

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331240

Luminaire Tested: **SA2XXDIP-C290D330U835-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331240
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C290D330U835-4F0-1E-UDD-A
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 330 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

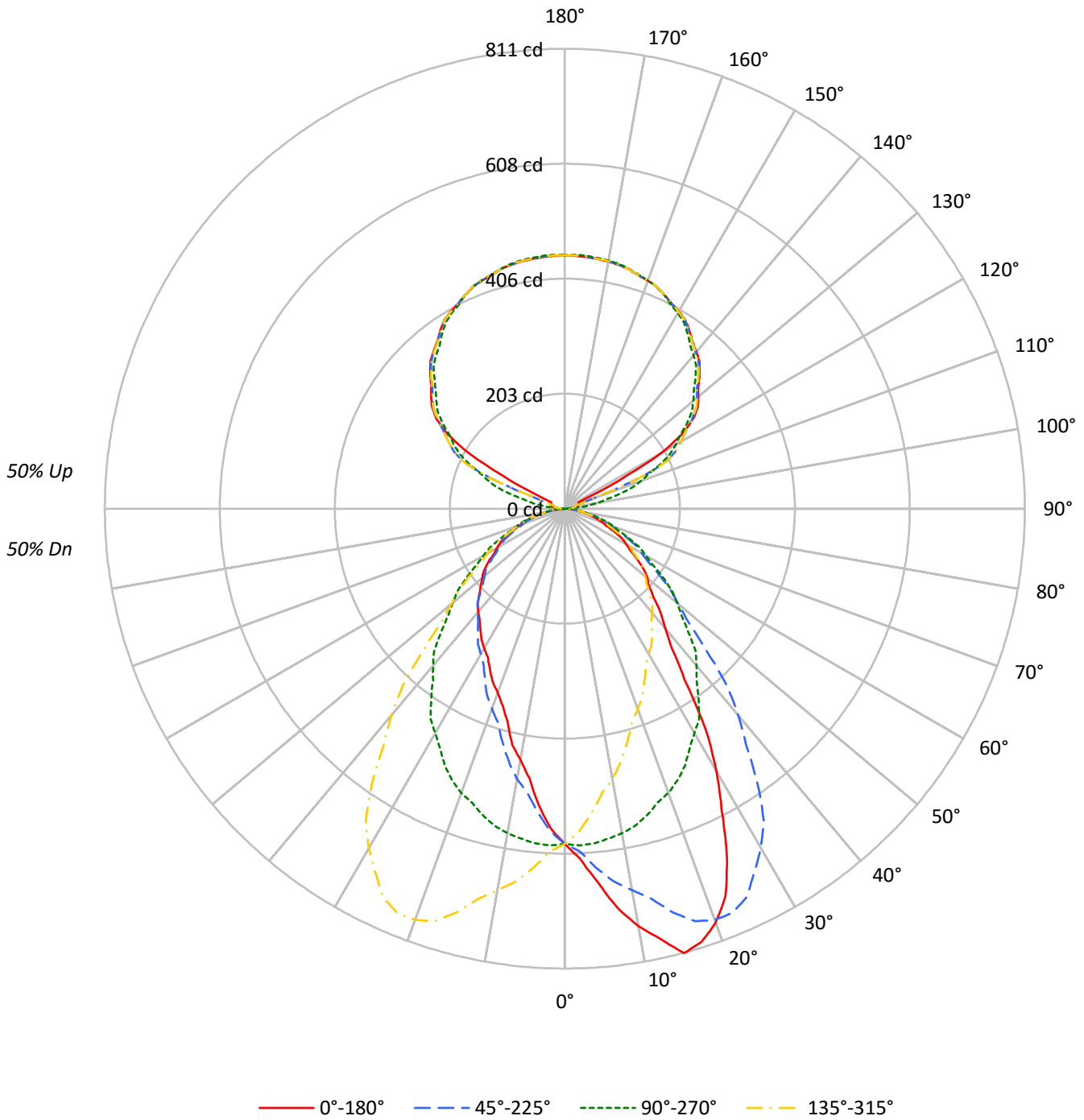
Lumens per Lamp: N/A
Luminaire Lumens: 2614.6 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 20.3
Input Voltage (V): 120
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: 25 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		0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10		0
RCR																			
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56		50
1	98	94	90	87	91	87	84	81	74	71	69	62	60	58	50	49	48		43
2	90	83	77	72	83	77	72	67	65	61	58	55	52	50	45	43	41		37
3	82	73	66	60	76	68	62	57	58	53	49	49	45	43	40	38	36		32
4	75	65	57	52	69	60	54	49	52	47	43	44	40	37	36	33	31		28
5	69	58	50	45	64	54	47	42	47	41	37	39	35	32	33	30	28		24
6	64	52	45	39	59	49	42	37	42	37	33	36	32	28	30	27	24		22
7	59	47	40	34	55	44	37	32	38	33	29	33	29	25	28	24	22		19
8	55	43	36	30	51	40	34	29	35	30	26	30	26	23	25	22	20		17
9	52	40	32	27	48	37	30	26	32	27	23	28	24	21	24	20	18		16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	16		15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9544	9544	9544	9544
5°	10699	9606	8512	9606
10°	12260	9527	7366	9527
15°	13563	9352	6509	9352
20°	13357	9165	5933	9165
25°	12043	8915	5569	8915
30°	9952	8516	5302	8516
35°	7253	8099	5113	8099
40°	5794	7609	5008	7609
45°	5062	7040	4866	7040
50°	4760	6488	4770	6488
55°	4386	5928	4642	5928
60°	4020	5331	4447	5331
65°	3664	4798	4252	4798
70°	3323	4277	3970	4277
75°	2951	3699	3512	3699
80°	2538	3059	2827	3059
85°	2279	2279	1686	2279



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	2.2
10°-20°	163.7	6.3
20°-30°	237.5	9.1
30°-40°	250.6	9.6
40°-50°	221.9	8.5
50°-60°	177.1	6.8
60°-70°	120.4	4.6
70°-80°	61.7	2.4
80°-90°	16.0	0.6
90°-100°	14.9	0.6
100°-110°	54.7	2.1
110°-120°	146.1	5.6
120°-130°	241.2	9.2
130°-140°	256.5	9.8
140°-150°	238.4	9.1
150°-160°	191.7	7.3
160°-170°	123.5	4.7
170°-180°	42.5	1.6
0°-30°	457.5	17.5
0°-40°	708.1	27.1
0°-60°	1107.1	42.3
0°-90°	1305.1	49.9
90°-120°	215.7	8.2
90°-150°	951.8	36.4
90°-180°	1309.0	50.1
0°-180°	2614.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	591	591	591	591	591	
5°	660	593	525	593	660	66
15°	811	560	389	560	811	224
25°	676	500	313	500	676	306
35°	368	411	259	411	368	239
45°	222	308	213	308	222	174
55°	156	211	165	211	156	140
65°	96	126	111	126	96	95
75°	47	59	56	59	47	51
85°	12	12	9	12	12	14
90°	9	0	9	0	9	4
95°	14	21	14	21	14	13
105°	25	98	25	98	25	26
115°	26	186	26	186	26	66
125°	276	263	276	263	276	239
135°	336	325	336	325	336	259
145°	383	377	383	377	383	240
155°	416	416	416	416	416	192
165°	437	438	437	438	437	123
175°	445	448	445	448	445	42
180°	447	447	447	447	447	



