

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: P999552

Luminaire Tested: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999552
REPORT IS A COMBINATION OF REPORTS P988105 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K
Description: Define 2 Regressed Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589}
{m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

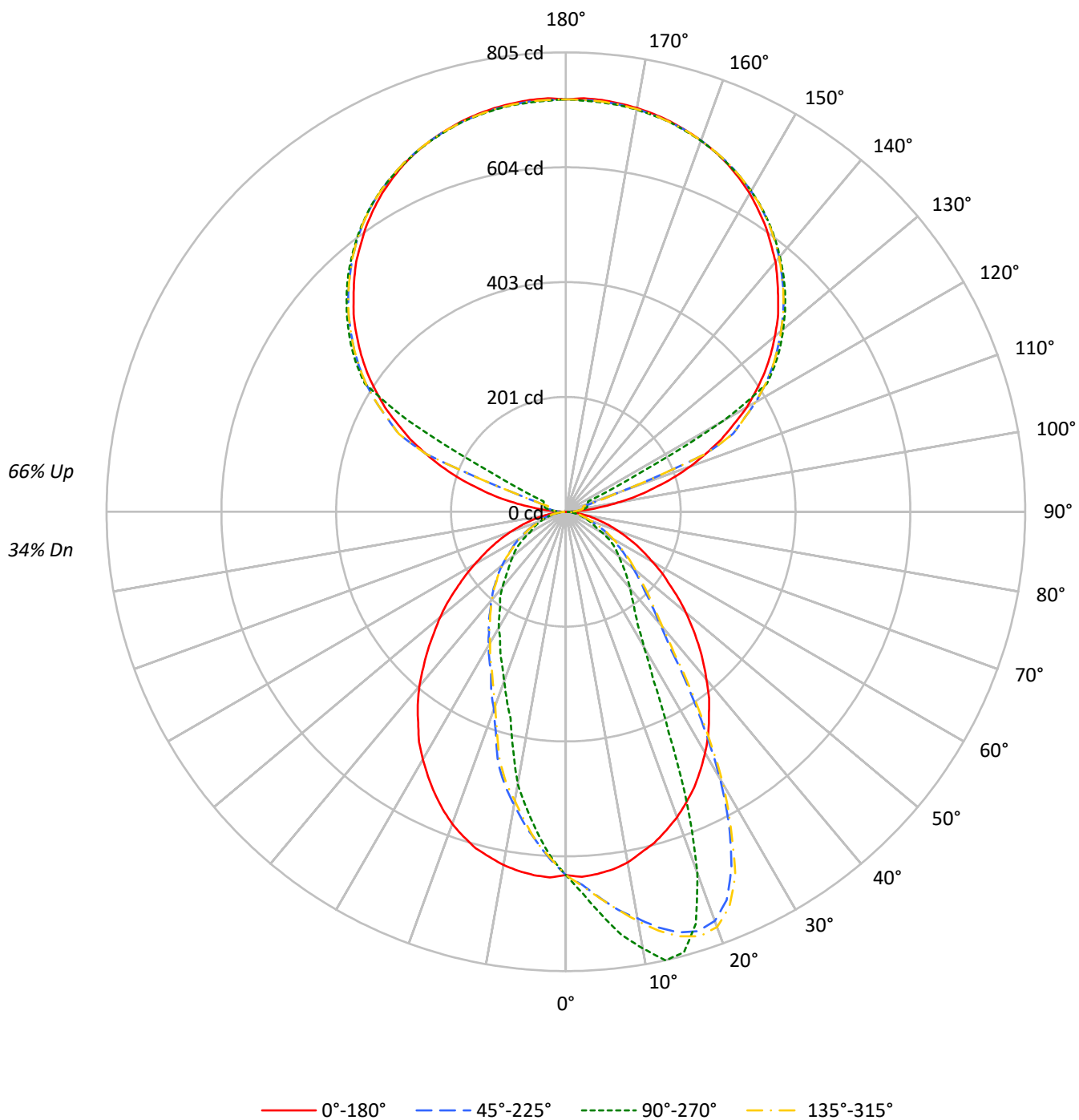
Lumens per Lamp: N/A
Luminaire Lumens: 3220.0 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P999552

