

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P998208

Luminaire Tested: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998208
REPORT IS A COMBINATION OF REPORTS P983948 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

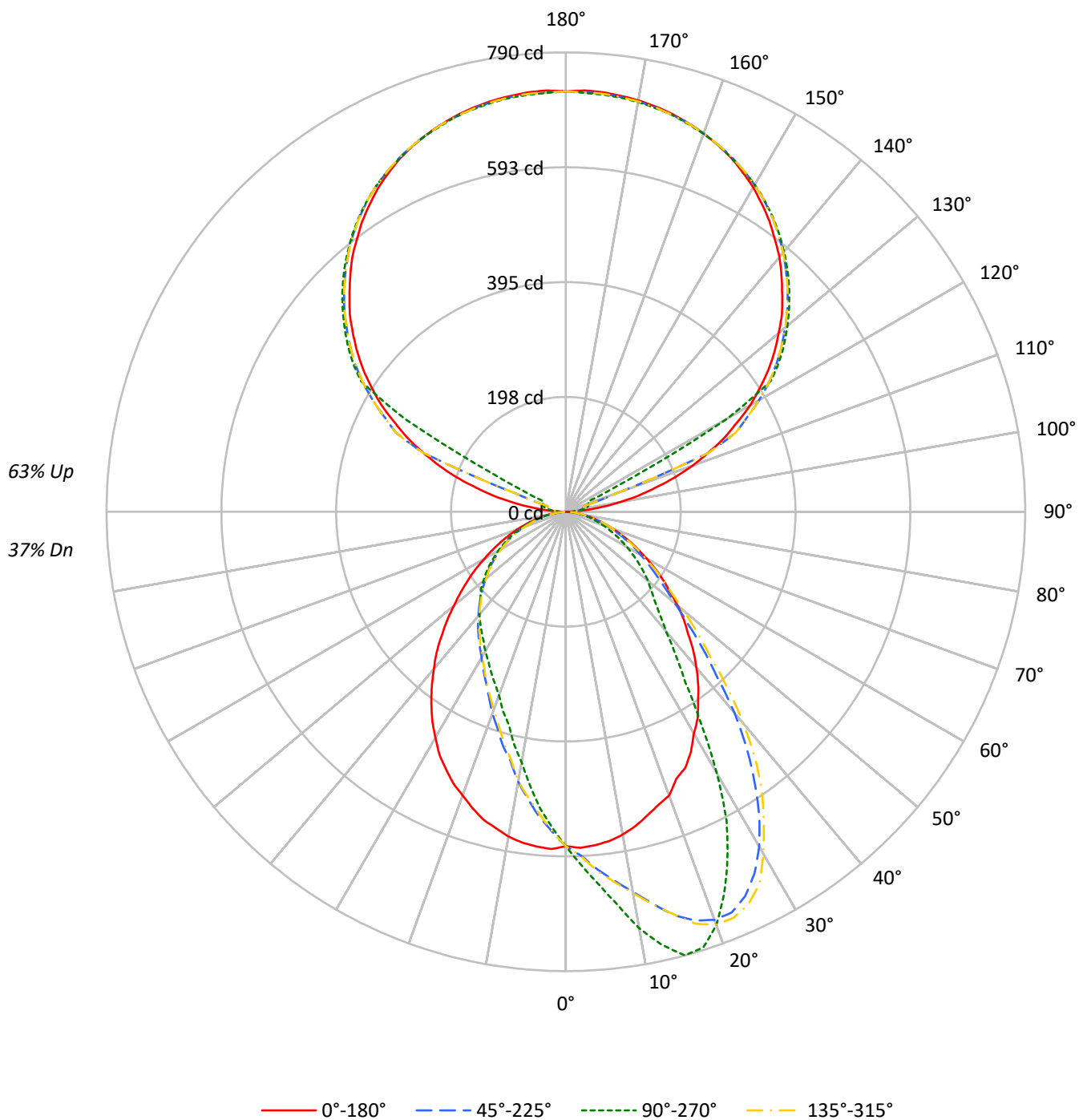
Lumens per Lamp: N/A
Luminaire Lumens: 3389.0 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	91	88	84	86	83	80	77	67	65	63	53	52	50	40	39	38
2	87	80	74	69	79	73	68	64	59	56	53	47	45	43	36	34	33
3	80	71	64	58	72	64	58	54	53	48	45	42	39	36	32	30	28
4	73	63	55	49	66	57	51	46	47	42	39	38	34	32	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	28	26	24	22
6	62	50	43	37	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	38	32	52	42	35	30	35	30	26	28	24	22	22	19	17
8	53	41	34	29	48	38	31	27	32	27	23	26	22	19	20	18	16
9	49	38	30	26	45	35	28	24	29	24	21	24	20	17	19	16	14
10	46	35	28	23	42	32	26	21	27	22	19	22	18	16	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9105	9105	9105	9105
5°	9126	9708	9161	7724
10°	9021	10597	9077	6367
15°	8802	11178	8924	5364
20°	8664	10495	8664	4662
25°	8389	9016	8427	4169
30°	7933	7088	8085	3777
35°	7532	4901	7657	3455
40°	7070	3701	7148	3199
45°	6497	3040	6604	2922
50°	6005	2670	6017	2675
55°	5441	2274	5478	2407
60°	4843	1899	4910	2101
65°	4305	1545	4383	1794
70°	3772	1212	3867	1447
75°	3166	880	3289	1049
80°	2467	557	2651	622
85°	1624	280	1752	207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 157.5°

Vertical Angle: 45°

Luminance: 9412 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	1.6
10°-20°	159.5	4.7
20°-30°	231.4	6.8
30°-40°	244.0	7.2
40°-50°	215.9	6.4
50°-60°	172.4	5.1
60°-70°	117.1	3.5
70°-80°	59.9	1.8
80°-90°	15.4	0.5
90°-100°	23.8	0.7
100°-110°	88.8	2.6
110°-120°	235.6	7.0
120°-130°	390.8	11.5
130°-140°	415.1	12.2
140°-150°	385.8	11.4
150°-160°	310.2	9.2
160°-170°	199.9	5.9
170°-180°	68.8	2.0
0°-30°	445.7	13.1
0°-40°	689.6	20.3
0°-60°	1077.9	31.8
0°-90°	1270.3	37.5
90°-120°	348.3	10.3
90°-150°	1539.9	45.4
90°-180°	2119.0	62.5
0°-180°	3389.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	575	575	575	575	575	
5°	576	642	578	511	576	55
15°	541	790	548	379	541	153
25°	486	658	488	304	486	222
35°	397	358	403	252	397	248
45°	298	216	302	207	298	231
55°	204	152	206	160	204	182
65°	121	93	123	108	121	120
75°	57	46	59	55	57	61
85°	12	12	12	9	12	13
90°	0	14	0	14	0	3
95°	34	22	34	22	34	40
105°	159	40	159	40	159	170
115°	301	43	301	43	301	296
125°	425	447	425	447	425	379
135°	526	543	526	543	526	406
145°	610	620	610	620	610	382
155°	672	672	672	672	672	310
165°	708	706	708	706	708	200
175°	724	720	724	720	724	69
180°	723	723	723	723	723	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	578.3	579.6	581.8	582.2	586.7	590.2	594.2	594.2	595.5	595.1	591.5
5°	575.6	579.6	585.3	590.2	598.2	601.7	607.0	611.0	614.5	617.2	616.7
7.5°	571.2	578.3	586.7	595.9	606.6	612.7	620.3	627.3	632.2	636.6	639.7
10°	563.7	575.6	587.1	599.5	613.2	621.6	630.4	639.7	647.2	655.6	663.6
12.5°	553.5	570.7	584.9	601.3	618.1	627.3	641.5	648.6	663.1	684.4	690.1
15°	540.7	564.1	577.4	598.2	620.3	627.8	647.2	658.7	688.8	702.1	718.0
17.5°	528.7	554.8	572.5	596.4	618.1	632.6	651.7	675.1	700.3	719.3	737.0
20°	519.0	544.2	565.4	592.0	619.4	637.9	657.8	686.1	713.5	733.0	746.7
22.5°	496.9	529.2	553.9	583.6	616.7	642.4	661.4	692.3	721.9	733.9	745.8
25°	485.9	513.7	542.5	576.1	615.0	645.5	661.8	696.3	722.4	726.8	729.5
27.5°	465.5	496.9	530.5	569.0	614.5	640.2	660.9	692.3	713.1	710.0	702.1
30°	440.3	478.8	515.9	557.5	608.3	636.2	655.6	684.4	695.0	679.1	664.9
32.5°	421.8	458.0	499.1	547.3	601.3	627.8	646.8	669.3	671.5	642.8	618.9
35°	396.6	436.8	483.2	534.1	589.3	613.2	630.9	644.6	634.0	593.7	565.4
37.5°	374.0	413.8	463.3	515.0	573.0	596.4	610.5	612.7	586.7	551.3	509.7
40°	349.3	390.4	442.1	496.5	554.8	575.2	584.0	577.4	539.8	498.7	450.5
42.5°	324.5	365.2	420.9	476.6	531.8	549.1	552.6	534.5	488.5	440.3	384.6
45°	297.5	340.0	395.7	451.8	505.3	515.0	515.5	489.4	435.0	384.6	332.9
47.5°	275.4	314.8	370.0	426.2	471.3	477.9	475.3	445.2	386.0	329.4	284.3
50°	251.1	288.7	343.5	398.8	437.2	439.0	432.4	389.5	331.6	279.8	244.0
52.5°	225.0	263.0	313.4	366.5	401.0	398.3	385.5	339.5	285.2	242.3	214.9
55°	204.2	237.8	285.2	336.9	361.2	353.7	339.5	292.7	249.8	213.5	189.7
57.5°	181.3	210.9	257.3	302.4	316.5	309.5	295.3	251.6	211.8	184.4	168.4
60°	159.6	186.6	227.2	264.8	275.9	268.4	252.0	212.6	183.9	160.9	149.0
62.5°	139.7	163.1	197.2	231.7	236.1	228.6	214.4	182.6	157.8	139.7	130.9
65°	121.1	143.2	170.6	196.7	200.7	192.8	178.2	155.2	134.4	122.9	114.5
67.5°	103.0	120.7	145.0	164.0	166.2	158.7	146.8	128.2	115.4	103.0	96.8
70°	87.1	100.4	119.4	134.8	135.7	128.7	122.5	105.7	95.9	87.1	82.2
72.5°	71.6	80.9	95.5	107.0	107.4	103.0	97.3	86.7	78.3	72.1	67.2
75°	56.6	64.5	73.4	83.6	83.1	79.6	75.2	68.5	61.5	57.5	55.3
77.5°	43.3	48.2	55.3	61.9	61.9	60.1	57.5	52.6	48.2	44.2	42.0
80°	30.9	34.0	39.8	42.0	42.9	42.4	40.2	36.7	34.9	31.8	30.9
82.5°	19.9	22.1	24.8	27.0	28.3	27.4	27.0	25.2	22.5	21.7	20.8
85°	11.5	12.4	13.7	15.0	15.5	15.0	15.9	14.6	13.3	13.3	12.8
87.5°	4.9	5.3	6.2	6.2	6.6	6.6	6.2	6.6	6.6	6.2	5.7
90°	0.5	1.8	3.1	4.4	5.7	6.3	6.8	7.7	8.6	9.6	10.5