TEST NUMBER: P331240

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	618.3	618.5	618.9	616.0	615.6	615.6	613.1	610.9	608.3	604.9	605.3
5°	660.1	662.6	663.5	660.8	656.7	656.3	652.4	646.1	640.1	635.4	632.0
7.5°	710.0	711.0	708.8	705.2	702.2	696.7	689.5	682.5	672.6	663.6	656.9
10°	747.8	749.2	745.3	740.1	735.8	729.4	719.0	708.3	695.4	682.9	672.9
12.5°	776.5	779.9	774.9	774.3	766.9	758.1	745.7	740.3	722.1	704.7	693.9
15°	811.4	811.2	811.7	807.3	801.9	800.5	787.4	773.0	747.4	737.1	719.4
17.5°	801.3	804.8	806.4	806.3	806.2	805.3	801.1	792.1	779.2	762.6	742.2
20°	777.4	781.9	782.6	787.8	790.8	794.6	796.2	793.7	785.8	771.9	754.2
22.5°	740.3	741.6	743.7	751.8	758.2	767.9	772.9	781.4	778.3	771.5	756.7
25°	676.0	673.8	681.7	685.8	700.6	716.0	727.2	739.4	750.3	756.9	752.6
27.5°	598.9	595.5	607.4	618.3	630.2	647.0	664.3	684.8	701.8	723.2	730.5
30°	533.8	535.9	547.2	558.8	577.0	600.6	620.2	642.6	667.0	690.8	707.4
32.5°	463.7	471.5	478.7	496.5	512.5	538.8	567.5	595.6	625.9	653.0	678.7
35°	368.0	377.1	387.1	400.0	422.5	448.6	476.6	514.5	555.9	592.9	623.3
37.5°	309.8	308.3	314.0	323.4	341.6	362.7	394.9	432.3	481.0	524.5	567.5
40°	274.9	274.0	278.0	286.7	300.5	316.0	344.2	377.1	422.3	475.5	526.6
42.5°	250.9	251.4	253.7	259.8	269.3	282.0	303.1	331.1	372.5	422.6	477.5
45°	221.7	223.3	225.8	228.8	234.2	244.7	256.5	276.5	309.2	351.0	405.0
47.5°	200.7	200.8	203.3	205.9	209.1	215.0	224.7	237.2	260.3	294.3	340.8
50°	189.5	187.9	189.7	191.7	195.1	199.2	205.6	217.4	232.8	260.3	299.2
52.5°	175.6	175.7	177.3	178.1	181.1	185.2	191.0	199.2	213.2	234.7	266.6
55°	155.8	157.0	157.9	159.2	162.0	164.9	169.5	174.9	185.8	201.9	225.6
57.5°	137.2	137.6	138.5	141.1	142.8	145.5	149.8	154.8	161.9	173.8	191.6
60°	124.5	124.5	126.3	127.4	129.7	132.4	135.8	140.6	147.0	156.7	171.1
62.5°	112.9	112.7	113.4	115.3	117.0	119.5	122.9	127.0	133.0	141.7	153.4
65°	95.9	95.4	96.8	97.2	99.0	101.5	104.3	108.6	113.4	119.7	130.2
67.5°	79.5	80.1	80.8	81.6	82.6	85.3	87.1	90.1	94.2	99.5	106.5
70°	70.4	70.4	70.4	71.1	72.5	73.8	75.6	78.1	82.0	86.5	92.9
72.5°	60.2	61.0	61.7	61.3	63.0	63.8	66.0	67.4	71.1	74.0	79.6
75°	47.3	47.3	47.3	48.4	49.1	49.7	51.1	52.5	54.3	57.9	60.9
77.5°	35.3	35.2	35.4	35.7	36.4	37.2	37.6	38.8	40.5	42.2	44.7
80°	27.3	27.7	27.9	28.4	28.4	28.8	29.1	30.7	31.8	32.9	34.5
82.5°	21.1	21.2	21.2	21.3	21.5	21.8	22.4	22.9	23.3	24.2	25.4
85°	12.3	12.0	12.0	12.5	12.3	12.3	12.7	13.2	13.2	13.4	14.1
87.5°	6.5	6.4	6.6	6.4	6.4	6.5	6.4	6.2	6.3	6.4	6.4
90°	8.7	8.6	8.4	8.3	8.2	7.9	7.5	7.2	6.8	6.5	5.9
92.5°	8.7	8.6	8.6	8.5	8.4	8.2	8.1	7.9	7.7	7.5	7.2
95°	13.9	14.0	14.0	14.1	14.2	14.0	13.7	13.3	13.0	12.6	12.1
97.5°	18.6	18.5	18.4	18.3	18.2	18.0	17.7	17.5	17.2	16.9	15.7
100°	21.7	21.5	21.4	21.2	21.1	20.7	20.2	19.6	19.0	18.4	17.2
102.5°	23.2	23.0	22.8	22.6	22.4	21.9	21.2	20.4	19.7	18.9	29.2
105°	24.6	24.3	24.0	23.7	23.4	22.9	22.1	21.3	20.5	19.7	39.3
107.5°	25.3	25.0	24.7	24.4	24.1	24.4	25.2	26.0	26.8	27.6	51.1
110°	25.5	25.3	25.0	24.7	24.4	27.8	35.0	42.2	49.4	56.6	77.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	25.8	25.6	25.3	25.1	24.9	37.9	64.1	90.3	116.5	142.7	147.8
115°	26.5	31.7	36.9	42.0	47.2	66.4	99.7	133.0	166.2	199.5	197.7
117.5°	108.3	125.3	142.3	159.3	176.3	188.8	196.8	204.9	212.9	221.0	219.7
120°	197.2	206.9	216.6	226.3	236.0	240.4	239.6	238.7	237.9	237.0	235.7
122.5°	246.1	248.0	249.9	251.8	253.6	254.3	253.8	253.3	252.8	252.3	250.9
125°	276.4	276.2	276.0	275.8	275.6	275.2	274.7	274.2	273.7	273.2	271.8
127.5°	295.6	295.5	295.5	295.5	295.4	295.0	294.3	293.6	292.8	292.1	291.1
130°	307.5	307.6	307.6	307.7	307.8	307.4	306.6	305.8	305.0	304.3	303.5
132.5°	319.1	319.2	319.3	319.3	319.4	319.1	318.4	317.8	317.1	316.4	315.6
135°	335.9	336.1	336.2	336.4	336.5	336.2	335.5	334.8	334.1	333.4	332.7
137.5°	351.3	351.5	351.8	352.0	352.2	352.0	351.3	350.6	349.9	349.2	348.5
140°	360.8	361.2	361.6	361.9	362.3	362.1	361.5	360.8	360.2	359.5	358.8
142.5°	370.1	370.5	370.9	371.2	371.6	371.5	370.9	370.3	369.7	369.1	368.2
