

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: P331240-927

Luminaire Tested: **SA2XXDIP-C290D330U927-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331240-927
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-C290D330U927-4F0-1E-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: 2071.3 lumens
Efficiency: N/A
Efficacy: 102.0 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

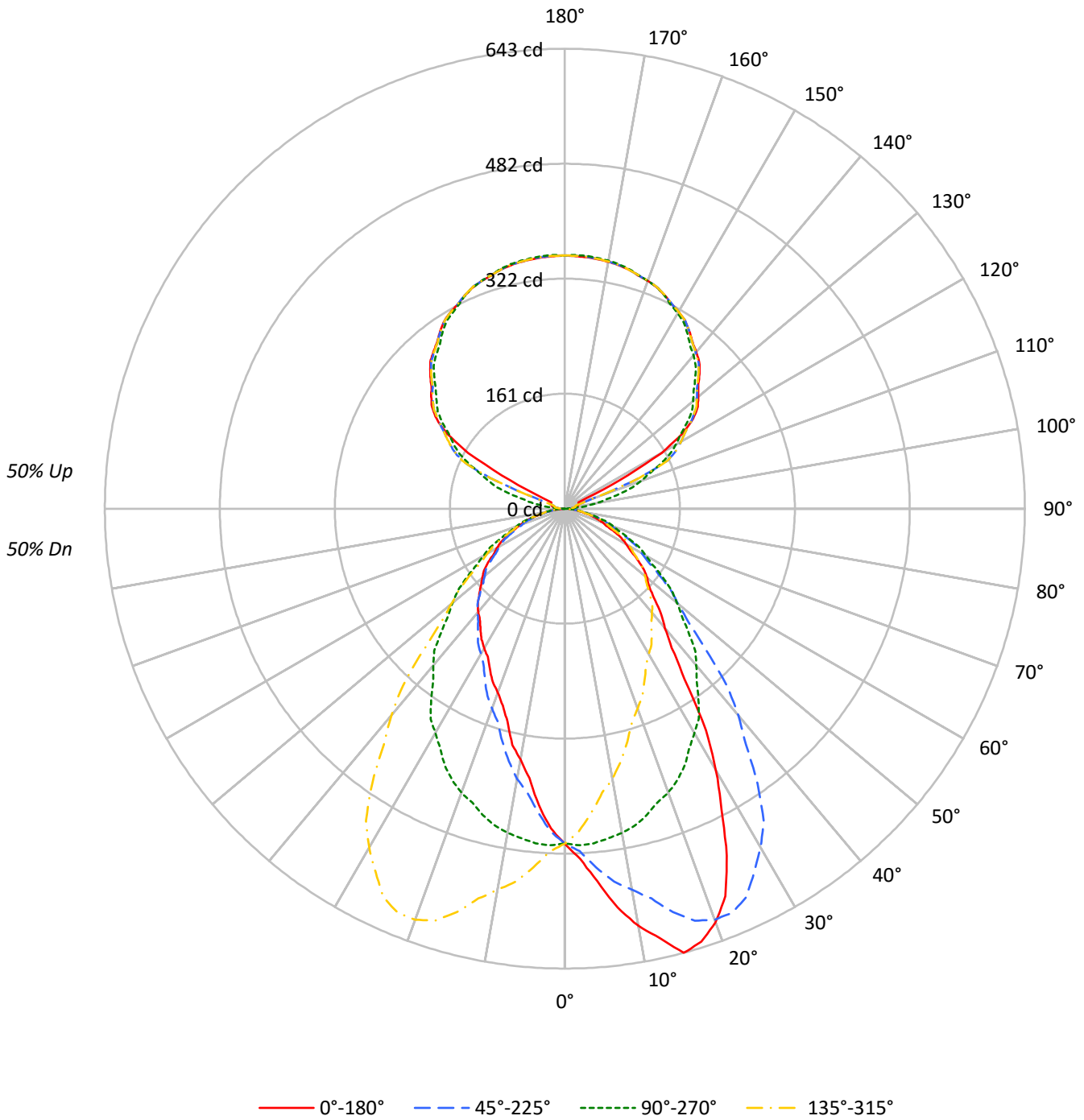
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7561	7561	7561	7561
5°	8475	7609	6744	7609
10°	9712	7547	5835	7547
15°	10745	7408	5157	7408
20°	10581	7261	4699	7261
25°	9540	7062	4411	7062
30°	7884	6747	4200	6747
35°	5746	6416	4050	6416
40°	4591	6028	3967	6028
45°	4010	5576	3854	5576
50°	3770	5139	3778	5139
55°	3474	4695	3676	4695
60°	3184	4224	3523	4224
65°	2904	3801	3370	3801
70°	2634	3389	3144	3389
75°	2339	2932	2782	2932
80°	2008	2427	2241	2427
85°	1797	1797	1334	1797



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	2.2
10°-20°	129.6	6.3
20°-30°	188.1	9.1
30°-40°	198.5	9.6
40°-50°	175.8	8.5
50°-60°	140.3	6.8
60°-70°	95.4	4.6
70°-80°	48.9	2.4
80°-90°	12.7	0.6
90°-100°	11.8	0.6
100°-110°	43.3	2.1
110°-120°	115.7	5.6
120°-130°	191.1	9.2
130°-140°	203.2	9.8
140°-150°	188.9	9.1
150°-160°	151.8	7.3
160°-170°	97.8	4.7
170°-180°	33.7	1.6
0°-30°	362.4	17.5
0°-40°	560.9	27.1
0°-60°	877.0	42.3
0°-90°	1033.9	49.9
90°-120°	170.8	8.2
90°-150°	754.0	36.4
90°-180°	1037.0	50.1
0°-180°	2071.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	468	468	468	468	468	
5°	523	470	416	470	523	52
15°	643	443	308	443	643	177
25°	536	396	248	396	536	242
35°	292	326	206	326	292	190
45°	176	244	169	244	176	138
55°	123	167	131	167	123	111
65°	76	100	88	100	76	76
75°	38	47	45	47	38	40
85°	10	10	7	10	10	11
90°	7	0	7	0	7	4
95°	11	17	11	17	11	10
105°	20	78	20	78	20	20
115°	21	147	21	147	21	53
125°	219	208	219	208	219	190
135°	266	258	266	258	266	205
145°	304	299	304	299	304	190
155°	329	329	329	329	329	152
165°	346	347	346	347	346	98
175°	353	355	353	355	353	34
180°	354	354	354	354	354	



TEST NUMBER: P331240-927

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	489.8	490.0	490.3	488.0	487.7	487.7	485.7	483.9	481.9	479.2	479.5
5°	522.9	524.9	525.6	523.5	520.2	519.9	516.8	511.8	507.1	503.4	500.7
7.5°	562.4	563.2	561.5	558.6	556.3	551.9	546.2	540.7	532.8	525.7	520.4
10°	592.4	593.5	590.4	586.3	582.9	577.8	569.6	561.1	550.9	541.0	533.1
12.5°	615.1	617.8	613.9	613.4	607.5	600.6	590.7	586.5	572.0	558.3	549.7
15°	642.8	642.6	643.0	639.5	635.3	634.1	623.8	612.4	592.1	583.9	569.9
17.5°	634.8	637.5	638.8	638.7	638.7	637.9	634.6	627.5	617.3	604.1	588.0
20°	615.8	619.4	620.0	624.1	626.5	629.5	630.7	628.8	622.5	611.5	597.5
22.5°	586.5	587.5	589.1	595.6	600.6	608.3	612.3	619.0	616.6	611.2	599.4
25°	535.5	533.8	540.0	543.3	555.0	567.2	576.1	585.7	594.4	599.6	596.2
27.5°	474.4	471.7	481.2	489.8	499.2	512.5	526.2	542.5	556.0	572.9	578.7
30°	422.9	424.5	433.5	442.7	457.1	475.8	491.3	509.1	528.4	547.2	560.4
32.5°	367.3	373.5	379.2	393.3	406.0	426.8	449.6	471.8	495.8	517.3	537.7
35°	291.5	298.7	306.7	316.9	334.7	355.4	377.6	407.6	440.4	469.7	493.8
37.5°	245.4	244.2	248.7	256.2	270.6	287.3	312.8	342.5	381.0	415.5	449.6
40°	217.8	217.1	220.2	227.1	238.1	250.3	272.7	298.7	334.5	376.7	417.2
42.5°	198.8	199.2	201.0	205.8	213.3	223.4	240.1	262.3	295.1	334.8	378.3
45°	175.6	176.9	178.9	181.3	185.5	193.8	203.2	219.0	244.9	278.1	320.8
47.5°	159.0	159.1	161.1	163.1	165.6	170.3	178.0	187.9	206.2	233.1	270.0
50°	150.1	148.9	150.3	151.9	154.6	157.8	162.9	172.2	184.4	206.2	237.0
52.5°	139.1	139.2	140.5	141.1	143.5	146.7	151.3	157.8	168.9	185.9	211.2
55°	123.4	124.4	125.1	126.1	128.3	130.6	134.3	138.6	147.2	159.9	178.7
57.5°	108.7	109.0	109.7	111.8	113.1	115.3	118.7	122.6	128.3	137.7	151.8
60°	98.6	98.6	100.1	100.9	102.7	104.9	107.6	111.4	116.5	124.1	135.5
62.5°	89.4	89.3	89.8	91.3	92.7	94.7	97.4	100.6	105.4	112.3	121.5
65°	76.0	75.6	76.7	77.0	78.4	80.4	82.6	86.0	89.8	94.8	103.1
67.5°	63.0	63.5	64.0	64.6	65.4	67.6	69.0	71.4	74.6	78.8	84.4
70°	55.8	55.8	55.8	56.3	57.4	58.5	59.9	61.9	65.0	68.5	73.6
72.5°	47.7	48.3	48.9	48.6	49.9	50.5	52.3	53.4	56.3	58.6	63.1
75°	37.5	37.5	37.5	38.3	38.9	39.4	40.5	41.6	43.0	45.9	48.2
77.5°	28.0	27.9	28.0	28.3	28.8	29.5	29.8	30.7	32.1	33.4	35.4
80°	21.6	21.9	22.1	22.5	22.5	22.8	23.1	24.3	25.2	26.1	27.3
82.5°	16.7	16.8	16.8	16.9	17.0	17.3	17.7	18.1	18.5	19.2	20.1
