

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: P331242-927

Luminaire Tested: **SA2XXDIP-C290D330U927-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331242-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,
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-A4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 330 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2047.2 lumens
Efficiency: N/A
Efficacy: 100.8 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

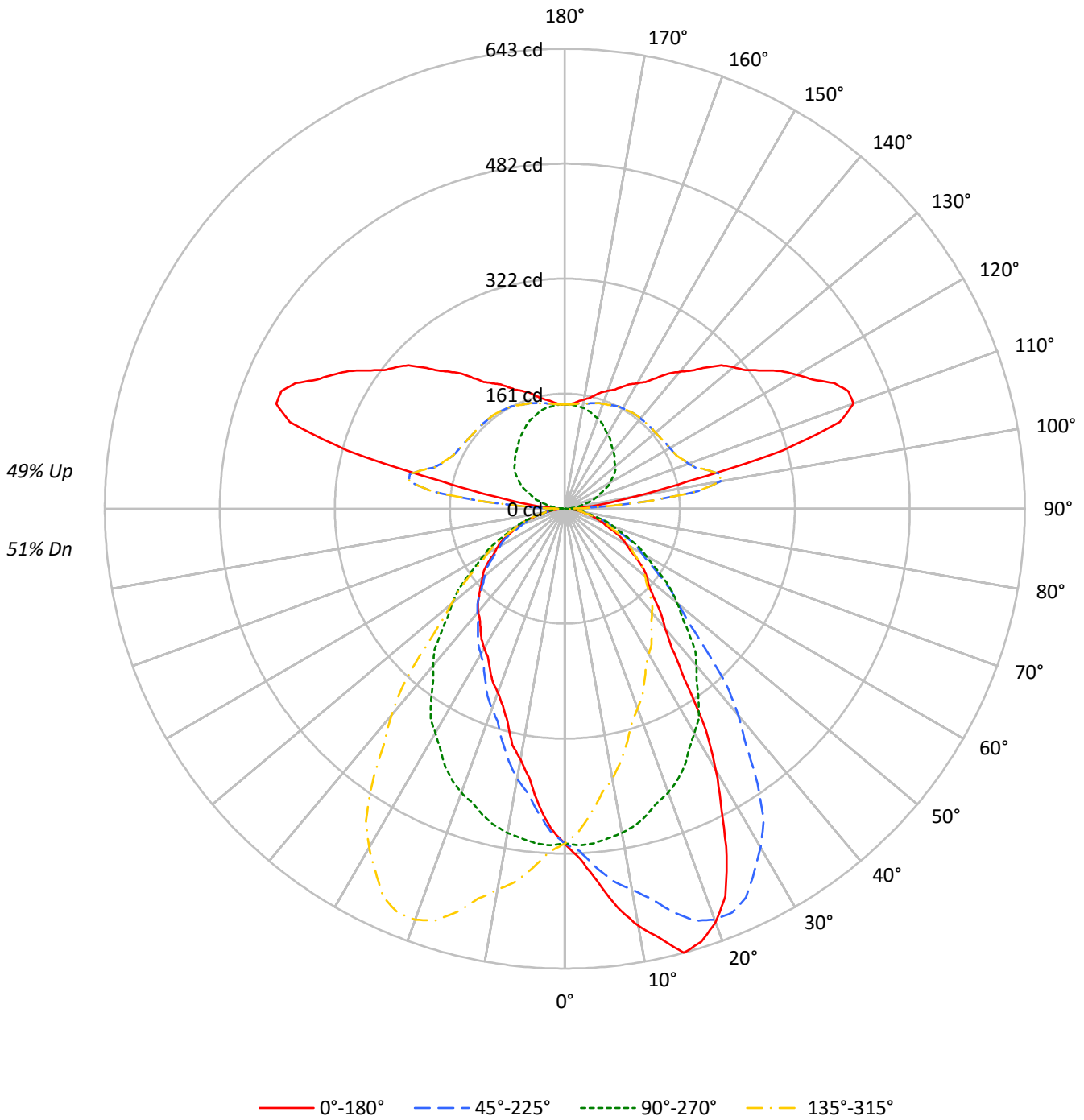
Input Watts (W): 20.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