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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42
1	95	91	87	84	85	82	79	76	66	64	62	51	50	49	38	37	36
2	87	80	74	69	78	72	68	64	58	55	52	46	43	42	34	32	31
3	79	71	64	58	72	64	58	54	52	48	45	41	38	36	30	29	27
4	73	63	56	50	66	57	51	46	47	42	38	37	34	31	28	26	24
5	67	56	49	43	61	51	45	40	42	37	34	33	30	27	25	23	21
6	62	51	43	38	56	46	40	35	38	33	30	30	27	24	23	21	19
7	57	46	38	33	52	42	35	31	35	30	26	28	24	22	21	19	17
8	53	42	34	29	48	38	32	27	32	27	23	25	22	19	20	17	16
9	50	38	31	26	45	35	29	25	29	24	21	24	20	18	18	16	14
10	46	35	28	24	42	32	26	22	27	22	19	22	18	16	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	10075	10075	10075	10075
5°	10100	10702	10135	8550
10°	9987	11313	10059	7060
15°	9772	11315	9936	5304
20°	9510	9353	9717	4376
25°	9195	5844	9394	3723
30°	8791	3743	9031	3205
35°	8299	2876	8569	2743
40°	7754	2417	8083	2399
45°	7168	2058	7467	2014
50°	6569	1749	6875	1742
55°	5905	1519	6225	1500
60°	5316	1159	5599	1145
65°	4764	871	5048	989
70°	4157	697	4482	807
75°	3513	534	3838	609
80°	2786	364	3002	399
85°	1935	188	2119	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 165°

Vertical Angle: 45°

Luminance: 9218 cd/sqm

TEST NUMBER: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	1.9
10°-20°	168.5	5.2
20°-30°	216.9	6.7
30°-40°	205.8	6.4
40°-50°	176.3	5.5
50°-60°	134.3	4.2
60°-70°	84.7	2.6
70°-80°	42.3	1.3
80°-90°	12.1	0.4
90°-100°	23.8	0.7
100°-110°	88.8	2.8
110°-120°	235.6	7.3
120°-130°	390.8	12.1
130°-140°	415.1	12.9
140°-150°	385.8	12.0
150°-160°	310.2	9.6
160°-170°	199.9	6.2
170°-180°	68.8	2.1
0°-30°	445.8	13.8
0°-40°	651.5	20.2
0°-60°	962.2	29.9
0°-90°	1101.3	34.2
90°-120°	348.3	10.8
90°-150°	1539.9	47.8
90°-180°	2119.0	65.8
0°-180°	3220.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	636	636	636	636	636	
5°	637	708	639	566	637	60
15°	600	799	610	375	600	169
25°	533	426	544	272	533	245
35°	437	210	451	200	437	273
45°	328	146	342	143	328	253
55°	222	101	234	100	222	200
65°	134	53	142	60	134	133
75°	63	28	69	32	63	68
85°	14	8	15	8	14	16
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	

TEST NUMBER: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	640.5	643.2	644.5	646.3	650.2	652.9	656.9	657.8	657.3	659.1	654.2
5°	637.0	642.7	648.0	652.5	659.5	664.0	668.8	674.6	675.9	682.5	678.6
7.5°	632.1	640.5	648.0	656.9	667.5	673.2	680.8	689.6	693.6	701.6	703.8
10°	624.1	636.1	648.9	658.2	672.8	683.0	690.1	704.2	713.5	725.4	723.7
12.5°	611.3	626.8	644.0	659.5	678.6	685.2	698.5	713.1	725.0	736.1	745.8
15°	600.3	618.0	637.0	656.0	677.7	690.1	703.3	722.3	735.2	754.6	763.0
17.5°	585.2	607.8	630.3	651.6	677.2	691.4	707.7	726.3	745.3	763.9	770.6
20°	569.7	594.1	618.4	647.1	676.3	690.1	706.9	729.9	748.4	763.0	763.0
22.5°	551.2	580.8	608.7	636.1	667.9	687.8	705.1	732.1	745.3	748.4	736.5
25°	532.6	562.2	592.7	626.8	663.1	680.8	700.2	725.4	729.9	717.5	686.5
27.5°	510.5	543.6	578.1	614.9	652.9	675.0	692.7	709.5	701.1	667.9	619.7
30°	487.9	523.7	562.7	597.6	643.6	664.0	679.0	683.9	657.3	603.4	541.0
32.5°	464.5	499.4	540.5	582.6	629.0	648.5	658.2	645.4	596.7	528.6	452.5
35°	437.0	476.4	519.3	563.1	609.1	623.7	629.5	598.0	535.7	447.6	372.0
37.5°	412.3	451.6	497.6	542.3	587.0	594.9	589.2	540.1	460.9	373.8	299.9
40°	383.1	425.1	470.2	520.2	556.9	559.1	545.0	481.3	383.1	301.2	255.7
42.5°	356.1	398.5	443.7	494.5	522.4	514.9	495.9	412.3	319.8	259.7	222.9
45°	328.2	368.5	417.1	462.2	482.2	464.5	435.7	346.8	268.5	223.4	195.1
47.5°	301.2	338.8	387.0	430.4	433.9	414.0	380.0	290.6	232.7	196.4	173.4
50°	274.7	312.3	357.4	393.2	389.7	362.3	323.8	252.6	202.1	173.4	154.4
52.5°	248.2	282.2	326.0	354.3	339.3	312.7	274.7	214.1	176.5	151.3	136.7
55°	221.6	253.5	291.1	314.5	290.6	260.1	233.1	183.6	153.0	132.7	121.6
57.5°	199.5	224.7	259.2	273.4	244.6	220.7	197.3	157.9	132.7	118.1	105.3
60°	175.2	198.2	226.5	234.9	205.2	185.8	165.9	133.6	113.7	100.9	92.4
62.5°	154.4	173.4	195.1	195.1	169.0	154.4	139.3	111.9	95.5	85.4	81.4
65°	134.0	147.7	163.2	161.5	139.3	126.5	114.6	92.4	80.1	73.0	69.0
67.5°	114.1	124.7	134.9	128.7	112.8	101.7	90.7	74.8	66.4	61.5	56.2
70°	96.0	104.4	109.7	104.0	88.0	78.7	70.8	60.2	53.5	47.3	44.2
72.5°	80.5	84.0	85.8	78.7	65.5	60.2	54.4	46.9	41.1	38.0	37.2
75°	62.8	65.9	64.6	59.3	48.2	44.2	39.8	34.5	33.2	31.4	30.5
77.5°	49.1	49.1	46.9	42.0	34.5	31.4	29.6	27.0	25.7	25.2	24.3
80°	34.9	34.5	33.2	27.9	23.4	21.7	21.7	19.9	19.5	18.6	18.6
82.5°	23.0	23.0	21.2	16.8	15.5	15.0	14.6	13.7	13.7	13.3	13.3
85°	13.7	12.8	10.6	9.3	8.8	8.8	8.4	8.0	8.4	8.0	8.0
87.5°	6.2	4.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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