145°	383.1	383.5	383.9	384.2	384.6	384.5	384.0	383.5	383.0	382.5	381.3
147.5°	394.6	394.9	395.2	395.5	395.8	395.8	395.4	395.0	394.6	394.3	393.1
150°	401.6	401.9	402.3	402.7	403.0	403.0	402.5	402.1	401.7	401.3	400.1
152.5°	407.5	408.0	408.5	408.9	409.4	409.4	409.0	408.6	408.1	407.7	406.6
155°	415.8	416.4	417.0	417.5	418.1	418.2	417.7	417.3	416.9	416.4	415.6
157.5°	423.4	423.9	424.5	425.0	425.6	425.6	425.2	424.7	424.2	423.7	423.1
160°	427.8	428.3	428.8	429.3	429.8	429.8	429.4	429.0	428.5	428.1	427.7
162.5°	431.4	432.0	432.6	433.2	433.9	433.9	433.4	432.9	432.5	432.0	431.6
165°	436.8	437.3	437.8	438.3	438.8	438.8	438.3	437.8	437.3	436.8	436.6
167.5°	440.2	440.9	441.5	442.2	442.8	442.9	442.4	441.9	441.4	440.9	440.7
170°	442.3	443.0	443.6	444.3	444.9	445.0	444.5	444.0	443.5	443.0	442.8
172.5°	443.9	444.5	445.2	445.8	446.5	446.5	446.0	445.5	445.0	444.5	444.4
175°	445.2	445.9	446.7	447.4	448.1	448.2	447.7	447.2	446.7	446.2	446.1
177.5°	446.1	446.6	447.1	447.6	448.1	448.2	447.8	447.4	447.0	446.6	446.5
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	606.5	605.1	604.2	600.9	598.0	595.1	594.2	594.5	590.5	586.7	585.1
5°	630.2	625.6	621.3	615.2	607.9	599.9	595.9	592.7	584.7	576.1	571.1
7.5°	651.3	644.8	636.5	625.0	614.4	601.9	593.9	586.9	575.3	563.1	555.6
10°	664.2	655.4	644.7	630.6	617.7	602.4	591.8	581.1	567.5	552.9	543.8
12.5°	675.3	663.4	652.9	634.8	619.5	600.4	587.8	572.7	558.4	541.1	532.2
15°	701.7	679.7	659.7	639.2	620.4	593.8	579.7	559.5	540.7	519.3	509.1
17.5°	722.1	697.3	665.9	639.9	617.9	588.4	567.8	543.6	521.3	496.9	483.0
20°	733.7	705.3	671.5	640.6	614.3	580.6	558.1	533.4	507.3	479.8	464.8
22.5°	740.6	710.8	677.3	637.9	607.0	574.3	546.0	518.8	492.4	462.7	447.0
25°	742.8	715.6	680.1	635.6	597.9	560.9	526.8	500.4	468.4	440.7	417.8
27.5°	732.0	712.5	678.4	631.3	587.4	544.1	506.1	476.3	442.5	412.4	389.3
30°	718.7	707.4	674.2	627.0	579.0	532.5	490.7	456.8	423.2	392.8	369.1
32.5°	698.2	695.8	666.6	620.8	570.1	517.8	474.5	440.3	403.0	373.1	350.6
35°	657.9	668.8	650.4	607.0	553.4	496.8	450.0	410.9	372.3	343.7	322.6
37.5°	603.8	630.9	626.1	586.8	530.7	474.0	422.3	381.5	344.7	315.8	295.1
40°	566.5	601.1	606.1	571.3	514.8	456.4	401.6	361.0	325.1	298.7	277.8
42.5°	526.6	566.9	580.6	552.8	497.3	437.8	383.1	341.0	305.4	279.8	261.3
45°	459.6	512.9	537.7	521.8	468.2	407.3	351.0	308.3	276.0	251.9	237.6
47.5°	396.9	455.2	488.5	482.9	435.8	375.5	319.8	278.8	247.4	228.2	215.4
50°	352.6	412.5	452.7	454.6	412.5	352.8	296.9	258.3	229.4	211.5	201.0
52.5°	314.0	371.3	415.1	424.8	386.5	329.2	276.4	237.9	212.5	196.0	186.7
55°	263.7	312.1	360.7	378.5	347.8	293.3	244.4	210.6	186.7	175.4	167.2
57.5°	219.3	259.6	304.5	324.1	305.2	258.5	212.7	183.3	164.0	154.0	147.7
60°	195.8	227.6	267.6	291.0	274.6	233.1	193.1	165.1	149.2	140.4	134.5
62.5°	174.0	202.2	236.0	257.4	248.5	209.3	173.5	148.8	135.1	126.8	122.5
65°	143.6	165.8	192.0	211.7	205.8	176.1	146.7	125.6	114.7	108.1	104.7
67.5°	118.2	134.3	152.4	169.7	165.0	143.9	120.4	103.9	95.8	90.1	88.0
70°	102.2	114.5	130.6	144.5	140.6	123.4	104.7	90.6	83.6	78.8	76.8
72.5°	87.0	97.0	109.4	120.7	118.1	103.7	88.2	77.6	72.1	67.7	66.1
75°	65.7	73.4	80.9	88.4	87.7	76.6	67.5	59.3	55.0	51.6	50.9
77.5°	48.5	52.8	57.9	62.3	61.1	54.7	47.6	42.9	39.8	37.5	37.1
80°	37.0	39.5	43.2	46.3	44.8	42.0	36.3	32.9	30.7	28.4	27.5
82.5°	26.9	29.3	31.5	33.3	32.0	29.5	26.0	23.7	22.3	20.8	20.4
85°	14.1	15.4	16.4	16.8	16.4	14.8	13.2	12.3	11.1	10.4	10.2
87.5°	6.5	6.4	6.3	6.5	5.8	5.7	4.8	4.1	4.0	4.0	3.8
90°	5.3	4.7	4.2	3.5	2.7	1.9	1.1	0.3	1.1	1.9	2.7
92.5°	6.9	6.6	6.4	6.2	6.3	6.4	6.5	6.5	6.5	6.4	6.3
95°	11.6	11.1	10.6	11.5	13.9	16.3	18.6	21.0	18.6	16.3	13.9
97.5°	14.5	13.4	12.2	15.0	21.7	28.3	35.0	41.7	35.0	28.3	21.7
100°	16.0	14.8	13.5	17.9	27.7	37.5	47.4	57.2	47.4	37.5	27.7
102.5°	39.4	49.6	59.8	66.0	68.1	70.1	72.2	74.3	72.2	70.1	68.1
105°	59.0	78.6	98.2	106.9	104.8	102.6	100.4	98.3	100.4	102.6	104.8
107.5°	74.7	98.2	121.7	132.6	130.9	129.1	127.4	125.6	127.4	129.1	130.9
110°	98.1	118.9	139.6	149.3	147.8	146.3	144.7	143.2	144.7	146.3	147.8