92.5°	13.1	12.6	12.2	11.7	11.2	11.0	11.2	11.5	11.9	12.2	12.6
95°	34.0	30.2	26.3	22.5	18.6	16.7	17.1	17.9	18.8	19.6	20.4
97.5°	61.2	51.7	42.1	32.6	23.1	18.3	19.2	21.1	23.0	24.8	26.7
100°	92.6	76.7	60.7	44.8	28.9	20.9	21.9	23.9	25.8	27.8	29.8
102.5°	127.1	126.9	126.6	126.4	126.1	126.0	115.4	94.3	73.2	52.0	30.9
105°	159.0	162.5	166.0	169.5	173.0	174.7	158.8	127.1	95.4	63.6	31.9
107.5°	196.1	199.0	201.9	204.8	207.7	209.2	189.6	150.4	111.3	72.1	32.9
110°	231.7	234.1	236.5	239.0	241.4	242.6	225.8	192.2	158.7	125.1	91.5

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	265.1	267.2	269.3	271.4	273.5	274.5	273.5	271.6	269.6	267.7	265.7
115°	300.7	302.7	304.7	306.6	308.6	309.6	311.1	314.0	316.9	319.8	322.7
117.5°	331.5	333.8	336.2	338.5	340.8	342.0	343.0	345.0	346.9	348.9	350.9
120°	366.1	367.8	369.6	371.3	373.0	373.9	374.9	377.0	379.1	381.2	383.3
122.5°	395.3	397.2	399.0	400.9	402.8	403.7	404.9	407.2	409.5	411.9	414.2
125°	425.2	426.7	428.2	429.7	431.2	432.0	433.1	435.3	437.5	439.7	441.9
127.5°	452.3	453.9	455.6	457.2	458.9	459.7	460.6	462.3	464.0	465.8	467.5
130°	478.0	479.8	481.7	483.5	485.4	486.3	486.9	488.2	489.5	490.8	492.1
132.5°	504.1	505.6	507.1	508.6	510.1	510.9	511.5	512.8	514.1	515.4	516.7
135°	526.1	527.9	529.8	531.6	533.5	534.4	534.9	536.0	537.1	538.1	539.2
137.5°	549.1	550.5	551.9	553.3	554.7	555.4	556.0	557.1	558.3	559.4	560.6
140°	571.6	572.5	573.5	574.4	575.3	575.8	576.4	577.7	579.0	580.2	581.5
142.5°	590.4	591.2	592.0	592.9	593.7	594.1	594.9	596.4	597.9	599.4	600.9
145°	610.3	610.2	610.1	610.0	609.9	609.8	610.8	612.7	614.7	616.6	618.6
147.5°	627.5	627.2	626.8	626.5	626.2	626.0	627.0	629.0	630.9	632.9	634.9
150°	644.3	643.5	642.7	641.8	641.0	640.6	641.5	643.4	645.3	647.1	649.0
152.5°	658.4	657.5	656.5	655.6	654.7	654.2	655.1	656.8	658.5	660.3	662.0
155°	672.0	671.0	669.9	668.9	667.8	667.3	668.0	669.4	670.8	672.2	673.6
157.5°	683.0	682.1	681.1	680.2	679.3	678.8	679.3	680.4	681.4	682.5	683.5
160°	692.4	691.7	691.0	690.3	689.6	689.2	689.6	690.3	691.0	691.7	692.4
162.5°	700.7	700.0	699.3	698.6	697.9	697.6	697.9	698.5	699.0	699.6	700.2
165°	708.1	707.4	706.7	706.0	705.3	704.9	705.1	705.4	705.8	706.1	706.5
167.5°	713.8	713.1	712.4	711.7	711.0	710.7	710.9	711.2	711.5	711.9	712.2
170°	718.5	717.8	717.1	716.4	715.7	715.4	715.5	715.7	716.0	716.2	716.4
172.5°	721.7	721.0	720.3	719.6	718.9	718.5	718.6	718.9	719.1	719.4	719.6
175°	724.3	723.5	722.7	721.8	721.0	720.6	720.7	721.0	721.2	721.5	721.7
177.5°	725.3	724.5	723.7	722.9	722.1	721.7	721.8	721.9	722.0	722.1	722.2
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	597.7	598.2	599.0	603.5	605.7	606.1	604.3	608.3	609.7	608.3	607.4
5°	626.0	628.7	634.0	639.7	639.3	639.7	642.4	645.0	645.9	642.4	643.7
7.5°	650.8	656.1	661.8	670.7	670.7	675.1	676.9	679.1	684.4	681.7	680.8
10°	679.1	686.1	696.7	710.9	711.3	715.8	720.2	727.3	729.5	727.7	728.6
12.5°	714.4	728.1	729.0	744.5	751.6	752.5	759.5	758.2	762.6	762.6	770.1
15°	729.9	751.1	763.1	778.1	782.5	777.2	783.0	789.1	789.6	789.6	789.1
17.5°	757.8	766.2	778.1	786.1	787.8	787.8	788.3	790.9	789.1	785.6	788.3
20°	763.5	767.0	771.5	770.6	771.5	767.0	762.6	758.2	758.6	756.4	763.1
22.5°	752.9	752.0	741.8	735.2	735.2	726.4	718.0	714.0	710.0	711.3	713.5
25°	726.4	712.7	700.3	690.6	688.3	674.2	662.7	659.2	652.5	657.8	658.7
27.5°	683.9	668.5	648.6	640.2	628.7	622.9	615.0	604.3	590.6	598.6	597.3
30°	638.4	615.4	599.0	578.7	560.6	559.3	544.2	526.5	519.5	519.5	523.4
32.5°	587.5	557.0	533.2	504.4	486.8	479.2	461.1	443.4	447.4	434.1	439.0
35°	528.3	488.1	458.0	430.2	416.9	408.1	384.6	374.9	364.3	358.1	369.6
37.5°	471.7	425.3	386.8	356.3	351.5	335.6	319.6	313.4	307.3	309.9	309.5
40°	402.8	361.6	327.2	303.3	294.9	287.4	276.8	269.2	265.3	267.5	267.9
42.5°	340.4	305.9	280.3	263.5	256.4	251.1	245.8	239.6	238.3	238.3	240.1
45°	292.2	263.9	246.7	233.0	229.0	225.0	221.0	218.4	217.5	215.7	217.1
47.5°	253.8	231.2	220.6	210.4	206.0	205.1	201.6	200.3	198.5	198.1	198.5
50°	221.5	207.3	197.6	191.9	188.8	187.4	185.7	183.0	182.1	184.4	183.5
52.5°	198.9	185.7	180.4	174.6	172.9	171.1	168.4	168.9	168.4	167.6	167.6
55°	176.4	168.0	162.7	158.3	157.8	156.1	153.9	153.0	152.5	151.6	153.0
57.5°	158.3	151.6	146.8	142.8	141.0	141.0	138.8	137.1	137.1	136.6	137.1
60°	140.1	133.5	130.4	126.4	125.1	124.7	123.3	122.5	121.1	121.1	121.1
62.5°	123.3	118.0	114.5	111.0	111.4	109.2	107.4	106.5	106.5	107.0	107.0
65°	107.4	103.9	99.5	96.4	95.5	95.1	94.2	93.7	92.4	93.3	93.3
67.5°	92.8	88.0	85.3	84.0	82.7	82.2	81.3	80.5	80.0	79.6	80.5
70°	78.3	74.3	72.1	71.2	69.9	69.4	69.0	67.6	68.1	68.5	69.0
72.5°	65.0	61.5	61.0	58.4	58.4	58.4	56.6	57.5	57.0	56.1	57.0
75°	51.3	49.5	48.6	47.3	47.7	47.3	46.9	45.5	45.5	46.0	46.4
77.5°	40.7	38.9	38.5	37.1	36.3	37.1	36.3	35.8	35.8	36.3	36.3
80°	30.1	29.2	27.9	27.9	27.9	27.4	27.4	27.4	27.0	26.5	27.0
82.5°	19.9	19.9	19.5	19.0	19.5	18.6	19.0	19.0	19.0	19.0	19.0
85°	12.8	12.4	12.4	11.9	11.9	11.9	12.4	11.5	11.5	11.9	11.9
87.5°	5.7	5.7	5.7	6.2	5.7	5.7	5.7	6.2	5.7	5.7	5.7
90°	11.1	11.7	12.2	12.8	13.1	13.2	13.4	13.7	13.9	14.1	13.9
92.5°	12.8	13.0	13.3	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.0
95°	21.0	21.6	22.1	22.7	23.0	22.9	22.8	22.7	22.6	22.5	22.6
