

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: P1001292

Luminaire Tested: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001292
REPORT IS A COMBINATION OF REPORTS P995911 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

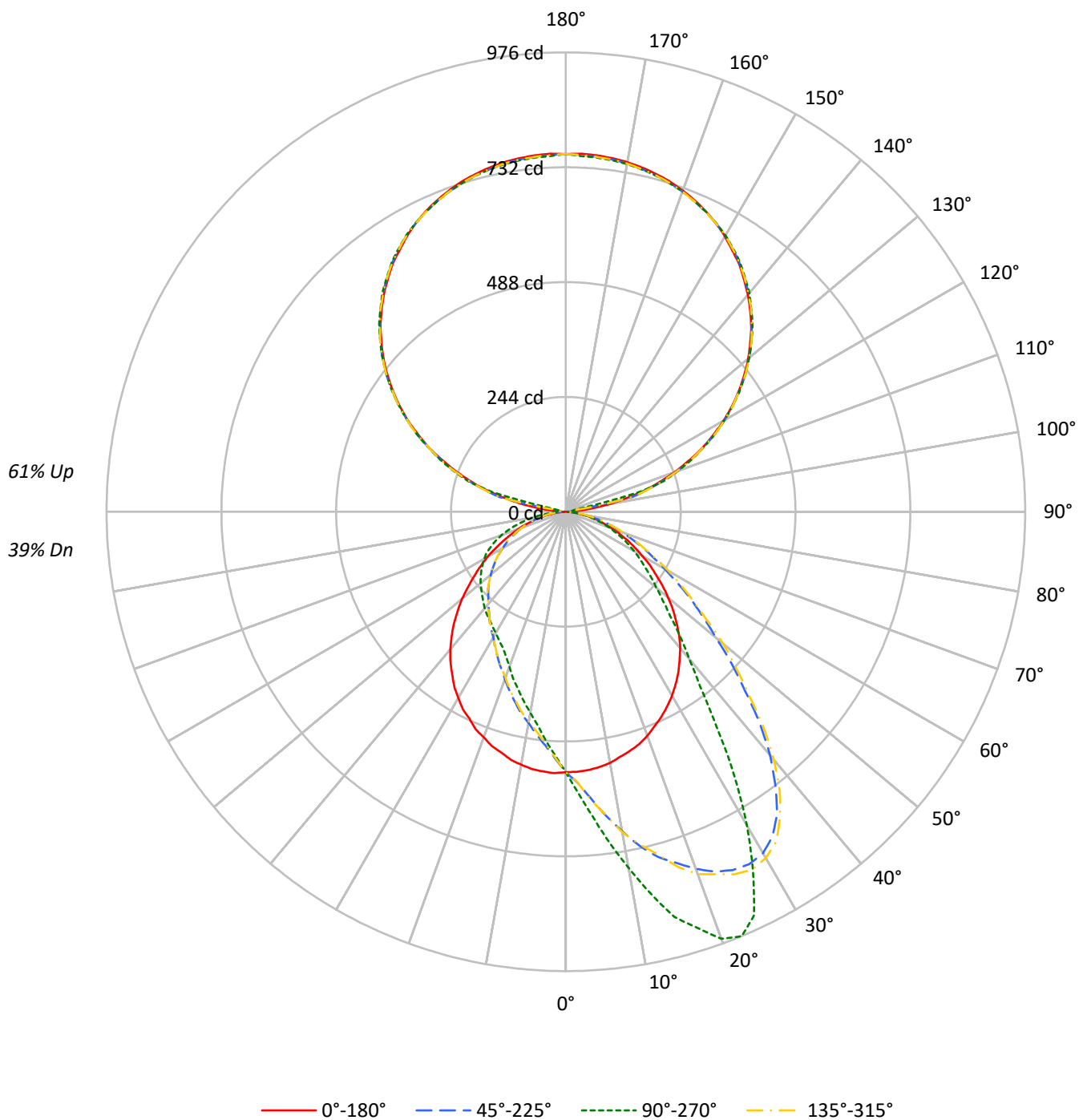
Lumens per Lamp: N/A
Luminaire Lumens: 3879.0 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
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



TEST NUMBER: P1001292

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39		
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	39	33		
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	36	35	33	28		
3	80	70	63	58	72	64	58	53	53	48	45	42	39	37	32	30	29	24		
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21		
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18		
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16		
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14		
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	17	15	13		
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14	12		
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	17	15	13	11		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4509	4509	4509	4509
5°	4498	5174	4524	3887
10°	4465	6036	4499	3411
15°	4411	6958	4441	3051
20°	4354	7545	4385	2736
25°	4271	7459	4311	2503
30°	4189	6165	4240	2383
35°	4075	4594	4120	2310
40°	3941	3461	3980	2274
45°	3738	2777	3784	2226
50°	3494	2340	3544	2203
55°	3208	2037	3257	2178
60°	2929	1794	3015	2141
65°	2668	1544	2694	2052
70°	2360	1270	2412	1889
75°	2060	976	2046	1606
80°	1620	641	1600	1220
85°	1070	287	997	711

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 145°

Vertical Angle: 45°

Luminance: 5831 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	1.4
10°-20°	166.1	4.3
20°-30°	263.9	6.8
30°-40°	293.2	7.6
40°-50°	266.7	6.9
50°-60°	217.9	5.6
60°-70°	155.6	4.0
70°-80°	85.6	2.2
80°-90°	24.7	0.6
90°-100°	25.2	0.7
100°-110°	166.1	4.3
110°-120°	317.2	8.2
120°-130°	402.7	10.4
130°-140°	430.8	11.1
140°-150°	402.8	10.4
150°-160°	324.8	8.4
160°-170°	209.5	5.4
170°-180°	72.2	1.9
0°-30°	483.9	12.5
0°-40°	777.1	20.0
0°-60°	1261.7	32.5
0°-90°	1527.6	39.4
90°-120°	508.5	13.1
90°-150°	1744.9	45.0
90°-180°	2351.0	60.6
0°-180°	3879.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	553	553	553	553	553	
5°	551	649	554	488	551	52
15°	526	891	530	391	526	148
25°	480	946	485	318	480	221
35°	416	559	421	281	416	260
45°	332	314	336	252	332	256
55°	234	205	237	220	234	210
65°	146	132	147	176	146	144
75°	72	66	71	109	72	75
85°	15	14	14	34	15	17
90°	2	17	2	17	2	3
95°	31	16	31	16	31	39
105°	171	162	171	162	171	179
115°	319	322	319	322	319	314
125°	449	452	449	452	449	401
135°	557	561	557	561	557	429
145°	642	646	642	646	642	401
155°	704	704	704	704	704	325
165°	743	739	743	739	743	210
175°	760	755	760	755	760	72
180°	760	760	760	760	760	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	553.0	558.5	560.8	562.6	568.6	570.4	570.9	573.6	575.9	576.4	576.4
5°	550.7	559.4	566.3	572.7	582.3	586.5	591.5	597.0	604.3	608.9	611.2
7.5°	547.1	559.9	570.4	581.4	594.7	603.0	607.5	622.2	632.3	640.5	650.6
10°	541.6	558.1	573.2	589.2	608.0	618.1	628.2	646.0	660.2	676.3	689.1
12.5°	533.3	554.8	573.2	595.6	619.0	630.9	642.8	674.0	690.5	704.7	727.6
15°	526.0	547.5	573.6	596.5	625.4	643.3	660.7	680.8	707.0	737.7	759.6
17.5°	517.7	544.8	569.0	601.1	633.2	650.1	664.3	695.5	732.2	762.4	782.6
20°	506.3	533.8	565.8	599.7	637.8	651.1	669.8	711.5	744.5	774.3	807.3
22.5°	493.0	525.1	559.0	591.5	630.9	658.9	679.5	716.1	756.0	790.3	827.5
25°	480.2	515.0	544.8	589.2	630.9	649.7	673.1	716.6	760.1	801.8	839.8
27.5°	466.4	498.9	539.3	574.5	621.7	642.4	667.6	715.2	761.5	803.2	844.0
30°	451.3	486.1	519.6	561.3	607.1	633.7	657.0	708.8	756.0	799.5	837.5
32.5°	434.3	467.3	503.1	542.5	590.6	617.6	646.9	700.1	750.5	788.1	817.4
35°	416.5	449.9	481.1	521.4	570.9	597.9	626.3	685.0	734.9	765.6	782.6
37.5°	396.8	428.4	459.1	498.9	548.4	577.3	606.2	663.0	710.2	735.8	731.2
40°	378.0	406.4	434.8	472.4	524.1	554.8	580.0	637.3	678.6	689.5	674.4
42.5°	356.5	380.7	408.2	446.7	497.1	526.0	557.6	609.8	640.5	635.9	610.3
45°	332.2	353.7	381.2	417.4	468.7	498.5	525.1	574.5	597.0	585.5	538.8
47.5°	308.8	329.9	352.3	388.5	438.5	463.7	490.7	535.1	548.0	523.7	477.0
50°	283.6	301.0	324.4	358.7	405.5	432.1	454.5	490.2	494.8	465.0	416.5
52.5°	259.3	274.0	296.4	330.3	373.9	394.9	416.9	448.6	444.9	414.2	367.5
55°	233.7	247.4	268.0	299.2	337.7	357.8	376.6	404.6	396.8	365.2	324.4
57.5°	212.1	221.8	241.9	270.8	302.4	324.4	340.4	362.4	350.5	318.9	280.9
60°	187.4	199.3	216.3	239.6	270.8	285.4	299.6	314.3	306.1	275.8	241.9
62.5°	164.9	174.1	188.8	211.2	235.5	248.8	263.9	273.1	264.8	236.9	208.5
65°	145.7	153.0	164.5	182.8	206.2	217.2	225.9	234.6	227.7	201.6	181.0
67.5°	124.6	131.0	140.7	155.3	175.0	182.8	191.1	197.0	189.2	171.8	151.7
70°	105.8	110.4	119.6	130.6	144.3	151.7	158.5	164.5	157.6	142.9	127.8
72.5°	86.6	90.3	98.5	106.3	118.7	123.7	128.7	133.3	131.0	117.3	104.9
75°	71.5	72.8	78.3	84.8	92.6	98.0	101.7	104.5	102.6	91.6	83.8
77.5°	54.1	55.9	60.0	65.1	71.9	75.1	77.4	80.2	77.9	69.2	63.7
80°	39.4	39.9	42.2	46.7	51.3	51.8	54.1	57.7	56.4	50.4	46.3
82.5°	25.2	26.6	27.5	30.2	33.4	34.4	35.7	36.7	36.2	32.5	31.2
85°	14.7	14.7	15.6	17.4	18.3	19.7	20.2	20.6	21.5	19.2	17.9
87.5°	6.4	6.9	6.9	7.3	8.2	8.2	8.7	9.2	9.6	9.2	7.8
90°	1.7	3.1	4.5	5.9	7.3	8.0	8.5	9.5	10.5	11.5	12.5
92.5°	8.5	8.3	8.0	7.8	7.5	7.4	7.9	8.9	9.9	10.9	11.9
95°	31.3	27.0	22.7	18.4	14.1	11.9	12.0	12.1	12.2	12.4	12.5
97.5°	59.7	62.5	65.3	68.0	70.8	72.2	65.6	52.3	39.0	25.8	12.5
100°	93.2	95.5	97.7	100.0	102.3	103.4	94.7	77.3	59.8	42.4	25.0
102.5°	130.7	132.2	133.7	135.2	136.7	137.5	138.3	139.8	141.3	142.9	144.4
105°	171.1	171.9	172.6	173.4	174.1	174.5	174.8	175.4	176.1	176.7	177.3
107.5°	208.0	208.4	208.8	209.1	209.5	209.7	210.1	211.0	211.9	212.8	213.7
110°	245.5	245.9	246.3	246.6	247.0	247.2	247.6	248.4	249.1	249.9	250.7

