.3	466.0	465.9	465.6	465.0	464.5	463.9	463.3	463.9	464.5	465.0
142.5°	482.5	482.2	482.1	481.8	481.2	480.7	480.1	479.5	480.1	480.7	481.2
145°	497.7	497.5	497.4	497.1	496.4	495.7	495.0	494.3	495.0	495.7	496.4
147.5°	511.2	511.0	510.9	510.7	510.2	509.7	509.2	508.7	509.2	509.7	510.2
150°	523.4	523.2	523.1	523.0	522.7	522.4	522.1	521.8	522.1	522.4	522.7
152.5°	534.2	534.1	534.0	534.0	533.9	533.8	533.7	533.6	533.7	533.8	533.9
155°	543.8	543.7	543.7	543.8	544.0	544.1	544.3	544.5	544.3	544.1	544.0
157.5°	553.1	553.2	553.3	553.3	553.3	553.3	553.3	553.3	553.3	553.3	553.3
160°	560.5	560.6	560.7	560.7	560.8	560.9	561.0	561.1	561.0	560.9	560.8
162.5°	567.1	567.2	567.2	567.3	567.6	567.9	568.2	568.5	568.2	567.9	567.6
165°	572.8	572.9	572.9	573.0	573.3	573.6	573.9	574.2	573.9	573.6	573.3
167.5°	577.3	577.3	577.3	577.5	577.9	578.2	578.6	579.0	578.6	578.2	577.9
170°	581.2	581.2	581.2	581.4	581.8	582.2	582.6	583.0	582.6	582.2	581.8
172.5°	583.5	583.4	583.4	583.6	584.1	584.6	585.1	585.6	585.1	584.6	584.1
175°	585.7	585.6	585.6	585.8	586.3	586.8	587.3	587.8	587.3	586.8	586.3
177.5°	586.6	586.5	586.4	586.6	587.1	587.6	588.1	588.6	588.1	587.6	587.1
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	443.0	442.5	443.4	440.8	436.4	434.2	428.1	426.8	426.4	426.8	427.3
5°	430.8	430.3	429.0	424.7	419.4	415.5	408.1	407.7	405.0	402.4	403.7
7.5°	419.0	417.2	414.6	409.0	402.0	397.6	391.5	387.2	383.7	381.5	379.7
10°	407.2	404.6	402.0	394.6	385.9	379.3	371.9	368.4	364.5	362.7	361.0
12.5°	392.0	389.3	384.5	375.8	370.6	362.3	354.9	351.4	349.2	345.7	343.6
15°	379.7	374.5	371.9	362.7	351.8	351.0	337.5	336.6	332.2	332.2	328.7
17.5°	365.8	361.9	357.1	347.9	340.1	332.2	325.2	322.6	318.7	317.8	316.1
20°	352.3	347.0	345.3	336.1	327.9	318.3	310.9	308.2	306.5	304.8	306.1
22.5°	338.3	334.0	329.6	321.3	315.2	305.6	301.3	298.7	296.0	295.2	295.6
25°	324.8	320.9	316.5	308.2	301.7	293.9	289.9	288.6	287.3	287.3	286.9
27.5°	311.7	307.8	303.9	296.5	289.9	284.3	281.2	279.9	278.6	279.5	280.3
30°	298.2	294.7	291.2	284.7	279.5	274.2	272.5	271.6	271.2	273.4	273.4
32.5°	286.0	283.0	280.3	274.2	269.0	264.6	263.3	263.8	264.2	265.5	266.4
35°	273.4	271.2	268.6	263.3	259.0	255.1	255.5	255.5	256.4	258.5	260.3
37.5°	262.0	259.0	256.8	252.4	249.0	245.5	246.8	248.1	249.0	251.6	252.4
40°	248.5	247.2	245.5	241.1	238.1	237.6	238.1	238.9	240.7	242.0	243.3