TEST NUMBER: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

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

TEST NUMBER: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	659.1	660.0	661.3	667.5	668.4	670.1	669.3	669.3	669.7	668.8	669.3
5°	687.4	688.7	695.4	702.9	704.6	702.9	705.1	708.2	708.2	708.2	707.3
7.5°	713.9	718.8	726.3	737.4	739.6	741.8	745.8	743.1	744.0	748.0	746.7
10°	739.6	746.7	755.1	764.4	769.2	772.3	774.1	778.1	787.4	776.8	780.7
12.5°	763.9	774.1	782.9	793.1	796.7	800.6	802.0	805.5	805.5	805.1	808.2
15°	779.8	789.1	797.1	803.7	804.6	803.7	802.8	803.3	804.6	799.3	802.4
17.5°	783.4	784.3	786.9	784.3	784.7	775.4	770.1	768.8	756.4	756.8	767.0
20°	766.1	751.1	747.1	732.5	723.7	699.8	698.9	692.3	666.2	674.1	672.4
22.5°	718.8	693.1	659.1	642.3	633.9	608.7	589.2	575.5	566.2	556.9	552.9
25°	656.4	614.9	566.6	533.5	528.6	505.2	469.3	452.5	432.6	426.4	437.0
27.5°	575.9	522.0	467.6	416.7	407.4	386.2	368.0	356.1	333.1	331.8	332.6
30°	466.7	412.3	366.7	333.5	310.5	300.8	288.8	280.0	270.7	274.3	275.1
32.5°	383.5	331.8	289.3	271.6	261.0	254.8	244.6	238.9	234.9	233.6	233.1
35°	304.8	270.3	251.2	234.0	227.8	223.4	215.9	213.2	209.7	210.1	210.1
37.5°	261.0	232.2	218.1	209.2	203.5	201.3	196.4	193.7	191.5	190.6	192.0
40°	225.2	205.2	196.4	188.4	183.6	182.7	180.0	176.9	174.3	174.7	176.1
42.5°	199.1	187.6	176.9	170.7	167.2	165.9	163.7	161.5	161.5	160.1	159.7
45°	178.3	169.0	160.1	154.4	152.2	150.4	147.7	147.3	145.5	146.0	146.4
47.5°	159.7	152.2	145.5	139.8	137.6	137.1	134.5	132.7	132.7	132.3	131.8
50°	142.9	135.4	129.6	126.5	123.4	122.5	122.1	121.6	120.8	120.8	121.2
52.5°	129.2	121.6	117.2	114.6	112.8	111.9	111.9	111.5	111.5	111.5	111.0
55°	114.1	107.9	104.4	103.5	102.6	102.2	101.7	100.9	100.4	101.3	100.4
57.5°	100.0	97.8	94.7	93.8	91.6	91.6	90.2	89.4	88.5	89.4	89.4
60°	88.9	85.8	84.0	81.4	79.6	77.9	75.6	75.2	74.3	73.9	73.4
62.5°	77.4	74.8	70.3	66.4	63.7	61.9	61.0	60.6	60.6	60.2	60.2
65°	64.6	58.4	56.2	54.9	54.4	54.0	53.1	52.6	53.1	52.6	53.1
67.5°	50.4	49.5	48.2	47.3	46.9	46.4	46.4	46.0	46.0	46.0	46.0
70°	43.8	41.6	41.1	40.3	40.3	39.8	39.8	39.8	39.8	39.4	40.3
72.5°	36.3	34.9	34.5	34.1	34.1	34.1	33.6	33.6	33.6	33.2	33.6
75°	29.6	29.2	28.3	28.3	27.9	28.3	27.9	27.9	27.4	27.9	27.9
77.5°	23.9	23.4	23.0	23.0	22.6	22.6	22.6	22.6	22.6	22.6	23.0
80°	18.1	17.7	17.3	17.7	17.3	17.7	17.3	17.3	17.7	17.3	17.3
82.5°	13.3	12.8	12.8	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
85°	8.0	7.5	7.5	8.0	7.5	8.0	7.5	7.5	7.5	8.0	8.0
87.5°	3.5	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4.0
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	671.0	667.9	667.0	667.9	667.0	667.5	664.4	652.9	656.0	651.1	653.8
5°	709.1	706.4	700.7	699.8	698.9	698.0	693.6	683.4	679.4	672.8	672.4
7.5°	745.3	745.3	740.9	737.8	733.8	730.7	725.0	710.0	703.8	695.8	691.4
10°	781.2	769.7	774.5	771.4	761.7	759.9	749.3	740.5	728.5	720.6	713.5
12.5°	806.8	803.3	798.9	796.2	793.6	787.8	780.7	758.2	752.0	736.1	728.1