97.5°	27.0	27.4	27.7	28.0	28.2	28.3	28.4	28.5	28.7	28.8	28.7
100°	30.7	31.7	32.6	33.5	34.0	34.1	34.3	34.6	34.8	35.0	34.8
102.5°	32.2	33.4	34.7	36.0	36.6	36.8	37.1	37.5	37.8	38.2	37.8
105°	33.2	34.5	35.8	37.1	37.7	37.9	38.4	38.8	39.3	39.7	39.3
107.5°	34.2	35.5	36.8	38.1	38.7	38.9	39.4	39.9	40.3	40.8	40.3
110°	79.9	68.3	56.6	45.0	39.2	39.4	39.9	40.4	40.8	41.3	40.8

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	215.6	165.5	115.4	65.3	40.3	40.5	40.8	41.1	41.5	41.8	41.5
115°	268.9	215.1	161.2	107.4	80.5	76.3	68.0	59.6	51.3	42.9	51.3
117.5°	334.3	317.7	301.0	284.4	276.1	260.9	230.4	200.0	169.5	139.1	169.5
120°	384.7	386.1	387.5	388.9	389.6	381.8	366.1	350.4	334.7	319.0	334.7
122.5°	414.9	415.6	416.3	417.0	417.3	417.4	417.5	417.6	417.7	417.8	417.7
125°	442.7	443.5	444.3	445.1	445.5	445.7	446.0	446.4	446.7	447.1	446.7
127.5°	468.7	469.8	471.0	472.1	472.7	472.8	472.9	473.0	473.2	473.3	473.2
130°	493.4	494.6	495.9	497.2	497.8	497.7	497.6	497.5	497.4	497.3	497.4
132.5°	517.7	518.8	519.8	520.9	521.4	521.3	521.2	521.1	521.0	520.9	521.0
135°	540.4	541.5	542.7	543.8	544.4	544.3	544.0	543.8	543.5	543.3	543.5
137.5°	561.8	562.9	564.1	565.2	565.8	565.6	565.3	565.0	564.6	564.3	564.6
140°	582.5	583.6	584.6	585.7	586.2	585.9	585.3	584.8	584.2	583.6	584.2
142.5°	601.8	602.7	603.6	604.5	605.0	604.7	604.1	603.6	603.0	602.4	603.0
145°	619.4	620.2	621.1	621.9	622.3	622.0	621.4	620.9	620.3	619.7	620.3
147.5°	635.5	636.1	636.6	637.2	637.5	637.3	636.8	636.3	635.9	635.4	635.9
150°	649.7	650.4	651.1	651.8	652.1	651.8	651.2	650.7	650.1	649.5	650.1
152.5°	662.7	663.4	664.1	664.8	665.2	664.8	664.0	663.1	662.3	661.5	662.3
155°	674.3	675.0	675.7	676.4	676.7	676.2	675.3	674.4	673.4	672.5	673.4
157.5°	684.3	685.1	685.9	686.7	687.1	686.6	685.7	684.8	683.9	683.0	683.9
160°	693.1	693.8	694.5	695.2	695.5	695.1	694.3	693.5	692.7	691.9	692.7
162.5°	701.0	701.8	702.7	703.5	703.9	703.4	702.3	701.3	700.2	699.2	700.2
165°	707.3	708.1	709.0	709.8	710.2	709.8	709.0	708.1	707.3	706.5	707.3
167.5°	713.0	713.8	714.7	715.5	715.9	715.4	714.3	713.3	712.2	711.2	712.2
170°	717.2	718.0	718.9	719.7	720.1	719.6	718.5	717.5	716.4	715.4	716.4
172.5°	720.4	721.2	722.0	722.8	723.2	722.7	721.6	720.6	719.5	718.5	719.5
175°	722.5	723.3	724.1	724.9	725.3	724.7	723.6	722.4	721.3	720.1	721.3
177.5°	723.0	723.8	724.6	725.4	725.8	725.3	724.2	723.2	722.1	721.1	722.1
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	609.7	606.6	603.9	604.3	606.6	604.8	600.4	594.6	592.4	589.8	592.4
5°	646.3	643.7	638.4	638.8	637.5	635.7	628.7	619.8	619.8	612.7	611.9
7.5°	682.6	678.6	675.1	674.2	669.3	665.8	659.6	647.2	642.4	634.0	629.1
10°	723.3	720.2	716.2	711.3	708.7	702.5	692.3	674.2	665.4	653.9	645.5
12.5°	764.4	763.9	755.1	745.4	744.9	735.2	728.1	703.8	691.9	676.4	656.5
15°	790.5	788.3	783.4	778.5	779.9	769.3	753.3	724.6	716.6	698.1	676.9
17.5°	790.0	790.0	788.7	787.8	786.5	783.4	774.6	755.5	742.7	719.3	699.4
20°	764.8	770.6	771.9	771.5	775.9	778.1	777.7	765.7	755.5	734.8	714.4
22.5°	714.4	727.7	733.4	737.0	746.3	751.1	762.6	758.2	755.5	740.1	722.8
25°	667.6	672.0	689.2	690.1	702.9	714.9	726.4	733.9	743.6	737.9	723.3
27.5°	607.0	617.2	629.5	638.8	641.5	665.8	684.8	699.0	721.1	722.8	718.0
30°	538.5	543.3	563.7	576.1	590.2	607.9	635.3	659.6	679.5	697.6	703.8
32.5°	454.9	474.8	486.8	501.8	514.2	545.5	579.1	610.5	633.5	664.0	677.3
35°	378.4	393.9	414.2	420.4	443.0	469.5	513.3	553.5	588.4	619.4	646.3
37.5°	315.2	327.6	349.3	359.0	372.2	406.3	443.0	492.9	534.9	573.0	606.6
40°	271.9	281.2	297.5	300.6	311.7	342.6	372.2	419.1	474.8	526.1	562.8
42.5°	242.3	246.7	257.7	261.7	268.8	289.6	316.1	360.3	412.0	465.1	516.8
45°	221.0	224.1	230.8	234.3	243.2	252.4	274.1	309.5	350.1	403.6	459.3
47.5°	202.0	206.0	208.7	210.9	215.7	225.9	240.1	266.1	305.0	354.1	408.1
50°	186.1	187.4	192.3	192.8	195.8	202.5	215.7	231.7	262.6	302.4	354.6
52.5°	170.2	171.5	174.6	177.7	179.0	184.4	193.2	206.5	229.4	260.8	307.3
55°	154.3	156.1	159.2	161.4	162.7	167.1	172.4	185.2	203.4	225.5	263.5
57.5°	138.4	142.4	143.2	144.6	146.8	151.6	156.5	164.0	178.2	198.5	226.4
60°	123.3	124.7	127.8	129.1	131.3	134.0	140.1	145.9	156.1	172.0	197.2
62.5°	107.9	111.0	112.3	113.6	115.4	118.5	122.5	128.7	137.5	150.3	170.2
65°	94.6	95.1	97.7	99.5	101.2	103.5	107.4	113.2	118.5	130.4	145.0
67.5°	81.8	82.7	83.6	85.3	87.5	89.7	93.3	96.4	103.0	111.0	122.5
70°	69.4	69.4	71.6	72.9	72.5	75.2	77.8	81.3	86.2	93.7	103.0
72.5°	58.4	57.9	59.7	60.1	61.0	62.8	64.5	68.1	70.7	76.5	83.6
75°	46.4	47.3	48.2	48.2	49.5	50.8	52.6	54.4	57.5	61.0	66.3
77.5°	36.7	36.7	37.6	38.0	39.3	38.9	40.7	42.4	44.7	47.7	51.7
80°	27.0	27.9	27.9	27.9	28.3	28.7	30.5	31.8	33.2	35.4	37.1
82.5°	19.0	19.0	19.9	19.9	19.9	20.8	20.8	21.2	22.1	23.4	24.8
85°	11.9	11.9	11.9	12.4	11.9	12.4	13.3	12.8	13.3	14.1	14.1
87.5°	5.7	5.7	5.7	5.7	5.7	6.2	5.7	6.2	6.6	6.6	6.6
90°	13.7	13.4	13.2	13.1	12.8	12.2	11.7	11.1	10.5	9.6	8.6
92.5°	13.9	13.8	13.7	13.6	13.5	13.3	13.0	12.8	12.6	12.2	11.9
95°	22.7	22.8	22.9	23.0	22.7	22.1	21.6	21.0	20.4	19.6	18.8
97.5°	28.5	28.4	28.3	28.2	28.0	27.7	27.4	27.0	26.7	24.8	23.0
100°	34.6	34.3	34.1	34.0	33.5	32.6	31.7	30.7	29.8	27.8	25.8
102.5°	37.5	37.1	36.8	36.6	36.0	34.7	33.4	32.2	30.9	52.0	73.2