Luminous Intensity Polar Plot





TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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	84	84	84	70	70	70	57	57	57	51
1	98	94	91	87	91	87	84	81	74	72	70	62	60	59	51	50	49	44
2	90	83	77	72	83	77	72	67	65	62	58	55	52	50	45	43	42	37
3	82	73	66	61	76	68	62	57	58	54	50	49	46	43	41	38	36	32
4	76	65	57	52	70	61	54	49	52	47	43	44	40	37	37	34	32	28
5	70	58	50	45	64	54	47	42	47	41	37	40	36	32	33	30	28	25
6	64	53	45	39	59	49	42	37	42	37	33	36	32	29	30	27	25	22
7	60	48	40	34	55	44	38	33	39	33	29	33	29	26	28	25	22	20
8	55	43	36	31	51	41	34	29	35	30	26	30	26	23	26	22	20	18
9	52	40	32	27	48	37	31	26	32	27	23	28	24	21	24	21	18	16
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	22	19	17	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



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	2.2
10°-20°	129.6	6.3
20°-30°	188.1	9.2
30°-40°	198.5	9.7
40°-50°	175.8	8.6
50°-60°	140.3	6.9
60°-70°	95.4	4.7
70°-80°	48.9	2.4
80°-90°	13.1	0.6
90°-100°	58.2	2.8
100°-110°	197.5	9.6
110°-120°	209.8	10.2
120°-130°	172.7	8.4
130°-140°	138.7	6.8
140°-150°	104.8	5.1
150°-160°	73.7	3.6
160°-170°	43.4	2.1
170°-180°	14.1	0.7
0°-30°	362.4	17.7
0°-40°	560.9	27.4
0°-60°	877.0	42.8
0°-90°	1034.4	50.5
90°-120°	465.5	22.7
90°-150°	881.7	43.1
90°-180°	1013.0	49.5
0°-180°	2047.2	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°	9	0	9	0	9	5
95°	32	10	32	10	32	41
105°	315	34	315	34	315	305
115°	415	60	415	60	415	406
125°	337	84	337	84	337	304
135°	279	98	279	98	279	217
145°	223	112	223	112	223	142
155°	187	128	187	128	187	87
165°	164	139	164	139	164	47
175°	148	145	148	145	148	14
180°	146	146	146	146	146	



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	5.6	5.6	5.7	5.6	5.6	5.7	5.5	5.5	5.7	5.9	6.0
90°	9.3	9.3	9.3	9.3	9.3	9.0	8.4	9.0	9.3	9.5	9.3
92.5°	15.5	15.9	15.8	16.6	16.9	18.6	20.9	24.4	30.7	36.4	35.9
95°	31.9	31.6	32.5	34.7	38.3	44.5	56.2	73.4	96.0	109.7	97.1
97.5°	62.8	65.2	69.2	76.1	89.5	109.7	140.0	171.1	196.5	187.3	141.1
100°	100.2	105.3	113.4	125.4	148.6	182.5	220.9	255.6	261.4	221.1	152.3
102.5°	176.3	183.2	193.3	213.8	239.1	275.0	303.0	310.9	285.6	222.2	148.0
105°	315.4	319.3	331.4	348.7	366.1	375.3	371.7	340.1	281.9	207.4	139.7
107.5°	403.0	408.1	410.6	411.5	409.3	395.8	366.7	319.0	257.3	191.5	135.5
110°	429.4	429.7	427.1	421.8	409.8	386.8	351.0	300.9	241.9	183.9	134.7