42.5°	237.6	235.9	233.7	230.2	227.6	228.0	228.5	229.3	230.2	232.4	233.7
45°	225.4	224.1	222.4	219.3	217.1	217.6	218.0	218.0	218.9	221.5	222.4
47.5°	211.9	212.3	210.1	207.1	205.8	205.8	205.8	206.7	208.8	209.7	210.1
50°	198.8	197.9	197.5	194.5	193.6	193.1	193.6	194.0	197.1	196.6	197.9
52.5°	184.9	184.9	184.4	182.7	181.4	181.4	180.5	182.7	183.6	184.4	185.7
55°	171.3	170.0	169.6	168.7	167.0	166.5	167.4	170.0	170.9	171.8	173.1
57.5°	156.5	156.5	155.6	154.3	154.3	154.3	154.3	156.1	157.4	158.3	160.9
60°	143.0	141.3	140.0	140.0	140.0	139.5	142.1	142.1	144.7	145.2	146.1
62.5°	126.9	126.0	125.1	125.6	125.1	126.0	126.9	128.6	129.1	130.4	131.7
65°	111.6	111.6	110.7	113.4	111.6	111.6	113.8	113.8	114.7	116.0	117.7
67.5°	96.8	97.2	96.4	96.4	97.2	97.7	98.1	99.8	100.3	102.0	104.2
70°	81.5	82.4	82.8	82.0	82.8	83.7	84.6	85.0	86.8	87.6	88.9
72.5°	68.0	68.9	67.6	68.0	68.5	69.3	69.8	70.6	71.5	74.1	75.0
75°	54.5	54.1	53.6	55.4	54.5	56.2	56.7	56.7	57.6	59.7	60.6
77.5°	41.9	41.9	42.3	41.4	42.7	42.3	42.7	44.0	45.3	45.3	48.8
80°	29.2	30.1	30.1	30.1	30.5	31.0	30.1	32.3	32.7	32.7	34.0
82.5°	18.7	19.2	18.7	19.6	19.6	20.5	20.1	20.5	21.4	22.2	22.7
85°	10.0	10.0	10.9	10.9	10.5	10.9	10.5	10.9	11.8	11.8	12.2
87.5°	3.5	3.5	3.5	3.5	3.9	3.5	3.9	3.9	3.5	3.5	4.8
90°	4.3	4.8	5.4	6.7	8.0	9.2	10.5	10.9	11.3	11.6	12.0
92.5°	7.7	7.4	7.8	8.7	9.6	10.5	11.4	12.1	12.7	13.4	14.1
95°	10.7	8.7	9.2	10.3	11.4	12.4	13.5	14.2	14.9	15.6	16.3
97.5°	37.6	36.2	33.7	28.8	23.9	18.9	14.0	14.8	15.6	16.3	17.1
100°	81.5	82.5	74.9	59.8	44.7	29.5	14.4	15.2	16.0	16.7	17.5
102.5°	107.7	108.3	99.9	83.0	66.1	49.2	32.3	29.1	25.9	22.7	19.5
105°	134.4	134.9	130.5	121.8	113.1	104.3	95.6	78.4	61.2	44.1	26.9
107.5°	162.9	163.3	164.0	165.5	167.0	168.4	169.9	154.9	140.0	125.0	110.1
110°	191.7	192.1	192.6	193.7	194.8	195.8	196.9	193.7	190.5	187.3	184.1

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	219.3	219.6	220.1	221.2	222.3	223.3	224.4	225.3	226.2	227.1	228.0
115°	246.4	246.7	247.1	248.0	248.9	249.7	250.6	251.6	252.6	253.5	254.5
117.5°	273.9	274.2	274.4	274.9	275.4	275.9	276.4	277.2	278.0	278.7	279.5
120°	299.6	300.0	300.1	300.4	300.7	301.0	301.3	302.1	302.9	303.6	304.4
122.5°	324.1	324.4	324.6	325.0	325.4	325.8	326.2	326.7	327.2	327.7	328.2
125°	347.2	347.6	347.8	348.2	348.5	348.9	349.3	349.5	349.7	349.9	350.1