105°	38.8	38.4	37.9	37.7	37.1	35.8	34.5	33.2	31.9	63.6	95.4
107.5°	39.9	39.4	38.9	38.7	38.1	36.8	35.5	34.2	32.9	72.1	111.3
110°	40.4	39.9	39.4	39.2	45.0	56.6	68.3	79.9	91.5	125.1	158.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	41.1	40.8	40.5	40.3	65.3	115.4	165.5	215.6	265.7	267.7	269.6
115°	59.6	68.0	76.3	80.5	107.4	161.2	215.1	268.9	322.7	319.8	316.9
117.5°	200.0	230.4	260.9	276.1	284.4	301.0	317.7	334.3	350.9	348.9	346.9
120°	350.4	366.1	381.8	389.6	388.9	387.5	386.1	384.7	383.3	381.2	379.1
122.5°	417.6	417.5	417.4	417.3	417.0	416.3	415.6	414.9	414.2	411.9	409.5
125°	446.4	446.0	445.7	445.5	445.1	444.3	443.5	442.7	441.9	439.7	437.5
127.5°	473.0	472.9	472.8	472.7	472.1	471.0	469.8	468.7	467.5	465.8	464.0
130°	497.5	497.6	497.7	497.8	497.2	495.9	494.6	493.4	492.1	490.8	489.5
132.5°	521.1	521.2	521.3	521.4	520.9	519.8	518.8	517.7	516.7	515.4	514.1
135°	543.8	544.0	544.3	544.4	543.8	542.7	541.5	540.4	539.2	538.1	537.1
137.5°	565.0	565.3	565.6	565.8	565.2	564.1	562.9	561.8	560.6	559.4	558.3
140°	584.8	585.3	585.9	586.2	585.7	584.6	583.6	582.5	581.5	580.2	579.0
142.5°	603.6	604.1	604.7	605.0	604.5	603.6	602.7	601.8	600.9	599.4	597.9
145°	620.9	621.4	622.0	622.3	621.9	621.1	620.2	619.4	618.6	616.6	614.7
147.5°	636.3	636.8	637.3	637.5	637.2	636.6	636.1	635.5	634.9	632.9	630.9
150°	650.7	651.2	651.8	652.1	651.8	651.1	650.4	649.7	649.0	647.1	645.3
152.5°	663.1	664.0	664.8	665.2	664.8	664.1	663.4	662.7	662.0	660.3	658.5
155°	674.4	675.3	676.2	676.7	676.4	675.7	675.0	674.3	673.6	672.2	670.8
157.5°	684.8	685.7	686.6	687.1	686.7	685.9	685.1	684.3	683.5	682.5	681.4
160°	693.5	694.3	695.1	695.5	695.2	694.5	693.8	693.1	692.4	691.7	691.0
162.5°	701.3	702.3	703.4	703.9	703.5	702.7	701.8	701.0	700.2	699.6	699.0
165°	708.1	709.0	709.8	710.2	709.8	709.0	708.1	707.3	706.5	706.1	705.8
167.5°	713.3	714.3	715.4	715.9	715.5	714.7	713.8	713.0	712.2	711.9	711.5
170°	717.5	718.5	719.6	720.1	719.7	718.9	718.0	717.2	716.4	716.2	716.0
172.5°	720.6	721.6	722.7	723.2	722.8	722.0	721.2	720.4	719.6	719.4	719.1
175°	722.4	723.6	724.7	725.3	724.9	724.1	723.3	722.5	721.7	721.5	721.2
177.5°	723.2	724.2	725.3	725.8	725.4	724.6	723.8	723.0	722.2	722.1	722.0
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	590.2	588.0	586.7	587.5	584.9	578.3	578.3	580.5	577.8	575.2	571.2
5°	606.6	602.1	599.5	599.0	592.9	582.2	580.0	577.8	572.1	565.9	559.3
7.5°	622.5	614.5	610.1	607.0	598.2	584.5	578.7	573.8	564.6	555.3	546.9
10°	635.7	624.2	618.9	614.1	602.6	585.3	576.1	567.2	555.3	543.3	532.7
12.5°	646.3	633.1	626.5	619.4	605.2	582.7	571.2	557.0	545.1	529.2	518.6
15°	664.0	636.6	630.4	623.8	609.2	578.3	564.1	548.2	531.8	510.6	499.1
17.5°	678.2	641.5	641.0	626.9	607.9	576.5	554.8	534.1	516.4	495.2	477.0
20°	686.6	649.0	641.9	627.3	603.5	564.6	542.0	519.0	500.0	474.4	456.2
22.5°	693.7	659.6	641.0	623.4	594.2	560.6	527.4	505.8	479.7	451.8	434.6
25°	696.3	661.8	642.4	622.0	587.5	549.1	511.5	488.1	458.9	433.7	410.3
27.5°	696.7	661.4	637.5	616.3	578.3	534.1	495.6	470.8	438.6	409.4	386.0
30°	692.3	656.5	634.9	611.9	569.4	520.3	476.1	448.7	414.2	385.1	360.8
32.5°	679.1	646.8	629.1	603.9	557.9	501.3	457.6	427.1	390.8	362.1	338.6
35°	657.0	634.9	615.4	592.0	542.9	483.7	439.0	403.2	366.5	339.1	317.0
37.5°	629.5	617.6	599.5	576.5	525.7	467.7	418.2	378.4	341.7	315.2	293.6
40°	592.4	595.5	577.8	557.0	505.3	446.1	391.3	353.2	318.8	294.0	272.8
42.5°	552.2	565.0	554.8	534.9	482.8	422.2	371.4	329.4	295.8	270.1	252.4
45°	508.9	531.0	524.8	510.2	459.3	397.0	343.1	302.4	272.8	248.0	232.5
47.5°	461.6	492.9	492.9	482.3	433.3	371.8	318.8	277.2	248.0	230.3	215.3
50°	413.4	448.7	454.5	447.4	404.1	343.1	289.1	251.6	226.4	209.1	198.1
52.5°	363.0	404.1	414.7	411.2	373.1	315.7	264.8	228.1	205.1	190.1	180.4
55°	314.8	362.5	374.0	375.3	340.0	285.6	237.8	205.6	183.5	173.3	164.9
57.5°	269.2	315.2	328.0	330.2	306.4	258.2	212.6	184.4	164.5	156.1	149.4
60°	230.3	268.8	285.6	290.5	269.7	226.4	189.2	161.8	146.8	138.8	132.6
62.5°	198.5	229.4	247.1	248.5	239.2	198.5	164.9	141.9	129.1	122.0	118.9
65°	167.6	195.4	206.0	211.3	203.8	172.0	142.4	123.3	113.2	107.0	103.9
67.5°	142.8	160.5	169.3	176.4	168.9	145.0	121.1	105.7	98.1	92.0	90.2
70°	117.2	131.7	138.4	145.5	138.8	120.7	103.5	89.3	82.7	77.8	75.6
72.5°	93.7	105.2	111.4	115.8	111.9	96.8	82.7	72.9	68.1	64.5	63.2
75°	74.3	82.2	85.8	88.9	87.1	75.6	66.8	58.8	54.4	51.3	50.4
77.5°	56.6	62.3	66.3	67.2	65.0	57.5	50.0	45.1	41.6	39.8	38.9
80°	40.2	43.8	46.0	47.3	45.1	42.0	36.7	33.2	30.1	27.9	27.4
82.5°	27.0	28.7	30.5	30.1	29.2	26.5	23.4	21.7	20.3	18.6	18.6
85°	15.5	15.9	16.8	17.2	16.8	15.0	13.3	12.4	11.5	10.2	10.2
87.5°	6.6	7.1	7.1	7.5	6.6	6.6	5.7	4.9	4.9	4.4	4.0
90°	7.7	6.8	6.3	5.7	4.4	3.1	1.8	0.5	1.8	3.1	4.4
92.5°	11.5	11.2	11.0	11.2	11.7	12.2	12.6	13.1	12.6	12.2	11.7
95°	17.9	17.1	16.7	18.6	22.5	26.3	30.2	34.0	30.2	26.3	22.5
97.5°	21.1	19.2	18.3	23.1	32.6	42.1	51.7	61.2	51.7	42.1	32.6
100°	23.9	21.9	20.9	28.9	44.8	60.7	76.7	92.6	76.7	60.7	44.8
102.5°	94.3	115.4	126.0	126.1	126.4	126.6	126.9	127.1	126.9	126.6	126.4
105°	127.1	158.8	174.7	173.0	169.5	166.0	162.5	159.0	162.5	166.0	169.5
107.5°	150.4	189.6	209.2	207.7	204.8	201.9	199.0	196.1	199.0	201.9	204.8