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	281.9	282.7	283.4	284.2	284.9	285.3	285.4	285.7	286.0	286.2	286.5
115°	319.4	319.8	320.2	320.5	320.9	321.1	321.0	320.9	320.8	320.7	320.6
117.5°	353.0	353.5	354.0	354.5	355.0	355.2	355.4	355.8	356.1	356.5	356.9
120°	387.1	387.6	388.1	388.6	389.1	389.3	389.2	389.1	389.0	388.9	388.8
122.5°	418.9	419.1	419.4	419.6	419.9	420.0	420.1	420.4	420.7	420.9	421.2
125°	449.0	449.5	450.0	450.5	451.0	451.3	451.2	450.9	450.6	450.4	450.1
127.5°	478.0	478.1	478.3	478.4	478.5	478.6	478.9	479.5	480.2	480.8	481.4
130°	505.8	505.9	506.1	506.2	506.3	506.4	506.6	507.0	507.3	507.7	508.1
132.5°	531.4	531.7	531.9	532.2	532.5	532.6	532.8	533.3	533.8	534.3	534.8
135°	557.0	556.9	556.7	556.6	556.5	556.4	556.7	557.2	557.7	558.2	558.7
137.5°	579.7	579.7	579.7	579.7	579.7	579.7	580.0	580.7	581.3	582.0	582.6
140°	601.9	602.1	602.4	602.6	602.9	603.0	603.1	603.4	603.7	603.9	604.2
142.5°	621.8	622.3	622.8	623.3	623.8	624.1	624.2	624.3	624.4	624.5	624.6
145°	642.3	642.7	643.1	643.4	643.8	644.0	644.0	644.0	644.0	644.0	644.0
147.5°	658.2	659.0	659.7	660.5	661.2	661.6	661.5	661.4	661.3	661.1	661.0
150°	675.8	676.3	676.8	677.3	677.8	678.1	678.0	677.9	677.8	677.6	677.5
152.5°	690.6	691.0	691.4	691.7	692.1	692.3	692.2	691.9	691.6	691.4	691.1
155°	704.2	704.3	704.5	704.6	704.7	704.8	704.6	704.2	703.9	703.5	703.1
157.5°	716.1	716.1	716.1	716.1	716.1	716.1	715.9	715.4	714.9	714.4	713.9
160°	726.4	726.0	725.6	725.3	724.9	724.7	724.6	724.5	724.4	724.2	724.1
162.5°	735.5	735.0	734.5	734.0	733.5	733.2	733.1	733.0	732.9	732.7	732.6
165°	742.9	742.3	741.6	741.0	740.3	740.0	740.0	740.0	740.0	740.0	740.0
167.5°	749.1	748.5	747.9	747.2	746.6	746.3	746.2	746.1	746.0	745.8	745.7
170°	754.2	753.4	752.7	751.9	751.2	750.8	750.9	751.0	751.1	751.3	751.4
172.5°	757.6	756.8	756.1	755.3	754.6	754.2	754.3	754.4	754.5	754.7	754.8
175°	759.9	759.1	758.4	757.6	756.9	756.5	756.6	756.7	756.8	757.0	757.1
177.5°	761.6	760.7	759.8	758.9	758.0	757.6	757.7	758.0	758.3	758.5	758.8
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	577.8	586.0	589.7	590.6	595.6	592.4	593.8	593.3	597.0	597.5	597.5
5°	619.9	629.5	632.7	637.3	644.2	646.0	644.6	647.4	652.4	648.8	654.3
7.5°	664.3	674.9	682.2	692.3	694.6	700.5	704.2	707.4	708.3	708.8	709.7
10°	705.6	718.9	729.0	745.9	749.6	752.8	768.8	762.4	770.6	767.9	768.8
12.5°	739.0	765.1	773.4	801.8	804.5	815.5	814.6	824.7	826.5	830.2	826.5
15°	783.0	813.3	826.5	842.6	851.7	864.6	866.9	880.6	886.1	891.1	886.1
17.5°	823.3	839.4	873.3	886.1	892.1	898.9	916.3	921.4	929.6	926.4	935.6
20°	843.5	866.4	902.1	924.1	933.3	939.7	954.4	962.2	965.4	965.4	966.3
22.5°	861.4	894.4	920.9	946.1	954.4	959.0	967.7	973.6	975.0	975.9	976.8
25°	877.4	907.2	928.7	942.9	946.1	946.1	951.2	947.5	941.5	946.1	948.9
27.5°	877.4	898.5	908.1	913.1	913.1	900.8	893.4	878.3	865.5	861.8	870.1
30°	862.7	872.4	859.1	846.7	837.1	828.8	800.0	777.1	772.5	769.3	781.6
32.5°	828.8	816.5	790.3	754.6	740.4	721.6	699.2	681.8	671.2	667.6	664.8
35°	768.8	736.7	702.8	654.7	644.6	620.8	590.1	577.3	559.9	559.4	565.4
37.5°	703.3	653.8	617.2	571.3	557.1	531.9	503.1	489.8	477.9	468.7	479.7
40°	626.8	583.7	527.8	490.2	470.1	456.8	432.5	417.9	412.4	407.8	414.6
42.5°	555.3	508.1	464.6	426.1	409.6	394.5	378.4	364.2	360.1	359.7	364.7
45°	484.3	438.0	397.7	364.7	354.2	345.0	329.4	325.3	318.4	313.8	316.1
47.5°	427.5	379.8	346.4	321.2	312.0	304.2	294.1	287.3	281.3	279.5	282.2
50°	371.6	339.5	305.1	284.1	277.2	269.9	262.1	255.7	252.9	251.1	252.9
52.5°	326.7	292.3	268.9	252.0	245.1	239.6	234.1	231.4	227.7	228.6	230.5
55°	286.4	256.1	236.4	224.0	219.9	217.6	210.8	207.6	206.2	205.3	206.2
57.5°	248.3	226.3	211.7	201.1	195.6	194.3	188.8	188.8	187.4	186.0	186.5
60°	218.1	199.3	185.1	176.9	175.9	173.6	170.0	169.5	166.3	167.7	168.1
62.5°	187.4	172.3	162.7	157.6	154.4	153.5	151.2	150.7	149.4	149.8	148.9
65°	163.1	150.7	141.1	137.0	135.6	135.2	133.3	132.0	131.0	132.0	131.0
67.5°	138.8	130.6	123.2	119.1	117.3	116.8	115.5	114.5	115.0	113.6	114.5
70°	115.9	107.7	103.1	100.8	99.9	98.5	98.5	98.5	98.5	97.6	97.1
72.5°	97.6	89.3	86.1	84.8	83.8	83.4	82.0	82.5	82.0	81.6	83.4
75°	77.4	72.4	69.2	67.8	68.7	67.4	66.0	66.9	65.5	66.0	67.8
77.5°	58.6	56.4	54.5	53.6	52.7	51.8	51.8	50.9	50.9	50.9	50.9
80°	42.6	42.2	38.9	38.5	38.5	37.6	37.6	37.6	37.6	37.1	37.6
82.5°	28.4	27.9	27.0	26.6	25.7	26.1	26.1	25.2	25.2	24.7	25.2
85°	16.5	16.5	15.6	15.1	14.7	15.1	14.2	13.7	14.2	13.7	14.2
87.5°	7.8	6.9	7.3	6.9	6.0	6.4	5.5	6.0	5.5	5.0	6.0
90°	13.3	14.0	14.8	15.5	15.9	16.0	16.3	16.6	16.8	17.1	16.8
92.5°	12.7	13.4	14.2	14.9	15.3	15.3	15.3	15.3	15.3	15.3	15.3
95°	13.3	14.0	14.8	15.5	15.9	16.0	16.1	16.2	16.4	16.5	16.4
97.5°	13.1	13.7	14.4	15.0	15.3	15.4	15.5	15.6	15.8	15.9	15.8
100°	22.8	20.7	18.5	16.4	15.3	15.4	15.5	15.6	15.8	15.9	15.8
102.5°	116.0	87.6	59.1	30.7	16.5	16.5	16.5	16.5	16.5	16.5	16.5
105°	178.4	179.6	180.7	181.8	182.4	180.1	175.6	171.1	166.5	162.0	166.5
107.5°	214.3	214.9	215.6	216.2	216.5	216.8	217.3	217.8	218.3	218.8	218.3
110°	250.9	251.2	251.4	251.7	251.8	252.0	252.4	252.7	253.1	253.5	253.1