85°	9.7	9.5	9.5	9.9	9.7	9.7	10.1	10.5	10.5	10.6	11.2
87.5°	5.1	5.1	5.2	5.1	5.1	5.1	5.1	4.9	5.0	5.1	5.1
90°	6.9	6.8	6.7	6.6	6.5	6.3	5.9	5.7	5.4	5.1	4.7
92.5°	6.9	6.8	6.8	6.7	6.7	6.5	6.4	6.3	6.1	5.9	5.7
95°	11.0	11.1	11.1	11.2	11.2	11.1	10.9	10.5	10.3	10.0	9.6
97.5°	14.7	14.7	14.6	14.5	14.4	14.3	14.0	13.9	13.6	13.4	12.4
100°	17.2	17.0	17.0	16.8	16.7	16.4	16.0	15.5	15.1	14.6	13.6
102.5°	18.4	18.2	18.1	17.9	17.7	17.3	16.8	16.2	15.6	15.0	23.1
105°	19.5	19.3	19.0	18.8	18.5	18.1	17.5	16.9	16.2	15.6	31.1
107.5°	20.0	19.8	19.6	19.3	19.1	19.3	20.0	20.6	21.2	21.9	40.5
110°	20.2	20.0	19.8	19.6	19.3	22.0	27.7	33.4	39.1	44.8	61.2



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	20.4	20.3	20.0	19.9	19.7	30.0	50.8	71.5	92.3	113.0	117.1
115°	21.0	25.1	29.2	33.3	37.4	52.6	79.0	105.4	131.7	158.0	156.6
117.5°	85.8	99.3	112.7	126.2	139.7	149.6	155.9	162.3	168.7	175.1	174.0
120°	156.2	163.9	171.6	179.3	187.0	190.4	189.8	189.1	188.5	187.7	186.7
122.5°	195.0	196.5	198.0	199.5	200.9	201.5	201.1	200.7	200.3	199.9	198.8
125°	219.0	218.8	218.6	218.5	218.3	218.0	217.6	217.2	216.8	216.4	215.3
127.5°	234.2	234.1	234.1	234.1	234.0	233.7	233.1	232.6	232.0	231.4	230.6
130°	243.6	243.7	243.7	243.8	243.8	243.5	242.9	242.2	241.6	241.1	240.4
132.5°	252.8	252.9	252.9	252.9	253.0	252.8	252.2	251.8	251.2	250.6	250.0
135°	266.1	266.3	266.3	266.5	266.6	266.3	265.8	265.2	264.7	264.1	263.6
137.5°	278.3	278.5	278.7	278.8	279.0	278.8	278.3	277.7	277.2	276.6	276.1
140°	285.8	286.1	286.5	286.7	287.0	286.8	286.4	285.8	285.3	284.8	284.2
142.5°	293.2	293.5	293.8	294.1	294.4	294.3	293.8	293.3	292.9	292.4	291.7
145°	303.5	303.8	304.1	304.4	304.7	304.6	304.2	303.8	303.4	303.0	302.1
147.5°	312.6	312.8	313.1	313.3	313.5	313.5	313.2	312.9	312.6	312.4	311.4
150°	318.1	318.4	318.7	319.0	319.2	319.2	318.9	318.5	318.2	317.9	317.0
152.5°	322.8	323.2	323.6	323.9	324.3	324.3	324.0	323.7	323.3	323.0	322.1
155°	329.4	329.9	330.3	330.7	331.2	331.3	330.9	330.6	330.3	329.9	329.2
157.5°	335.4	335.8	336.3	336.7	337.2	337.2	336.8	336.4	336.0	335.6	335.2
160°	338.9	339.3	339.7	340.1	340.5	340.5	340.2	339.8	339.5	339.1	338.8
162.5°	341.7	342.2	342.7	343.2	343.7	343.7	343.3	342.9	342.6	342.2	341.9
165°	346.0	346.4	346.8	347.2	347.6	347.6	347.2	346.8	346.4	346.0	345.9
167.5°	348.7	349.3	349.7	350.3	350.8	350.9	350.5	350.1	349.7	349.3	349.1
170°	350.4	350.9	351.4	352.0	352.4	352.5	352.1	351.7	351.3	350.9	350.8
172.5°	351.6	352.1	352.7	353.2	353.7	353.7	353.3	352.9	352.5	352.1	352.0
175°	352.7	353.2	353.9	354.4	355.0	355.1	354.7	354.3	353.9	353.5	353.4
177.5°	353.4	353.8	354.2	354.6	355.0	355.1	354.7	354.4	354.1	353.8	353.7
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	480.5	479.3	478.6	476.0	473.7	471.4	470.7	471.0	467.8	464.8	463.5
5°	499.2	495.6	492.2	487.4	481.6	475.2	472.1	469.5	463.2	456.4	452.4
7.5°	515.9	510.8	504.2	495.1	486.7	476.8	470.5	464.9	455.7	446.1	440.1
10°	526.2	519.2	510.7	499.6	489.3	477.2	468.8	460.3	449.6	438.0	430.8
12.5°	535.0	525.5	517.2	502.9	490.8	475.6	465.6	453.7	442.4	428.6	421.6
15°	555.9	538.4	522.6	506.4	491.5	470.4	459.2	443.2	428.3	411.4	403.3
17.5°	572.0	552.4	527.5	506.9	489.5	466.1	449.8	430.6	413.0	393.6	382.6
20°	581.2	558.7	532.0	507.5	486.6	459.9	442.1	422.6	401.9	380.1	368.2
22.5°	586.7	563.1	536.5	505.3	480.9	455.0	432.5	411.0	390.1	366.5	354.1
25°	588.4	566.9	538.8	503.5	473.6	444.3	417.3	396.4	371.1	349.1	331.0
27.5°	579.9	564.4	537.4	500.1	465.3	431.0	400.9	377.3	350.5	326.7	308.4
30°	569.3	560.4	534.1	496.7	458.7	421.8	388.7	361.9	335.3	311.2	292.4
32.5°	553.1	551.2	528.1	491.8	451.6	410.2	375.9	348.8	319.2	295.6	277.7
35°	521.2	529.8	515.2	480.9	438.4	393.6	356.5	325.5	294.9	272.3	255.6
37.5°	478.3	499.8	496.0	464.9	420.4	375.5	334.5	302.2	273.1	250.2	233.8
40°	448.8	476.2	480.1	452.6	407.8	361.6	318.1	286.0	257.5	236.6	220.1
42.5°	417.2	449.1	459.9	437.9	394.0	346.8	303.5	270.1	241.9	221.7	207.0
45°	364.1	406.3	426.0	413.4	370.9	322.7	278.1	244.2	218.6	199.6	188.2
47.5°	314.4	360.6	387.0	382.5	345.2	297.5	253.3	220.9	196.0	180.8	170.6
50°	279.3	326.8	358.6	360.1	326.8	279.5	235.2	204.6	181.7	167.5	159.2
52.5°	248.7	294.1	328.8	336.5	306.2	260.8	219.0	188.5	168.3	155.3	147.9
55°	208.9	247.2	285.7	299.8	275.5	232.3	193.6	166.8	147.9	138.9	132.5
57.5°	173.7	205.7	241.2	256.7	241.8	204.8	168.5	145.2	129.9	122.0	117.0
60°	155.1	180.3	212.0	230.5	217.5	184.7	153.0	130.8	118.2	111.2	106.5
62.5°	137.8	160.2	187.0	203.9	196.9	165.8	137.4	117.9	107.0	100.4	97.0