110°	192.2	225.8	242.6	241.4	239.0	236.5	234.1	231.7	234.1	236.5	239.0

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
112.5°	271.6	273.5	274.5	273.5	271.4	269.3	267.2	265.1	267.2	269.3	271.4
115°	314.0	311.1	309.6	308.6	306.6	304.7	302.7	300.7	302.7	304.7	306.6
117.5°	345.0	343.0	342.0	340.8	338.5	336.2	333.8	331.5	333.8	336.2	338.5
120°	377.0	374.9	373.9	373.0	371.3	369.6	367.8	366.1	367.8	369.6	371.3
122.5°	407.2	404.9	403.7	402.8	400.9	399.0	397.2	395.3	397.2	399.0	400.9
125°	435.3	433.1	432.0	431.2	429.7	428.2	426.7	425.2	426.7	428.2	429.7
127.5°	462.3	460.6	459.7	458.9	457.2	455.6	453.9	452.3	453.9	455.6	457.2
130°	488.2	486.9	486.3	485.4	483.5	481.7	479.8	478.0	479.8	481.7	483.5
132.5°	512.8	511.5	510.9	510.1	508.6	507.1	505.6	504.1	505.6	507.1	508.6
135°	536.0	534.9	534.4	533.5	531.6	529.8	527.9	526.1	527.9	529.8	531.6
137.5°	557.1	556.0	555.4	554.7	553.3	551.9	550.5	549.1	550.5	551.9	553.3
140°	577.7	576.4	575.8	575.3	574.4	573.5	572.5	571.6	572.5	573.5	574.4
142.5°	596.4	594.9	594.1	593.7	592.9	592.0	591.2	590.4	591.2	592.0	592.9
145°	612.7	610.8	609.8	609.9	610.0	610.1	610.2	610.3	610.2	610.1	610.0
147.5°	629.0	627.0	626.0	626.2	626.5	626.8	627.2	627.5	627.2	626.8	626.5
150°	643.4	641.5	640.6	641.0	641.8	642.7	643.5	644.3	643.5	642.7	641.8
152.5°	656.8	655.1	654.2	654.7	655.6	656.5	657.5	658.4	657.5	656.5	655.6
155°	669.4	668.0	667.3	667.8	668.9	669.9	671.0	672.0	671.0	669.9	668.9
157.5°	680.4	679.3	678.8	679.3	680.2	681.1	682.1	683.0	682.1	681.1	680.2
160°	690.3	689.6	689.2	689.6	690.3	691.0	691.7	692.4	691.7	691.0	690.3
162.5°	698.5	697.9	697.6	697.9	698.6	699.3	700.0	700.7	700.0	699.3	698.6
165°	705.4	705.1	704.9	705.3	706.0	706.7	707.4	708.1	707.4	706.7	706.0
167.5°	711.2	710.9	710.7	711.0	711.7	712.4	713.1	713.8	713.1	712.4	711.7
170°	715.7	715.5	715.4	715.7	716.4	717.1	717.8	718.5	717.8	717.1	716.4
172.5°	718.9	718.6	718.5	718.9	719.6	720.3	721.0	721.7	721.0	720.3	719.6
175°	721.0	720.7	720.6	721.0	721.8	722.7	723.5	724.3	723.5	722.7	721.8
177.5°	721.9	721.8	721.7	722.1	722.9	723.7	724.5	725.3	724.5	723.7	722.9
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	569.0	571.2	570.7	566.3	561.5	557.5	550.0	550.9	548.2	548.6	551.3
5°	554.8	554.8	553.1	546.9	538.9	534.5	526.1	523.9	518.6	518.1	517.7
7.5°	539.8	537.6	535.4	526.5	516.8	509.7	498.2	495.6	490.3	486.8	485.0
10°	522.1	519.0	514.6	504.4	492.5	483.7	471.7	468.2	458.0	453.6	450.9
12.5°	502.7	500.9	493.8	485.4	466.0	456.2	439.0	442.5	432.4	423.5	422.2
15°	483.2	476.6	472.6	458.9	435.5	431.0	417.3	410.3	401.0	393.9	393.9
17.5°	464.2	454.0	445.2	430.6	413.4	401.0	390.8	387.3	375.8	368.7	367.4
20°	439.0	427.5	425.3	404.5	392.6	378.9	369.2	360.3	351.9	348.8	346.6
22.5°	415.1	401.9	398.3	380.6	368.7	355.0	345.3	339.1	332.9	330.7	326.7
25°	389.5	381.5	376.2	357.2	344.0	331.1	324.5	320.1	314.3	313.9	311.2
27.5°	364.7	357.2	351.9	333.8	324.1	312.1	306.8	302.0	298.9	297.5	296.2
30°	343.5	335.1	328.9	315.7	303.7	294.0	289.6	286.5	284.7	282.5	282.1
32.5°	320.1	315.2	306.8	296.6	287.4	278.1	275.4	273.2	270.6	269.7	269.2
35°	300.2	293.6	288.2	276.8	272.8	264.8	261.7	260.0	256.4	255.5	254.6
37.5°	280.7	274.5	268.8	261.7	254.2	249.8	248.0	245.4	243.6	244.0	243.2
40°	261.3	256.4	252.0	244.5	240.1	237.8	234.3	231.7	230.8	231.2	230.8
42.5°	242.3	237.8	235.2	229.4	225.0	222.8	220.6	218.0	219.3	219.3	220.6
45°	225.0	221.0	219.3	214.9	212.2	208.7	206.5	206.0	207.8	207.3	207.3
47.5°	207.3	206.0	203.8	199.8	196.3	194.1	193.6	193.6	195.4	196.3	195.8
50°	193.6	191.0	188.3	185.2	182.6	181.7	180.4	181.3	183.0	183.0	183.9
52.5°	176.4	174.6	173.7	171.1	169.3	169.3	169.3	169.8	171.1	172.4	172.0
55°	161.4	160.0	159.2	157.8	155.6	156.1	155.6	156.5	157.8	159.2	160.0
57.5°	145.5	145.0	144.1	141.9	141.9	141.5	142.8	143.2	145.5	146.3	147.7
60°	131.3	130.0	130.0	128.2	128.2	128.2	129.5	130.9	132.6	133.1	134.0
62.5°	116.3	116.3	115.8	114.5	114.5	115.8	116.3	118.0	118.9	118.9	120.3
65°	102.1	101.7	101.2	101.7	102.1	102.1	103.5	104.3	105.2	105.7	106.1
67.5°	88.0	87.5	88.4	88.0	88.9	90.6	90.2	91.5	92.8	92.8	93.3
70°	74.7	75.6	75.2	76.0	75.6	76.5	77.8	78.3	78.3	78.7	80.0
72.5°	62.3	62.3	62.3	61.9	62.3	63.2	64.1	64.5	65.4	65.9	67.2
75°	50.4	50.4	49.5	50.4	50.4	51.3	52.2	52.2	52.2	53.1	54.4
77.5°	38.0	38.5	38.0	38.9	38.9	39.3	40.2	39.8	40.7	41.1	41.6
80°	27.9	27.4	27.4	27.4	27.9	27.9	28.7	29.2	29.2	30.5	29.6
82.5°	17.7	18.1	17.7	18.1	18.1	18.6	18.1	18.6	19.0	19.9	19.5
85°	10.2	9.7	9.7	10.2	9.7	9.7	10.2	9.7	10.2	9.7	10.2
87.5°	4.0	3.5	3.5	3.5	3.5	3.1	3.1	2.7	2.7	2.7	2.2
90°	5.7	6.3	6.8	7.7	8.6	9.6	10.5	11.1	11.7	12.2	12.8
92.5°	11.2	11.0	11.2	11.5	11.9	12.2	12.6	12.8	13.0	13.3	13.5
95°	18.6	16.7	17.1	17.9	18.8	19.6	20.4	21.0	21.6	22.1	22.7
97.5°	23.1	18.3	19.2	21.1	23.0	24.8	26.7	27.0	27.4	27.7	28.0
100°	28.9	20.9	21.9	23.9	25.8	27.8	29.8	30.7	31.7	32.6	33.5
102.5°	126.1	126.0	115.4	94.3	73.2	52.0	30.9	32.2	33.4	34.7	36.0
105°	173.0	174.7	158.8	127.1	95.4	63.6	31.9	33.2	34.5	35.8	37.1
107.5°	207.7	209.2	189.6	150.4	111.3	72.1	32.9	34.2	35.5	36.8	38.1
110°	241.4	242.6	225.8	192.2	158.7	125.1	91.5	79.9	68.3	56.6	45.0

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