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	428.9	427.4	422.6	413.8	397.0	370.7	332.4	284.3	231.1	179.0	134.8
115°	415.1	412.6	405.3	392.4	372.6	343.7	307.0	264.0	217.8	173.6	136.0
117.5°	390.4	388.2	380.6	367.0	346.7	319.7	286.5	248.6	209.4	170.9	138.1
120°	374.5	371.7	363.6	350.5	330.8	305.4	275.7	241.0	204.9	169.4	139.4
122.5°	357.9	355.6	348.4	335.4	317.8	294.9	266.7	235.0	201.1	168.4	140.9
125°	336.8	334.5	327.5	316.9	300.6	279.6	255.0	226.2	195.7	166.8	143.3
127.5°	318.1	316.3	310.3	300.3	286.1	266.8	243.6	217.5	190.6	165.9	145.7
130°	307.6	305.4	299.8	290.3	276.6	258.1	236.0	211.9	187.3	165.4	147.5
132.5°	296.7	294.6	289.5	280.0	266.5	249.1	228.8	206.5	184.6	165.2	149.3
135°	279.1	278.0	272.9	263.6	251.6	236.0	217.5	199.0	180.8	164.9	151.5
137.5°	261.8	260.2	255.7	247.8	236.8	223.2	208.5	193.1	178.2	164.8	153.4
140°	249.9	248.3	244.1	236.8	227.8	215.6	202.6	189.2	176.6	164.6	154.2
142.5°	238.1	237.7	234.0	227.4	218.9	208.6	197.5	186.1	175.1	164.6	154.9
145°	222.8	222.0	219.2	214.4	207.7	199.6	190.9	181.6	173.0	164.0	155.6
147.5°	210.0	209.5	207.6	203.7	198.2	192.3	185.5	178.2	170.9	163.0	155.8
150°	202.4	202.1	200.4	197.0	192.8	187.8	182.0	175.8	169.1	162.3	155.6
152.5°	195.9	195.8	194.6	191.7	188.4	184.0	179.0	173.3	167.5	161.2	155.2
155°	187.3	187.8	186.7	184.7	181.6	178.6	174.4	169.9	164.6	159.2	154.5
157.5°	179.9	179.9	179.4	177.8	175.6	173.2	169.7	166.0	161.8	157.2	153.2
160°	175.2	175.2	174.9	173.6	171.6	169.6	166.5	163.4	159.8	155.9	152.6
162.5°	170.7	171.0	170.7	169.8	167.8	166.3	163.7	161.0	158.0	154.8	151.9
165°	164.3	164.6	164.6	163.4	162.3	161.2	159.2	157.3	155.0	152.6	150.6
167.5°	158.4	158.7	158.8	158.1	157.6	156.6	155.3	153.8	152.2	150.6	149.3
170°	154.8	155.3	155.6	154.8	154.5	153.9	152.8	152.0	150.6	149.5	148.6
172.5°	151.9	152.2	152.5	152.1	151.8	151.5	150.6	150.0	149.0	148.1	147.7
175°	148.1	148.6	148.9	148.6	148.6	148.4	148.1	147.8	146.9	146.6	146.4
177.5°	145.8	146.2	146.5	146.5	146.5	146.5	146.2	146.2	145.8	145.5	145.8
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	5.9	5.5	5.1	5.3	4.8	4.6	3.8	3.2	3.2	3.3	3.2
90°	7.5	5.6	4.2	3.3	2.8	2.2	1.1	0.3	1.1	2.2	2.8
92.5°	28.0	19.0	12.7	10.1	8.2	7.0	4.9	3.4	4.9	7.0	8.2
95°	64.6	40.3	27.4	20.7	16.2	13.7	10.9	9.8	10.9	13.7	16.2
97.5°	87.1	53.2	37.0	29.4	24.2	20.4	17.4	15.9	17.4	20.4	24.2
100°	91.8	57.7	42.9	35.0	29.4	24.9	22.4	21.5	22.4	24.9	29.4
102.5°	92.1	61.7	48.0	40.2	34.3	29.9	27.3	26.7	27.3	29.9	34.3
105°	93.5	68.6	55.5	47.6	41.4	37.2	35.3	34.1	35.3	37.2	41.4
107.5°	97.4	75.7	62.9	55.0	48.9	45.0	43.1	42.2	43.1	45.0	48.9
110°	100.4	80.3	68.0	59.9	54.0	50.4	48.7	47.6	48.7	50.4	54.0