65°	113.8	131.3	152.1	167.7	163.0	139.5	116.2	99.5	90.9	85.6	82.9
67.5°	93.6	106.4	120.7	134.4	130.7	114.0	95.4	82.3	75.9	71.4	69.7
70°	81.0	90.7	103.5	114.5	111.4	97.8	82.9	71.8	66.2	62.4	60.8
72.5°	68.9	76.8	86.7	95.6	93.6	82.1	69.9	61.5	57.1	53.6	52.4
75°	52.0	58.1	64.1	70.0	69.5	60.7	53.5	47.0	43.6	40.9	40.3
77.5°	38.4	41.8	45.9	49.4	48.4	43.3	37.7	34.0	31.5	29.7	29.4
80°	29.3	31.3	34.2	36.7	35.5	33.3	28.8	26.1	24.3	22.5	21.8
82.5°	21.3	23.2	25.0	26.4	25.3	23.4	20.6	18.8	17.7	16.5	16.2
85°	11.2	12.2	13.0	13.3	13.0	11.7	10.5	9.7	8.8	8.2	8.1
87.5°	5.1	5.1	5.0	5.1	4.6	4.5	3.8	3.2	3.2	3.2	3.0
90°	4.2	3.7	3.3	2.8	2.1	1.5	0.9	0.2	0.9	1.5	2.1
92.5°	5.5	5.2	5.1	4.9	5.0	5.1	5.1	5.1	5.1	5.1	5.0
95°	9.2	8.8	8.4	9.1	11.0	12.9	14.7	16.6	14.7	12.9	11.0
97.5°	11.5	10.6	9.7	11.9	17.2	22.4	27.7	33.0	27.7	22.4	17.2
100°	12.7	11.7	10.7	14.2	21.9	29.7	37.5	45.3	37.5	29.7	21.9
102.5°	31.2	39.3	47.4	52.3	53.9	55.5	57.2	58.9	57.2	55.5	53.9
105°	46.7	62.3	77.8	84.7	83.0	81.3	79.5	77.9	79.5	81.3	83.0
107.5°	59.2	77.8	96.4	105.0	103.7	102.3	100.9	99.5	100.9	102.3	103.7
110°	77.7	94.2	110.6	118.3	117.1	115.9	114.6	113.4	114.6	115.9	117.1



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	121.2	125.2	129.3	130.8	129.8	128.7	127.6	126.6	127.6	128.7	129.8
115°	155.2	153.8	152.3	151.1	150.2	149.2	148.2	147.3	148.2	149.2	150.2
117.5°	173.1	172.1	171.1	170.1	169.1	167.9	166.8	165.8	166.8	167.9	169.1
120°	185.7	184.7	183.6	182.7	181.9	181.0	180.1	179.3	180.1	181.0	181.9
122.5°	197.6	196.5	195.4	194.4	193.5	192.6	191.7	190.8	191.7	192.6	193.5
125°	214.3	213.2	212.1	211.2	210.5	209.7	209.0	208.3	209.0	209.7	210.5
127.5°	229.8	228.9	228.1	227.4	226.6	225.7	224.9	224.0	224.9	225.7	226.6
130°	239.8	239.2	238.5	237.7	236.9	235.9	235.0	234.1	235.0	235.9	236.9
132.5°	249.4	248.7	248.1	247.5	246.7	245.9	245.1	244.4	245.1	245.9	246.7
135°	263.1	262.5	262.1	261.3	260.4	259.5	258.6	257.7	258.6	259.5	260.4
137.5°	275.4	274.9	274.3	273.7	273.1	272.4	271.8	271.2	271.8	272.4	273.1
140°	283.6	283.0	282.3	281.8	281.3	280.8	280.4	280.0	280.4	280.8	281.3
142.5°	291.0	290.3	289.5	289.0	288.6	288.1	287.7	287.3	287.7	288.1	288.6
145°	301.1	300.1	299.1	298.7	298.7	298.8	298.9	298.9	298.9	298.8	298.7
147.5°	310.5	309.4	308.5	308.2	308.3	308.6	308.8	309.0	308.8	308.6	308.3
150°	316.1	315.1	314.3	313.9	314.3	314.7	315.1	315.5	315.1	314.7	314.3
152.5°	321.2	320.4	319.5	319.3	319.7	320.2	320.7	321.1	320.7	320.2	319.7
155°	328.5	327.9	327.2	327.1	327.6	328.1	328.6	329.2	328.6	328.1	327.6
157.5°	334.7	334.2	333.7	333.7	334.1	334.5	335.0	335.4	335.0	334.5	334.1
160°	338.4	338.1	337.8	337.8	338.1	338.4	338.8	339.1	338.8	338.4	338.1
162.5°	341.6	341.3	341.0	341.0	341.4	341.7	342.1	342.4	342.1	341.7	341.4
165°	345.7	345.5	345.4	345.5	345.8	346.1	346.5	346.8	346.5	346.1	345.8
167.5°	349.0	348.8	348.6	348.7	349.0	349.4	349.7	350.1	349.7	349.4	349.0
170°	350.7	350.5	350.5	350.5	350.9	351.3	351.6	352.0	351.6	351.3	350.9
172.5°	351.9	351.8	351.6	351.8	352.1	352.4	352.8	353.2	352.8	352.4	352.1
175°	353.2	353.2	353.0	353.2	353.6	353.9	354.3	354.7	354.3	353.9	353.6
177.5°	353.7	353.6	353.6	353.7	354.0	354.3	354.7	355.0	354.7	354.3	354.0
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	462.1	461.2	458.2	456.6	454.0	451.5	450.0	450.7	451.2	451.0	450.5
5°	448.8	445.4	440.1	435.7	432.5	426.5	424.0	422.7	421.6	420.4	419.1
7.5°	433.0	427.6	420.2	413.8	407.7	400.3	396.1	393.6	391.0	388.2	385.6
10°	421.8	414.2	406.3	397.4	390.1	383.5	377.6	373.6	369.9	366.5	364.1
12.5°	410.0	401.3	391.5	379.2	371.3	361.7	360.8	353.9	348.2	346.1	343.2
15°	391.3	379.0	366.5	352.0	345.7	337.1	331.7	326.2	321.4	318.0	317.1
17.5°	369.9	354.0	341.7	331.2	320.9	312.0	307.0	302.8	298.7	294.2	293.6
20°	353.6	339.9	326.5	317.3	306.7	297.6	291.5	287.2	283.8	281.1	278.8
22.5°	338.2	323.2	310.9	300.9	290.4	283.1	278.3	274.1	271.2	268.3	266.1
25°	313.5	301.8	288.3	276.9	268.3	263.6	259.7	256.1	254.3	252.3	249.8
27.5°	291.8	278.8	266.3	257.5	249.9	245.7	242.9	240.4	238.8	237.6	236.1
30°	276.6	263.5	253.6	244.9	238.6	234.5	232.7	231.2	229.3	228.5	227.8
32.5°	261.9	250.1	241.6	234.1	228.1	225.4	223.8	222.4	220.9	220.2	218.7
35°	241.1	231.2	223.0	218.8	214.0	211.6	210.4	208.6	207.2	206.4	206.2
37.5°	221.6	213.0	207.6	202.2	200.2	198.8	197.0	195.8	195.4	195.3	195.0
40°	208.9	201.9	197.0	192.7	191.9	189.6	188.2	187.2	187.2	187.4	187.2
42.5°	197.4	191.1	186.8	183.1	182.0	180.8	179.3	179.3	179.5	180.1	179.5