127.5°	369.9	370.3	370.5	371.0	371.5	372.0	372.5	372.8	373.1	373.4	373.7
130°	390.9	391.3	391.5	391.9	392.2	392.6	393.0	393.4	393.8	394.1	394.5
132.5°	410.9	411.3	411.5	411.8	412.1	412.4	412.7	413.1	413.5	413.8	414.2
135°	430.7	431.0	431.2	431.6	431.9	432.3	432.7	433.0	433.3	433.6	433.9
137.5°	448.9	449.3	449.4	449.6	449.8	450.0	450.2	450.7	451.2	451.7	452.2
140°	465.6	465.9	466.0	466.3	466.6	466.9	467.2	467.6	468.0	468.4	468.8
142.5°	481.8	482.1	482.2	482.5	482.8	483.1	483.4	483.7	484.0	484.3	484.6
145°	497.1	497.4	497.5	497.7	497.8	498.0	498.2	498.4	498.6	498.8	499.0
147.5°	510.7	510.9	511.0	511.2	511.4	511.6	511.8	512.0	512.2	512.3	512.5
150°	523.0	523.1	523.2	523.4	523.6	523.8	524.0	524.2	524.4	524.6	524.8
152.5°	534.0	534.0	534.1	534.2	534.3	534.4	534.5	534.9	535.3	535.6	536.0
155°	543.8	543.7	543.7	543.8	543.9	544.0	544.1	544.6	545.1	545.6	546.1
157.5°	553.3	553.3	553.2	553.1	553.0	552.9	552.8	553.4	554.0	554.5	555.1
160°	560.7	560.7	560.6	560.5	560.4	560.3	560.2	560.8	561.4	562.0	562.6
162.5°	567.3	567.2	567.2	567.1	567.0	566.9	566.8	567.5	568.2	568.9	569.6
165°	573.0	572.9	572.9	572.8	572.7	572.6	572.5	573.3	574.1	574.8	575.6
167.5°	577.5	577.3	577.3	577.3	577.3	577.3	577.3	578.1	578.9	579.6	580.4
170°	581.4	581.2	581.2	581.2	581.2	581.2	581.2	582.0	582.8	583.5	584.3
172.5°	583.6	583.4	583.4	583.5	583.6	583.7	583.8	584.6	585.4	586.1	586.9
175°	585.8	585.6	585.6	585.7	585.8	585.9	586.0	586.7	587.4	588.1	588.8
177.5°	586.6	586.4	586.5	586.6	586.7	586.8	586.9	587.7	588.5	589.2	590.0
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	426.8	427.3	425.5	424.2	427.7	425.5	425.5	426.0	425.1	426.4	426.0
5°	402.9	403.3	400.2	401.1	399.4	398.9	398.5	401.1	400.7	400.2	401.1
7.5°	379.3	379.3	378.0	377.1	377.1	375.8	377.6	377.1	378.0	378.0	379.3
10°	359.7	360.6	358.4	356.2	355.8	356.2	356.2	356.6	357.1	360.1	359.7
12.5°	343.6	342.3	341.8	340.5	338.3	337.5	336.6	341.4	340.1	340.1	340.1
15°	325.7	328.7	328.3	324.4	323.5	325.2	324.4	324.4	328.7	328.3	327.9
17.5°	316.1	315.2	314.3	312.2	312.6	312.2	312.6	312.6	315.2	315.2	315.2
20°	305.2	303.4	303.4	302.6	302.6	301.3	303.0	303.4	305.2	305.2	305.6
22.5°	295.6	294.3	294.3	293.9	294.7	293.0	294.7	295.2	295.2	296.5	296.5
25°	287.3	286.4	286.4	287.3	287.3	287.3	287.3	289.1	287.8	288.2	287.8