112.5°	273.5	274.5	273.5	271.6	269.6	267.7	265.7	215.6	165.5	115.4	65.3
115°	308.6	309.6	311.1	314.0	316.9	319.8	322.7	268.9	215.1	161.2	107.4
117.5°	340.8	342.0	343.0	345.0	346.9	348.9	350.9	334.3	317.7	301.0	284.4
120°	373.0	373.9	374.9	377.0	379.1	381.2	383.3	384.7	386.1	387.5	388.9
122.5°	402.8	403.7	404.9	407.2	409.5	411.9	414.2	414.9	415.6	416.3	417.0
125°	431.2	432.0	433.1	435.3	437.5	439.7	441.9	442.7	443.5	444.3	445.1
127.5°	458.9	459.7	460.6	462.3	464.0	465.8	467.5	468.7	469.8	471.0	472.1
130°	485.4	486.3	486.9	488.2	489.5	490.8	492.1	493.4	494.6	495.9	497.2
132.5°	510.1	510.9	511.5	512.8	514.1	515.4	516.7	517.7	518.8	519.8	520.9
135°	533.5	534.4	534.9	536.0	537.1	538.1	539.2	540.4	541.5	542.7	543.8
137.5°	554.7	555.4	556.0	557.1	558.3	559.4	560.6	561.8	562.9	564.1	565.2
140°	575.3	575.8	576.4	577.7	579.0	580.2	581.5	582.5	583.6	584.6	585.7
142.5°	593.7	594.1	594.9	596.4	597.9	599.4	600.9	601.8	602.7	603.6	604.5
145°	609.9	609.8	610.8	612.7	614.7	616.6	618.6	619.4	620.2	621.1	621.9
147.5°	626.2	626.0	627.0	629.0	630.9	632.9	634.9	635.5	636.1	636.6	637.2
150°	641.0	640.6	641.5	643.4	645.3	647.1	649.0	649.7	650.4	651.1	651.8
152.5°	654.7	654.2	655.1	656.8	658.5	660.3	662.0	662.7	663.4	664.1	664.8
155°	667.8	667.3	668.0	669.4	670.8	672.2	673.6	674.3	675.0	675.7	676.4
157.5°	679.3	678.8	679.3	680.4	681.4	682.5	683.5	684.3	685.1	685.9	686.7
160°	689.6	689.2	689.6	690.3	691.0	691.7	692.4	693.1	693.8	694.5	695.2
162.5°	697.9	697.6	697.9	698.5	699.0	699.6	700.2	701.0	701.8	702.7	703.5
165°	705.3	704.9	705.1	705.4	705.8	706.1	706.5	707.3	708.1	709.0	709.8
167.5°	711.0	710.7	710.9	711.2	711.5	711.9	712.2	713.0	713.8	714.7	715.5
170°	715.7	715.4	715.5	715.7	716.0	716.2	716.4	717.2	718.0	718.9	719.7
172.5°	718.9	718.5	718.6	718.9	719.1	719.4	719.6	720.4	721.2	722.0	722.8
175°	721.0	720.6	720.7	721.0	721.2	721.5	721.7	722.5	723.3	724.1	724.9
177.5°	722.1	721.7	721.8	721.9	722.0	722.1	722.2	723.0	723.8	724.6	725.4
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	548.2	549.5	546.4	545.5	546.4	543.3	544.2	545.1	545.1	546.4	547.3
5°	516.4	514.6	511.5	510.6	509.7	511.1	510.2	511.5	511.9	515.0	515.5
7.5°	485.0	482.3	479.7	477.0	476.1	473.9	476.1	476.1	479.2	478.4	480.6
10°	447.8	447.4	443.9	442.5	440.8	437.2	442.1	440.8	443.0	447.0	447.8
12.5°	420.4	415.6	417.8	411.6	413.8	410.3	410.7	410.7	414.2	414.7	413.8
15°	394.4	390.4	384.6	382.0	380.6	378.9	384.6	385.1	382.4	388.6	386.4
17.5°	367.8	367.8	362.5	361.2	357.7	359.4	358.5	359.0	358.1	362.5	364.7
20°	344.8	342.6	340.9	341.3	336.9	336.0	335.1	336.0	339.1	342.2	343.1
22.5°	326.3	324.9	320.5	321.4	317.9	319.2	318.3	320.5	321.0	321.0	324.1
25°	308.6	306.8	307.3	305.5	304.2	304.2	302.8	304.2	305.9	306.8	307.3
27.5°	295.3	294.0	291.8	290.5	291.3	289.1	290.9	292.2	292.2	291.3	292.2
30°	279.4	280.3	280.3	275.9	277.6	276.8	278.1	279.0	279.0	279.4	278.5
32.5°	268.8	266.1	265.7	265.3	265.3	263.5	263.5	264.8	265.3	265.7	267.0
35°	254.6	254.6	252.4	253.8	252.0	252.4	252.0	252.4	253.3	252.0	253.3
37.5°	241.8	242.3	241.4	242.3	242.7	241.8	240.9	242.7	241.8	241.8	240.9
40°	230.8	230.3	230.8	230.8	230.8	231.2	230.3	230.3	230.3	229.4	228.6
42.5°	221.5	218.8	219.7	220.2	218.8	218.8	219.3	218.8	220.2	217.5	217.5
45°	208.2	207.3	207.8	207.8	208.7	207.3	208.2	208.7	207.3	206.9	206.0
47.5°	196.3	197.2	196.3	197.2	197.2	198.1	196.3	196.7	197.2	195.4	194.1
50°	184.4	184.4	185.7	185.2	185.7	184.8	184.8	184.4	184.8	183.9	182.6
52.5°	173.3	172.0	174.2	173.7	173.3	172.9	172.4	172.9	172.0	171.1	171.1
55°	159.6	159.6	160.9	161.4	161.4	160.5	159.6	160.0	159.6	159.2	158.7
57.5°	148.5	146.8	147.7	148.1	148.1	146.8	147.7	146.8	146.8	147.2	145.9
60°	134.4	134.4	133.5	134.8	134.8	134.0	134.0	134.4	133.5	133.1	132.6
62.5°	119.4	119.8	121.1	121.6	122.0	121.1	120.3	120.7	120.7	119.4	119.8
65°	106.5	107.4	109.2	108.8	107.9	108.3	107.4	107.9	106.5	107.0	105.7
67.5°	94.2	93.7	94.2	94.2	95.1	94.6	93.7	93.7	93.3	94.6	93.3
70°	80.9	80.9	80.9	80.9	81.3	81.8	80.9	80.0	80.5	79.6	79.1
72.5°	67.2	67.6	67.2	68.1	66.8	67.6	67.6	67.2	66.8	66.8	66.8
75°	54.4	55.3	53.9	54.4	53.9	54.8	54.4	54.4	53.5	53.1	53.5
77.5°	41.6	42.0	41.1	41.6	41.1	41.6	41.6	41.1	41.1	41.1	41.1
80°	29.6	30.1	29.6	29.2	28.7	29.6	28.7	29.2	29.6	29.2	30.1
82.5°	19.0	19.0	18.6	19.0	18.1	18.1	18.6	18.6	18.1	19.0	18.1
85°	9.3	9.3	10.2	9.3	8.8	8.8	8.8	9.3	8.8	9.7	9.3
87.5°	2.2	1.8	2.2	2.2	1.8	1.8	2.2	1.8	2.2	2.7	1.8
90°	13.1	13.2	13.4	13.7	13.9	14.1	13.9	13.7	13.4	13.2	13.1
92.5°	13.6	13.7	13.8	13.9	14.0	14.1	14.0	13.9	13.8	13.7	13.6
95°	23.0	22.9	22.8	22.7	22.6	22.5	22.6	22.7	22.8	22.9	23.0
97.5°	28.2	28.3	28.4	28.5	28.7	28.8	28.7	28.5	28.4	28.3	28.2
100°	34.0	34.1	34.3	34.6	34.8	35.0	34.8	34.6	34.3	34.1	34.0
102.5°	36.6	36.8	37.1	37.5	37.8	38.2	37.8	37.5	37.1	36.8	36.6
105°	37.7	37.9	38.4	38.8	39.3	39.7	39.3	38.8	38.4	37.9	37.7
107.5°	38.7	38.9	39.4	39.9	40.3	40.8	40.3	39.9	39.4	38.9	38.7
110°	39.2	39.4	39.9	40.4	40.8	41.3	40.8	40.4	39.9	39.4	39.2

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
112.5°	40.3	40.5	40.8	41.1	41.5	41.8	41.5	41.1	40.8	40.5	40.3
115°	80.5	76.3	68.0	59.6	51.3	42.9	51.3	59.6	68.0	76.3	80.5
117.5°	276.1	260.9	230.4	200.0	169.5	139.1	169.5	200.0	230.4	260.9	276.1