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	103.9	84.8	73.0	64.6	58.9	55.5	53.6	52.5	53.6	55.5	58.9
115°	108.8	91.8	79.8	72.2	66.6	63.3	61.6	60.2	61.6	63.3	66.6
117.5°	114.2	98.2	87.1	79.3	73.9	70.9	69.2	68.1	69.2	70.9	73.9
120°	117.9	102.7	91.8	84.0	78.3	75.9	74.1	73.0	74.1	75.9	78.3
122.5°	121.0	106.9	96.7	88.6	83.1	80.3	78.7	77.8	78.7	80.3	83.1
125°	126.0	113.4	103.3	95.5	89.8	86.5	84.8	84.0	84.8	86.5	89.8
127.5°	130.6	119.3	109.5	101.4	96.1	92.4	90.0	88.9	90.0	92.4	96.1
130°	133.5	122.9	113.0	105.3	99.7	95.7	92.9	91.8	92.9	95.7	99.7
132.5°	136.4	126.0	116.7	108.8	103.0	98.9	95.9	94.5	95.9	98.9	103.0
135°	140.2	130.5	121.4	113.7	107.2	103.0	99.7	98.5	99.7	103.0	107.2
137.5°	143.1	134.0	125.2	117.9	111.5	107.0	103.7	102.3	103.7	107.0	111.5
140°	144.7	136.0	127.6	120.3	114.2	109.7	106.4	105.3	106.4	109.7	114.2
142.5°	146.1	137.6	129.4	122.6	116.7	112.2	109.1	108.1	109.1	112.2	116.7
145°	147.8	140.0	132.4	126.3	120.6	116.5	113.7	112.5	113.7	116.5	120.6
147.5°	148.8	141.9	134.8	129.3	124.6	120.7	118.0	117.2	118.0	120.7	124.6
150°	149.2	142.8	136.3	131.3	127.1	123.4	121.2	120.3	121.2	123.4	127.1
152.5°	149.4	143.6	137.8	133.3	129.3	126.1	123.9	123.5	123.9	126.1	129.3
155°	149.7	145.0	140.2	136.0	132.9	129.8	128.2	127.9	128.2	129.8	132.9
157.5°	149.7	145.9	141.9	138.4	135.9	133.2	131.9	131.6	131.9	133.2	135.9
160°	149.7	146.4	143.1	140.0	137.7	135.5	134.4	134.0	134.4	135.5	137.7
162.5°	149.5	146.6	143.7	141.3	139.3	137.5	136.3	136.6	136.3	137.5	139.3
165°	148.9	146.9	144.4	142.8	141.3	139.7	139.1	139.4	139.1	139.7	141.3
167.5°	148.5	146.9	145.0	144.0	143.0	141.9	141.4	141.7	141.4	141.9	143.0
170°	148.1	146.6	145.3	144.4	143.9	143.1	142.8	143.3	142.8	143.1	143.9
172.5°	147.4	146.5	145.5	144.9	144.6	143.7	143.9	144.2	143.9	143.7	144.6
175°	146.6	146.1	145.5	145.3	145.3	144.7	145.0	145.3	145.0	144.7	145.3
177.5°	146.2	145.8	145.5	145.5	145.5	145.1	145.3	145.8	145.3	145.1	145.5
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	3.1	3.2	3.2	3.6	3.9	3.8	3.6	3.5	3.4	3.2	3.2
90°	3.3	4.2	5.6	7.5	9.3	9.5	9.3	9.0	8.4	9.0	9.3
92.5°	10.1	12.7	19.0	28.0	35.9	36.4	30.7	24.4	20.9	18.6	16.9
95°	20.7	27.4	40.3	64.6	97.1	109.7	96.0	73.4	56.2	44.5	38.3
97.5°	29.4	37.0	53.2	87.1	141.1	187.3	196.5	171.1	140.0	109.7	89.5
100°	35.0	42.9	57.7	91.8	152.3	221.1	261.4	255.6	220.9	182.5	148.6
102.5°	40.2	48.0	61.7	92.1	148.0	222.2	285.6	310.9	303.0	275.0	239.1
105°	47.6	55.5	68.6	93.5	139.7	207.4	281.9	340.1	371.7	375.3	366.1
107.5°	55.0	62.9	75.7	97.4	135.5	191.5	257.3	319.0	366.7	395.8	409.3
110°	59.9	68.0	80.3	100.4	134.7	183.9	241.9	300.9	351.0	386.8	409.8