27.5°	279.9	280.3	280.8	281.2	280.8	281.2	281.7	282.5	283.0	282.5	281.7
30°	272.9	274.2	274.7	274.7	275.5	276.0	276.4	276.4	276.9	275.5	276.4
32.5°	267.7	267.7	268.6	269.0	269.9	270.3	270.3	271.2	270.8	269.4	269.9
35°	260.3	260.3	262.0	262.9	264.2	263.8	264.2	264.2	264.6	263.8	262.5
37.5°	252.9	253.7	253.7	255.5	255.9	256.4	255.9	256.8	256.4	255.5	255.1
40°	244.2	243.7	244.2	245.5	245.9	245.9	245.9	246.8	246.8	246.8	246.3
42.5°	233.3	234.6	234.1	235.4	235.0	235.0	235.9	236.7	237.2	235.9	236.3
45°	222.8	222.8	223.7	223.7	224.1	224.1	225.8	225.0	225.8	225.0	225.4
47.5°	211.5	211.9	211.9	212.3	213.2	214.1	213.2	213.6	213.6	214.1	213.2
50°	198.8	198.8	199.7	201.0	202.7	201.9	201.4	203.2	201.9	201.9	201.0
52.5°	185.7	187.0	187.5	188.8	190.1	190.5	191.0	190.1	190.5	189.2	189.7
55°	173.1	173.5	175.3	176.6	177.9	177.9	177.4	177.9	178.3	176.6	176.6
57.5°	160.4	161.8	163.5	163.5	165.2	165.2	164.8	164.8	165.2	163.9	163.5
60°	146.9	148.2	150.4	150.4	153.0	153.5	152.6	151.7	151.7	150.4	150.9
62.5°	132.5	133.8	135.2	137.3	139.1	138.2	140.0	138.2	138.6	136.0	136.0
65°	119.9	120.3	122.5	124.7	124.7	125.6	124.7	125.1	123.8	123.8	122.1
67.5°	105.1	105.1	107.3	109.4	111.6	111.6	111.6	110.3	110.3	109.0	109.0
70°	92.0	91.6	93.7	95.0	96.4	96.8	95.9	95.5	94.6	93.3	92.9
72.5°	75.9	76.7	78.9	79.8	82.0	81.5	83.7	81.1	81.1	78.9	78.5
75°	61.5	62.3	64.5	65.8	67.1	67.1	68.5	67.1	65.4	64.5	64.1
77.5°	48.8	48.4	50.1	52.3	52.8	52.3	53.2	52.8	51.0	51.0	50.1
80°	34.9	36.2	37.9	37.5	39.2	38.8	38.8	37.9	37.9	36.6	37.5
82.5°	23.1	24.4	24.9	24.4	24.9	25.7	26.2	25.7	25.7	24.9	25.3
85°	12.2	12.2	13.1	13.5	13.1	13.1	13.5	14.8	14.0	13.1	14.0
87.5°	3.9	3.5	3.5	3.9	3.5	3.5	3.9	3.9	4.4	4.4	4.4
90°	12.2	12.3	12.5	12.7	12.9	13.1	12.9	12.7	12.5	12.3	12.2
92.5°	14.4	14.4	14.5	14.6	14.7	14.8	14.7	14.6	14.5	14.4	14.4
95°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
97.5°	17.5	17.5	17.6	17.7	17.8	17.9	17.8	17.7	17.6	17.5	17.5
100°	17.9	17.9	18.0	18.1	18.2	18.3	18.2	18.1	18.0	17.9	17.9
102.5°	17.9	18.0	18.2	18.4	18.6	18.8	18.6	18.4	18.2	18.0	17.9
105°	18.3	18.4	18.6	18.8	19.0	19.2	19.0	18.8	18.6	18.4	18.3
107.5°	102.6	96.2	83.5	70.8	58.1	45.4	58.1	70.8	83.5	96.2	102.6
110°	182.5	175.6	161.7	147.8	134.0	120.1	134.0	147.8	161.7	175.6	182.5

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	228.4	228.3	228.1	227.9	227.7	227.5	227.7	227.9	228.1	228.3	228.4