15°	805.9	803.7	805.1	805.1	804.2	802.8	797.1	780.7	770.1	754.6	740.9
17.5°	762.6	768.3	774.1	778.1	786.9	790.9	796.2	786.5	779.8	766.6	752.0
20°	687.0	701.1	717.9	721.5	729.4	752.9	763.5	771.9	774.5	770.1	758.2
22.5°	581.7	593.6	634.3	633.4	644.9	672.8	703.8	729.0	748.9	759.9	755.5
25°	455.6	472.4	494.1	510.5	548.1	589.6	628.1	668.4	702.9	733.4	740.9
27.5°	344.6	366.7	384.0	405.6	424.6	473.7	523.3	586.1	626.4	684.3	714.4
30°	278.7	288.8	306.1	316.3	325.6	363.2	419.3	481.3	552.0	618.8	670.6
32.5°	238.0	245.1	257.9	262.3	272.0	297.3	332.6	389.3	462.2	543.2	611.3
35°	213.7	221.2	223.8	227.8	235.8	251.7	276.0	317.2	383.1	462.2	543.6
37.5°	192.9	196.8	204.4	207.0	209.7	221.6	238.0	266.7	310.5	375.5	465.8
40°	178.3	180.5	184.5	186.7	188.4	196.8	211.4	230.9	263.2	312.7	395.9
42.5°	162.8	165.4	168.1	170.7	173.0	179.6	188.4	207.0	228.7	266.3	326.4
45°	147.7	149.5	152.6	154.4	157.5	162.8	170.7	183.6	203.0	226.9	275.6
47.5°	134.0	136.2	137.6	139.8	142.0	147.7	155.3	163.7	179.6	203.0	238.4
50°	121.6	124.3	126.1	126.5	128.3	133.6	139.8	149.1	159.2	177.4	208.3
52.5°	112.8	113.2	114.6	116.3	115.9	119.0	124.7	131.8	142.4	157.0	179.6
55°	102.6	104.0	104.8	105.3	105.3	107.9	111.0	117.7	126.1	138.0	157.0
57.5°	89.8	91.1	93.8	94.7	96.0	97.3	98.6	103.1	110.1	121.6	137.1
60°	76.5	77.4	80.1	81.8	82.7	86.3	88.0	91.6	95.5	104.0	118.5
62.5°	61.5	62.4	63.7	65.5	67.2	72.5	77.0	80.5	83.6	89.4	101.3
65°	53.5	54.0	54.9	55.3	55.7	57.9	61.9	66.8	72.5	77.0	84.0
67.5°	46.4	46.9	47.3	48.2	48.7	49.1	50.9	52.2	57.9	64.1	69.4
70°	39.8	40.7	41.1	41.1	41.6	42.5	43.3	45.1	46.9	50.0	56.6
72.5°	33.6	34.1	34.9	34.9	34.9	35.8	36.7	37.6	38.5	40.3	42.9
75°	27.9	28.8	28.8	28.8	29.2	29.2	30.1	31.0	31.8	33.2	34.1
77.5°	23.0	23.0	23.0	23.0	23.4	23.4	23.9	24.8	25.2	25.7	26.5
80°	17.3	17.7	17.7	17.7	18.1	18.1	18.1	19.0	19.5	19.5	20.3
82.5°	12.8	12.8	12.8	13.3	12.8	13.3	13.3	13.7	13.3	13.7	14.2
85°	8.0	8.0	8.0	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.8
87.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.4	4.0	4.0
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	649.8	647.6	647.6	646.3	646.3	639.2	639.2	641.4	638.7	635.6	631.2
5°	666.6	661.7	660.4	658.6	652.9	644.0	640.5	639.2	633.9	627.2	619.7
7.5°	682.5	674.6	670.6	666.6	659.1	646.7	639.6	634.8	626.8	616.6	606.9
10°	698.0	687.8	677.7	672.8	662.2	646.7	636.5	628.6	617.1	603.4	589.6
12.5°	712.2	690.9	689.2	679.4	664.0	646.3	630.8	619.3	604.7	588.8	572.8
15°	724.6	702.9	692.3	683.4	663.1	641.0	624.6	610.4	591.0	572.8	553.4
17.5°	730.7	707.3	700.2	685.6	664.8	636.1	614.0	596.7	575.5	553.8	531.7
20°	736.9	709.5	698.0	687.8	659.5	626.8	602.0	582.1	558.7	533.0	508.7
22.5°	740.0	709.5	695.8	681.6	654.2	616.6	587.4	564.0	536.6	510.5	481.3
25°	734.7	706.9	690.5	675.9	644.9	604.2	570.6	544.1	514.9	485.2	455.6
27.5°	721.5	700.7	681.6	666.6	632.1	588.3	552.9	522.8	492.8	459.6	429.5
30°	696.7	687.4	672.4	655.5	618.0	574.2	532.1	501.2	468.0	434.8	403.4