TEST NUMBER: P331240
 CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	153.0	158.1	163.2	165.1	163.8	162.5	161.1	159.8	161.1	162.5	163.8
115°	195.9	194.1	192.3	190.8	189.6	188.4	187.1	185.9	187.1	188.4	189.6
117.5°	218.5	217.3	216.0	214.7	213.4	212.0	210.6	209.3	210.6	212.0	213.4
120°	234.4	233.1	231.8	230.6	229.6	228.5	227.4	226.3	227.4	228.5	229.6
122.5°	249.4	248.0	246.6	245.4	244.2	243.1	242.0	240.8	242.0	243.1	244.2
125°	270.5	269.1	267.8	266.6	265.7	264.7	263.8	262.9	263.8	264.7	265.7
127.5°	290.1	289.0	288.0	287.0	286.0	284.9	283.9	282.8	283.9	284.9	286.0
130°	302.7	301.9	301.1	300.1	299.0	297.8	296.7	295.5	296.7	297.8	299.0
132.5°	314.8	314.0	313.2	312.4	311.4	310.4	309.4	308.5	309.4	310.4	311.4
135°	332.1	331.4	330.8	329.9	328.7	327.6	326.4	325.3	326.4	327.6	328.7
137.5°	347.7	347.0	346.3	345.5	344.7	343.9	343.1	342.3	343.1	343.9	344.7
140°	358.0	357.2	356.4	355.7	355.1	354.5	354.0	353.4	354.0	354.5	355.1
142.5°	367.3	366.4	365.5	364.8	364.3	363.7	363.2	362.7	363.2	363.7	364.3
145°	380.1	378.8	377.6	377.0	377.1	377.2	377.3	377.3	377.3	377.2	377.1
147.5°	391.9	390.6	389.4	389.0	389.2	389.5	389.8	390.1	389.8	389.5	389.2
150°	399.0	397.8	396.7	396.3	396.8	397.3	397.8	398.3	397.8	397.3	396.8
152.5°	405.5	404.4	403.3	403.1	403.6	404.2	404.8	405.3	404.8	404.2	403.6
155°	414.7	413.9	413.0	412.9	413.5	414.2	414.8	415.5	414.8	414.2	413.5
157.5°	422.5	421.9	421.3	421.2	421.8	422.3	422.9	423.4	422.9	422.3	421.8
160°	427.2	426.8	426.4	426.4	426.8	427.2	427.7	428.1	427.7	427.2	426.8
162.5°	431.2	430.8	430.5	430.5	430.9	431.4	431.8	432.2	431.8	431.4	430.9
165°	436.4	436.2	436.0	436.1	436.5	436.9	437.4	437.8	437.4	436.9	436.5
167.5°	440.5	440.3	440.1	440.2	440.6	441.1	441.5	441.9	441.5	441.1	440.6
170°	442.7	442.5	442.4	442.5	443.0	443.4	443.8	444.3	443.8	443.4	443.0
172.5°	444.2	444.1	443.9	444.1	444.5	444.9	445.4	445.8	445.4	444.9	444.5
175°	445.9	445.8	445.6	445.8	446.3	446.8	447.3	447.8	447.3	446.8	446.3
177.5°	446.5	446.4	446.4	446.5	446.9	447.3	447.7	448.1	447.7	447.3	446.9
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	583.3	582.2	578.4	576.4	573.1	570.0	568.0	568.9	569.6	569.3	568.7
5°	566.5	562.2	555.6	550.0	545.9	538.4	535.2	533.6	532.2	530.7	529.1
7.5°	546.6	539.8	530.4	522.3	514.7	505.3	500.0	496.9	493.6	490.0	486.8
10°	532.5	522.9	512.9	501.6	492.5	484.1	476.6	471.6	467.0	462.7	459.6
12.5°	517.6	506.6	494.2	478.7	468.7	456.6	455.5	446.7	439.6	436.9	433.2
15°	493.9	478.4	462.7	444.3	436.4	425.5	418.7	411.8	405.7	401.4	400.3
17.5°	466.9	446.9	431.3	418.1	405.1	393.9	387.6	382.2	377.1	371.4	370.6
20°	446.4	429.1	412.1	400.5	387.1	375.7	368.0	362.6	358.2	354.8	351.9
22.5°	426.9	408.0	392.4	379.8	366.6	357.4	351.3	346.0	342.4	338.7	335.9
25°	395.7	381.0	363.9	349.6	338.7	332.8	327.8	323.3	321.0	318.5	315.3
27.5°	368.4	352.0	336.1	325.0	315.4	310.2	306.6	303.5	301.4	299.9	298.1
30°	349.2	332.6	320.1	309.2	301.2	296.0	293.7	291.9	289.4	288.5	287.6
32.5°	330.6	315.7	305.0	295.5	288.0	284.5	282.5	280.8	278.9	278.0	276.1
35°	304.4	291.9	281.5	276.2	270.1	267.1	265.6	263.3	261.5	260.6	260.3
37.5°	279.7	268.9	262.0	255.3	252.7	250.9	248.7	247.2	246.6	246.5	246.2
40°	263.7	254.9	248.7	243.3	242.2	239.4	237.6	236.3	236.3	236.5	236.3
42.5°	249.2	241.2	235.8	231.1	229.8	228.2	226.3	226.3	226.6	227.4	226.6
45°	227.2	221.5	217.6	215.4	212.9	211.3	211.0	211.7	211.9	212.2	212.9
47.5°	206.9	203.1	199.6	197.1	196.0	195.8	195.5	196.7	197.8	198.2	199.2
50°	194.9	190.6	187.6	186.0	185.1	184.7	185.1	186.5	187.4	188.5	189.2
52.5°	181.5	178.4	176.4	175.1	174.8	175.1	175.1	176.7	178.1	178.6	178.9
55°	162.9	160.6	160.2	158.1	159.0	158.8	159.9	160.8	162.2	163.6	163.8
57.5°	144.3	142.5	141.3	141.5	141.8	142.8	143.7	145.3	146.7	148.2	148.3
60°	132.0	131.1	130.4	130.4	130.8	132.2	133.3	134.9	135.8	136.8	137.4
62.5°	120.7	119.8	119.1	119.5	120.7	121.5	122.8	123.7	124.6	125.5	125.8
65°	102.9	102.5	103.1	103.6	103.8	104.9	106.5	107.2	108.1	108.6	110.2
67.5°	86.5	86.6	86.5	87.1	88.5	88.7	90.2	91.8	92.0	92.9	93.9
70°	75.4	75.9	76.3	76.8	77.9	78.4	79.5	80.2	81.1	81.8	82.5
72.5°	65.2	65.3	65.8	65.7	66.7	67.6	68.6	69.3	70.2	71.1	71.7
75°	50.2	50.2	50.7	50.9	52.0	53.2	52.9	53.4	54.3	55.2	55.7
77.5°	36.7	36.2	36.7	36.9	37.3	38.2	38.4	39.0	40.1	39.8	40.3
80°	27.9	27.3	27.9	28.2	28.2	29.3	29.3	29.8	30.4	29.8	30.4
82.5°	19.9	19.6	20.1	20.2	20.5	20.6	20.9	21.0	21.7	21.4	21.7
85°	10.0	9.8	10.0	9.8	10.0	10.2	10.2	10.0	10.0	10.4	9.8
87.5°	3.8	3.7	3.7	3.8	3.7	3.7	3.5	3.6	3.7	3.4	3.4
90°	3.5	4.2	4.7	5.3	5.9	6.5	6.8	7.2	7.5	7.9	8.2
92.5°	6.2	6.4	6.6	6.9	7.2	7.5	7.7	7.9	8.1	8.2	8.4
95°	11.5	10.6	11.1	11.6	12.1	12.6	13.0	13.3	13.7	14.0	14.2
97.5°	15.0	12.2	13.4	14.5	15.7	16.9	17.2	17.5	17.7	18.0	18.2
100°	17.9	13.5	14.8	16.0	17.2	18.4	19.0	19.6	20.2	20.7	21.1
102.5°	66.0	59.8	49.6	39.4	29.2	18.9	19.7	20.4	21.2	21.9	22.4
105°	106.9	98.2	78.6	59.0	39.3	19.7	20.5	21.3	22.1	22.9	23.4
107.5°	132.6	121.7	98.2	74.7	51.1	27.6	26.8	26.0	25.2	24.4	24.1
110°	149.3	139.6	118.9	98.1	77.3	56.6	49.4	42.2	35.0	27.8	24.4