115°	255.0	255.2	255.6	256.0	256.4	256.8	256.4	256.0	255.6	255.2	255.0
117.5°	279.9	279.9	280.0	280.1	280.2	280.3	280.2	280.1	280.0	279.9	279.9
120°	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8
122.5°	328.4	328.4	328.5	328.6	328.7	328.8	328.7	328.6	328.5	328.4	328.4
125°	350.2	350.3	350.5	350.7	350.9	351.1	350.9	350.7	350.5	350.3	350.2
127.5°	373.8	373.7	373.5	373.3	373.1	372.9	373.1	373.3	373.5	373.7	373.8
130°	394.7	394.6	394.4	394.3	394.1	393.9	394.1	394.3	394.4	394.6	394.7
132.5°	414.4	414.3	414.0	413.7	413.4	413.1	413.4	413.7	414.0	414.3	414.4
135°	434.0	433.9	433.6	433.3	433.0	432.7	433.0	433.3	433.6	433.9	434.0
137.5°	452.4	452.3	452.1	451.9	451.7	451.5	451.7	451.9	452.1	452.3	452.4
140°	469.0	468.9	468.7	468.5	468.3	468.1	468.3	468.5	468.7	468.9	469.0
142.5°	484.7	484.6	484.3	484.0	483.7	483.4	483.7	484.0	484.3	484.6	484.7
145°	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1	499.1
147.5°	512.6	512.4	511.9	511.4	511.0	510.5	511.0	511.4	511.9	512.4	512.6
150°	524.9	524.8	524.5	524.2	523.9	523.6	523.9	524.2	524.5	524.8	524.9
152.5°	536.2	536.0	535.5	535.0	534.5	534.0	534.5	535.0	535.5	536.0	536.2
155°	546.3	546.0	545.4	544.9	544.3	543.7	544.3	544.9	545.4	546.0	546.3
157.5°	555.4	555.0	554.2	553.5	552.7	551.9	552.7	553.5	554.2	555.0	555.4
160°	562.9	562.6	561.9	561.2	560.5	559.8	560.5	561.2	561.9	562.6	562.9
162.5°	569.9	569.6	569.0	568.4	567.8	567.2	567.8	568.4	569.0	569.6	569.9
165°	576.0	575.7	575.0	574.3	573.6	572.9	573.6	574.3	575.0	575.7	576.0
167.5°	580.8	580.4	579.6	578.9	578.1	577.3	578.1	578.9	579.6	580.4	580.8
170°	584.7	584.3	583.5	582.8	582.0	581.2	582.0	582.8	583.5	584.3	584.7
172.5°	587.3	586.9	586.0	585.1	584.3	583.4	584.3	585.1	586.0	586.9	587.3
175°	589.1	588.7	587.9	587.2	586.4	585.6	586.4	587.2	587.9	588.7	589.1
177.5°	590.4	589.9	588.9	588.0	587.0	586.0	587.0	588.0	588.9	589.9	590.4
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9	449.9
2.5°	427.3	428.1	428.6	426.8	425.5	427.7	430.8	432.9	434.7	436.9	438.2
5°	402.0	405.0	405.0	405.9	407.2	409.4	415.1	419.0	422.5	425.1	427.3
7.5°	380.6	382.8	384.1	386.3	388.5	391.5	398.1	403.7	409.0	412.0	415.5
10°	361.4	363.2	365.4	366.7	370.6	375.0	383.2	388.0	394.1	398.9	403.3
12.5°	343.1	349.2	350.5	350.1	353.6	358.4	366.7	374.1	380.6	385.4	390.2