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	286.4	286.2	286.1	286.0	285.9	286.2	286.7	287.2	287.7	288.2	287.7
115°	320.8	321.1	321.3	321.6	321.7	321.7	321.7	321.7	321.7	321.7	321.7
117.5°	356.8	356.7	356.6	356.5	356.4	356.4	356.4	356.4	356.4	356.4	356.4
120°	389.0	389.3	389.5	389.8	389.9	389.8	389.5	389.3	389.0	388.8	389.0
122.5°	421.3	421.4	421.5	421.6	421.7	421.6	421.3	421.1	420.8	420.6	420.8
125°	450.5	450.9	451.3	451.7	451.9	452.0	452.1	452.2	452.3	452.4	452.3
127.5°	481.3	481.1	481.0	480.9	480.8	480.7	480.6	480.5	480.4	480.3	480.4
130°	508.2	508.4	508.5	508.6	508.7	508.7	508.7	508.7	508.7	508.7	508.7
132.5°	534.9	535.1	535.2	535.3	535.4	535.3	535.2	535.1	534.9	534.8	534.9
135°	558.9	559.2	559.4	559.7	559.8	559.9	560.2	560.5	560.7	561.0	560.7
137.5°	582.8	583.1	583.3	583.6	583.7	583.6	583.5	583.4	583.2	583.1	583.2
140°	604.6	605.0	605.3	605.7	605.9	606.0	606.1	606.2	606.4	606.5	606.4
142.5°	624.9	625.1	625.4	625.7	625.8	625.8	625.8	625.8	625.8	625.8	625.8
145°	644.1	644.2	644.3	644.4	644.5	644.6	644.9	645.2	645.4	645.7	645.4
147.5°	661.1	661.3	661.4	661.5	661.6	661.7	661.8	661.9	662.1	662.2	662.1
150°	677.5	677.5	677.5	677.5	677.5	677.6	677.7	677.8	678.0	678.1	678.0
152.5°	691.4	691.6	691.9	692.2	692.3	692.2	692.1	692.0	691.8	691.7	691.8
155°	703.6	704.1	704.6	705.1	705.3	705.1	704.7	704.4	704.0	703.6	704.0
157.5°	714.5	715.1	715.8	716.4	716.7	716.4	715.8	715.1	714.5	713.9	714.5
160°	724.9	725.6	726.4	727.1	727.5	727.1	726.4	725.6	724.9	724.1	724.9
162.5°	733.4	734.1	734.9	735.6	736.0	735.6	734.7	733.8	733.0	732.1	733.0
165°	741.0	742.0	743.1	744.1	744.6	744.0	742.9	741.7	740.6	739.4	740.6
167.5°	746.8	748.0	749.1	750.2	750.8	750.2	748.9	747.6	746.4	745.1	746.4
170°	752.4	753.4	754.4	755.4	755.9	755.3	754.0	752.7	751.5	750.2	751.5
172.5°	755.8	756.8	757.8	758.8	759.3	758.6	757.2	755.9	754.5	753.1	754.5
175°	758.2	759.4	760.5	761.6	762.2	761.4	759.9	758.4	756.9	755.4	756.9
177.5°	759.8	760.8	761.8	762.8	763.3	762.5	761.0	759.5	758.0	756.5	758.0
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	596.5	595.2	593.3	593.3	591.0	591.0	587.4	581.0	575.5	573.6	574.5
5°	647.4	647.9	645.1	642.8	638.7	635.5	629.5	618.1	614.4	607.1	602.0
7.5°	705.6	703.8	698.7	695.0	694.1	686.8	674.0	660.2	649.2	641.9	631.4
10°	771.1	763.8	756.4	754.2	748.7	736.3	721.6	706.5	691.4	675.3	657.5
12.5°	826.1	811.9	811.4	805.9	795.4	788.5	771.1	749.6	723.5	705.6	685.4
15°	885.2	871.9	860.9	850.8	845.8	825.6	811.0	783.9	752.8	733.5	719.8
17.5°	927.3	921.4	902.6	898.0	891.1	867.8	844.4	817.8	790.8	763.8	726.7
20°	961.2	957.6	945.2	938.8	927.8	909.5	881.1	850.4	819.2	780.7	745.9
22.5°	975.9	971.3	961.2	955.7	948.9	933.3	909.0	874.2	833.4	799.1	761.9
25°	947.0	955.3	952.5	950.2	947.5	938.3	920.0	889.3	849.5	810.5	764.2
27.5°	882.0	896.2	909.9	911.8	916.3	920.0	912.7	890.7	857.2	816.0	765.1
30°	794.5	800.9	828.8	837.1	843.5	866.9	880.6	875.1	849.5	812.3	765.6
32.5°	682.2	699.2	727.6	747.3	764.7	790.8	826.5	840.7	831.6	801.3	755.1
35°	575.9	596.1	629.1	654.3	671.7	708.8	750.9	781.6	793.1	778.0	736.7
37.5°	488.9	513.2	542.5	552.1	572.3	618.1	676.3	718.9	746.8	748.2	716.1
40°	423.4	435.7	459.1	473.7	493.5	531.9	588.8	645.1	687.3	701.5	684.5
42.5°	367.9	377.5	394.9	412.8	430.7	460.0	512.2	564.9	621.7	650.1	649.7
45°	323.9	334.0	345.9	360.6	373.0	404.6	445.8	499.9	548.9	592.9	603.9
47.5°	285.4	294.1	308.8	315.2	323.5	353.3	389.0	439.4	490.2	540.6	553.5
50°	257.0	264.4	274.4	278.6	287.7	309.7	339.0	379.8	436.2	482.5	506.3
52.5°	231.4	236.9	244.7	247.9	254.3	270.8	297.4	329.4	376.2	423.8	457.3
55°	209.4	213.0	218.5	222.2	226.8	241.5	261.2	290.0	330.3	371.6	404.1
57.5°	188.8	191.5	197.0	198.8	202.5	214.0	227.7	252.0	289.1	325.8	357.4
60°	169.5	171.4	174.6	178.7	181.4	189.2	202.1	222.2	252.0	285.4	311.1
62.5°	151.2	153.9	154.9	156.7	159.0	166.3	176.4	191.1	217.2	244.7	271.7
65°	132.4	134.7	136.5	137.0	139.3	144.8	153.9	166.8	183.7	207.6	232.8
67.5°	115.0	116.4	117.3	119.1	121.4	124.2	131.5	141.1	156.7	175.9	196.1
70°	99.0	99.0	100.3	100.8	103.5	106.8	110.0	119.1	132.9	148.4	162.2
72.5°	81.6	83.8	83.4	85.7	85.2	87.5	91.6	97.6	107.7	120.0	133.3
75°	66.4	67.8	67.8	67.8	68.7	70.6	72.8	78.3	86.1	96.2	104.0
77.5°	51.8	52.7	52.7	52.7	53.1	55.0	57.3	60.9	66.4	72.4	77.0
80°	37.1	38.0	38.0	38.9	38.9	39.4	41.7	43.5	46.3	50.9	55.4
82.5°	25.2	25.7	26.6	26.6	26.1	27.0	27.5	29.3	32.1	33.0	36.2
85°	13.7	14.2	14.7	14.7	15.1	16.0	15.6	17.4	17.4	19.2	20.2
87.5°	5.5	6.4	6.4	6.0	6.4	6.4	6.4	7.3	7.8	8.2	7.8
90°	16.6	16.3	16.0	15.9	15.5	14.8	14.0	13.3	12.5	11.5	10.5
92.5°	15.3	15.3	15.3	15.3	14.9	14.2	13.4	12.7	11.9	10.9	9.9
95°	16.2	16.1	16.0	15.9	15.5	14.8	14.0	13.3	12.5	12.4	12.2
97.5°	15.6	15.5	15.4	15.3	15.0	14.4	13.7	13.1	12.5	25.8	39.0
100°	15.6	15.5	15.4	15.3	16.4	18.5	20.7	22.8	25.0	42.4	59.8
102.5°	16.5	16.5	16.5	16.5	30.7	59.1	87.6	116.0	144.4	142.9	141.3
105°	171.1	175.6	180.1	182.4	181.8	180.7	179.6	178.4	177.3	176.7	176.1
107.5°	217.8	217.3	216.8	216.5	216.2	215.6	214.9	214.3	213.7	212.8	211.9
110°	252.7	252.4	252.0	251.8	251.7	251.4	251.2	250.9	250.7	249.9	249.1