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	165.1	163.2	158.1	153.0	147.8	142.7	116.5	90.3	64.1	37.9	24.9
115°	190.8	192.3	194.1	195.9	197.7	199.5	166.2	133.0	99.7	66.4	47.2
117.5°	214.7	216.0	217.3	218.5	219.7	221.0	212.9	204.9	196.8	188.8	176.3
120°	230.6	231.8	233.1	234.4	235.7	237.0	237.9	238.7	239.6	240.4	236.0
122.5°	245.4	246.6	248.0	249.4	250.9	252.3	252.8	253.3	253.8	254.3	253.6
125°	266.6	267.8	269.1	270.5	271.8	273.2	273.7	274.2	274.7	275.2	275.6
127.5°	287.0	288.0	289.0	290.1	291.1	292.1	292.8	293.6	294.3	295.0	295.4
130°	300.1	301.1	301.9	302.7	303.5	304.3	305.0	305.8	306.6	307.4	307.8
132.5°	312.4	313.2	314.0	314.8	315.6	316.4	317.1	317.8	318.4	319.1	319.4
135°	329.9	330.8	331.4	332.1	332.7	333.4	334.1	334.8	335.5	336.2	336.5
137.5°	345.5	346.3	347.0	347.7	348.5	349.2	349.9	350.6	351.3	352.0	352.2
140°	355.7	356.4	357.2	358.0	358.8	359.5	360.2	360.8	361.5	362.1	362.3
142.5°	364.8	365.5	366.4	367.3	368.2	369.1	369.7	370.3	370.9	371.5	371.6
145°	377.0	377.6	378.8	380.1	381.3	382.5	383.0	383.5	384.0	384.5	384.6
147.5°	389.0	389.4	390.6	391.9	393.1	394.3	394.6	395.0	395.4	395.8	395.8
150°	396.3	396.7	397.8	399.0	400.1	401.3	401.7	402.1	402.5	403.0	403.0
152.5°	403.1	403.3	404.4	405.5	406.6	407.7	408.1	408.6	409.0	409.4	409.4
155°	412.9	413.0	413.9	414.7	415.6	416.4	416.9	417.3	417.7	418.2	418.1
157.5°	421.2	421.3	421.9	422.5	423.1	423.7	424.2	424.7	425.2	425.6	425.6
160°	426.4	426.4	426.8	427.2	427.7	428.1	428.5	429.0	429.4	429.8	429.8
162.5°	430.5	430.5	430.8	431.2	431.6	432.0	432.5	432.9	433.4	433.9	433.9
165°	436.1	436.0	436.2	436.4	436.6	436.8	437.3	437.8	438.3	438.8	438.8
167.5°	440.2	440.1	440.3	440.5	440.7	440.9	441.4	441.9	442.4	442.9	442.8
170°	442.5	442.4	442.5	442.7	442.8	443.0	443.5	444.0	444.5	445.0	444.9
172.5°	444.1	443.9	444.1	444.2	444.4	444.5	445.0	445.5	446.0	446.5	446.5
175°	445.8	445.6	445.8	445.9	446.1	446.2	446.7	447.2	447.7	448.2	448.1
177.5°	446.5	446.4	446.4	446.5	446.5	446.6	447.0	447.4	447.8	448.2	448.1
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	566.9	566.5	566.5	564.9	566.5	566.5	566.9	568.7	569.3	569.6	568.9
5°	525.9	525.2	524.1	525.2	524.1	525.2	525.9	529.1	530.7	532.2	533.6
7.5°	485.3	482.6	482.2	479.5	482.2	482.6	485.3	486.8	490.0	493.6	496.9
10°	455.7	453.9	453.6	449.3	453.6	453.9	455.7	459.6	462.7	467.0	471.6
12.5°	433.2	428.8	429.7	427.2	429.7	428.8	433.2	433.2	436.9	439.6	446.7
15°	394.1	394.1	393.2	389.4	393.2	394.1	394.1	400.3	401.4	405.7	411.8
17.5°	366.1	365.6	363.5	364.6	363.5	365.6	366.1	370.6	371.4	377.1	382.2
20°	349.4	348.0	345.3	345.3	345.3	348.0	349.4	351.9	354.8	358.2	362.6
22.5°	333.6	333.5	330.6	331.5	330.6	333.5	333.6	335.9	338.7	342.4	346.0
25°	315.1	313.3	311.9	312.6	311.9	313.3	315.1	315.3	318.5	321.0	323.3
27.5°	297.5	296.5	296.4	294.6	296.4	296.5	297.5	298.1	299.9	301.4	303.5
30°	287.4	285.1	285.5	284.4	285.5	285.1	287.4	287.6	288.5	289.4	291.9
32.5°	275.7	274.9	274.5	273.5	274.5	274.9	275.7	276.1	278.0	278.9	280.8
35°	259.9	260.1	259.0	259.4	259.0	260.1	259.9	260.3	260.6	261.5	263.3
37.5°	246.0	246.7	246.2	246.3	246.2	246.7	246.0	246.2	246.5	246.6	247.2
40°	236.9	236.9	236.9	237.6	236.9	236.9	236.9	236.3	236.5	236.3	236.3
42.5°	228.2	227.8	227.5	227.4	227.5	227.8	228.2	226.6	227.4	226.6	226.3
45°	213.3	214.0	214.2	213.1	214.2	214.0	213.3	212.9	212.2	211.9	211.7
47.5°	199.8	199.9	199.8	200.8	199.8	199.9	199.8	199.2	198.2	197.8	196.7
50°	190.4	189.9	190.4	189.9	190.4	189.9	190.4	189.2	188.5	187.4	186.5
52.5°	180.4	180.5	180.2	180.1	180.2	180.5	180.4	178.9	178.6	178.1	176.7
55°	164.7	165.1	164.9	164.9	164.9	165.1	164.7	163.8	163.6	162.2	160.8
57.5°	148.5	148.9	149.2	148.2	149.2	148.9	148.5	148.3	148.2	146.7	145.3
60°	137.2	138.3	138.1	137.7	138.1	138.3	137.2	137.4	136.8	135.8	134.9
62.5°	126.8	127.3	127.2	127.1	127.2	127.3	126.8	125.8	125.5	124.6	123.7
65°	110.9	111.3	110.6	111.3	110.6	111.3	110.9	110.2	108.6	108.1	107.2
67.5°	93.6	93.8	94.3	94.6	94.3	93.8	93.6	93.9	92.9	92.0	91.8
70°	82.9	82.7	83.4	84.1	83.4	82.7	82.9	82.5	81.8	81.1	80.2
72.5°	71.6	72.1	71.9	72.4	71.9	72.1	71.6	71.7	71.1	70.2	69.3
75°	55.2	55.9	55.7	56.3	55.7	55.9	55.2	55.7	55.2	54.3	53.4
77.5°	39.9	40.0	39.9	40.3	39.9	40.0	39.9	40.3	39.8	40.1	39.0
80°	30.4	30.0	29.5	30.4	29.5	30.0	30.4	30.4	29.8	30.4	29.8
82.5°	21.2	21.4	21.0	21.0	21.0	21.4	21.2	21.7	21.4	21.7	21.0
85°	9.8	9.5	9.1	9.1	9.1	9.5	9.8	9.8	10.4	10.0	10.0
87.5°	3.5	3.3	3.4	3.2	3.4	3.3	3.5	3.4	3.4	3.7	3.6
90°	8.3	8.4	8.6	8.7	8.6	8.4	8.3	8.2	7.9	7.5	7.2
92.5°	8.5	8.6	8.6	8.7	8.6	8.6	8.5	8.4	8.2	8.1	7.9
95°	14.1	14.0	14.0	13.9	14.0	14.0	14.1	14.2	14.0	13.7	13.3
97.5°	18.3	18.4	18.5	18.6	18.5	18.4	18.3	18.2	18.0	17.7	17.5
100°	21.2	21.4	21.5	21.7	21.5	21.4	21.2	21.1	20.7	20.2	19.6
102.5°	22.6	22.8	23.0	23.2	23.0	22.8	22.6	22.4	21.9	21.2	20.4
105°	23.7	24.0	24.3	24.6	24.3	24.0	23.7	23.4	22.9	22.1	21.3
107.5°	24.4	24.7	25.0	25.3	25.0	24.7	24.4	24.1	24.4	25.2	26.0
110°	24.7	25.0	25.3	25.5	25.3	25.0	24.7	24.4	27.8	35.0	42.2