15°	330.0	332.2	334.8	334.4	341.8	343.1	350.1	358.8	367.5	370.6	375.0
17.5°	315.7	319.1	321.8	323.1	325.2	330.0	336.6	343.1	354.5	354.9	366.2
20°	304.3	307.8	309.6	311.3	312.6	318.3	323.9	331.4	340.5	345.3	351.4
22.5°	296.9	298.7	300.0	301.3	303.0	306.1	313.0	321.3	327.4	332.7	336.6
25°	288.2	289.9	291.7	292.6	293.9	295.6	300.8	307.4	316.1	319.6	323.5
27.5°	282.1	282.1	283.0	283.0	284.7	286.4	290.4	296.5	303.4	307.8	313.0
30°	275.5	275.1	275.5	275.1	274.7	277.3	280.8	286.0	290.8	296.0	299.5
32.5°	269.0	268.6	268.6	269.0	267.3	268.6	270.3	275.1	280.3	283.0	286.9
35°	262.0	261.2	261.2	261.2	260.3	259.4	261.2	265.5	269.0	272.5	275.5
37.5°	255.1	253.7	253.7	252.9	252.0	250.7	250.7	254.2	259.0	260.3	264.2
40°	245.5	245.5	244.6	244.2	243.3	242.4	241.1	244.2	248.5	249.8	252.9
42.5°	235.9	234.6	234.1	234.1	234.1	232.8	231.9	234.1	236.7	238.9	240.7
45°	225.0	224.1	224.5	224.1	223.2	222.8	222.4	223.2	226.3	227.2	229.3
47.5°	213.2	212.8	212.8	212.3	211.9	212.3	210.6	212.8	213.6	214.5	216.3
50°	201.0	200.6	200.1	199.7	199.7	200.1	199.7	199.7	201.4	202.3	204.0
52.5°	188.8	187.5	187.5	187.0	187.0	186.2	187.0	187.5	188.3	189.2	190.1
55°	175.7	175.7	174.4	174.4	173.5	173.5	174.0	173.5	175.3	176.1	176.1
57.5°	163.1	161.3	161.8	160.9	160.0	159.6	159.6	160.4	161.3	161.3	162.2
60°	149.5	147.8	147.4	145.6	146.5	145.2	145.6	145.6	147.4	146.5	147.4
62.5°	136.0	133.8	132.5	131.7	131.7	132.1	131.2	130.8	131.7	132.5	134.3
65°	121.6	120.3	119.0	117.7	117.7	117.3	118.2	116.8	116.4	116.8	117.7
67.5°	106.8	105.5	104.2	102.9	103.3	102.0	101.1	102.5	101.6	102.0	102.9
70°	92.4	91.6	88.9	88.1	87.6	88.1	87.6	86.8	88.1	87.6	88.1
72.5°	78.0	77.2	75.9	73.7	73.7	73.2	72.8	72.8	72.4	72.4	72.4
75°	64.1	62.3	61.0	60.6	59.7	59.3	58.9	58.0	58.4	58.9	58.0
77.5°	49.7	47.5	47.1	47.1	45.8	45.8	46.2	45.8	45.3	45.3	45.3
80°	36.6	34.9	34.9	34.0	33.1	33.1	33.1	33.1	32.7	32.3	32.7
82.5°	23.5	23.1	22.7	22.7	23.5	21.8	22.7	22.2	21.8	21.8	21.4
85°	13.1	13.5	13.1	13.5	12.6	13.1	13.1	13.1	12.6	13.1	12.2
87.5°	4.8	4.8	4.8	5.2	5.2	5.2	5.2	5.2	5.7	5.2	5.2
90°	12.0	11.6	11.3	10.9	10.5	9.2	8.0	6.7	5.4	4.8	4.3
92.5°	14.1	13.4	12.7	12.1	11.4	10.5	9.6	8.7	7.8	7.4	7.7
95°	16.3	15.6	14.9	14.2	13.5	12.4	11.4	10.3	9.2	8.7	10.7
97.5°	17.1	16.3	15.6	14.8	14.0	18.9	23.9	28.8	33.7	36.2	37.6
100°	17.5	16.7	16.0	15.2	14.4	29.5	44.7	59.8	74.9	82.5	81.5