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	287.2	286.7	286.2	285.9	286.0	286.1	286.2	286.4	286.5	286.2	286.0
115°	321.7	321.7	321.7	321.7	321.6	321.3	321.1	320.8	320.6	320.7	320.8
117.5°	356.4	356.4	356.4	356.4	356.5	356.6	356.7	356.8	356.9	356.5	356.1
120°	389.3	389.5	389.8	389.9	389.8	389.5	389.3	389.0	388.8	388.9	389.0
122.5°	421.1	421.3	421.6	421.7	421.6	421.5	421.4	421.3	421.2	420.9	420.7
125°	452.2	452.1	452.0	451.9	451.7	451.3	450.9	450.5	450.1	450.4	450.6
127.5°	480.5	480.6	480.7	480.8	480.9	481.0	481.1	481.3	481.4	480.8	480.2
130°	508.7	508.7	508.7	508.7	508.6	508.5	508.4	508.2	508.1	507.7	507.3
132.5°	535.1	535.2	535.3	535.4	535.3	535.2	535.1	534.9	534.8	534.3	533.8
135°	560.5	560.2	559.9	559.8	559.7	559.4	559.2	558.9	558.7	558.2	557.7
137.5°	583.4	583.5	583.6	583.7	583.6	583.3	583.1	582.8	582.6	582.0	581.3
140°	606.2	606.1	606.0	605.9	605.7	605.3	605.0	604.6	604.2	603.9	603.7
142.5°	625.8	625.8	625.8	625.8	625.7	625.4	625.1	624.9	624.6	624.5	624.4
145°	645.2	644.9	644.6	644.5	644.4	644.3	644.2	644.1	644.0	644.0	644.0
147.5°	661.9	661.8	661.7	661.6	661.5	661.4	661.3	661.1	661.0	661.1	661.3
150°	677.8	677.7	677.6	677.5	677.5	677.5	677.5	677.5	677.5	677.6	677.8
152.5°	692.0	692.1	692.2	692.3	692.2	691.9	691.6	691.4	691.1	691.4	691.6
155°	704.4	704.7	705.1	705.3	705.1	704.6	704.1	703.6	703.1	703.5	703.9
157.5°	715.1	715.8	716.4	716.7	716.4	715.8	715.1	714.5	713.9	714.4	714.9
160°	725.6	726.4	727.1	727.5	727.1	726.4	725.6	724.9	724.1	724.2	724.4
162.5°	733.8	734.7	735.6	736.0	735.6	734.9	734.1	733.4	732.6	732.7	732.9
165°	741.7	742.9	744.0	744.6	744.1	743.1	742.0	741.0	740.0	740.0	740.0
167.5°	747.6	748.9	750.2	750.8	750.2	749.1	748.0	746.8	745.7	745.8	746.0
170°	752.7	754.0	755.3	755.9	755.4	754.4	753.4	752.4	751.4	751.3	751.1
172.5°	755.9	757.2	758.6	759.3	758.8	757.8	756.8	755.8	754.8	754.7	754.5
175°	758.4	759.9	761.4	762.2	761.6	760.5	759.4	758.2	757.1	757.0	756.8
177.5°	759.5	761.0	762.5	763.3	762.8	761.8	760.8	759.8	758.8	758.5	758.3
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	570.4	568.6	567.2	567.2	563.1	559.0	556.7	555.8	554.8	551.2	546.1
5°	593.8	587.8	583.7	579.6	572.7	565.4	558.1	553.9	548.0	539.7	533.8
7.5°	619.9	605.7	601.1	596.1	582.3	570.0	559.9	551.2	541.6	531.0	520.5
10°	641.9	626.8	616.7	608.0	590.1	573.6	558.5	545.7	533.3	519.6	506.7
12.5°	663.0	641.4	630.9	618.1	599.3	575.5	555.8	539.7	521.4	507.2	491.6
15°	692.3	656.1	638.7	630.4	605.2	577.3	553.5	529.6	514.5	493.0	479.2
17.5°	696.9	667.6	656.1	635.0	604.8	573.2	545.7	521.9	498.9	479.7	461.8
20°	712.9	674.4	656.1	642.8	603.0	570.9	540.6	509.9	488.0	467.3	447.2
22.5°	723.0	679.5	660.2	639.1	601.1	562.6	526.9	500.3	473.3	452.2	436.2
25°	720.2	676.7	655.2	635.5	589.2	550.7	518.7	484.7	459.5	436.6	415.6
27.5°	718.9	669.8	646.9	624.9	581.4	541.1	500.8	473.3	445.3	418.8	403.2
30°	715.2	661.1	634.6	610.7	565.4	523.2	488.9	456.8	428.8	404.6	383.9
32.5°	702.8	646.5	620.8	595.2	548.0	505.8	471.0	441.2	413.3	388.1	368.4
35°	686.3	629.1	601.1	574.1	526.9	484.3	452.2	421.1	394.9	370.7	351.9
37.5°	669.8	608.9	582.8	551.6	508.1	463.7	430.7	402.7	378.4	353.3	332.6
40°	646.0	585.1	556.2	529.6	478.8	437.1	406.9	381.7	357.8	334.0	316.6
42.5°	613.5	559.0	529.2	499.9	452.2	411.0	381.7	359.2	336.8	317.1	297.8
45°	580.5	527.4	500.8	474.7	422.9	383.9	356.9	336.3	317.5	296.0	280.4
47.5°	540.6	495.7	469.2	443.5	394.5	355.5	330.8	311.6	294.1	276.3	261.6
50°	499.9	460.9	436.6	410.1	363.3	328.1	303.8	287.7	273.5	256.6	244.7
52.5°	455.9	422.0	401.4	375.7	334.5	301.9	277.2	261.2	249.2	236.9	226.3
55°	409.1	384.4	362.4	341.8	302.9	273.5	251.5	237.3	229.1	217.6	208.5
57.5°	367.0	343.2	329.9	306.5	272.6	243.7	226.3	214.4	204.8	197.9	190.6
60°	323.0	303.8	289.1	272.2	242.4	218.1	199.8	192.9	182.8	177.8	174.6
62.5°	280.9	267.1	253.4	240.5	214.0	191.1	177.3	168.6	162.7	157.6	154.9
65°	241.0	228.2	218.5	207.1	185.1	166.8	153.9	147.1	141.1	139.7	136.5
67.5°	202.1	196.6	186.0	176.9	158.1	143.9	134.2	125.5	122.3	121.0	118.2
70°	169.1	162.7	154.4	146.6	132.4	120.0	111.3	108.1	103.5	103.1	99.9
72.5°	139.3	131.5	125.5	119.6	109.0	98.0	93.5	88.9	86.6	84.8	83.4
75°	110.4	104.9	100.8	95.8	86.6	79.3	72.8	71.0	69.6	69.2	68.3
77.5°	82.5	78.8	77.0	71.9	65.5	59.1	56.4	53.6	53.6	52.7	53.1
80°	58.6	56.4	54.1	51.3	45.8	43.1	40.8	38.9	38.0	37.6	38.0
82.5°	37.1	35.7	35.3	33.4	29.8	28.4	26.6	25.2	25.2	25.2	25.2
85°	20.6	20.6	20.6	17.9	16.5	15.1	14.2	13.7	13.7	13.7	14.2
87.5°	8.7	8.7	7.3	7.3	6.9	6.0	5.5	5.5	6.0	6.0	6.4
90°	9.5	8.5	8.0	7.3	5.9	4.5	3.1	1.7	3.1	4.5	5.9
92.5°	8.9	7.9	7.4	7.5	7.8	8.0	8.3	8.5	8.3	8.0	7.8
95°	12.1	12.0	11.9	14.1	18.4	22.7	27.0	31.3	27.0	22.7	18.4
97.5°	52.3	65.6	72.2	70.8	68.0	65.3	62.5	59.7	62.5	65.3	68.0
100°	77.3	94.7	103.4	102.3	100.0	97.7	95.5	93.2	95.5	97.7	100.0
102.5°	139.8	138.3	137.5	136.7	135.2	133.7	132.2	130.7	132.2	133.7	135.2
105°	175.4	174.8	174.5	174.1	173.4	172.6	171.9	171.1	171.9	172.6	173.4
107.5°	211.0	210.1	209.7	209.5	209.1	208.8	208.4	208.0	208.4	208.8	209.1
110°	248.4	247.6	247.2	247.0	246.6	246.3	245.9	245.5	245.9	246.3	246.6