120°	389.6	381.8	366.1	350.4	334.7	319.0	334.7	350.4	366.1	381.8	389.6
122.5°	417.3	417.4	417.5	417.6	417.7	417.8	417.7	417.6	417.5	417.4	417.3
125°	445.5	445.7	446.0	446.4	446.7	447.1	446.7	446.4	446.0	445.7	445.5
127.5°	472.7	472.8	472.9	473.0	473.2	473.3	473.2	473.0	472.9	472.8	472.7
130°	497.8	497.7	497.6	497.5	497.4	497.3	497.4	497.5	497.6	497.7	497.8
132.5°	521.4	521.3	521.2	521.1	521.0	520.9	521.0	521.1	521.2	521.3	521.4
135°	544.4	544.3	544.0	543.8	543.5	543.3	543.5	543.8	544.0	544.3	544.4
137.5°	565.8	565.6	565.3	565.0	564.6	564.3	564.6	565.0	565.3	565.6	565.8
140°	586.2	585.9	585.3	584.8	584.2	583.6	584.2	584.8	585.3	585.9	586.2
142.5°	605.0	604.7	604.1	603.6	603.0	602.4	603.0	603.6	604.1	604.7	605.0
145°	622.3	622.0	621.4	620.9	620.3	619.7	620.3	620.9	621.4	622.0	622.3
147.5°	637.5	637.3	636.8	636.3	635.9	635.4	635.9	636.3	636.8	637.3	637.5
150°	652.1	651.8	651.2	650.7	650.1	649.5	650.1	650.7	651.2	651.8	652.1
152.5°	665.2	664.8	664.0	663.1	662.3	661.5	662.3	663.1	664.0	664.8	665.2
155°	676.7	676.2	675.3	674.4	673.4	672.5	673.4	674.4	675.3	676.2	676.7
157.5°	687.1	686.6	685.7	684.8	683.9	683.0	683.9	684.8	685.7	686.6	687.1
160°	695.5	695.1	694.3	693.5	692.7	691.9	692.7	693.5	694.3	695.1	695.5
162.5°	703.9	703.4	702.3	701.3	700.2	699.2	700.2	701.3	702.3	703.4	703.9
165°	710.2	709.8	709.0	708.1	707.3	706.5	707.3	708.1	709.0	709.8	710.2
167.5°	715.9	715.4	714.3	713.3	712.2	711.2	712.2	713.3	714.3	715.4	715.9
170°	720.1	719.6	718.5	717.5	716.4	715.4	716.4	717.5	718.5	719.6	720.1
172.5°	723.2	722.7	721.6	720.6	719.5	718.5	719.5	720.6	721.6	722.7	723.2
175°	725.3	724.7	723.6	722.4	721.3	720.1	721.3	722.4	723.6	724.7	725.3
177.5°	725.8	725.3	724.2	723.2	722.1	721.1	722.1	723.2	724.2	725.3	725.8
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2	575.2
2.5°	546.0	549.5	548.2	543.3	549.1	549.1	553.1	553.1	557.9	559.7	562.3
5°	515.0	517.7	519.9	517.7	521.7	527.9	531.4	534.5	541.1	543.8	547.8
7.5°	481.9	486.8	489.0	489.0	495.6	502.7	509.7	514.2	523.4	527.0	531.0
10°	449.6	455.4	459.8	459.3	470.4	474.8	483.7	493.8	503.1	508.4	514.2
12.5°	415.6	418.7	424.9	433.7	436.4	444.3	454.5	467.3	484.1	489.0	497.4
15°	387.3	395.7	400.5	404.5	410.7	418.2	429.3	441.7	458.5	469.1	477.9
17.5°	363.4	374.5	377.6	376.7	384.6	396.1	408.9	418.2	433.3	446.1	454.5
20°	344.0	348.4	353.7	355.9	362.1	374.5	386.8	397.4	409.8	420.0	429.7
22.5°	324.5	328.0	332.5	336.4	341.3	348.4	360.3	373.6	385.5	395.2	406.3
25°	308.6	310.8	314.8	317.9	323.2	328.0	336.4	351.0	365.2	370.9	380.6
27.5°	293.1	294.9	297.5	301.1	303.7	308.6	316.1	328.0	342.6	348.4	361.6
30°	279.4	280.7	283.4	285.2	286.5	292.2	298.0	307.3	318.3	326.3	336.0
32.5°	266.6	267.9	270.6	271.0	272.8	275.9	281.2	289.6	299.3	305.9	314.3
35°	252.4	253.3	256.0	256.9	258.2	260.8	264.8	271.0	279.8	284.7	292.2
37.5°	241.4	240.9	242.7	244.0	245.8	247.1	248.5	254.6	261.3	265.7	271.4
40°	229.4	228.6	229.0	230.8	231.7	233.4	233.4	239.6	244.0	247.6	252.0
42.5°	217.5	217.1	216.2	217.1	218.0	218.4	218.8	223.3	227.7	230.8	235.6
45°	205.6	205.1	204.2	204.7	204.7	205.6	206.9	208.7	211.8	214.4	217.1
47.5°	194.5	193.6	192.3	191.9	192.8	192.8	192.8	194.5	197.6	198.5	201.2
50°	183.0	181.7	179.9	179.0	179.0	178.6	179.5	179.9	182.6	183.5	185.7
52.5°	170.6	169.8	168.0	166.2	166.7	165.8	166.2	166.7	167.6	168.9	170.2
55°	158.3	156.5	155.2	154.7	153.4	153.4	152.1	153.9	153.4	153.9	155.6
57.5°	146.3	144.6	142.4	141.5	140.1	139.7	138.8	138.4	138.8	140.1	141.5
60°	132.2	131.3	130.0	128.7	127.8	126.4	125.6	125.6	125.1	125.1	125.6
62.5°	118.5	118.0	116.3	115.8	114.9	114.1	112.7	111.9	111.9	112.7	113.2
65°	105.2	104.8	103.5	103.0	100.8	99.9	99.5	99.0	98.1	98.1	98.1
67.5°	92.8	91.5	91.5	89.3	87.5	86.7	85.8	85.3	85.3	85.3	85.8
70°	79.1	79.1	77.8	76.5	74.7	75.2	73.8	72.5	72.5	71.6	72.1
72.5°	65.9	65.4	64.1	63.7	62.3	61.0	60.1	61.0	59.7	59.2	59.7
75°	53.1	52.6	51.7	50.8	51.3	50.0	48.6	48.2	48.2	47.3	47.3
77.5°	40.7	41.6	39.8	39.3	38.5	37.6	37.1	36.7	36.7	36.7	37.6
80°	28.3	28.7	28.7	27.9	28.3	27.0	27.0	27.0	25.6	26.1	26.5
82.5°	18.1	18.1	17.7	18.1	17.7	17.7	17.2	17.2	16.8	16.8	17.2
85°	10.2	9.7	9.3	10.2	9.7	9.7	9.3	9.3	9.3	9.3	9.3
87.5°	2.2	2.7	2.7	2.7	2.7	3.1	3.1	3.1	3.5	3.5	3.5
90°	12.8	12.2	11.7	11.1	10.5	9.6	8.6	7.7	6.8	6.3	5.7
92.5°	13.5	13.3	13.0	12.8	12.6	12.2	11.9	11.5	11.2	11.0	11.2
95°	22.7	22.1	21.6	21.0	20.4	19.6	18.8	17.9	17.1	16.7	18.6
97.5°	28.0	27.7	27.4	27.0	26.7	24.8	23.0	21.1	19.2	18.3	23.1
100°	33.5	32.6	31.7	30.7	29.8	27.8	25.8	23.9	21.9	20.9	28.9
102.5°	36.0	34.7	33.4	32.2	30.9	52.0	73.2	94.3	115.4	126.0	126.1
105°	37.1	35.8	34.5	33.2	31.9	63.6	95.4	127.1	158.8	174.7	173.0
107.5°	38.1	36.8	35.5	34.2	32.9	72.1	111.3	150.4	189.6	209.2	207.7
110°	45.0	56.6	68.3	79.9	91.5	125.1	158.7	192.2	225.8	242.6	241.4

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
112.5°	65.3	115.4	165.5	215.6	265.7	267.7	269.6	271.6	273.5	274.5	273.5
115°	107.4	161.2	215.1	268.9	322.7	319.8	316.9	314.0	311.1	309.6	308.6
117.5°	284.4	301.0	317.7	334.3	350.9	348.9	346.9	345.0	343.0	342.0	340.8
120°	388.9	387.5	386.1	384.7	383.3	381.2	379.1	377.0	374.9	373.9	373.0
122.5°	417.0	416.3	415.6	414.9	414.2	411.9	409.5	407.2	404.9	403.7	402.8