102.5°	19.5	22.7	25.9	29.1	32.3	49.2	66.1	83.0	99.9	108.3	107.7
105°	26.9	44.1	61.2	78.4	95.6	104.3	113.1	121.8	130.5	134.9	134.4
107.5°	110.1	125.0	140.0	154.9	169.9	168.4	167.0	165.5	164.0	163.3	162.9
110°	184.1	187.3	190.5	193.7	196.9	195.8	194.8	193.7	192.6	192.1	191.7

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	228.0	227.1	226.2	225.3	224.4	223.3	222.3	221.2	220.1	219.6	219.3
115°	254.5	253.5	252.6	251.6	250.6	249.7	248.9	248.0	247.1	246.7	246.4
117.5°	279.5	278.7	278.0	277.2	276.4	275.9	275.4	274.9	274.4	274.2	273.9
120°	304.4	303.6	302.9	302.1	301.3	301.0	300.7	300.4	300.1	300.0	299.6
122.5°	328.2	327.7	327.2	326.7	326.2	325.8	325.4	325.0	324.6	324.4	324.1
125°	350.1	349.9	349.7	349.5	349.3	348.9	348.5	348.2	347.8	347.6	347.2
127.5°	373.7	373.4	373.1	372.8	372.5	372.0	371.5	371.0	370.5	370.3	369.9
130°	394.5	394.1	393.8	393.4	393.0	392.6	392.2	391.9	391.5	391.3	390.9
132.5°	414.2	413.8	413.5	413.1	412.7	412.4	412.1	411.8	411.5	411.3	410.9
135°	433.9	433.6	433.3	433.0	432.7	432.3	431.9	431.6	431.2	431.0	430.7
137.5°	452.2	451.7	451.2	450.7	450.2	450.0	449.8	449.6	449.4	449.3	448.9
140°	468.8	468.4	468.0	467.6	467.2	466.9	466.6	466.3	466.0	465.9	465.6
142.5°	484.6	484.3	484.0	483.7	483.4	483.1	482.8	482.5	482.2	482.1	481.8
145°	499.0	498.8	498.6	498.4	498.2	498.0	497.8	497.7	497.5	497.4	497.1
147.5°	512.5	512.3	512.2	512.0	511.8	511.6	511.4	511.2	511.0	510.9	510.7
150°	524.8	524.6	524.4	524.2	524.0	523.8	523.6	523.4	523.2	523.1	523.0
152.5°	536.0	535.6	535.3	534.9	534.5	534.4	534.3	534.2	534.1	534.0	534.0
155°	546.1	545.6	545.1	544.6	544.1	544.0	543.9	543.8	543.7	543.7	543.8
157.5°	555.1	554.5	554.0	553.4	552.8	552.9	553.0	553.1	553.2	553.3	553.3
160°	562.6	562.0	561.4	560.8	560.2	560.3	560.4	560.5	560.6	560.7	560.7
162.5°	569.6	568.9	568.2	567.5	566.8	566.9	567.0	567.1	567.2	567.2	567.3
165°	575.6	574.8	574.1	573.3	572.5	572.6	572.7	572.8	572.9	572.9	573.0
167.5°	580.4	579.6	578.9	578.1	577.3	577.3	577.3	577.3	577.3	577.3	577.5
170°	584.3	583.5	582.8	582.0	581.2	581.2	581.2	581.2	581.2	581.2	581.4
172.5°	586.9	586.1	585.4	584.6	583.8	583.7	583.6	583.5	583.4	583.4	583.6
175°	588.8	588.1	587.4	586.7	586.0	585.9	585.8	585.7	585.6	585.6	585.8
177.5°	590.0	589.2	588.5	587.7	586.9	586.8	586.7	586.6	586.5	586.4	586.6