45°	180.0	175.5	172.4	170.6	168.7	167.4	167.2	167.7	167.9	168.1	168.7
47.5°	163.9	160.9	158.1	156.1	155.3	155.1	154.9	155.8	156.7	157.0	157.8
50°	154.4	151.0	148.6	147.3	146.6	146.3	146.6	147.7	148.5	149.3	149.9
52.5°	143.8	141.3	139.7	138.7	138.5	138.7	138.7	140.0	141.1	141.5	141.7
55°	129.0	127.2	126.9	125.2	126.0	125.8	126.7	127.4	128.5	129.6	129.8
57.5°	114.3	112.9	111.9	112.1	112.3	113.1	113.8	115.1	116.2	117.4	117.5
60°	104.6	103.9	103.3	103.3	103.6	104.7	105.6	106.9	107.6	108.4	108.8
62.5°	95.6	94.9	94.3	94.7	95.6	96.3	97.3	98.0	98.7	99.4	99.7
65°	81.5	81.2	81.7	82.1	82.2	83.1	84.4	84.9	85.6	86.0	87.3
67.5°	68.5	68.6	68.5	69.0	70.1	70.3	71.5	72.7	72.9	73.6	74.4
70°	59.7	60.1	60.4	60.8	61.7	62.1	63.0	63.5	64.2	64.8	65.4
72.5°	51.7	51.7	52.1	52.0	52.8	53.6	54.3	54.9	55.6	56.3	56.8
75°	39.8	39.8	40.2	40.3	41.2	42.1	41.9	42.3	43.0	43.7	44.1
77.5°	29.1	28.7	29.1	29.2	29.5	30.3	30.4	30.9	31.8	31.5	31.9
80°	22.1	21.6	22.1	22.3	22.3	23.2	23.2	23.6	24.1	23.6	24.1
82.5°	15.8	15.5	15.9	16.0	16.2	16.3	16.6	16.6	17.2	17.0	17.2
85°	7.9	7.8	7.9	7.8	7.9	8.1	8.1	7.9	7.9	8.2	7.8
87.5°	3.0	2.9	2.9	3.0	2.9	2.9	2.8	2.9	2.9	2.7	2.7
90°	2.8	3.3	3.7	4.2	4.7	5.1	5.4	5.7	5.9	6.3	6.5
92.5°	4.9	5.1	5.2	5.5	5.7	5.9	6.1	6.3	6.4	6.5	6.7
95°	9.1	8.4	8.8	9.2	9.6	10.0	10.3	10.5	10.9	11.1	11.2
97.5°	11.9	9.7	10.6	11.5	12.4	13.4	13.6	13.9	14.0	14.3	14.4
100°	14.2	10.7	11.7	12.7	13.6	14.6	15.1	15.5	16.0	16.4	16.7
102.5°	52.3	47.4	39.3	31.2	23.1	15.0	15.6	16.2	16.8	17.3	17.7
105°	84.7	77.8	62.3	46.7	31.1	15.6	16.2	16.9	17.5	18.1	18.5
107.5°	105.0	96.4	77.8	59.2	40.5	21.9	21.2	20.6	20.0	19.3	19.1
110°	118.3	110.6	94.2	77.7	61.2	44.8	39.1	33.4	27.7	22.0	19.3



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	130.8	129.3	125.2	121.2	117.1	113.0	92.3	71.5	50.8	30.0	19.7
115°	151.1	152.3	153.8	155.2	156.6	158.0	131.7	105.4	79.0	52.6	37.4
117.5°	170.1	171.1	172.1	173.1	174.0	175.1	168.7	162.3	155.9	149.6	139.7
120°	182.7	183.6	184.7	185.7	186.7	187.7	188.5	189.1	189.8	190.4	187.0
122.5°	194.4	195.4	196.5	197.6	198.8	199.9	200.3	200.7	201.1	201.5	200.9
125°	211.2	212.1	213.2	214.3	215.3	216.4	216.8	217.2	217.6	218.0	218.3
127.5°	227.4	228.1	228.9	229.8	230.6	231.4	232.0	232.6	233.1	233.7	234.0
130°	237.7	238.5	239.2	239.8	240.4	241.1	241.6	242.2	242.9	243.5	243.8
132.5°	247.5	248.1	248.7	249.4	250.0	250.6	251.2	251.8	252.2	252.8	253.0
135°	261.3	262.1	262.5	263.1	263.6	264.1	264.7	265.2	265.8	266.3	266.6
137.5°	273.7	274.3	274.9	275.4	276.1	276.6	277.2	277.7	278.3	278.8	279.0
140°	281.8	282.3	283.0	283.6	284.2	284.8	285.3	285.8	286.4	286.8	287.0
142.5°	289.0	289.5	290.3	291.0	291.7	292.4	292.9	293.3	293.8	294.3	294.4
145°	298.7	299.1	300.1	301.1	302.1	303.0	303.4	303.8	304.2	304.6	304.7
147.5°	308.2	308.5	309.4	310.5	311.4	312.4	312.6	312.9	313.2	313.5	313.5
150°	313.9	314.3	315.1	316.1	317.0	317.9	318.2	318.5	318.9	319.2	319.2
152.5°	319.3	319.5	320.4	321.2	322.1	323.0	323.3	323.7	324.0	324.3	324.3
155°	327.1	327.2	327.9	328.5	329.2	329.9	330.3	330.6	330.9	331.3	331.2
157.5°	333.7	333.7	334.2	334.7	335.2	335.6	336.0	336.4	336.8	337.2	337.2
160°	337.8	337.8	338.1	338.4	338.8	339.1	339.5	339.8	340.2	340.5	340.5
162.5°	341.0	341.0	341.3	341.6	341.9	342.2	342.6	342.9	343.3	343.7	343.7
165°	345.5	345.4	345.5	345.7	345.9	346.0	346.4	346.8	347.2	347.6	347.6
167.5°	348.7	348.6	348.8	349.0	349.1	349.3	349.7	350.1	350.5	350.9	350.8
170°	350.5	350.5	350.5	350.7	350.8	350.9	351.3	351.7	352.1	352.5	352.4
172.5°	351.8	351.6	351.8	351.9	352.0	352.1	352.5	352.9	353.3	353.7	353.7
175°	353.2	353.0	353.2	353.2	353.4	353.5	353.9	354.3	354.7	355.1	355.0
177.5°	353.7	353.6	353.6	353.7	353.7	353.8	354.1	354.4	354.7	355.1	355.0
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	449.1	448.8	448.8	447.5	448.8	448.8	449.1	450.5	451.0	451.2	450.7
5°	416.6	416.1	415.2	416.1	415.2	416.1	416.6	419.1	420.4	421.6	422.7
7.5°	384.4	382.3	382.0	379.9	382.0	382.3	384.4	385.6	388.2	391.0	393.6
10°	361.0	359.6	359.3	355.9	359.3	359.6	361.0	364.1	366.5	369.9	373.6
12.5°	343.2	339.7	340.4	338.4	340.4	339.7	343.2	343.2	346.1	348.2	353.9
15°	312.2	312.2	311.5	308.5	311.5	312.2	312.2	317.1	318.0	321.4	326.2
17.5°	290.0	289.6	288.0	288.8	288.0	289.6	290.0	293.6	294.2	298.7	302.8
20°	276.8	275.7	273.5	273.5	273.5	275.7	276.8	278.8	281.1	283.8	287.2
22.5°	264.3	264.2	261.9	262.6	261.9	264.2	264.3	266.1	268.3	271.2	274.1
25°	249.6	248.2	247.1	247.6	247.1	248.2	249.6	249.8	252.3	254.3	256.1