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	285.7	285.4	285.3	284.9	284.2	283.4	282.7	281.9	282.7	283.4	284.2
115°	320.9	321.0	321.1	320.9	320.5	320.2	319.8	319.4	319.8	320.2	320.5
117.5°	355.8	355.4	355.2	355.0	354.5	354.0	353.5	353.0	353.5	354.0	354.5
120°	389.1	389.2	389.3	389.1	388.6	388.1	387.6	387.1	387.6	388.1	388.6
122.5°	420.4	420.1	420.0	419.9	419.6	419.4	419.1	418.9	419.1	419.4	419.6
125°	450.9	451.2	451.3	451.0	450.5	450.0	449.5	449.0	449.5	450.0	450.5
127.5°	479.5	478.9	478.6	478.5	478.4	478.3	478.1	478.0	478.1	478.3	478.4
130°	507.0	506.6	506.4	506.3	506.2	506.1	505.9	505.8	505.9	506.1	506.2
132.5°	533.3	532.8	532.6	532.5	532.2	531.9	531.7	531.4	531.7	531.9	532.2
135°	557.2	556.7	556.4	556.5	556.6	556.7	556.9	557.0	556.9	556.7	556.6
137.5°	580.7	580.0	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7	579.7
140°	603.4	603.1	603.0	602.9	602.6	602.4	602.1	601.9	602.1	602.4	602.6
142.5°	624.3	624.2	624.1	623.8	623.3	622.8	622.3	621.8	622.3	622.8	623.3
145°	644.0	644.0	644.0	643.8	643.4	643.1	642.7	642.3	642.7	643.1	643.4
147.5°	661.4	661.5	661.6	661.2	660.5	659.7	659.0	658.2	659.0	659.7	660.5
150°	677.9	678.0	678.1	677.8	677.3	676.8	676.3	675.8	676.3	676.8	677.3
152.5°	691.9	692.2	692.3	692.1	691.7	691.4	691.0	690.6	691.0	691.4	691.7
155°	704.2	704.6	704.8	704.7	704.6	704.5	704.3	704.2	704.3	704.5	704.6
157.5°	715.4	715.9	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1	716.1
160°	724.5	724.6	724.7	724.9	725.3	725.6	726.0	726.4	726.0	725.6	725.3
162.5°	733.0	733.1	733.2	733.5	734.0	734.5	735.0	735.5	735.0	734.5	734.0
165°	740.0	740.0	740.0	740.3	741.0	741.6	742.3	742.9	742.3	741.6	741.0
167.5°	746.1	746.2	746.3	746.6	747.2	747.9	748.5	749.1	748.5	747.9	747.2
170°	751.0	750.9	750.8	751.2	751.9	752.7	753.4	754.2	753.4	752.7	751.9
172.5°	754.4	754.3	754.2	754.6	755.3	756.1	756.8	757.6	756.8	756.1	755.3
175°	756.7	756.6	756.5	756.9	757.6	758.4	759.1	759.9	759.1	758.4	757.6
177.5°	758.0	757.7	757.6	758.0	758.9	759.8	760.7	761.6	760.7	759.8	758.9
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	544.8	542.9	543.8	539.3	535.1	529.2	524.1	523.2	522.3	525.1	523.2
5°	529.2	526.9	524.6	519.1	510.9	505.8	498.5	498.0	495.3	491.2	492.1
7.5°	512.2	510.9	507.7	498.9	491.6	482.9	477.0	471.9	469.6	466.0	464.6
10°	498.5	493.5	490.7	481.1	472.4	463.2	455.4	451.8	447.6	444.4	442.1
12.5°	479.7	478.3	470.5	462.8	455.4	444.9	438.9	428.4	422.9	425.6	424.7
15°	467.3	460.9	459.1	448.1	435.7	428.8	417.9	411.0	408.7	404.6	399.5
17.5°	450.8	446.7	440.3	430.2	416.0	406.4	398.6	392.2	389.4	383.9	379.8
20°	435.3	428.4	423.4	414.2	400.4	388.1	378.4	374.3	367.5	362.9	360.6
22.5°	421.1	416.0	408.7	394.9	383.0	371.1	359.7	353.7	347.3	344.5	340.9
25°	403.6	395.4	390.4	375.2	362.4	352.8	342.3	334.5	330.8	326.2	325.3
27.5°	386.7	378.9	373.0	359.7	344.1	331.7	325.3	319.8	313.4	313.4	311.1
30°	369.7	364.2	355.1	342.3	327.6	315.7	308.3	303.3	301.0	299.2	298.7
32.5°	352.8	345.5	340.0	322.6	311.6	300.6	295.1	290.9	288.2	287.7	288.2
35°	335.4	327.1	321.6	306.1	295.1	285.0	282.7	279.0	277.7	277.2	279.5
37.5°	317.1	310.6	303.8	290.9	278.6	272.6	268.0	266.7	266.2	268.9	269.9
40°	300.1	294.6	288.2	274.4	265.3	258.9	256.6	255.2	257.0	259.8	261.2
42.5°	284.1	276.3	271.2	258.9	250.6	247.0	244.2	244.2	246.0	249.2	251.5
45°	267.1	261.2	256.1	245.1	237.8	233.7	233.2	233.7	236.0	238.2	241.0
47.5°	250.6	244.7	239.2	230.0	223.6	221.3	220.8	221.3	225.0	228.2	231.4
50°	235.5	229.1	224.0	215.3	210.3	207.6	208.0	210.3	213.0	217.6	221.8
52.5°	217.6	213.0	208.5	200.7	196.1	194.3	195.6	197.5	202.5	205.7	210.8
55°	200.2	196.1	192.4	186.5	182.8	181.4	182.4	185.1	189.2	194.7	200.7
57.5°	184.2	179.6	175.9	171.8	167.7	168.1	168.6	172.3	177.3	182.4	189.2
60°	166.3	163.6	160.4	155.3	153.5	153.5	154.9	159.0	163.6	171.8	177.8
62.5°	150.3	146.6	144.3	141.1	138.4	138.8	142.0	145.7	151.2	158.1	165.9
65°	133.8	129.7	127.8	125.1	124.2	124.6	126.9	132.4	138.4	144.3	151.7
67.5°	115.5	114.1	112.3	109.5	110.4	110.9	113.2	117.8	124.2	130.1	138.4
70°	99.9	97.1	96.7	94.4	94.4	95.8	100.3	103.5	109.5	115.9	124.6
72.5°	83.4	81.1	81.1	79.3	80.6	82.0	84.3	88.9	94.4	100.8	108.1
75°	66.4	65.5	66.4	65.5	65.5	67.8	70.6	74.2	80.2	87.1	93.0
77.5°	51.3	51.3	50.9	52.2	52.2	53.6	57.3	60.9	65.5	71.0	77.4
80°	37.6	37.6	37.6	38.9	40.3	40.3	42.6	47.2	51.3	55.0	60.9
82.5°	25.7	25.7	25.7	26.6	28.4	28.4	31.2	33.9	38.5	41.7	44.4
85°	15.6	15.6	15.1	16.0	16.5	17.9	20.2	22.0	24.3	27.0	29.8
87.5°	6.9	6.9	7.3	7.8	8.2	9.2	10.1	11.0	13.3	14.2	15.6
90°	7.3	8.0	8.5	9.5	10.5	11.5	12.5	13.3	14.0	14.8	15.5
92.5°	7.5	7.4	7.9	8.9	9.9	10.9	11.9	12.7	13.4	14.2	14.9
95°	14.1	11.9	12.0	12.1	12.2	12.4	12.5	13.3	14.0	14.8	15.5
97.5°	70.8	72.2	65.6	52.3	39.0	25.8	12.5	13.1	13.7	14.4	15.0
100°	102.3	103.4	94.7	77.3	59.8	42.4	25.0	22.8	20.7	18.5	16.4
102.5°	136.7	137.5	138.3	139.8	141.3	142.9	144.4	116.0	87.6	59.1	30.7
105°	174.1	174.5	174.8	175.4	176.1	176.7	177.3	178.4	179.6	180.7	181.8
107.5°	209.5	209.7	210.1	211.0	211.9	212.8	213.7	214.3	214.9	215.6	216.2
110°	247.0	247.2	247.6	248.4	249.1	249.9	250.7	250.9	251.2	251.4	251.7