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	64.6	73.0	84.8	103.9	134.8	179.0	231.1	284.3	332.4	370.7	397.0
115°	72.2	79.8	91.8	108.8	136.0	173.6	217.8	264.0	307.0	343.7	372.6
117.5°	79.3	87.1	98.2	114.2	138.1	170.9	209.4	248.6	286.5	319.7	346.7
120°	84.0	91.8	102.7	117.9	139.4	169.4	204.9	241.0	275.7	305.4	330.8
122.5°	88.6	96.7	106.9	121.0	140.9	168.4	201.1	235.0	266.7	294.9	317.8
125°	95.5	103.3	113.4	126.0	143.3	166.8	195.7	226.2	255.0	279.6	300.6
127.5°	101.4	109.5	119.3	130.6	145.7	165.9	190.6	217.5	243.6	266.8	286.1
130°	105.3	113.0	122.9	133.5	147.5	165.4	187.3	211.9	236.0	258.1	276.6
132.5°	108.8	116.7	126.0	136.4	149.3	165.2	184.6	206.5	228.8	249.1	266.5
135°	113.7	121.4	130.5	140.2	151.5	164.9	180.8	199.0	217.5	236.0	251.6
137.5°	117.9	125.2	134.0	143.1	153.4	164.8	178.2	193.1	208.5	223.2	236.8
140°	120.3	127.6	136.0	144.7	154.2	164.6	176.6	189.2	202.6	215.6	227.8
142.5°	122.6	129.4	137.6	146.1	154.9	164.6	175.1	186.1	197.5	208.6	218.9
145°	126.3	132.4	140.0	147.8	155.6	164.0	173.0	181.6	190.9	199.6	207.7
147.5°	129.3	134.8	141.9	148.8	155.8	163.0	170.9	178.2	185.5	192.3	198.2
150°	131.3	136.3	142.8	149.2	155.6	162.3	169.1	175.8	182.0	187.8	192.8
152.5°	133.3	137.8	143.6	149.4	155.2	161.2	167.5	173.3	179.0	184.0	188.4
155°	136.0	140.2	145.0	149.7	154.5	159.2	164.6	169.9	174.4	178.6	181.6
157.5°	138.4	141.9	145.9	149.7	153.2	157.2	161.8	166.0	169.7	173.2	175.6
160°	140.0	143.1	146.4	149.7	152.6	155.9	159.8	163.4	166.5	169.6	171.6
162.5°	141.3	143.7	146.6	149.5	151.9	154.8	158.0	161.0	163.7	166.3	167.8
165°	142.8	144.4	146.9	148.9	150.6	152.6	155.0	157.3	159.2	161.2	162.3
167.5°	144.0	145.0	146.9	148.5	149.3	150.6	152.2	153.8	155.3	156.6	157.6
170°	144.4	145.3	146.6	148.1	148.6	149.5	150.6	152.0	152.8	153.9	154.5
172.5°	144.9	145.5	146.5	147.4	147.7	148.1	149.0	150.0	150.6	151.5	151.8
175°	145.3	145.5	146.1	146.6	146.4	146.6	146.9	147.8	148.1	148.4	148.6
177.5°	145.5	145.5	145.8	146.2	145.8	145.5	145.8	146.2	146.2	146.5	146.5
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	3.2	3.2	3.2	3.0	3.2	3.2	3.2	3.2	3.2	3.4	3.5
90°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.0	8.4	9.0
92.5°	16.6	15.8	15.9	15.5	15.9	15.8	16.6	16.9	18.6	20.9	24.4
95°	34.7	32.5	31.6	31.9	31.6	32.5	34.7	38.3	44.5	56.2	73.4
97.5°	76.1	69.2	65.2	62.8	65.2	69.2	76.1	89.5	109.7	140.0	171.1
100°	125.4	113.4	105.3	100.2	105.3	113.4	125.4	148.6	182.5	220.9	255.6
102.5°	213.8	193.3	183.2	176.3	183.2	193.3	213.8	239.1	275.0	303.0	310.9
105°	348.7	331.4	319.3	315.4	319.3	331.4	348.7	366.1	375.3	371.7	340.1
107.5°	411.5	410.6	408.1	403.0	408.1	410.6	411.5	409.3	395.8	366.7	319.0
110°	421.8	427.1	429.7	429.4	429.7	427.1	421.8	409.8	386.8	351.0	300.9