32.5°	658.2	666.2	656.4	641.8	601.1	554.7	510.0	478.6	442.3	406.5	377.8
35°	611.3	639.6	634.3	624.1	583.4	533.9	489.2	451.2	414.9	378.6	349.9
37.5°	560.0	602.9	607.3	601.1	563.1	512.7	463.6	426.4	389.3	352.5	323.4
40°	489.7	555.6	569.7	572.4	541.9	487.0	435.7	399.4	362.7	326.9	291.5
42.5°	425.1	508.2	525.9	537.0	514.9	461.8	410.0	369.8	333.5	301.2	265.8
45°	364.5	451.2	479.9	494.1	484.4	433.1	379.5	341.9	308.8	279.1	245.1
47.5°	302.1	389.3	429.5	452.1	452.1	403.9	350.3	313.2	281.3	256.1	226.0
50°	260.5	333.1	374.7	404.3	412.3	374.2	323.8	287.5	257.4	230.0	207.0
52.5°	222.1	287.1	321.6	352.5	375.5	342.4	294.2	261.4	231.8	206.1	188.0
55°	192.0	240.6	272.0	306.1	331.8	310.1	265.4	233.6	207.9	186.7	171.2
57.5°	163.2	205.7	231.3	261.4	288.8	272.5	236.7	209.2	186.7	168.1	154.4
60°	138.9	173.4	193.3	216.7	250.8	239.3	209.7	184.5	166.3	149.5	138.0
62.5°	118.1	145.5	162.3	179.1	210.1	204.8	181.8	162.3	146.9	132.7	123.0
65°	96.9	119.4	132.7	147.3	172.1	174.3	155.7	142.0	127.8	115.5	106.6
67.5°	78.3	96.0	107.9	120.3	140.2	146.4	133.6	122.1	110.1	100.0	92.0
70°	63.3	75.6	84.5	94.2	110.6	118.1	111.5	103.5	93.8	85.4	78.3
72.5°	50.0	57.9	63.3	70.8	84.0	91.6	91.1	84.0	77.0	71.2	65.5
75°	36.7	42.9	47.3	52.2	62.8	69.9	71.7	68.6	61.5	57.1	52.6
77.5°	27.9	31.4	33.6	37.2	44.7	50.9	53.5	52.6	47.8	44.2	41.1
80°	21.2	22.1	23.0	24.3	30.5	36.3	38.0	37.6	34.9	33.6	30.1
82.5°	15.0	15.5	15.9	16.4	18.6	23.4	25.2	26.1	23.9	22.6	19.5
85°	8.8	9.3	9.3	10.2	10.6	11.9	15.0	15.0	14.6	12.8	12.4
87.5°	4.4	4.4	4.0	4.0	4.4	4.9	5.8	6.6	5.8	5.3	4.9
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	629.5	629.9	631.2	627.2	621.0	618.4	610.4	609.1	607.8	607.8	609.1
5°	615.3	613.5	614.0	606.4	597.6	592.3	581.2	583.0	577.3	573.7	574.6
7.5°	599.8	594.9	594.5	584.8	573.7	564.0	552.5	549.8	544.5	538.3	535.7
10°	580.4	576.8	570.2	559.1	545.0	537.0	521.5	512.2	510.9	501.6	498.1
12.5°	560.4	554.3	547.6	532.1	516.2	503.4	491.9	481.7	474.6	466.7	461.4
15°	537.4	529.9	522.4	506.0	487.5	474.6	457.4	442.3	421.6	405.2	395.9
17.5°	512.2	503.8	493.7	475.5	457.4	439.7	407.8	390.1	375.5	365.8	360.1
20°	486.1	476.8	466.7	448.5	417.1	386.2	368.5	354.8	345.9	336.2	329.1
22.5°	458.7	449.0	437.9	409.6	376.4	354.8	341.0	328.2	315.4	310.1	306.5
25°	433.1	424.2	410.0	371.6	345.5	325.6	310.1	301.7	295.0	288.0	281.3
27.5°	406.5	390.1	370.2	337.9	321.6	301.2	290.2	284.0	272.5	267.6	264.5
30°	374.7	356.5	337.5	314.5	295.5	281.3	271.2	261.0	254.3	249.5	244.2
32.5°	342.4	325.1	313.2	289.3	275.1	260.5	250.8	244.6	234.9	231.8	229.6
35°	314.5	299.9	289.3	269.8	256.6	243.3	236.2	226.9	220.7	215.0	211.4
37.5°	287.1	279.1	268.1	251.7	237.5	226.9	217.2	214.1	205.7	202.6	199.1
40°	268.1	256.1	246.8	232.7	220.7	209.2	203.0	196.0	190.2	185.3	184.0
42.5°	245.1	236.2	230.9	215.4	203.0	196.4	188.9	180.9	176.5	172.5	167.6
45°	227.8	219.8	212.3	199.9	188.9	180.5	173.8	168.5	161.0	159.2	151.7
47.5°	209.7	201.7	196.0	183.6	173.4	165.4	160.6	153.5	147.3	143.3	139.8