27.5°	235.7	234.9	234.8	233.4	234.8	234.9	235.7	236.1	237.6	238.8	240.4
30°	227.7	225.9	226.2	225.3	226.2	225.9	227.7	227.8	228.5	229.3	231.2
32.5°	218.4	217.8	217.5	216.7	217.5	217.8	218.4	218.7	220.2	220.9	222.4
35°	205.9	206.0	205.2	205.5	205.2	206.0	205.9	206.2	206.4	207.2	208.6
37.5°	194.9	195.4	195.0	195.1	195.0	195.4	194.9	195.0	195.3	195.4	195.8
40°	187.7	187.7	187.7	188.2	187.7	187.7	187.7	187.2	187.4	187.2	187.2
42.5°	180.8	180.5	180.2	180.1	180.2	180.5	180.8	179.5	180.1	179.5	179.3
45°	169.0	169.5	169.7	168.8	169.7	169.5	169.0	168.7	168.1	167.9	167.7
47.5°	158.3	158.4	158.3	159.1	158.3	158.4	158.3	157.8	157.0	156.7	155.8
50°	150.8	150.4	150.8	150.4	150.8	150.4	150.8	149.9	149.3	148.5	147.7
52.5°	142.9	143.0	142.8	142.7	142.8	143.0	142.9	141.7	141.5	141.1	140.0
55°	130.5	130.8	130.6	130.6	130.6	130.8	130.5	129.8	129.6	128.5	127.4
57.5°	117.6	118.0	118.2	117.4	118.2	118.0	117.6	117.5	117.4	116.2	115.1
60°	108.7	109.6	109.4	109.1	109.4	109.6	108.7	108.8	108.4	107.6	106.9
62.5°	100.4	100.8	100.8	100.7	100.8	100.8	100.4	99.7	99.4	98.7	98.0
65°	87.9	88.2	87.6	88.2	87.6	88.2	87.9	87.3	86.0	85.6	84.9
67.5°	74.1	74.3	74.7	74.9	74.7	74.3	74.1	74.4	73.6	72.9	72.7
70°	65.7	65.5	66.1	66.6	66.1	65.5	65.7	65.4	64.8	64.2	63.5
72.5°	56.7	57.1	57.0	57.4	57.0	57.1	56.7	56.8	56.3	55.6	54.9
75°	43.7	44.3	44.1	44.6	44.1	44.3	43.7	44.1	43.7	43.0	42.3
77.5°	31.6	31.7	31.6	31.9	31.6	31.7	31.6	31.9	31.5	31.8	30.9
80°	24.1	23.8	23.4	24.1	23.4	23.8	24.1	24.1	23.6	24.1	23.6
82.5°	16.8	17.0	16.6	16.6	16.6	17.0	16.8	17.2	17.0	17.2	16.6
85°	7.8	7.5	7.2	7.2	7.2	7.5	7.8	7.8	8.2	7.9	7.9
87.5°	2.8	2.6	2.7	2.5	2.7	2.6	2.8	2.7	2.7	2.9	2.9
90°	6.6	6.7	6.8	6.9	6.8	6.7	6.6	6.5	6.3	5.9	5.7
92.5°	6.7	6.8	6.8	6.9	6.8	6.8	6.7	6.7	6.5	6.4	6.3
95°	11.2	11.1	11.1	11.0	11.1	11.1	11.2	11.2	11.1	10.9	10.5
97.5°	14.5	14.6	14.7	14.7	14.7	14.6	14.5	14.4	14.3	14.0	13.9
100°	16.8	17.0	17.0	17.2	17.0	17.0	16.8	16.7	16.4	16.0	15.5
102.5°	17.9	18.1	18.2	18.4	18.2	18.1	17.9	17.7	17.3	16.8	16.2
105°	18.8	19.0	19.3	19.5	19.3	19.0	18.8	18.5	18.1	17.5	16.9
107.5°	19.3	19.6	19.8	20.0	19.8	19.6	19.3	19.1	19.3	20.0	20.6
110°	19.6	19.8	20.0	20.2	20.0	19.8	19.6	19.3	22.0	27.7	33.4



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	19.9	20.0	20.3	20.4	20.3	20.0	19.9	19.7	30.0	50.8	71.5
115°	33.3	29.2	25.1	21.0	25.1	29.2	33.3	37.4	52.6	79.0	105.4
117.5°	126.2	112.7	99.3	85.8	99.3	112.7	126.2	139.7	149.6	155.9	162.3
120°	179.3	171.6	163.9	156.2	163.9	171.6	179.3	187.0	190.4	189.8	189.1
122.5°	199.5	198.0	196.5	195.0	196.5	198.0	199.5	200.9	201.5	201.1	200.7
125°	218.5	218.6	218.8	219.0	218.8	218.6	218.5	218.3	218.0	217.6	217.2
127.5°	234.1	234.1	234.1	234.2	234.1	234.1	234.1	234.0	233.7	233.1	232.6
130°	243.8	243.7	243.7	243.6	243.7	243.7	243.8	243.8	243.5	242.9	242.2
132.5°	252.9	252.9	252.9	252.8	252.9	252.9	252.9	253.0	252.8	252.2	251.8
135°	266.5	266.3	266.3	266.1	266.3	266.3	266.5	266.6	266.3	265.8	265.2
137.5°	278.8	278.7	278.5	278.3	278.5	278.7	278.8	279.0	278.8	278.3	277.7
140°	286.7	286.5	286.1	285.8	286.1	286.5	286.7	287.0	286.8	286.4	285.8
142.5°	294.1	293.8	293.5	293.2	293.5	293.8	294.1	294.4	294.3	293.8	293.3
145°	304.4	304.1	303.8	303.5	303.8	304.1	304.4	304.7	304.6	304.2	303.8
147.5°	313.3	313.1	312.8	312.6	312.8	313.1	313.3	313.5	313.5	313.2	312.9
150°	319.0	318.7	318.4	318.1	318.4	318.7	319.0	319.2	319.2	318.9	318.5
152.5°	323.9	323.6	323.2	322.8	323.2	323.6	323.9	324.3	324.3	324.0	323.7
155°	330.7	330.3	329.9	329.4	329.9	330.3	330.7	331.2	331.3	330.9	330.6
157.5°	336.7	336.3	335.8	335.4	335.8	336.3	336.7	337.2	337.2	336.8	336.4
160°	340.1	339.7	339.3	338.9	339.3	339.7	340.1	340.5	340.5	340.2	339.8
162.5°	343.2	342.7	342.2	341.7	342.2	342.7	343.2	343.7	343.7	343.3	342.9
165°	347.2	346.8	346.4	346.0	346.4	346.8	347.2	347.6	347.6	347.2	346.8
167.5°	350.3	349.7	349.3	348.7	349.3	349.7	350.3	350.8	350.9	350.5	350.1
170°	352.0	351.4	350.9	350.4	350.9	351.4	352.0	352.4	352.5	352.1	351.7
172.5°	353.2	352.7	352.1	351.6	352.1	352.7	353.2	353.7	353.7	353.3	352.9
175°	354.4	353.9	353.2	352.7	353.2	353.9	354.4	355.0	355.1	354.7	354.3
177.5°	354.6	354.2	353.8	353.4	353.8	354.2	354.6	355.0	355.1	354.7	354.4
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927
 CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	450.0	451.5	454.0	456.6	458.2	461.2	462.1	463.5	464.8	467.8	471.0
5°	424.0	426.5	432.5	435.7	440.1	445.4	448.8	452.4	456.4	463.2	469.5