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	25.1	25.3	25.6	25.8	25.6	25.3	25.1	24.9	37.9	64.1	90.3
115°	42.0	36.9	31.7	26.5	31.7	36.9	42.0	47.2	66.4	99.7	133.0
117.5°	159.3	142.3	125.3	108.3	125.3	142.3	159.3	176.3	188.8	196.8	204.9
120°	226.3	216.6	206.9	197.2	206.9	216.6	226.3	236.0	240.4	239.6	238.7
122.5°	251.8	249.9	248.0	246.1	248.0	249.9	251.8	253.6	254.3	253.8	253.3
125°	275.8	276.0	276.2	276.4	276.2	276.0	275.8	275.6	275.2	274.7	274.2
127.5°	295.5	295.5	295.5	295.6	295.5	295.5	295.5	295.4	295.0	294.3	293.6
130°	307.7	307.6	307.6	307.5	307.6	307.6	307.7	307.8	307.4	306.6	305.8
132.5°	319.3	319.3	319.2	319.1	319.2	319.3	319.3	319.4	319.1	318.4	317.8
135°	336.4	336.2	336.1	335.9	336.1	336.2	336.4	336.5	336.2	335.5	334.8
137.5°	352.0	351.8	351.5	351.3	351.5	351.8	352.0	352.2	352.0	351.3	350.6
140°	361.9	361.6	361.2	360.8	361.2	361.6	361.9	362.3	362.1	361.5	360.8
142.5°	371.2	370.9	370.5	370.1	370.5	370.9	371.2	371.6	371.5	370.9	370.3
145°	384.2	383.9	383.5	383.1	383.5	383.9	384.2	384.6	384.5	384.0	383.5
147.5°	395.5	395.2	394.9	394.6	394.9	395.2	395.5	395.8	395.8	395.4	395.0
150°	402.7	402.3	401.9	401.6	401.9	402.3	402.7	403.0	403.0	402.5	402.1
152.5°	408.9	408.5	408.0	407.5	408.0	408.5	408.9	409.4	409.4	409.0	408.6
155°	417.5	417.0	416.4	415.8	416.4	417.0	417.5	418.1	418.2	417.7	417.3
157.5°	425.0	424.5	423.9	423.4	423.9	424.5	425.0	425.6	425.6	425.2	424.7
160°	429.3	428.8	428.3	427.8	428.3	428.8	429.3	429.8	429.8	429.4	429.0
162.5°	433.2	432.6	432.0	431.4	432.0	432.6	433.2	433.9	433.9	433.4	432.9
165°	438.3	437.8	437.3	436.8	437.3	437.8	438.3	438.8	438.8	438.3	437.8
167.5°	442.2	441.5	440.9	440.2	440.9	441.5	442.2	442.8	442.9	442.4	441.9
170°	444.3	443.6	443.0	442.3	443.0	443.6	444.3	444.9	445.0	444.5	444.0
172.5°	445.8	445.2	444.5	443.9	444.5	445.2	445.8	446.5	446.5	446.0	445.5
175°	447.4	446.7	445.9	445.2	445.9	446.7	447.4	448.1	448.2	447.7	447.2
177.5°	447.6	447.1	446.6	446.1	446.6	447.1	447.6	448.1	448.2	447.8	447.4
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	568.0	570.0	573.1	576.4	578.4	582.2	583.3	585.1	586.7	590.5	594.5
5°	535.2	538.4	545.9	550.0	555.6	562.2	566.5	571.1	576.1	584.7	592.7
7.5°	500.0	505.3	514.7	522.3	530.4	539.8	546.6	555.6	563.1	575.3	586.9
10°	476.6	484.1	492.5	501.6	512.9	522.9	532.5	543.8	552.9	567.5	581.1
12.5°	455.5	456.6	468.7	478.7	494.2	506.6	517.6	532.2	541.1	558.4	572.7
15°	418.7	425.5	436.4	444.3	462.7	478.4	493.9	509.1	519.3	540.7	559.5
17.5°	387.6	393.9	405.1	418.1	431.3	446.9	466.9	483.0	496.9	521.3	543.6
20°	368.0	375.7	387.1	400.5	412.1	429.1	446.4	464.8	479.8	507.3	533.4
22.5°	351.3	357.4	366.6	379.8	392.4	408.0	426.9	447.0	462.7	492.4	518.8
25°	327.8	332.8	338.7	349.6	363.9	381.0	395.7	417.8	440.7	468.4	500.4
27.5°	306.6	310.2	315.4	325.0	336.1	352.0	368.4	389.3	412.4	442.5	476.3
30°	293.7	296.0	301.2	309.2	320.1	332.6	349.2	369.1	392.8	423.2	456.8
32.5°	282.5	284.5	288.0	295.5	305.0	315.7	330.6	350.6	373.1	403.0	440.3
35°	265.6	267.1	270.1	276.2	281.5	291.9	304.4	322.6	343.7	372.3	410.9
37.5°	248.7	250.9	252.7	255.3	262.0	268.9	279.7	295.1	315.8	344.7	381.5
40°	237.6	239.4	242.2	243.3	248.7	254.9	263.7	277.8	298.7	325.1	361.0
42.5°	226.3	228.2	229.8	231.1	235.8	241.2	249.2	261.3	279.8	305.4	341.0
45°	211.0	211.3	212.9	215.4	217.6	221.5	227.2	237.6	251.9	276.0	308.3
47.5°	195.5	195.8	196.0	197.1	199.6	203.1	206.9	215.4	228.2	247.4	278.8
50°	185.1	184.7	185.1	186.0	187.6	190.6	194.9	201.0	211.5	229.4	258.3
52.5°	175.1	175.1	174.8	175.1	176.4	178.4	181.5	186.7	196.0	212.5	237.9
55°	159.9	158.8	159.0	158.1	160.2	160.6	162.9	167.2	175.4	186.7	210.6
57.5°	143.7	142.8	141.8	141.5	141.3	142.5	144.3	147.7	154.0	164.0	183.3
60°	133.3	132.2	130.8	130.4	130.4	131.1	132.0	134.5	140.4	149.2	165.1
62.5°	122.8	121.5	120.7	119.5	119.1	119.8	120.7	122.5	126.8	135.1	148.8
65°	106.5	104.9	103.8	103.6	103.1	102.5	102.9	104.7	108.1	114.7	125.6
67.5°	90.2	88.7	88.5	87.1	86.5	86.6	86.5	88.0	90.1	95.8	103.9
70°	79.5	78.4	77.9	76.8	76.3	75.9	75.4	76.8	78.8	83.6	90.6
72.5°	68.6	67.6	66.7	65.7	65.8	65.3	65.2	66.1	67.7	72.1	77.6
75°	52.9	53.2	52.0	50.9	50.7	50.2	50.2	50.9	51.6	55.0	59.3
77.5°	38.4	38.2	37.3	36.9	36.7	36.2	36.7	37.1	37.5	39.8	42.9
80°	29.3	29.3	28.2	28.2	27.9	27.3	27.9	27.5	28.4	30.7	32.9
82.5°	20.9	20.6	20.5	20.2	20.1	19.6	19.9	20.4	20.8	22.3	23.7
85°	10.2	10.2	10.0	9.8	10.0	9.8	10.0	10.2	10.4	11.1	12.3
87.5°	3.5	3.7	3.7	3.8	3.7	3.7	3.8	3.8	4.0	4.0	4.1
90°	6.8	6.5	5.9	5.3	4.7	4.2	3.5	2.7	1.9	1.1	0.3
92.5°	7.7	7.5	7.2	6.9	6.6	6.4	6.2	6.3	6.4	6.5	6.5
95°	13.0	12.6	12.1	11.6	11.1	10.6	11.5	13.9	16.3	18.6	21.0
97.5°	17.2	16.9	15.7	14.5	13.4	12.2	15.0	21.7	28.3	35.0	41.7
100°	19.0	18.4	17.2	16.0	14.8	13.5	17.9	27.7	37.5	47.4	57.2
102.5°	19.7	18.9	29.2	39.4	49.6	59.8	66.0	68.1	70.1	72.2	74.3
105°	20.5	19.7	39.3	59.0	78.6	98.2	106.9	104.8	102.6	100.4	98.3
107.5°	26.8	27.6	51.1	74.7	98.2	121.7	132.6	130.9	129.1	127.4	125.6
110°	49.4	56.6	77.3	98.1	118.9	139.6	149.3	147.8	146.3	144.7	143.2