50°	191.5	184.9	179.6	169.0	160.1	151.7	145.1	138.0	135.4	128.7	126.5
52.5°	174.3	169.9	164.1	153.9	145.1	138.0	130.9	125.2	121.2	117.7	115.0
55°	159.7	152.6	150.0	138.9	131.4	123.9	117.7	114.1	109.3	107.0	104.8
57.5°	143.3	139.3	134.9	126.5	118.1	111.0	106.6	101.3	98.6	96.0	94.2
60°	129.2	123.4	119.9	112.8	105.3	98.6	94.7	90.7	87.1	84.9	81.4
62.5°	112.8	108.4	106.2	98.6	92.4	86.3	82.7	78.7	76.1	72.1	67.7
65°	98.6	95.1	92.4	86.3	80.5	74.8	71.2	66.4	62.8	60.6	60.2
67.5°	86.3	83.6	79.6	73.9	68.1	63.7	59.7	55.7	55.3	54.4	54.4
70°	72.5	69.9	67.7	61.5	56.6	51.8	50.9	49.5	48.2	47.8	46.9
72.5°	60.6	58.4	55.7	50.4	45.6	44.2	43.3	42.5	41.1	40.7	40.3
75°	49.1	46.0	44.2	39.4	38.0	37.2	36.3	34.9	34.1	33.6	32.7
77.5°	37.6	34.5	34.5	31.8	31.0	29.6	28.8	27.9	27.4	26.5	26.5
80°	26.5	26.5	25.7	24.3	23.0	22.6	21.2	20.8	20.3	20.8	19.9
82.5°	19.5	17.7	17.7	16.8	15.9	15.5	14.6	14.6	14.2	14.2	14.2
85°	11.1	11.1	10.6	9.7	9.3	9.3	8.8	8.8	8.4	8.4	8.0
87.5°	4.4	4.0	4.4	4.0	4.0	3.5	3.5	3.5	3.1	3.5	3.1
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	609.1	608.2	605.6	606.4	605.1	605.1	604.2	604.2	604.2	606.4	605.1
5°	575.9	572.8	569.7	568.4	567.1	565.8	565.8	565.3	569.3	568.4	571.9
7.5°	534.8	533.9	527.7	527.7	525.5	524.6	526.8	527.3	527.7	528.6	530.8
10°	498.1	495.9	487.0	487.9	486.6	484.8	486.1	485.2	488.3	489.2	488.3
12.5°	454.7	450.7	441.0	436.1	430.8	426.9	431.7	428.2	440.6	444.1	453.8
15°	397.2	389.7	383.1	383.1	378.2	374.7	376.9	380.9	383.5	387.5	389.3
17.5°	358.7	355.6	350.3	347.2	345.9	344.6	344.6	346.4	352.1	351.7	355.2
20°	326.0	324.2	321.6	317.6	316.3	315.4	315.4	315.4	319.4	322.9	325.1
22.5°	303.4	302.1	300.3	295.0	292.4	291.5	293.7	295.0	298.1	300.8	303.0
25°	280.9	277.8	274.7	272.9	271.6	271.6	272.5	272.9	274.3	275.6	278.2
27.5°	262.3	260.1	255.7	250.8	250.8	249.5	250.4	251.2	254.3	258.8	261.0
30°	241.5	241.1	239.3	237.5	235.8	234.9	236.7	238.0	238.4	240.6	240.6
32.5°	226.5	223.4	220.3	218.5	217.6	217.2	217.6	219.4	219.4	222.1	225.2
35°	211.4	209.7	206.6	203.5	202.6	200.4	202.1	203.9	207.0	208.3	209.7
37.5°	195.1	192.9	191.5	190.6	188.9	189.3	188.0	190.6	193.3	192.9	193.7
40°	182.7	178.7	174.7	174.3	173.8	173.4	173.4	173.8	175.6	177.4	180.0
42.5°	166.8	165.4	161.9	158.4	157.5	156.6	155.7	157.5	161.0	164.1	165.4
45°	150.4	148.6	147.7	145.1	143.3	142.9	142.0	144.2	147.3	148.6	149.5
47.5°	135.4	134.9	132.3	132.7	131.4	131.8	131.4	132.7	132.7	134.0	134.9
50°	125.2	123.9	122.5	121.6	120.3	120.3	119.9	120.3	122.1	123.9	123.4
52.5°	115.0	112.8	112.4	111.9	111.0	111.9	110.6	111.0	112.8	113.7	113.2
55°	103.1	102.6	101.7	100.9	100.4	100.0	100.0	100.0	101.7	103.1	103.5
57.5°	93.8	91.6	89.8	89.8	88.0	87.6	88.5	88.9	90.2	91.1	92.0
60°	80.9	80.1	77.4	76.1	73.4	73.0	73.0	74.8	77.0	80.1	80.9
62.5°	67.2	65.9	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.9	65.9
65°	59.7	60.2	59.7	59.3	59.7	59.7	59.3	59.3	59.3	59.7	60.2
67.5°	53.5	53.1	53.5	53.1	52.6	52.6	52.2	52.6	53.1	53.5	53.5