7.5°	396.1	400.3	407.7	413.8	420.2	427.6	433.0	440.1	446.1	455.7	464.9
10°	377.6	383.5	390.1	397.4	406.3	414.2	421.8	430.8	438.0	449.6	460.3
12.5°	360.8	361.7	371.3	379.2	391.5	401.3	410.0	421.6	428.6	442.4	453.7
15°	331.7	337.1	345.7	352.0	366.5	379.0	391.3	403.3	411.4	428.3	443.2
17.5°	307.0	312.0	320.9	331.2	341.7	354.0	369.9	382.6	393.6	413.0	430.6
20°	291.5	297.6	306.7	317.3	326.5	339.9	353.6	368.2	380.1	401.9	422.6
22.5°	278.3	283.1	290.4	300.9	310.9	323.2	338.2	354.1	366.5	390.1	411.0
25°	259.7	263.6	268.3	276.9	288.3	301.8	313.5	331.0	349.1	371.1	396.4
27.5°	242.9	245.7	249.9	257.5	266.3	278.8	291.8	308.4	326.7	350.5	377.3
30°	232.7	234.5	238.6	244.9	253.6	263.5	276.6	292.4	311.2	335.3	361.9
32.5°	223.8	225.4	228.1	234.1	241.6	250.1	261.9	277.7	295.6	319.2	348.8
35°	210.4	211.6	214.0	218.8	223.0	231.2	241.1	255.6	272.3	294.9	325.5
37.5°	197.0	198.8	200.2	202.2	207.6	213.0	221.6	233.8	250.2	273.1	302.2
40°	188.2	189.6	191.9	192.7	197.0	201.9	208.9	220.1	236.6	257.5	286.0
42.5°	179.3	180.8	182.0	183.1	186.8	191.1	197.4	207.0	221.7	241.9	270.1
45°	167.2	167.4	168.7	170.6	172.4	175.5	180.0	188.2	199.6	218.6	244.2
47.5°	154.9	155.1	155.3	156.1	158.1	160.9	163.9	170.6	180.8	196.0	220.9
50°	146.6	146.3	146.6	147.3	148.6	151.0	154.4	159.2	167.5	181.7	204.6
52.5°	138.7	138.7	138.5	138.7	139.7	141.3	143.8	147.9	155.3	168.3	188.5
55°	126.7	125.8	126.0	125.2	126.9	127.2	129.0	132.5	138.9	147.9	166.8
57.5°	113.8	113.1	112.3	112.1	111.9	112.9	114.3	117.0	122.0	129.9	145.2
60°	105.6	104.7	103.6	103.3	103.3	103.9	104.6	106.5	111.2	118.2	130.8
62.5°	97.3	96.3	95.6	94.7	94.3	94.9	95.6	97.0	100.4	107.0	117.9
65°	84.4	83.1	82.2	82.1	81.7	81.2	81.5	82.9	85.6	90.9	99.5
67.5°	71.5	70.3	70.1	69.0	68.5	68.6	68.5	69.7	71.4	75.9	82.3
70°	63.0	62.1	61.7	60.8	60.4	60.1	59.7	60.8	62.4	66.2	71.8
72.5°	54.3	53.6	52.8	52.0	52.1	51.7	51.7	52.4	53.6	57.1	61.5
75°	41.9	42.1	41.2	40.3	40.2	39.8	39.8	40.3	40.9	43.6	47.0
77.5°	30.4	30.3	29.5	29.2	29.1	28.7	29.1	29.4	29.7	31.5	34.0
80°	23.2	23.2	22.3	22.3	22.1	21.6	22.1	21.8	22.5	24.3	26.1
82.5°	16.6	16.3	16.2	16.0	15.9	15.5	15.8	16.2	16.5	17.7	18.8
85°	8.1	8.1	7.9	7.8	7.9	7.8	7.9	8.1	8.2	8.8	9.7
87.5°	2.8	2.9	2.9	3.0	2.9	2.9	3.0	3.0	3.2	3.2	3.2
90°	5.4	5.1	4.7	4.2	3.7	3.3	2.8	2.1	1.5	0.9	0.2
92.5°	6.1	5.9	5.7	5.5	5.2	5.1	4.9	5.0	5.1	5.1	5.1
95°	10.3	10.0	9.6	9.2	8.8	8.4	9.1	11.0	12.9	14.7	16.6
97.5°	13.6	13.4	12.4	11.5	10.6	9.7	11.9	17.2	22.4	27.7	33.0
100°	15.1	14.6	13.6	12.7	11.7	10.7	14.2	21.9	29.7	37.5	45.3
102.5°	15.6	15.0	23.1	31.2	39.3	47.4	52.3	53.9	55.5	57.2	58.9
105°	16.2	15.6	31.1	46.7	62.3	77.8	84.7	83.0	81.3	79.5	77.9
107.5°	21.2	21.9	40.5	59.2	77.8	96.4	105.0	103.7	102.3	100.9	99.5
110°	39.1	44.8	61.2	77.7	94.2	110.6	118.3	117.1	115.9	114.6	113.4



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	92.3	113.0	117.1	121.2	125.2	129.3	130.8	129.8	128.7	127.6	126.6
115°	131.7	158.0	156.6	155.2	153.8	152.3	151.1	150.2	149.2	148.2	147.3
117.5°	168.7	175.1	174.0	173.1	172.1	171.1	170.1	169.1	167.9	166.8	165.8
120°	188.5	187.7	186.7	185.7	184.7	183.6	182.7	181.9	181.0	180.1	179.3
122.5°	200.3	199.9	198.8	197.6	196.5	195.4	194.4	193.5	192.6	191.7	190.8
125°	216.8	216.4	215.3	214.3	213.2	212.1	211.2	210.5	209.7	209.0	208.3
127.5°	232.0	231.4	230.6	229.8	228.9	228.1	227.4	226.6	225.7	224.9	224.0
130°	241.6	241.1	240.4	239.8	239.2	238.5	237.7	236.9	235.9	235.0	234.1
132.5°	251.2	250.6	250.0	249.4	248.7	248.1	247.5	246.7	245.9	245.1	244.4
135°	264.7	264.1	263.6	263.1	262.5	262.1	261.3	260.4	259.5	258.6	257.7
137.5°	277.2	276.6	276.1	275.4	274.9	274.3	273.7	273.1	272.4	271.8	271.2
140°	285.3	284.8	284.2	283.6	283.0	282.3	281.8	281.3	280.8	280.4	280.0
142.5°	292.9	292.4	291.7	291.0	290.3	289.5	289.0	288.6	288.1	287.7	287.3
145°	303.4	303.0	302.1	301.1	300.1	299.1	298.7	298.7	298.8	298.9	298.9
147.5°	312.6	312.4	311.4	310.5	309.4	308.5	308.2	308.3	308.6	308.8	309.0
150°	318.2	317.9	317.0	316.1	315.1	314.3	313.9	314.3	314.7	315.1	315.5
152.5°	323.3	323.0	322.1	321.2	320.4	319.5	319.3	319.7	320.2	320.7	321.1
155°	330.3	329.9	329.2	328.5	327.9	327.2	327.1	327.6	328.1	328.6	329.2
157.5°	336.0	335.6	335.2	334.7	334.2	333.7	333.7	334.1	334.5	335.0	335.4
160°	339.5	339.1	338.8	338.4	338.1	337.8	337.8	338.1	338.4	338.8	339.1
162.5°	342.6	342.2	341.9	341.6	341.3	341.0	341.0	341.4	341.7	342.1	342.4
165°	346.4	346.0	345.9	345.7	345.5	345.4	345.5	345.8	346.1	346.5	346.8