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	413.8	422.6	427.4	428.9	427.4	422.6	413.8	397.0	370.7	332.4	284.3
115°	392.4	405.3	412.6	415.1	412.6	405.3	392.4	372.6	343.7	307.0	264.0
117.5°	367.0	380.6	388.2	390.4	388.2	380.6	367.0	346.7	319.7	286.5	248.6
120°	350.5	363.6	371.7	374.5	371.7	363.6	350.5	330.8	305.4	275.7	241.0
122.5°	335.4	348.4	355.6	357.9	355.6	348.4	335.4	317.8	294.9	266.7	235.0
125°	316.9	327.5	334.5	336.8	334.5	327.5	316.9	300.6	279.6	255.0	226.2
127.5°	300.3	310.3	316.3	318.1	316.3	310.3	300.3	286.1	266.8	243.6	217.5
130°	290.3	299.8	305.4	307.6	305.4	299.8	290.3	276.6	258.1	236.0	211.9
132.5°	280.0	289.5	294.6	296.7	294.6	289.5	280.0	266.5	249.1	228.8	206.5
135°	263.6	272.9	278.0	279.1	278.0	272.9	263.6	251.6	236.0	217.5	199.0
137.5°	247.8	255.7	260.2	261.8	260.2	255.7	247.8	236.8	223.2	208.5	193.1
140°	236.8	244.1	248.3	249.9	248.3	244.1	236.8	227.8	215.6	202.6	189.2
142.5°	227.4	234.0	237.7	238.1	237.7	234.0	227.4	218.9	208.6	197.5	186.1
145°	214.4	219.2	222.0	222.8	222.0	219.2	214.4	207.7	199.6	190.9	181.6
147.5°	203.7	207.6	209.5	210.0	209.5	207.6	203.7	198.2	192.3	185.5	178.2
150°	197.0	200.4	202.1	202.4	202.1	200.4	197.0	192.8	187.8	182.0	175.8
152.5°	191.7	194.6	195.8	195.9	195.8	194.6	191.7	188.4	184.0	179.0	173.3
155°	184.7	186.7	187.8	187.3	187.8	186.7	184.7	181.6	178.6	174.4	169.9
157.5°	177.8	179.4	179.9	179.9	179.9	179.4	177.8	175.6	173.2	169.7	166.0
160°	173.6	174.9	175.2	175.2	175.2	174.9	173.6	171.6	169.6	166.5	163.4
162.5°	169.8	170.7	171.0	170.7	171.0	170.7	169.8	167.8	166.3	163.7	161.0
165°	163.4	164.6	164.6	164.3	164.6	164.6	163.4	162.3	161.2	159.2	157.3
167.5°	158.1	158.8	158.7	158.4	158.7	158.8	158.1	157.6	156.6	155.3	153.8
170°	154.8	155.6	155.3	154.8	155.3	155.6	154.8	154.5	153.9	152.8	152.0
172.5°	152.1	152.5	152.2	151.9	152.2	152.5	152.1	151.8	151.5	150.6	150.0
175°	148.6	148.9	148.6	148.1	148.6	148.9	148.6	148.6	148.4	148.1	147.8
177.5°	146.5	146.5	146.2	145.8	146.2	146.5	146.5	146.5	146.5	146.2	146.2
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	3.6	3.8	3.9	3.6	3.2	3.2	3.1	3.2	3.3	3.2	3.2
90°	9.3	9.5	9.3	7.5	5.6	4.2	3.3	2.8	2.2	1.1	0.3
92.5°	30.7	36.4	35.9	28.0	19.0	12.7	10.1	8.2	7.0	4.9	3.4
95°	96.0	109.7	97.1	64.6	40.3	27.4	20.7	16.2	13.7	10.9	9.8
97.5°	196.5	187.3	141.1	87.1	53.2	37.0	29.4	24.2	20.4	17.4	15.9
100°	261.4	221.1	152.3	91.8	57.7	42.9	35.0	29.4	24.9	22.4	21.5
102.5°	285.6	222.2	148.0	92.1	61.7	48.0	40.2	34.3	29.9	27.3	26.7
105°	281.9	207.4	139.7	93.5	68.6	55.5	47.6	41.4	37.2	35.3	34.1
107.5°	257.3	191.5	135.5	97.4	75.7	62.9	55.0	48.9	45.0	43.1	42.2
110°	241.9	183.9	134.7	100.4	80.3	68.0	59.9	54.0	50.4	48.7	47.6