70°	46.4	46.4	46.0	46.4	46.0	45.6	45.1	45.1	46.0	46.4	46.4
72.5°	39.8	39.8	39.4	39.4	38.5	38.5	38.9	38.5	38.5	39.8	39.8
75°	33.2	32.7	32.3	32.3	31.8	31.8	31.8	31.4	32.3	32.3	32.7
77.5°	26.1	26.1	26.1	25.7	25.7	25.2	25.2	25.7	25.7	25.7	26.1
80°	19.9	19.9	19.9	19.5	19.0	19.0	19.0	19.0	19.0	19.5	19.0
82.5°	13.7	13.7	13.7	13.7	13.7	13.3	13.3	13.3	13.7	13.7	13.3
85°	8.4	8.0	8.4	8.4	8.0	8.4	8.0	8.0	7.5	7.5	8.0
87.5°	3.5	3.1	2.7	2.7	3.1	2.7	2.7	2.7	3.1	2.7	2.7
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5
2.5°	606.4	608.7	607.8	602.9	607.8	609.1	611.8	614.4	616.2	618.8	621.0
5°	568.4	572.8	575.5	572.8	581.7	583.0	589.2	592.7	598.0	602.5	606.0
7.5°	532.6	536.1	541.4	542.3	547.6	553.8	562.7	571.5	579.9	584.3	588.3
10°	494.1	500.3	508.2	506.5	514.4	524.2	533.5	547.6	554.7	562.7	569.7
12.5°	455.6	459.6	470.2	473.7	485.2	492.8	505.6	514.4	532.1	541.4	547.6
15°	388.4	404.7	418.0	433.9	449.0	463.1	474.6	490.6	506.0	513.1	523.3
17.5°	357.9	365.4	373.3	381.3	400.8	426.0	446.3	463.6	476.8	486.1	498.1
20°	326.0	333.5	342.4	349.9	361.8	380.0	405.2	434.8	450.7	460.5	472.0
22.5°	303.4	310.5	316.3	322.9	332.2	345.5	364.5	401.2	422.4	434.4	444.6
25°	279.1	288.0	294.2	299.0	306.5	321.1	336.6	357.4	395.5	404.7	418.9
27.5°	262.3	265.0	272.0	279.6	287.1	295.0	311.0	328.7	354.3	374.7	391.9
30°	242.4	249.0	255.7	258.8	265.4	276.9	286.6	305.7	325.6	341.5	362.3
32.5°	227.4	231.3	235.8	243.3	249.5	257.4	267.2	283.1	299.9	310.1	326.0
35°	210.6	213.2	222.5	225.6	231.8	239.7	249.5	261.9	280.0	288.0	299.5
37.5°	194.6	200.8	203.5	210.6	216.3	224.3	231.3	245.5	257.4	266.7	277.3
40°	182.2	184.9	189.8	196.0	200.8	207.0	215.9	226.0	238.9	246.4	255.7
42.5°	167.2	169.4	175.6	179.1	187.1	192.9	198.2	210.6	222.1	227.8	237.1
45°	150.8	156.1	160.1	167.2	171.6	178.7	185.3	194.2	204.8	211.4	216.7
47.5°	136.7	142.0	146.0	152.6	159.7	162.8	169.9	179.1	188.9	194.2	201.7
50°	125.2	127.0	134.5	137.6	145.1	151.3	156.1	164.1	174.7	177.8	184.0
52.5°	114.1	115.5	120.3	124.3	130.9	136.2	142.4	150.0	158.8	163.7	168.5
55°	104.4	105.3	107.5	111.9	116.3	123.0	128.7	135.8	143.3	148.6	153.0
57.5°	93.3	95.1	96.9	99.5	104.0	110.1	116.3	123.0	129.2	132.7	138.5
60°	80.5	83.2	86.3	89.4	92.4	96.9	104.0	110.1	115.9	119.0	123.4
62.5°	66.8	72.1	74.8	78.3	80.9	84.9	90.2	97.3	101.3	105.3	108.8
65°	60.2	60.6	61.0	64.6	69.4	73.4	78.3	83.6	89.8	92.4	95.1
67.5°	53.5	54.0	54.9	55.3	57.1	61.5	66.8	72.5	77.4	79.2	81.8
70°	46.9	46.9	48.7	49.1	49.5	50.0	54.4	60.2	64.6	66.8	69.9
72.5°	39.8	40.3	41.1	41.6	42.5	43.3	44.7	47.8	53.1	55.3	58.8
75°	32.7	33.2	33.6	34.1	35.4	35.8	37.2	38.9	41.1	43.8	46.0
77.5°	26.1	26.1	26.5	27.4	28.3	28.8	30.1	31.0	31.8	33.2	34.9
80°	19.5	19.9	19.9	20.8	20.8	21.2	21.7	23.0	23.9	24.8	25.7
82.5°	13.3	14.2	14.2	14.2	14.6	15.0	15.5	15.5	16.4	16.8	18.1
85°	8.0	8.4	8.4	8.4	8.0	8.8	8.8	9.3	9.3	9.3	9.7
87.5°	3.1	2.7	3.1	3.1	3.1	3.5	3.1	3.1	3.5	4.0	4.0
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: P999552