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	284.9	285.3	285.4	285.7	286.0	286.2	286.5	286.4	286.2	286.1	286.0
115°	320.9	321.1	321.0	320.9	320.8	320.7	320.6	320.8	321.1	321.3	321.6
117.5°	355.0	355.2	355.4	355.8	356.1	356.5	356.9	356.8	356.7	356.6	356.5
120°	389.1	389.3	389.2	389.1	389.0	388.9	388.8	389.0	389.3	389.5	389.8
122.5°	419.9	420.0	420.1	420.4	420.7	420.9	421.2	421.3	421.4	421.5	421.6
125°	451.0	451.3	451.2	450.9	450.6	450.4	450.1	450.5	450.9	451.3	451.7
127.5°	478.5	478.6	478.9	479.5	480.2	480.8	481.4	481.3	481.1	481.0	480.9
130°	506.3	506.4	506.6	507.0	507.3	507.7	508.1	508.2	508.4	508.5	508.6
132.5°	532.5	532.6	532.8	533.3	533.8	534.3	534.8	534.9	535.1	535.2	535.3
135°	556.5	556.4	556.7	557.2	557.7	558.2	558.7	558.9	559.2	559.4	559.7
137.5°	579.7	579.7	580.0	580.7	581.3	582.0	582.6	582.8	583.1	583.3	583.6
140°	602.9	603.0	603.1	603.4	603.7	603.9	604.2	604.6	605.0	605.3	605.7
142.5°	623.8	624.1	624.2	624.3	624.4	624.5	624.6	624.9	625.1	625.4	625.7
145°	643.8	644.0	644.0	644.0	644.0	644.0	644.0	644.1	644.2	644.3	644.4
147.5°	661.2	661.6	661.5	661.4	661.3	661.1	661.0	661.1	661.3	661.4	661.5
150°	677.8	678.1	678.0	677.9	677.8	677.6	677.5	677.5	677.5	677.5	677.5
152.5°	692.1	692.3	692.2	691.9	691.6	691.4	691.1	691.4	691.6	691.9	692.2
155°	704.7	704.8	704.6	704.2	703.9	703.5	703.1	703.6	704.1	704.6	705.1
157.5°	716.1	716.1	715.9	715.4	714.9	714.4	713.9	714.5	715.1	715.8	716.4
160°	724.9	724.7	724.6	724.5	724.4	724.2	724.1	724.9	725.6	726.4	727.1
162.5°	733.5	733.2	733.1	733.0	732.9	732.7	732.6	733.4	734.1	734.9	735.6
165°	740.3	740.0	740.0	740.0	740.0	740.0	740.0	741.0	742.0	743.1	744.1
167.5°	746.6	746.3	746.2	746.1	746.0	745.8	745.7	746.8	748.0	749.1	750.2
170°	751.2	750.8	750.9	751.0	751.1	751.3	751.4	752.4	753.4	754.4	755.4
172.5°	754.6	754.2	754.3	754.4	754.5	754.7	754.8	755.8	756.8	757.8	758.8
175°	756.9	756.5	756.6	756.7	756.8	757.0	757.1	758.2	759.4	760.5	761.6
177.5°	758.0	757.6	757.7	758.0	758.3	758.5	758.8	759.8	760.8	761.8	762.8
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	521.9	521.4	519.1	520.0	517.3	518.2	519.6	520.0	521.9	520.5	520.0
5°	489.8	488.9	487.5	486.1	485.7	487.5	484.3	485.2	486.1	487.5	489.3
7.5°	463.7	463.2	461.8	459.5	458.6	457.7	458.2	461.4	460.9	460.5	463.7
10°	439.8	440.3	437.6	437.1	434.3	433.9	434.3	435.3	436.6	438.5	438.9
12.5°	415.1	421.1	416.0	414.2	410.1	412.4	413.3	409.1	411.4	412.8	419.7
15°	399.5	396.8	393.6	393.6	391.7	390.8	388.5	391.7	393.6	396.3	395.4
17.5°	378.0	373.4	371.6	369.7	370.2	372.0	367.0	374.3	374.3	375.7	373.4
20°	359.2	355.5	353.3	352.3	351.0	350.0	349.6	351.4	354.2	355.1	357.4
22.5°	339.5	339.5	335.8	334.5	333.5	332.2	334.5	333.1	334.9	336.8	340.4
25°	323.0	323.0	321.6	319.8	318.4	317.5	318.9	318.4	319.8	322.1	323.0
27.5°	309.7	308.3	307.9	307.4	307.0	307.4	307.0	308.3	309.7	310.2	309.3
30°	298.3	296.9	297.4	297.4	297.8	297.4	296.9	298.3	298.7	297.8	298.3
32.5°	287.7	287.7	288.6	289.1	289.1	289.6	290.0	289.1	289.6	288.2	288.6
35°	279.0	279.9	280.9	281.3	281.8	281.3	282.2	281.8	280.9	279.9	279.5
37.5°	270.3	271.2	273.1	273.5	274.9	275.4	274.4	274.4	274.0	272.2	271.2
40°	261.2	262.1	264.4	265.7	266.7	268.0	267.1	267.1	265.3	263.4	262.1
42.5°	252.5	254.3	256.6	258.0	259.8	259.8	259.8	258.9	256.6	254.7	253.4
45°	243.7	244.2	247.4	249.7	251.5	251.5	251.5	250.2	248.8	245.1	243.3
47.5°	234.1	235.5	239.2	241.5	243.3	243.7	243.7	242.4	239.6	236.4	234.1
50°	223.6	225.9	230.0	233.2	235.5	236.4	235.0	234.1	230.9	227.3	224.5
52.5°	213.5	216.3	221.3	224.0	227.3	227.7	227.3	225.9	222.2	217.2	214.9
55°	203.4	205.7	211.2	215.8	218.5	219.5	218.5	216.3	211.7	206.6	204.3
57.5°	192.4	195.6	201.6	206.2	209.4	209.8	208.9	206.6	203.0	196.6	193.3
60°	181.0	185.1	191.1	195.6	199.8	200.2	199.3	196.1	191.5	185.1	182.4
62.5°	169.5	172.7	179.6	184.6	187.9	190.1	188.3	185.1	180.5	174.1	170.0
65°	156.2	160.8	166.8	171.4	175.0	175.5	174.6	171.8	166.8	159.9	156.7
67.5°	143.4	146.6	152.6	158.5	159.9	161.3	159.9	157.2	153.0	147.1	142.5
70°	127.8	130.6	137.9	142.0	143.9	145.2	144.3	141.6	137.9	132.4	128.7
72.5°	112.3	114.5	121.4	124.6	128.3	127.8	127.4	125.5	120.5	116.8	114.5
75°	95.8	98.5	103.1	107.2	108.6	108.6	108.6	107.2	104.0	98.0	95.8
77.5°	80.6	82.0	85.7	88.0	89.3	89.8	89.3	87.1	85.2	81.1	79.7
80°	61.9	65.5	68.3	68.7	70.6	70.6	70.6	69.6	67.8	63.7	63.2
82.5°	46.7	47.6	50.4	51.8	52.7	52.2	52.2	50.4	49.9	47.6	46.7
85°	31.6	33.0	32.5	34.4	34.8	33.9	33.9	34.8	32.5	33.0	31.6
87.5°	17.4	17.4	18.3	17.9	19.7	19.7	18.8	19.2	18.3	17.9	17.4
90°	15.9	16.0	16.3	16.6	16.8	17.1	16.8	16.6	16.3	16.0	15.9
92.5°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
95°	15.9	16.0	16.1	16.2	16.4	16.5	16.4	16.2	16.1	16.0	15.9
97.5°	15.3	15.4	15.5	15.6	15.8	15.9	15.8	15.6	15.5	15.4	15.3
100°	15.3	15.4	15.5	15.6	15.8	15.9	15.8	15.6	15.5	15.4	15.3
102.5°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
105°	182.4	180.1	175.6	171.1	166.5	162.0	166.5	171.1	175.6	180.1	182.4
107.5°	216.5	216.8	217.3	217.8	218.3	218.8	218.3	217.8	217.3	216.8	216.5
110°	251.8	252.0	252.4	252.7	253.1	253.5	253.1	252.7	252.4	252.0	251.8