125°	445.1	444.3	443.5	442.7	441.9	439.7	437.5	435.3	433.1	432.0	431.2
127.5°	472.1	471.0	469.8	468.7	467.5	465.8	464.0	462.3	460.6	459.7	458.9
130°	497.2	495.9	494.6	493.4	492.1	490.8	489.5	488.2	486.9	486.3	485.4
132.5°	520.9	519.8	518.8	517.7	516.7	515.4	514.1	512.8	511.5	510.9	510.1
135°	543.8	542.7	541.5	540.4	539.2	538.1	537.1	536.0	534.9	534.4	533.5
137.5°	565.2	564.1	562.9	561.8	560.6	559.4	558.3	557.1	556.0	555.4	554.7
140°	585.7	584.6	583.6	582.5	581.5	580.2	579.0	577.7	576.4	575.8	575.3
142.5°	604.5	603.6	602.7	601.8	600.9	599.4	597.9	596.4	594.9	594.1	593.7
145°	621.9	621.1	620.2	619.4	618.6	616.6	614.7	612.7	610.8	609.8	609.9
147.5°	637.2	636.6	636.1	635.5	634.9	632.9	630.9	629.0	627.0	626.0	626.2
150°	651.8	651.1	650.4	649.7	649.0	647.1	645.3	643.4	641.5	640.6	641.0
152.5°	664.8	664.1	663.4	662.7	662.0	660.3	658.5	656.8	655.1	654.2	654.7
155°	676.4	675.7	675.0	674.3	673.6	672.2	670.8	669.4	668.0	667.3	667.8
157.5°	686.7	685.9	685.1	684.3	683.5	682.5	681.4	680.4	679.3	678.8	679.3
160°	695.2	694.5	693.8	693.1	692.4	691.7	691.0	690.3	689.6	689.2	689.6
162.5°	703.5	702.7	701.8	701.0	700.2	699.6	699.0	698.5	697.9	697.6	697.9
165°	709.8	709.0	708.1	707.3	706.5	706.1	705.8	705.4	705.1	704.9	705.3
167.5°	715.5	714.7	713.8	713.0	712.2	711.9	711.5	711.2	710.9	710.7	711.0
170°	719.7	718.9	718.0	717.2	716.4	716.2	716.0	715.7	715.5	715.4	715.7
172.5°	722.8	722.0	721.2	720.4	719.6	719.4	719.1	718.9	718.6	718.5	718.9
175°	724.9	724.1	723.3	722.5	721.7	721.5	721.2	721.0	720.7	720.6	721.0
177.5°	725.4	724.6	723.8	723.0	722.2	722.1	722.0	721.9	721.8	721.7	722.1
180°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	575.2	575.2	575.2	575.2
2.5°	564.6	564.6	571.2	578.3
5°	552.2	555.3	565.9	575.6
7.5°	540.2	545.5	558.8	571.2
10°	525.7	532.7	549.1	563.7
12.5°	511.5	518.1	537.1	553.5
15°	491.6	500.0	520.3	540.7
17.5°	471.7	480.1	504.9	528.7
20°	448.3	459.3	487.2	519.0
22.5°	426.6	440.3	471.3	496.9
25°	402.8	424.0	452.7	485.9
27.5°	381.5	402.8	431.9	465.5
30°	357.7	379.3	409.4	440.3
32.5°	334.7	354.6	383.7	421.8
35°	310.8	329.8	358.1	396.6
37.5°	289.1	307.7	338.6	374.0
40°	267.9	287.4	313.9	349.3
42.5°	248.0	265.3	289.1	324.5
45°	229.9	242.3	264.4	297.5
47.5°	210.9	221.9	242.3	275.4
50°	193.2	202.5	220.2	251.1
52.5°	176.0	183.9	200.3	225.0
55°	160.5	168.0	179.9	204.2
57.5°	144.6	150.3	161.8	181.3
60°	129.1	134.4	143.7	159.6
62.5°	113.6	118.0	126.9	139.7
65°	99.9	103.5	110.1	121.1
67.5°	86.7	88.9	94.2	103.0
70°	73.8	75.6	80.0	87.1
72.5°	60.1	61.9	66.8	71.6
75°	48.6	49.1	52.6	56.6
77.5°	38.0	37.6	40.2	43.3
80°	26.1	27.4	29.6	30.9
82.5°	17.7	18.1	19.0	19.9
85°	9.7	10.2	10.2	11.5
87.5°	4.0	4.4	4.4	4.9
90°	4.4	3.1	1.8	0.5
92.5°	11.7	12.2	12.6	13.1
95°	22.5	26.3	30.2	34.0
97.5°	32.6	42.1	51.7	61.2
100°	44.8	60.7	76.7	92.6
102.5°	126.4	126.6	126.9	127.1
105°	169.5	166.0	162.5	159.0
107.5°	204.8	201.9	199.0	196.1
110°	239.0	236.5	234.1	231.7



TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
112.5°	271.4	269.3	267.2	265.1
115°	306.6	304.7	302.7	300.7
117.5°	338.5	336.2	333.8	331.5
120°	371.3	369.6	367.8	366.1
122.5°	400.9	399.0	397.2	395.3
125°	429.7	428.2	426.7	425.2
127.5°	457.2	455.6	453.9	452.3
130°	483.5	481.7	479.8	478.0
132.5°	508.6	507.1	505.6	504.1
135°	531.6	529.8	527.9	526.1
137.5°	553.3	551.9	550.5	549.1
140°	574.4	573.5	572.5	571.6
142.5°	592.9	592.0	591.2	590.4
145°	610.0	610.1	610.2	610.3
147.5°	626.5	626.8	627.2	627.5
150°	641.8	642.7	643.5	644.3
152.5°	655.6	656.5	657.5	658.4
155°	668.9	669.9	671.0	672.0
157.5°	680.2	681.1	682.1	683.0
160°	690.3	691.0	691.7	692.4
162.5°	698.6	699.3	700.0	700.7
165°	706.0	706.7	707.4	708.1
167.5°	711.7	712.4	713.1	713.8
170°	716.4	717.1	717.8	718.5
172.5°	719.6	720.3	721.0	721.7
175°	721.8	722.7	723.5	724.3
177.5°	722.9	723.7	724.5	725.3
180°	722.7	722.7	722.7	722.7

TEST NUMBER: P998208

CATALOG NUMBER: SA2XXDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.22	12.96	13.29	14.02	15.46	9.72	10.45	10.78	11.51	12.96
	3H	13.03	13.68	14.10	14.76	16.22	11.05	11.71	12.12	12.78	14.24
	4H	13.19	13.81	14.27	14.89	16.35	11.51	12.13	12.59	13.20	14.67
	6H	13.23	13.80	14.32	14.88	16.36	11.81	12.38	12.90	13.46	14.94
	8H	13.20	13.75	14.30	14.84	16.31	11.89	12.44	12.99	13.53	15.00
	12H	13.16	13.68	14.26	14.77	16.26	11.93	12.45	13.03	13.53	15.03
4H	2H	12.25	12.87	13.34	13.95	15.41	10.15	10.77	11.24	11.84	13.31
	3H	13.22	13.74	14.32	14.84	16.32	11.60	12.12	12.69	13.22	14.70
	4H	13.49	13.97	14.59	15.06	16.56	12.13	12.60	13.23	13.69	15.19
	6H	13.61	14.02	14.72	15.14	16.63	12.50	12.91	13.61	14.02	15.51
	8H	13.61	13.99	14.72	15.10	16.61	12.61	12.99	13.72	14.09	15.60
	12H	13.57	13.91	14.70	15.03	16.54	12.66	13.00	13.78	14.12	15.63
8H	4H	13.49	13.87	14.60	14.98	16.49	12.26	12.64	13.37	13.75	15.25
	6H	13.67	13.98	14.80	15.13	16.63	12.69	13.00	13.82	14.15	15.66
	8H	13.69	13.97	14.83	15.10	16.62	12.84	13.11	13.98	14.24	15.77
	12H	13.67	13.91	14.81	15.04	16.60	12.93	13.17	14.07	14.29	15.85
12H	4H	13.44	13.79	14.57	14.90	16.42	12.23	12.57	13.35	13.69	15.20
	6H	13.64	13.92	14.78	15.05	16.57	12.69	12.96	13.83	14.09	15.62
	8H	13.67	13.91	14.81	15.04	16.60	12.84	13.08	13.98	14.21	15.77