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	231.1	179.0	134.8	103.9	84.8	73.0	64.6	58.9	55.5	53.6	52.5
115°	217.8	173.6	136.0	108.8	91.8	79.8	72.2	66.6	63.3	61.6	60.2
117.5°	209.4	170.9	138.1	114.2	98.2	87.1	79.3	73.9	70.9	69.2	68.1
120°	204.9	169.4	139.4	117.9	102.7	91.8	84.0	78.3	75.9	74.1	73.0
122.5°	201.1	168.4	140.9	121.0	106.9	96.7	88.6	83.1	80.3	78.7	77.8
125°	195.7	166.8	143.3	126.0	113.4	103.3	95.5	89.8	86.5	84.8	84.0
127.5°	190.6	165.9	145.7	130.6	119.3	109.5	101.4	96.1	92.4	90.0	88.9
130°	187.3	165.4	147.5	133.5	122.9	113.0	105.3	99.7	95.7	92.9	91.8
132.5°	184.6	165.2	149.3	136.4	126.0	116.7	108.8	103.0	98.9	95.9	94.5
135°	180.8	164.9	151.5	140.2	130.5	121.4	113.7	107.2	103.0	99.7	98.5
137.5°	178.2	164.8	153.4	143.1	134.0	125.2	117.9	111.5	107.0	103.7	102.3
140°	176.6	164.6	154.2	144.7	136.0	127.6	120.3	114.2	109.7	106.4	105.3
142.5°	175.1	164.6	154.9	146.1	137.6	129.4	122.6	116.7	112.2	109.1	108.1
145°	173.0	164.0	155.6	147.8	140.0	132.4	126.3	120.6	116.5	113.7	112.5
147.5°	170.9	163.0	155.8	148.8	141.9	134.8	129.3	124.6	120.7	118.0	117.2
150°	169.1	162.3	155.6	149.2	142.8	136.3	131.3	127.1	123.4	121.2	120.3
152.5°	167.5	161.2	155.2	149.4	143.6	137.8	133.3	129.3	126.1	123.9	123.5
155°	164.6	159.2	154.5	149.7	145.0	140.2	136.0	132.9	129.8	128.2	127.9
157.5°	161.8	157.2	153.2	149.7	145.9	141.9	138.4	135.9	133.2	131.9	131.6
160°	159.8	155.9	152.6	149.7	146.4	143.1	140.0	137.7	135.5	134.4	134.0
162.5°	158.0	154.8	151.9	149.5	146.6	143.7	141.3	139.3	137.5	136.3	136.6
165°	155.0	152.6	150.6	148.9	146.9	144.4	142.8	141.3	139.7	139.1	139.4
167.5°	152.2	150.6	149.3	148.5	146.9	145.0	144.0	143.0	141.9	141.4	141.7
170°	150.6	149.5	148.6	148.1	146.6	145.3	144.4	143.9	143.1	142.8	143.3
172.5°	149.0	148.1	147.7	147.4	146.5	145.5	144.9	144.6	143.7	143.9	144.2
175°	146.9	146.6	146.4	146.6	146.1	145.5	145.3	145.3	144.7	145.0	145.3
177.5°	145.8	145.5	145.8	146.2	145.8	145.5	145.5	145.5	145.1	145.3	145.8
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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	4.6	4.8	5.3	5.1	5.5	5.9	6.0	5.9	5.7	5.5
90°	1.1	2.2	2.8	3.3	4.2	5.6	7.5	9.3	9.5	9.3	9.0
92.5°	4.9	7.0	8.2	10.1	12.7	19.0	28.0	35.9	36.4	30.7	24.4
95°	10.9	13.7	16.2	20.7	27.4	40.3	64.6	97.1	109.7	96.0	73.4
97.5°	17.4	20.4	24.2	29.4	37.0	53.2	87.1	141.1	187.3	196.5	171.1
100°	22.4	24.9	29.4	35.0	42.9	57.7	91.8	152.3	221.1	261.4	255.6
102.5°	27.3	29.9	34.3	40.2	48.0	61.7	92.1	148.0	222.2	285.6	310.9
105°	35.3	37.2	41.4	47.6	55.5	68.6	93.5	139.7	207.4	281.9	340.1
107.5°	43.1	45.0	48.9	55.0	62.9	75.7	97.4	135.5	191.5	257.3	319.0
110°	48.7	50.4	54.0	59.9	68.0	80.3	100.4	134.7	183.9	241.9	300.9



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	53.6	55.5	58.9	64.6	73.0	84.8	103.9	134.8	179.0	231.1	284.3
115°	61.6	63.3	66.6	72.2	79.8	91.8	108.8	136.0	173.6	217.8	264.0
117.5°	69.2	70.9	73.9	79.3	87.1	98.2	114.2	138.1	170.9	209.4	248.6
120°	74.1	75.9	78.3	84.0	91.8	102.7	117.9	139.4	169.4	204.9	241.0
122.5°	78.7	80.3	83.1	88.6	96.7	106.9	121.0	140.9	168.4	201.1	235.0
125°	84.8	86.5	89.8	95.5	103.3	113.4	126.0	143.3	166.8	195.7	226.2
127.5°	90.0	92.4	96.1	101.4	109.5	119.3	130.6	145.7	165.9	190.6	217.5
130°	92.9	95.7	99.7	105.3	113.0	122.9	133.5	147.5	165.4	187.3	211.9
132.5°	95.9	98.9	103.0	108.8	116.7	126.0	136.4	149.3	165.2	184.6	206.5
135°	99.7	103.0	107.2	113.7	121.4	130.5	140.2	151.5	164.9	180.8	199.0
137.5°	103.7	107.0	111.5	117.9	125.2	134.0	143.1	153.4	164.8	178.2	193.1
140°	106.4	109.7	114.2	120.3	127.6	136.0	144.7	154.2	164.6	176.6	189.2
142.5°	109.1	112.2	116.7	122.6	129.4	137.6	146.1	154.9	164.6	175.1	186.1
145°	113.7	116.5	120.6	126.3	132.4	140.0	147.8	155.6	164.0	173.0	181.6
147.5°	118.0	120.7	124.6	129.3	134.8	141.9	148.8	155.8	163.0	170.9	178.2
150°	121.2	123.4	127.1	131.3	136.3	142.8	149.2	155.6	162.3	169.1	175.8
152.5°	123.9	126.1	129.3	133.3	137.8	143.6	149.4	155.2	161.2	167.5	173.3
155°	128.2	129.8	132.9	136.0	140.2	145.0	149.7	154.5	159.2	164.6	169.9
157.5°	131.9	133.2	135.9	138.4	141.9	145.9	149.7	153.2	157.2	161.8	166.0
160°	134.4	135.5	137.7	140.0	143.1	146.4	149.7	152.6	155.9	159.8	163.4
162.5°	136.3	137.5	139.3	141.3	143.7	146.6	149.5	151.9	154.8	158.0	161.0
165°	139.1	139.7	141.3	142.8	144.4	146.9	148.9	150.6	152.6	155.0	157.3
167.5°	141.4	141.9	143.0	144.0	145.0	146.9	148.5	149.3	150.6	152.2	153.8
170°	142.8	143.1	143.9	144.4	145.3	146.6	148.1	148.6	149.5	150.6	152.0
172.5°	143.9	143.7	144.6	144.9	145.5	146.5	147.4	147.7	148.1	149.0	150.0
175°	145.0	144.7	145.3	145.3	145.5	146.1	146.6	146.4	146.6	146.9	147.8
177.5°	145.3	145.1	145.5	145.5	145.5	145.8	146.2	145.8	145.5	145.8	146.2
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