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	116.5	142.7	147.8	153.0	158.1	163.2	165.1	163.8	162.5	161.1	159.8
115°	166.2	199.5	197.7	195.9	194.1	192.3	190.8	189.6	188.4	187.1	185.9
117.5°	212.9	221.0	219.7	218.5	217.3	216.0	214.7	213.4	212.0	210.6	209.3
120°	237.9	237.0	235.7	234.4	233.1	231.8	230.6	229.6	228.5	227.4	226.3
122.5°	252.8	252.3	250.9	249.4	248.0	246.6	245.4	244.2	243.1	242.0	240.8
125°	273.7	273.2	271.8	270.5	269.1	267.8	266.6	265.7	264.7	263.8	262.9
127.5°	292.8	292.1	291.1	290.1	289.0	288.0	287.0	286.0	284.9	283.9	282.8
130°	305.0	304.3	303.5	302.7	301.9	301.1	300.1	299.0	297.8	296.7	295.5
132.5°	317.1	316.4	315.6	314.8	314.0	313.2	312.4	311.4	310.4	309.4	308.5
135°	334.1	333.4	332.7	332.1	331.4	330.8	329.9	328.7	327.6	326.4	325.3
137.5°	349.9	349.2	348.5	347.7	347.0	346.3	345.5	344.7	343.9	343.1	342.3
140°	360.2	359.5	358.8	358.0	357.2	356.4	355.7	355.1	354.5	354.0	353.4
142.5°	369.7	369.1	368.2	367.3	366.4	365.5	364.8	364.3	363.7	363.2	362.7
145°	383.0	382.5	381.3	380.1	378.8	377.6	377.0	377.1	377.2	377.3	377.3
147.5°	394.6	394.3	393.1	391.9	390.6	389.4	389.0	389.2	389.5	389.8	390.1
150°	401.7	401.3	400.1	399.0	397.8	396.7	396.3	396.8	397.3	397.8	398.3
152.5°	408.1	407.7	406.6	405.5	404.4	403.3	403.1	403.6	404.2	404.8	405.3
155°	416.9	416.4	415.6	414.7	413.9	413.0	412.9	413.5	414.2	414.8	415.5
157.5°	424.2	423.7	423.1	422.5	421.9	421.3	421.2	421.8	422.3	422.9	423.4
160°	428.5	428.1	427.7	427.2	426.8	426.4	426.4	426.8	427.2	427.7	428.1
162.5°	432.5	432.0	431.6	431.2	430.8	430.5	430.5	430.9	431.4	431.8	432.2
165°	437.3	436.8	436.6	436.4	436.2	436.0	436.1	436.5	436.9	437.4	437.8
167.5°	441.4	440.9	440.7	440.5	440.3	440.1	440.2	440.6	441.1	441.5	441.9
170°	443.5	443.0	442.8	442.7	442.5	442.4	442.5	443.0	443.4	443.8	444.3
172.5°	445.0	444.5	444.4	444.2	444.1	443.9	444.1	444.5	444.9	445.4	445.8
175°	446.7	446.2	446.1	445.9	445.8	445.6	445.8	446.3	446.8	447.3	447.8
177.5°	447.0	446.6	446.5	446.5	446.4	446.4	446.5	446.9	447.3	447.7	448.1
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	594.2	595.1	598.0	600.9	604.2	605.1	606.5	605.3	604.9	608.3	610.9
5°	595.9	599.9	607.9	615.2	621.3	625.6	630.2	632.0	635.4	640.1	646.1
7.5°	593.9	601.9	614.4	625.0	636.5	644.8	651.3	656.9	663.6	672.6	682.5
10°	591.8	602.4	617.7	630.6	644.7	655.4	664.2	672.9	682.9	695.4	708.3
12.5°	587.8	600.4	619.5	634.8	652.9	663.4	675.3	693.9	704.7	722.1	740.3
15°	579.7	593.8	620.4	639.2	659.7	679.7	701.7	719.4	737.1	747.4	773.0
17.5°	567.8	588.4	617.9	639.9	665.9	697.3	722.1	742.2	762.6	779.2	792.1
20°	558.1	580.6	614.3	640.6	671.5	705.3	733.7	754.2	771.9	785.8	793.7
22.5°	546.0	574.3	607.0	637.9	677.3	710.8	740.6	756.7	771.5	778.3	781.4
25°	526.8	560.9	597.9	635.6	680.1	715.6	742.8	752.6	756.9	750.3	739.4
27.5°	506.1	544.1	587.4	631.3	678.4	712.5	732.0	730.5	723.2	701.8	684.8
30°	490.7	532.5	579.0	627.0	674.2	707.4	718.7	707.4	690.8	667.0	642.6
32.5°	474.5	517.8	570.1	620.8	666.6	695.8	698.2	678.7	653.0	625.9	595.6
35°	450.0	496.8	553.4	607.0	650.4	668.8	657.9	623.3	592.9	555.9	514.5
37.5°	422.3	474.0	530.7	586.8	626.1	630.9	603.8	567.5	524.5	481.0	432.3
40°	401.6	456.4	514.8	571.3	606.1	601.1	566.5	526.6	475.5	422.3	377.1
42.5°	383.1	437.8	497.3	552.8	580.6	566.9	526.6	477.5	422.6	372.5	331.1
45°	351.0	407.3	468.2	521.8	537.7	512.9	459.6	405.0	351.0	309.2	276.5
47.5°	319.8	375.5	435.8	482.9	488.5	455.2	396.9	340.8	294.3	260.3	237.2
50°	296.9	352.8	412.5	454.6	452.7	412.5	352.6	299.2	260.3	232.8	217.4
52.5°	276.4	329.2	386.5	424.8	415.1	371.3	314.0	266.6	234.7	213.2	199.2
55°	244.4	293.3	347.8	378.5	360.7	312.1	263.7	225.6	201.9	185.8	174.9
57.5°	212.7	258.5	305.2	324.1	304.5	259.6	219.3	191.6	173.8	161.9	154.8
60°	193.1	233.1	274.6	291.0	267.6	227.6	195.8	171.1	156.7	147.0	140.6
62.5°	173.5	209.3	248.5	257.4	236.0	202.2	174.0	153.4	141.7	133.0	127.0
65°	146.7	176.1	205.8	211.7	192.0	165.8	143.6	130.2	119.7	113.4	108.6
67.5°	120.4	143.9	165.0	169.7	152.4	134.3	118.2	106.5	99.5	94.2	90.1
70°	104.7	123.4	140.6	144.5	130.6	114.5	102.2	92.9	86.5	82.0	78.1
72.5°	88.2	103.7	118.1	120.7	109.4	97.0	87.0	79.6	74.0	71.1	67.4
75°	67.5	76.6	87.7	88.4	80.9	73.4	65.7	60.9	57.9	54.3	52.5
77.5°	47.6	54.7	61.1	62.3	57.9	52.8	48.5	44.7	42.2	40.5	38.8
80°	36.3	42.0	44.8	46.3	43.2	39.5	37.0	34.5	32.9	31.8	30.7
82.5°	26.0	29.5	32.0	33.3	31.5	29.3	26.9	25.4	24.2	23.3	22.9
85°	13.2	14.8	16.4	16.8	16.4	15.4	14.1	14.1	13.4	13.2	13.2
87.5°	4.8	5.7	5.8	6.5	6.3	6.4	6.5	6.4	6.4	6.3	6.2
90°	1.1	1.9	2.7	3.5	4.2	4.7	5.3	5.9	6.5	6.8	7.2
92.5°	6.5	6.4	6.3	6.2	6.4	6.6	6.9	7.2	7.5	7.7	7.9
95°	18.6	16.3	13.9	11.5	10.6	11.1	11.6	12.1	12.6	13.0	13.3
97.5°	35.0	28.3	21.7	15.0	12.2	13.4	14.5	15.7	16.9	17.2	17.5
100°	47.4	37.5	27.7	17.9	13.5	14.8	16.0	17.2	18.4	19.0	19.6
102.5°	72.2	70.1	68.1	66.0	59.8	49.6	39.4	29.2	18.9	19.7	20.4
105°	100.4	102.6	104.8	106.9	98.2	78.6	59.0	39.3	19.7	20.5	21.3
107.5°	127.4	129.1	130.9	132.6	121.7	98.2	74.7	51.1	27.6	26.8	26.0
110°	144.7	146.3	147.8	149.3	139.6	118.9	98.1	77.3	56.6	49.4	42.2