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	285.9	286.2	286.7	287.2	287.7	288.2	287.7	287.2	286.7	286.2	285.9
115°	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7	321.7
117.5°	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4	356.4
120°	389.9	389.8	389.5	389.3	389.0	388.8	389.0	389.3	389.5	389.8	389.9
122.5°	421.7	421.6	421.3	421.1	420.8	420.6	420.8	421.1	421.3	421.6	421.7
125°	451.9	452.0	452.1	452.2	452.3	452.4	452.3	452.2	452.1	452.0	451.9
127.5°	480.8	480.7	480.6	480.5	480.4	480.3	480.4	480.5	480.6	480.7	480.8
130°	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7	508.7
132.5°	535.4	535.3	535.2	535.1	534.9	534.8	534.9	535.1	535.2	535.3	535.4
135°	559.8	559.9	560.2	560.5	560.7	561.0	560.7	560.5	560.2	559.9	559.8
137.5°	583.7	583.6	583.5	583.4	583.2	583.1	583.2	583.4	583.5	583.6	583.7
140°	605.9	606.0	606.1	606.2	606.4	606.5	606.4	606.2	606.1	606.0	605.9
142.5°	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8
145°	644.5	644.6	644.9	645.2	645.4	645.7	645.4	645.2	644.9	644.6	644.5
147.5°	661.6	661.7	661.8	661.9	662.1	662.2	662.1	661.9	661.8	661.7	661.6
150°	677.5	677.6	677.7	677.8	678.0	678.1	678.0	677.8	677.7	677.6	677.5
152.5°	692.3	692.2	692.1	692.0	691.8	691.7	691.8	692.0	692.1	692.2	692.3
155°	705.3	705.1	704.7	704.4	704.0	703.6	704.0	704.4	704.7	705.1	705.3
157.5°	716.7	716.4	715.8	715.1	714.5	713.9	714.5	715.1	715.8	716.4	716.7
160°	727.5	727.1	726.4	725.6	724.9	724.1	724.9	725.6	726.4	727.1	727.5
162.5°	736.0	735.6	734.7	733.8	733.0	732.1	733.0	733.8	734.7	735.6	736.0
165°	744.6	744.0	742.9	741.7	740.6	739.4	740.6	741.7	742.9	744.0	744.6
167.5°	750.8	750.2	748.9	747.6	746.4	745.1	746.4	747.6	748.9	750.2	750.8
170°	755.9	755.3	754.0	752.7	751.5	750.2	751.5	752.7	754.0	755.3	755.9
172.5°	759.3	758.6	757.2	755.9	754.5	753.1	754.5	755.9	757.2	758.6	759.3
175°	762.2	761.4	759.9	758.4	756.9	755.4	756.9	758.4	759.9	761.4	762.2
177.5°	763.3	762.5	761.0	759.5	758.0	756.5	758.0	759.5	761.0	762.5	763.3
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0	553.0
2.5°	520.0	522.8	520.0	521.9	522.8	525.1	526.0	530.1	531.5	534.7	534.7
5°	488.9	490.2	490.7	492.5	494.4	498.9	502.2	508.1	515.0	515.9	520.0
7.5°	463.7	466.0	469.6	468.3	471.5	478.3	482.5	489.8	496.7	500.3	505.4
10°	441.2	444.0	445.3	446.7	452.7	458.6	465.0	470.1	479.2	484.7	488.9
12.5°	422.9	420.6	423.4	428.4	435.3	438.9	447.6	455.4	462.3	468.3	471.9
15°	399.1	400.9	403.6	412.4	414.2	423.4	426.6	435.3	448.1	453.6	458.2
17.5°	376.2	382.1	387.6	390.8	396.3	403.6	412.8	422.4	430.7	437.1	442.6
20°	357.8	363.8	367.0	369.3	374.8	384.9	393.6	405.5	416.0	421.1	428.4
22.5°	343.2	343.2	347.8	354.6	357.8	367.5	374.8	387.6	399.1	405.5	412.4
25°	324.8	327.6	331.3	337.2	341.8	349.6	360.1	371.1	383.5	389.0	397.7
27.5°	309.7	312.9	318.0	319.3	323.9	330.8	341.8	353.7	366.5	372.5	379.8
30°	298.3	300.1	301.9	304.7	308.8	314.8	323.9	334.5	350.0	354.6	363.8
32.5°	288.2	289.1	290.0	292.3	294.6	300.6	307.9	319.3	332.2	339.0	347.3
35°	279.0	278.1	278.6	279.9	282.2	284.5	292.3	301.9	313.8	322.1	328.5
37.5°	270.3	268.5	268.0	268.0	268.9	271.7	277.7	285.9	298.7	305.6	312.0
40°	260.7	258.9	258.0	257.5	257.0	258.9	263.4	271.7	281.8	288.2	295.5
42.5°	251.5	249.7	247.4	247.0	246.0	247.0	250.2	258.0	266.7	273.1	279.0
45°	242.4	239.2	236.4	234.6	235.0	233.7	236.0	241.9	252.0	256.1	262.1
47.5°	232.3	228.6	225.0	223.1	221.3	222.2	223.1	228.2	236.9	241.0	247.0
50°	222.7	217.6	213.5	211.2	209.8	208.9	209.8	214.9	221.3	225.0	230.0
52.5°	211.7	206.6	202.5	198.8	197.0	195.6	196.1	200.7	206.6	210.3	215.3
55°	201.6	195.2	189.7	185.1	183.7	183.3	182.8	186.0	191.1	194.7	198.8
57.5°	190.1	183.7	177.8	172.3	169.5	169.1	169.1	170.0	176.4	179.1	181.4
60°	178.7	171.8	165.4	160.4	156.2	154.9	154.4	156.2	159.4	162.2	165.4
62.5°	165.9	159.0	151.2	146.6	142.5	138.8	140.2	140.7	145.2	146.6	149.4
65°	153.5	145.7	139.3	132.0	127.4	125.1	124.2	125.1	128.7	129.2	131.0
67.5°	139.3	132.0	124.2	119.1	115.0	110.9	110.0	110.0	111.8	113.2	115.5
70°	125.5	118.2	109.5	104.0	99.9	96.2	94.8	94.4	95.8	96.7	99.0
72.5°	109.5	102.2	95.8	89.8	84.8	82.0	80.6	79.7	81.1	82.0	82.5
75°	92.6	86.6	80.2	74.2	71.0	68.3	66.4	65.1	66.0	66.0	66.0
77.5°	76.5	70.6	65.5	61.4	57.3	54.1	52.7	51.3	51.8	51.8	52.7
80°	59.6	55.4	51.3	47.6	44.0	41.2	40.3	38.9	38.0	37.6	37.6
82.5°	44.0	40.8	37.1	33.9	32.1	29.3	28.4	26.6	26.6	26.1	26.1
85°	29.3	27.5	23.8	21.5	20.2	18.8	17.9	17.0	15.6	15.6	15.1
87.5°	15.6	14.7	13.7	11.0	11.0	9.6	9.2	8.7	7.3	7.8	7.8
90°	15.5	14.8	14.0	13.3	12.5	11.5	10.5	9.5	8.5	8.0	7.3
92.5°	14.9	14.2	13.4	12.7	11.9	10.9	9.9	8.9	7.9	7.4	7.5
95°	15.5	14.8	14.0	13.3	12.5	12.4	12.2	12.1	12.0	11.9	14.1
97.5°	15.0	14.4	13.7	13.1	12.5	25.8	39.0	52.3	65.6	72.2	70.8
100°	16.4	18.5	20.7	22.8	25.0	42.4	59.8	77.3	94.7	103.4	102.3
102.5°	30.7	59.1	87.6	116.0	144.4	142.9	141.3	139.8	138.3	137.5	136.7
105°	181.8	180.7	179.6	178.4	177.3	176.7	176.1	175.4	174.8	174.5	174.1
107.5°	216.2	215.6	214.9	214.3	213.7	212.8	211.9	211.0	210.1	209.7	209.5
110°	251.7	251.4	251.2	250.9	250.7	249.9	249.1	248.4	247.6	247.2	247.0