167.5°	349.7	349.3	349.1	349.0	348.8	348.6	348.7	349.0	349.4	349.7	350.1
170°	351.3	350.9	350.8	350.7	350.5	350.5	350.5	350.9	351.3	351.6	352.0
172.5°	352.5	352.1	352.0	351.9	351.8	351.6	351.8	352.1	352.4	352.8	353.2
175°	353.9	353.5	353.4	353.2	353.2	353.0	353.2	353.6	353.9	354.3	354.7
177.5°	354.1	353.8	353.7	353.7	353.6	353.6	353.7	354.0	354.3	354.7	355.0
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	470.7	471.4	473.7	476.0	478.6	479.3	480.5	479.5	479.2	481.9	483.9
5°	472.1	475.2	481.6	487.4	492.2	495.6	499.2	500.7	503.4	507.1	511.8
7.5°	470.5	476.8	486.7	495.1	504.2	510.8	515.9	520.4	525.7	532.8	540.7
10°	468.8	477.2	489.3	499.6	510.7	519.2	526.2	533.1	541.0	550.9	561.1
12.5°	465.6	475.6	490.8	502.9	517.2	525.5	535.0	549.7	558.3	572.0	586.5
15°	459.2	470.4	491.5	506.4	522.6	538.4	555.9	569.9	583.9	592.1	612.4
17.5°	449.8	466.1	489.5	506.9	527.5	552.4	572.0	588.0	604.1	617.3	627.5
20°	442.1	459.9	486.6	507.5	532.0	558.7	581.2	597.5	611.5	622.5	628.8
22.5°	432.5	455.0	480.9	505.3	536.5	563.1	586.7	599.4	611.2	616.6	619.0
25°	417.3	444.3	473.6	503.5	538.8	566.9	588.4	596.2	599.6	594.4	585.7
27.5°	400.9	431.0	465.3	500.1	537.4	564.4	579.9	578.7	572.9	556.0	542.5
30°	388.7	421.8	458.7	496.7	534.1	560.4	569.3	560.4	547.2	528.4	509.1
32.5°	375.9	410.2	451.6	491.8	528.1	551.2	553.1	537.7	517.3	495.8	471.8
35°	356.5	393.6	438.4	480.9	515.2	529.8	521.2	493.8	469.7	440.4	407.6
37.5°	334.5	375.5	420.4	464.9	496.0	499.8	478.3	449.6	415.5	381.0	342.5
40°	318.1	361.6	407.8	452.6	480.1	476.2	448.8	417.2	376.7	334.5	298.7
42.5°	303.5	346.8	394.0	437.9	459.9	449.1	417.2	378.3	334.8	295.1	262.3
45°	278.1	322.7	370.9	413.4	426.0	406.3	364.1	320.8	278.1	244.9	219.0
47.5°	253.3	297.5	345.2	382.5	387.0	360.6	314.4	270.0	233.1	206.2	187.9
50°	235.2	279.5	326.8	360.1	358.6	326.8	279.3	237.0	206.2	184.4	172.2
52.5°	219.0	260.8	306.2	336.5	328.8	294.1	248.7	211.2	185.9	168.9	157.8
55°	193.6	232.3	275.5	299.8	285.7	247.2	208.9	178.7	159.9	147.2	138.6
57.5°	168.5	204.8	241.8	256.7	241.2	205.7	173.7	151.8	137.7	128.3	122.6
60°	153.0	184.7	217.5	230.5	212.0	180.3	155.1	135.5	124.1	116.5	111.4
62.5°	137.4	165.8	196.9	203.9	187.0	160.2	137.8	121.5	112.3	105.4	100.6
65°	116.2	139.5	163.0	167.7	152.1	131.3	113.8	103.1	94.8	89.8	86.0
67.5°	95.4	114.0	130.7	134.4	120.7	106.4	93.6	84.4	78.8	74.6	71.4
70°	82.9	97.8	111.4	114.5	103.5	90.7	81.0	73.6	68.5	65.0	61.9
72.5°	69.9	82.1	93.6	95.6	86.7	76.8	68.9	63.1	58.6	56.3	53.4
75°	53.5	60.7	69.5	70.0	64.1	58.1	52.0	48.2	45.9	43.0	41.6
77.5°	37.7	43.3	48.4	49.4	45.9	41.8	38.4	35.4	33.4	32.1	30.7
80°	28.8	33.3	35.5	36.7	34.2	31.3	29.3	27.3	26.1	25.2	24.3
82.5°	20.6	23.4	25.3	26.4	25.0	23.2	21.3	20.1	19.2	18.5	18.1
85°	10.5	11.7	13.0	13.3	13.0	12.2	11.2	11.2	10.6	10.5	10.5
87.5°	3.8	4.5	4.6	5.1	5.0	5.1	5.1	5.1	5.1	5.0	4.9
90°	0.9	1.5	2.1	2.8	3.3	3.7	4.2	4.7	5.1	5.4	5.7
92.5°	5.1	5.1	5.0	4.9	5.1	5.2	5.5	5.7	5.9	6.1	6.3
95°	14.7	12.9	11.0	9.1	8.4	8.8	9.2	9.6	10.0	10.3	10.5
97.5°	27.7	22.4	17.2	11.9	9.7	10.6	11.5	12.4	13.4	13.6	13.9
100°	37.5	29.7	21.9	14.2	10.7	11.7	12.7	13.6	14.6	15.1	15.5
102.5°	57.2	55.5	53.9	52.3	47.4	39.3	31.2	23.1	15.0	15.6	16.2
105°	79.5	81.3	83.0	84.7	77.8	62.3	46.7	31.1	15.6	16.2	16.9
107.5°	100.9	102.3	103.7	105.0	96.4	77.8	59.2	40.5	21.9	21.2	20.6
110°	114.6	115.9	117.1	118.3	110.6	94.2	77.7	61.2	44.8	39.1	33.4



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	127.6	128.7	129.8	130.8	129.3	125.2	121.2	117.1	113.0	92.3	71.5
115°	148.2	149.2	150.2	151.1	152.3	153.8	155.2	156.6	158.0	131.7	105.4
117.5°	166.8	167.9	169.1	170.1	171.1	172.1	173.1	174.0	175.1	168.7	162.3
120°	180.1	181.0	181.9	182.7	183.6	184.7	185.7	186.7	187.7	188.5	189.1
122.5°	191.7	192.6	193.5	194.4	195.4	196.5	197.6	198.8	199.9	200.3	200.7
125°	209.0	209.7	210.5	211.2	212.1	213.2	214.3	215.3	216.4	216.8	217.2
127.5°	224.9	225.7	226.6	227.4	228.1	228.9	229.8	230.6	231.4	232.0	232.6
130°	235.0	235.9	236.9	237.7	238.5	239.2	239.8	240.4	241.1	241.6	242.2
132.5°	245.1	245.9	246.7	247.5	248.1	248.7	249.4	250.0	250.6	251.2	251.8
135°	258.6	259.5	260.4	261.3	262.1	262.5	263.1	263.6	264.1	264.7	265.2
137.5°	271.8	272.4	273.1	273.7	274.3	274.9	275.4	276.1	276.6	277.2	277.7
140°	280.4	280.8	281.3	281.8	282.3	283.0	283.6	284.2	284.8	285.3	285.8
142.5°	287.7	288.1	288.6	289.0	289.5	290.3	291.0	291.7	292.4	292.9	293.3
145°	298.9	298.8	298.7	298.7	299.1	300.1	301.1	302.1	303.0	303.4	303.8