TEST NUMBER: P331240

CATALOG NUMBER: SA2XXDIP-C290D330U835-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	161.1	162.5	163.8	165.1	163.2	158.1	153.0	147.8	142.7	116.5	90.3
115°	187.1	188.4	189.6	190.8	192.3	194.1	195.9	197.7	199.5	166.2	133.0
117.5°	210.6	212.0	213.4	214.7	216.0	217.3	218.5	219.7	221.0	212.9	204.9
120°	227.4	228.5	229.6	230.6	231.8	233.1	234.4	235.7	237.0	237.9	238.7
122.5°	242.0	243.1	244.2	245.4	246.6	248.0	249.4	250.9	252.3	252.8	253.3
125°	263.8	264.7	265.7	266.6	267.8	269.1	270.5	271.8	273.2	273.7	274.2
127.5°	283.9	284.9	286.0	287.0	288.0	289.0	290.1	291.1	292.1	292.8	293.6
130°	296.7	297.8	299.0	300.1	301.1	301.9	302.7	303.5	304.3	305.0	305.8
132.5°	309.4	310.4	311.4	312.4	313.2	314.0	314.8	315.6	316.4	317.1	317.8
135°	326.4	327.6	328.7	329.9	330.8	331.4	332.1	332.7	333.4	334.1	334.8
137.5°	343.1	343.9	344.7	345.5	346.3	347.0	347.7	348.5	349.2	349.9	350.6
140°	354.0	354.5	355.1	355.7	356.4	357.2	358.0	358.8	359.5	360.2	360.8
142.5°	363.2	363.7	364.3	364.8	365.5	366.4	367.3	368.2	369.1	369.7	370.3
145°	377.3	377.2	377.1	377.0	377.6	378.8	380.1	381.3	382.5	383.0	383.5
147.5°	389.8	389.5	389.2	389.0	389.4	390.6	391.9	393.1	394.3	394.6	395.0
150°	397.8	397.3	396.8	396.3	396.7	397.8	399.0	400.1	401.3	401.7	402.1
152.5°	404.8	404.2	403.6	403.1	403.3	404.4	405.5	406.6	407.7	408.1	408.6
155°	414.8	414.2	413.5	412.9	413.0	413.9	414.7	415.6	416.4	416.9	417.3
157.5°	422.9	422.3	421.8	421.2	421.3	421.9	422.5	423.1	423.7	424.2	424.7
160°	427.7	427.2	426.8	426.4	426.4	426.8	427.2	427.7	428.1	428.5	429.0
162.5°	431.8	431.4	430.9	430.5	430.5	430.8	431.2	431.6	432.0	432.5	432.9
165°	437.4	436.9	436.5	436.1	436.0	436.2	436.4	436.6	436.8	437.3	437.8
167.5°	441.5	441.1	440.6	440.2	440.1	440.3	440.5	440.7	440.9	441.4	441.9
170°	443.8	443.4	443.0	442.5	442.4	442.5	442.7	442.8	443.0	443.5	444.0
172.5°	445.4	444.9	444.5	444.1	443.9	444.1	444.2	444.4	444.5	445.0	445.5
175°	447.3	446.8	446.3	445.8	445.6	445.8	445.9	446.1	446.2	446.7	447.2
177.5°	447.7	447.3	446.9	446.5	446.4	446.4	446.5	446.5	446.6	447.0	447.4
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8	446.8



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	613.1	615.6	615.6	616.0	618.9	618.5	618.3
5°	652.4	656.3	656.7	660.8	663.5	662.6	660.1
7.5°	689.5	696.7	702.2	705.2	708.8	711.0	710.0
10°	719.0	729.4	735.8	740.1	745.3	749.2	747.8
12.5°	745.7	758.1	766.9	774.3	774.9	779.9	776.5
15°	787.4	800.5	801.9	807.3	811.7	811.2	811.4
17.5°	801.1	805.3	806.2	806.3	806.4	804.8	801.3
20°	796.2	794.6	790.8	787.8	782.6	781.9	777.4
22.5°	772.9	767.9	758.2	751.8	743.7	741.6	740.3
25°	727.2	716.0	700.6	685.8	681.7	673.8	676.0
27.5°	664.3	647.0	630.2	618.3	607.4	595.5	598.9
30°	620.2	600.6	577.0	558.8	547.2	535.9	533.8
32.5°	567.5	538.8	512.5	496.5	478.7	471.5	463.7
35°	476.6	448.6	422.5	400.0	387.1	377.1	368.0
37.5°	394.9	362.7	341.6	323.4	314.0	308.3	309.8
40°	344.2	316.0	300.5	286.7	278.0	274.0	274.9
42.5°	303.1	282.0	269.3	259.8	253.7	251.4	250.9
45°	256.5	244.7	234.2	228.8	225.8	223.3	221.7
47.5°	224.7	215.0	209.1	205.9	203.3	200.8	200.7
50°	205.6	199.2	195.1	191.7	189.7	187.9	189.5
52.5°	191.0	185.2	181.1	178.1	177.3	175.7	175.6
55°	169.5	164.9	162.0	159.2	157.9	157.0	155.8
57.5°	149.8	145.5	142.8	141.1	138.5	137.6	137.2
60°	135.8	132.4	129.7	127.4	126.3	124.5	124.5
62.5°	122.9	119.5	117.0	115.3	113.4	112.7	112.9
65°	104.3	101.5	99.0	97.2	96.8	95.4	95.9
67.5°	87.1	85.3	82.6	81.6	80.8	80.1	79.5
70°	75.6	73.8	72.5	71.1	70.4	70.4	70.4
72.5°	66.0	63.8	63.0	61.3	61.7	61.0	60.2
75°	51.1	49.7	49.1	48.4	47.3	47.3	47.3
77.5°	37.6	37.2	36.4	35.7	35.4	35.2	35.3
80°	29.1	28.8	28.4	28.4	27.9	27.7	27.3
82.5°	22.4	21.8	21.5	21.3	21.2	21.2	21.1
85°	12.7	12.3	12.3	12.5	12.0	12.0	12.3
87.5°	6.4	6.5	6.4	6.4	6.6	6.4	6.5
90°	7.5	7.9	8.2	8.3	8.4	8.6	8.7
92.5°	8.1	8.2	8.4	8.5	8.6	8.6	8.7
95°	13.7	14.0	14.2	14.1	14.0	14.0	13.9
97.5°	17.7	18.0	18.2	18.3	18.4	18.5	18.6
100°	20.2	20.7	21.1	21.2	21.4	21.5	21.7
102.5°	21.2	21.9	22.4	22.6	22.8	23.0	23.2
105°	22.1	22.9	23.4	23.7	24.0	24.3	24.6
107.5°	25.2	24.4	24.1	24.4	24.7	25.0	25.3
110°	35.0	27.8	24.4	24.7	25.0	25.3	25.5



TEST NUMBER: P331240

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	64.1	37.9	24.9	25.1	25.3	25.6	25.8
115°	99.7	66.4	47.2	42.0	36.9	31.7	26.5
117.5°	196.8	188.8	176.3	159.3	142.3	125.3	108.3
120°	239.6	240.4	236.0	226.3	216.6	206.9	197.2
122.5°	253.8	254.3	253.6	251.8	249.9	248.0	246.1
125°	274.7	275.2	275.6	275.8	276.0	276.2	276.4
127.5°	294.3	295.0	295.4	295.5	295.5	295.5	295.6
130°	306.6	307.4	307.8	307.7	307.6	307.6	307.5
132.5°	318.4	319.1	319.4	319.3	319.3	319.2	319.1
135°	335.5	336.2	336.5	336.4	336.2	336.1	335.9
137.5°	351.3	352.0	352.2	352.0	351.8	351.5	351.3
140°	361.5	362.1	362.3	361.9	361.6	361.2	360.8
142.5°	370.9	371.5	371.6	371.2	370.9	370.5	370.1
145°	384.0	384.5	384.6	384.2	383.9	383.5	383.1
147.5°	395.4	395.8	395.8	395.5	395.2	394.9	394.6
150°	402.5	403.0	403.0	402.7	402.3	401.9	401.6
152.5°	409.0	409.4	409.4	408.9	408.5	408.0	407.5
155°	417.7	418.2	418.1	417.5	417.0	416.4	415.8
157.5°	425.2	425.6	425.6	425.0	424.5	423.9	423.4
160°	429.4	429.8	429.8	429.3	428.8	428.3	427.8
162.5°	433.4	433.9	433.9	433.2	432.6	432.0	431.4
165°	438.3	438.8	438.8	438.3	437.8	437.3	436.8
167.5°	442.4	442.9	442.8	442.2	441.5	440.9	440.2
170°	444.5	445.0	444.9	444.3	443.6	443.0	442.3
172.5°	446.0	446.5	446.5	445.8	445.2	444.5	443.9
175°	447.7	448.2	448.1	447.4	446.7	445.9	445.2
177.5°	447.8	448.2	448.1	447.6	447.1	446.6	446.1
180°	446.8	446.8	446.8	446.8	446.8	446.8	446.8

(END OF REPORT)