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	286.0	286.1	286.2	286.4	286.5	286.2	286.0	285.7	285.4	285.3	284.9
115°	321.6	321.3	321.1	320.8	320.6	320.7	320.8	320.9	321.0	321.1	320.9
117.5°	356.5	356.6	356.7	356.8	356.9	356.5	356.1	355.8	355.4	355.2	355.0
120°	389.8	389.5	389.3	389.0	388.8	388.9	389.0	389.1	389.2	389.3	389.1
122.5°	421.6	421.5	421.4	421.3	421.2	420.9	420.7	420.4	420.1	420.0	419.9
125°	451.7	451.3	450.9	450.5	450.1	450.4	450.6	450.9	451.2	451.3	451.0
127.5°	480.9	481.0	481.1	481.3	481.4	480.8	480.2	479.5	478.9	478.6	478.5
130°	508.6	508.5	508.4	508.2	508.1	507.7	507.3	507.0	506.6	506.4	506.3
132.5°	535.3	535.2	535.1	534.9	534.8	534.3	533.8	533.3	532.8	532.6	532.5
135°	559.7	559.4	559.2	558.9	558.7	558.2	557.7	557.2	556.7	556.4	556.5
137.5°	583.6	583.3	583.1	582.8	582.6	582.0	581.3	580.7	580.0	579.7	579.7
140°	605.7	605.3	605.0	604.6	604.2	603.9	603.7	603.4	603.1	603.0	602.9
142.5°	625.7	625.4	625.1	624.9	624.6	624.5	624.4	624.3	624.2	624.1	623.8
145°	644.4	644.3	644.2	644.1	644.0	644.0	644.0	644.0	644.0	644.0	643.8
147.5°	661.5	661.4	661.3	661.1	661.0	661.1	661.3	661.4	661.5	661.6	661.2
150°	677.5	677.5	677.5	677.5	677.5	677.6	677.8	677.9	678.0	678.1	677.8
152.5°	692.2	691.9	691.6	691.4	691.1	691.4	691.6	691.9	692.2	692.3	692.1
155°	705.1	704.6	704.1	703.6	703.1	703.5	703.9	704.2	704.6	704.8	704.7
157.5°	716.4	715.8	715.1	714.5	713.9	714.4	714.9	715.4	715.9	716.1	716.1
160°	727.1	726.4	725.6	724.9	724.1	724.2	724.4	724.5	724.6	724.7	724.9
162.5°	735.6	734.9	734.1	733.4	732.6	732.7	732.9	733.0	733.1	733.2	733.5
165°	744.1	743.1	742.0	741.0	740.0	740.0	740.0	740.0	740.0	740.0	740.3
167.5°	750.2	749.1	748.0	746.8	745.7	745.8	746.0	746.1	746.2	746.3	746.6
170°	755.4	754.4	753.4	752.4	751.4	751.3	751.1	751.0	750.9	750.8	751.2
172.5°	758.8	757.8	756.8	755.8	754.8	754.7	754.5	754.4	754.3	754.2	754.6
175°	761.6	760.5	759.4	758.2	757.1	757.0	756.8	756.7	756.6	756.5	756.9
177.5°	762.8	761.8	760.8	759.8	758.8	758.5	758.3	758.0	757.7	757.6	758.0
180°	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9	759.9

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	553.0	553.0	553.0	553.0
2.5°	537.9	542.5	546.6	553.0
5°	526.0	532.4	541.1	550.7
7.5°	512.2	522.3	533.8	547.1
10°	499.4	510.9	525.5	541.6
12.5°	486.1	499.9	515.9	533.3
15°	471.0	484.7	502.6	526.0
17.5°	457.3	473.7	493.0	517.7
20°	441.2	456.8	477.9	506.3
22.5°	427.0	444.9	468.3	493.0
25°	411.4	427.0	450.4	480.2
27.5°	395.9	415.1	437.6	466.4
30°	380.7	396.8	421.1	451.3
32.5°	364.2	383.5	405.9	434.3
35°	346.4	364.7	385.8	416.5
37.5°	330.3	348.2	369.7	396.8
40°	312.5	331.3	351.0	378.0
42.5°	295.1	312.0	331.7	356.5
45°	278.1	292.8	310.6	332.2
47.5°	260.7	273.1	289.6	308.8
50°	241.9	255.2	267.6	283.6
52.5°	224.5	236.0	246.0	259.3
55°	207.6	215.3	223.6	233.7
57.5°	189.7	195.6	201.6	212.1
60°	171.8	177.3	180.5	187.4
62.5°	154.4	156.7	160.8	164.9
65°	135.2	138.4	140.7	145.7
67.5°	117.8	119.1	121.4	124.6
70°	99.4	102.6	103.5	105.8
72.5°	83.8	85.2	86.1	86.6
75°	66.4	67.8	68.7	71.5
77.5°	52.2	51.8	53.6	54.1
80°	38.5	37.1	37.6	39.4
82.5°	25.2	25.7	25.2	25.2
85°	15.6	15.1	14.2	14.7
87.5°	6.9	6.9	6.4	6.4
90°	5.9	4.5	3.1	1.7
92.5°	7.8	8.0	8.3	8.5
95°	18.4	22.7	27.0	31.3
97.5°	68.0	65.3	62.5	59.7
100°	100.0	97.7	95.5	93.2
102.5°	135.2	133.7	132.2	130.7
105°	173.4	172.6	171.9	171.1
107.5°	209.1	208.8	208.4	208.0
110°	246.6	246.3	245.9	245.5

TEST NUMBER: P1001292

CATALOG NUMBER: SA4XXDIP-B350D590UB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	284.2	283.4	282.7	281.9
115°	320.5	320.2	319.8	319.4
117.5°	354.5	354.0	353.5	353.0
120°	388.6	388.1	387.6	387.1
122.5°	419.6	419.4	419.1	418.9
125°	450.5	450.0	449.5	449.0
127.5°	478.4	478.3	478.1	478.0
130°	506.2	506.1	505.9	505.8
132.5°	532.2	531.9	531.7	531.4
135°	556.6	556.7	556.9	557.0
137.5°	579.7	579.7	579.7	579.7
140°	602.6	602.4	602.1	601.9
142.5°	623.3	622.8	622.3	621.8
145°	643.4	643.1	642.7	642.3
147.5°	660.5	659.7	659.0	658.2
150°	677.3	676.8	676.3	675.8
152.5°	691.7	691.4	691.0	690.6
155°	704.6	704.5	704.3	704.2
157.5°	716.1	716.1	716.1	716.1
160°	725.3	725.6	726.0	726.4
162.5°	734.0	734.5	735.0	735.5
165°	741.0	741.6	742.3	742.9
167.5°	747.2	747.9	748.5	749.1
170°	751.9	752.7	753.4	754.2
172.5°	755.3	756.1	756.8	757.6
175°	757.6	758.4	759.1	759.9
177.5°	758.9	759.8	760.7	761.6
180°	759.9	759.9	759.9	759.9

(END OF REPORT)