147.5°	308.8	308.6	308.3	308.2	308.5	309.4	310.5	311.4	312.4	312.6	312.9
150°	315.1	314.7	314.3	313.9	314.3	315.1	316.1	317.0	317.9	318.2	318.5
152.5°	320.7	320.2	319.7	319.3	319.5	320.4	321.2	322.1	323.0	323.3	323.7
155°	328.6	328.1	327.6	327.1	327.2	327.9	328.5	329.2	329.9	330.3	330.6
157.5°	335.0	334.5	334.1	333.7	333.7	334.2	334.7	335.2	335.6	336.0	336.4
160°	338.8	338.4	338.1	337.8	337.8	338.1	338.4	338.8	339.1	339.5	339.8
162.5°	342.1	341.7	341.4	341.0	341.0	341.3	341.6	341.9	342.2	342.6	342.9
165°	346.5	346.1	345.8	345.5	345.4	345.5	345.7	345.9	346.0	346.4	346.8
167.5°	349.7	349.4	349.0	348.7	348.6	348.8	349.0	349.1	349.3	349.7	350.1
170°	351.6	351.3	350.9	350.5	350.5	350.5	350.7	350.8	350.9	351.3	351.7
172.5°	352.8	352.4	352.1	351.8	351.6	351.8	351.9	352.0	352.1	352.5	352.9
175°	354.3	353.9	353.6	353.2	353.0	353.2	353.2	353.4	353.5	353.9	354.3
177.5°	354.7	354.3	354.0	353.7	353.6	353.6	353.7	353.7	353.8	354.1	354.4
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9	353.9



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	468.3	468.3	468.3	468.3	468.3	468.3	468.3
2.5°	485.7	487.7	487.7	488.0	490.3	490.0	489.8
5°	516.8	519.9	520.2	523.5	525.6	524.9	522.9
7.5°	546.2	551.9	556.3	558.6	561.5	563.2	562.4
10°	569.6	577.8	582.9	586.3	590.4	593.5	592.4
12.5°	590.7	600.6	607.5	613.4	613.9	617.8	615.1
15°	623.8	634.1	635.3	639.5	643.0	642.6	642.8
17.5°	634.6	637.9	638.7	638.7	638.8	637.5	634.8
20°	630.7	629.5	626.5	624.1	620.0	619.4	615.8
22.5°	612.3	608.3	600.6	595.6	589.1	587.5	586.5
25°	576.1	567.2	555.0	543.3	540.0	533.8	535.5
27.5°	526.2	512.5	499.2	489.8	481.2	471.7	474.4
30°	491.3	475.8	457.1	442.7	433.5	424.5	422.9
32.5°	449.6	426.8	406.0	393.3	379.2	373.5	367.3
35°	377.6	355.4	334.7	316.9	306.7	298.7	291.5
37.5°	312.8	287.3	270.6	256.2	248.7	244.2	245.4
40°	272.7	250.3	238.1	227.1	220.2	217.1	217.8
42.5°	240.1	223.4	213.3	205.8	201.0	199.2	198.8
45°	203.2	193.8	185.5	181.3	178.9	176.9	175.6
47.5°	178.0	170.3	165.6	163.1	161.1	159.1	159.0
50°	162.9	157.8	154.6	151.9	150.3	148.9	150.1
52.5°	151.3	146.7	143.5	141.1	140.5	139.2	139.1
55°	134.3	130.6	128.3	126.1	125.1	124.4	123.4
57.5°	118.7	115.3	113.1	111.8	109.7	109.0	108.7
60°	107.6	104.9	102.7	100.9	100.1	98.6	98.6
62.5°	97.4	94.7	92.7	91.3	89.8	89.3	89.4
65°	82.6	80.4	78.4	77.0	76.7	75.6	76.0
67.5°	69.0	67.6	65.4	64.6	64.0	63.5	63.0
70°	59.9	58.5	57.4	56.3	55.8	55.8	55.8
72.5°	52.3	50.5	49.9	48.6	48.9	48.3	47.7
75°	40.5	39.4	38.9	38.3	37.5	37.5	37.5
77.5°	29.8	29.5	28.8	28.3	28.0	27.9	28.0
80°	23.1	22.8	22.5	22.5	22.1	21.9	21.6
82.5°	17.7	17.3	17.0	16.9	16.8	16.8	16.7
85°	10.1	9.7	9.7	9.9	9.5	9.5	9.7
87.5°	5.1	5.1	5.1	5.1	5.2	5.1	5.1
90°	5.9	6.3	6.5	6.6	6.7	6.8	6.9
92.5°	6.4	6.5	6.7	6.7	6.8	6.8	6.9
95°	10.9	11.1	11.2	11.2	11.1	11.1	11.0
97.5°	14.0	14.3	14.4	14.5	14.6	14.7	14.7
100°	16.0	16.4	16.7	16.8	17.0	17.0	17.2
102.5°	16.8	17.3	17.7	17.9	18.1	18.2	18.4
105°	17.5	18.1	18.5	18.8	19.0	19.3	19.5
107.5°	20.0	19.3	19.1	19.3	19.6	19.8	20.0
110°	27.7	22.0	19.3	19.6	19.8	20.0	20.2



TEST NUMBER: P331240-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	50.8	30.0	19.7	19.9	20.0	20.3	20.4
115°	79.0	52.6	37.4	33.3	29.2	25.1	21.0
117.5°	155.9	149.6	139.7	126.2	112.7	99.3	85.8
120°	189.8	190.4	187.0	179.3	171.6	163.9	156.2
122.5°	201.1	201.5	200.9	199.5	198.0	196.5	195.0
125°	217.6	218.0	218.3	218.5	218.6	218.8	219.0
127.5°	233.1	233.7	234.0	234.1	234.1	234.1	234.2
130°	242.9	243.5	243.8	243.8	243.7	243.7	243.6
132.5°	252.2	252.8	253.0	252.9	252.9	252.9	252.8
135°	265.8	266.3	266.6	266.5	266.3	266.3	266.1
137.5°	278.3	278.8	279.0	278.8	278.7	278.5	278.3
140°	286.4	286.8	287.0	286.7	286.5	286.1	285.8
142.5°	293.8	294.3	294.4	294.1	293.8	293.5	293.2
145°	304.2	304.6	304.7	304.4	304.1	303.8	303.5
147.5°	313.2	313.5	313.5	313.3	313.1	312.8	312.6
150°	318.9	319.2	319.2	319.0	318.7	318.4	318.1
152.5°	324.0	324.3	324.3	323.9	323.6	323.2	322.8
155°	330.9	331.3	331.2	330.7	330.3	329.9	329.4
157.5°	336.8	337.2	337.2	336.7	336.3	335.8	335.4
160°	340.2	340.5	340.5	340.1	339.7	339.3	338.9
162.5°	343.3	343.7	343.7	343.2	342.7	342.2	341.7
165°	347.2	347.6	347.6	347.2	346.8	346.4	346.0
167.5°	350.5	350.9	350.8	350.3	349.7	349.3	348.7
170°	352.1	352.5	352.4	352.0	351.4	350.9	350.4
172.5°	353.3	353.7	353.7	353.2	352.7	352.1	351.6
175°	354.7	355.1	355.0	354.4	353.9	353.2	352.7
177.5°	354.7	355.1	355.0	354.6	354.2	353.8	353.4
180°	353.9	353.9	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)