180°	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8	587.8

TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	449.9	449.9	449.9	449.9
2.5°	440.4	441.7	446.0	451.3
5°	431.6	435.1	441.2	449.5
7.5°	422.0	427.3	436.0	446.5
10°	411.1	418.6	429.5	442.5
12.5°	399.4	409.0	422.9	436.4
15°	392.0	401.5	414.2	429.0
17.5°	377.6	388.9	402.0	422.9
20°	362.7	375.4	392.4	413.3
22.5°	351.4	364.9	381.1	403.3
25°	337.9	351.8	369.3	392.4
27.5°	323.5	337.5	357.1	381.5
30°	312.6	326.1	344.9	371.0
32.5°	299.5	312.6	332.2	359.7
35°	284.7	299.5	318.3	346.2
37.5°	273.4	286.9	306.5	333.1
40°	261.2	272.9	292.1	318.3
42.5°	248.1	261.2	277.7	303.9
45°	235.9	245.5	262.5	287.3
47.5°	222.8	233.7	246.8	266.0
50°	208.8	218.0	232.4	245.5
52.5°	195.3	202.7	214.9	225.0
55°	180.9	188.3	197.5	203.6
57.5°	167.4	172.7	178.8	182.7
60°	150.9	156.1	160.0	163.9
62.5°	136.0	140.0	142.1	144.3
65°	120.8	122.9	124.3	126.0
67.5°	104.2	106.4	106.8	109.4
70°	88.9	89.4	90.3	91.6
72.5°	74.6	75.4	75.0	75.9
75°	59.7	60.6	59.7	60.6
77.5°	45.3	46.2	46.2	47.5
80°	32.7	33.1	33.6	33.6
82.5°	21.4	22.7	21.8	22.2
85°	12.2	12.6	12.6	13.1
87.5°	5.7	6.1	5.7	6.5
90°	3.3	2.4	1.4	0.4
92.5°	8.3	8.8	9.4	10.0
95°	14.7	18.6	22.6	26.6
97.5°	40.3	43.0	45.8	48.5
100°	79.6	77.7	75.7	73.8
102.5°	106.4	105.1	103.9	102.6
105°	133.3	132.2	131.2	130.1
107.5°	162.0	161.1	160.3	159.4
110°	190.9	190.2	189.4	188.6



TEST NUMBER: P1030838

CATALOG NUMBER: S123DIW-B340D460UB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	218.6	217.9	217.3	216.6
115°	245.8	245.3	244.7	244.1
117.5°	273.2	272.5	271.9	271.2
120°	298.7	297.8	297.0	296.1
122.5°	323.4	322.7	322.1	321.4
125°	346.4	345.7	344.9	344.1
127.5°	369.1	368.4	367.6	366.8
130°	390.1	389.4	388.6	387.8
132.5°	410.1	409.4	408.6	407.8
135°	430.1	429.6	429.0	428.4
137.5°	448.1	447.4	446.6	445.8
140°	465.0	464.5	463.9	463.3
142.5°	481.2	480.7	480.1	479.5
145°	496.4	495.7	495.0	494.3
147.5°	510.2	509.7	509.2	508.7
150°	522.7	522.4	522.1	521.8
152.5°	533.9	533.8	533.7	533.6
155°	544.0	544.1	544.3	544.5
157.5°	553.3	553.3	553.3	553.3
160°	560.8	560.9	561.0	561.1
162.5°	567.6	567.9	568.2	568.5
165°	573.3	573.6	573.9	574.2
167.5°	577.9	578.2	578.6	579.0
170°	581.8	582.2	582.6	583.0
172.5°	584.1	584.6	585.1	585.6
175°	586.3	586.8	587.3	587.8
177.5°	587.1	587.6	588.1	588.6
180°	587.8	587.8	587.8	587.8

(END OF REPORT)