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°	5.5	5.7	5.6	5.6	5.7	5.6	5.6
90°	8.4	9.0	9.3	9.3	9.3	9.3	9.3
92.5°	20.9	18.6	16.9	16.6	15.8	15.9	15.5
95°	56.2	44.5	38.3	34.7	32.5	31.6	31.9
97.5°	140.0	109.7	89.5	76.1	69.2	65.2	62.8
100°	220.9	182.5	148.6	125.4	113.4	105.3	100.2
102.5°	303.0	275.0	239.1	213.8	193.3	183.2	176.3
105°	371.7	375.3	366.1	348.7	331.4	319.3	315.4
107.5°	366.7	395.8	409.3	411.5	410.6	408.1	403.0
110°	351.0	386.8	409.8	421.8	427.1	429.7	429.4



TEST NUMBER: P331242-927

CATALOG NUMBER: SA2XXDIP-C290D330U927-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	332.4	370.7	397.0	413.8	422.6	427.4	428.9
115°	307.0	343.7	372.6	392.4	405.3	412.6	415.1
117.5°	286.5	319.7	346.7	367.0	380.6	388.2	390.4
120°	275.7	305.4	330.8	350.5	363.6	371.7	374.5
122.5°	266.7	294.9	317.8	335.4	348.4	355.6	357.9
125°	255.0	279.6	300.6	316.9	327.5	334.5	336.8
127.5°	243.6	266.8	286.1	300.3	310.3	316.3	318.1
130°	236.0	258.1	276.6	290.3	299.8	305.4	307.6
132.5°	228.8	249.1	266.5	280.0	289.5	294.6	296.7
135°	217.5	236.0	251.6	263.6	272.9	278.0	279.1
137.5°	208.5	223.2	236.8	247.8	255.7	260.2	261.8
140°	202.6	215.6	227.8	236.8	244.1	248.3	249.9
142.5°	197.5	208.6	218.9	227.4	234.0	237.7	238.1
145°	190.9	199.6	207.7	214.4	219.2	222.0	222.8
147.5°	185.5	192.3	198.2	203.7	207.6	209.5	210.0
150°	182.0	187.8	192.8	197.0	200.4	202.1	202.4
152.5°	179.0	184.0	188.4	191.7	194.6	195.8	195.9
155°	174.4	178.6	181.6	184.7	186.7	187.8	187.3
157.5°	169.7	173.2	175.6	177.8	179.4	179.9	179.9
160°	166.5	169.6	171.6	173.6	174.9	175.2	175.2
162.5°	163.7	166.3	167.8	169.8	170.7	171.0	170.7
165°	159.2	161.2	162.3	163.4	164.6	164.6	164.3
167.5°	155.3	156.6	157.6	158.1	158.8	158.7	158.4
170°	152.8	153.9	154.5	154.8	155.6	155.3	154.8
172.5°	150.6	151.5	151.8	152.1	152.5	152.2	151.9
175°	148.1	148.4	148.6	148.6	148.9	148.6	148.1
177.5°	146.2	146.5	146.5	146.5	146.5	146.2	145.8
180°	145.5	145.5	145.5	145.5	145.5	145.5	145.5

(END OF REPORT)