CATALOG NUMBER: SA2XXRDIP-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: P999552

CATALOG NUMBER: SA2XXRDIP-B290D530UB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	636.5	636.5	636.5	636.5
2.5°	625.0	623.7	631.7	640.5
5°	612.2	614.4	624.6	637.0
7.5°	598.9	603.8	615.7	632.1
10°	580.4	589.2	607.3	624.1
12.5°	562.2	574.2	591.4	611.3
15°	541.9	555.1	576.4	600.3
17.5°	519.3	534.3	559.1	585.2
20°	495.4	515.3	541.4	569.7
22.5°	468.9	492.8	519.8	551.2
25°	443.2	469.3	496.3	532.6
27.5°	418.0	443.7	473.7	510.5
30°	392.8	416.2	448.5	487.9
32.5°	365.8	390.1	424.2	464.5
35°	341.0	365.4	397.2	437.0
37.5°	314.5	340.6	371.1	412.3
40°	283.5	314.1	343.7	383.1
42.5°	257.9	290.2	318.9	356.1
45°	237.5	268.1	291.9	328.2
47.5°	218.5	243.3	267.6	301.2
50°	200.4	219.4	244.6	274.7
52.5°	181.8	198.2	219.8	248.2
55°	165.0	180.5	199.9	221.6
57.5°	149.5	160.6	180.0	199.5
60°	132.3	143.8	158.8	175.2
62.5°	117.7	126.5	140.7	154.4
65°	102.2	110.6	121.2	134.0
67.5°	88.0	95.5	104.0	114.1
70°	75.2	80.9	87.1	96.0
72.5°	61.5	67.7	73.4	80.5
75°	50.4	53.1	57.9	62.8
77.5°	38.9	42.5	45.1	49.1
80°	27.9	31.0	31.8	34.9
82.5°	18.6	20.3	22.1	23.0
85°	10.6	11.5	13.3	13.7
87.5°	4.0	4.4	5.3	6.2
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: P999552

CATALOG NUMBER: SA2XXRDIP-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

(END OF REPORT)