

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: P331240-930

Luminaire Tested: **SA2XXDIP-C290D330U930-4F0-1E-UDD-A**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331240-930
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-C290D330U930-4F0-1E-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

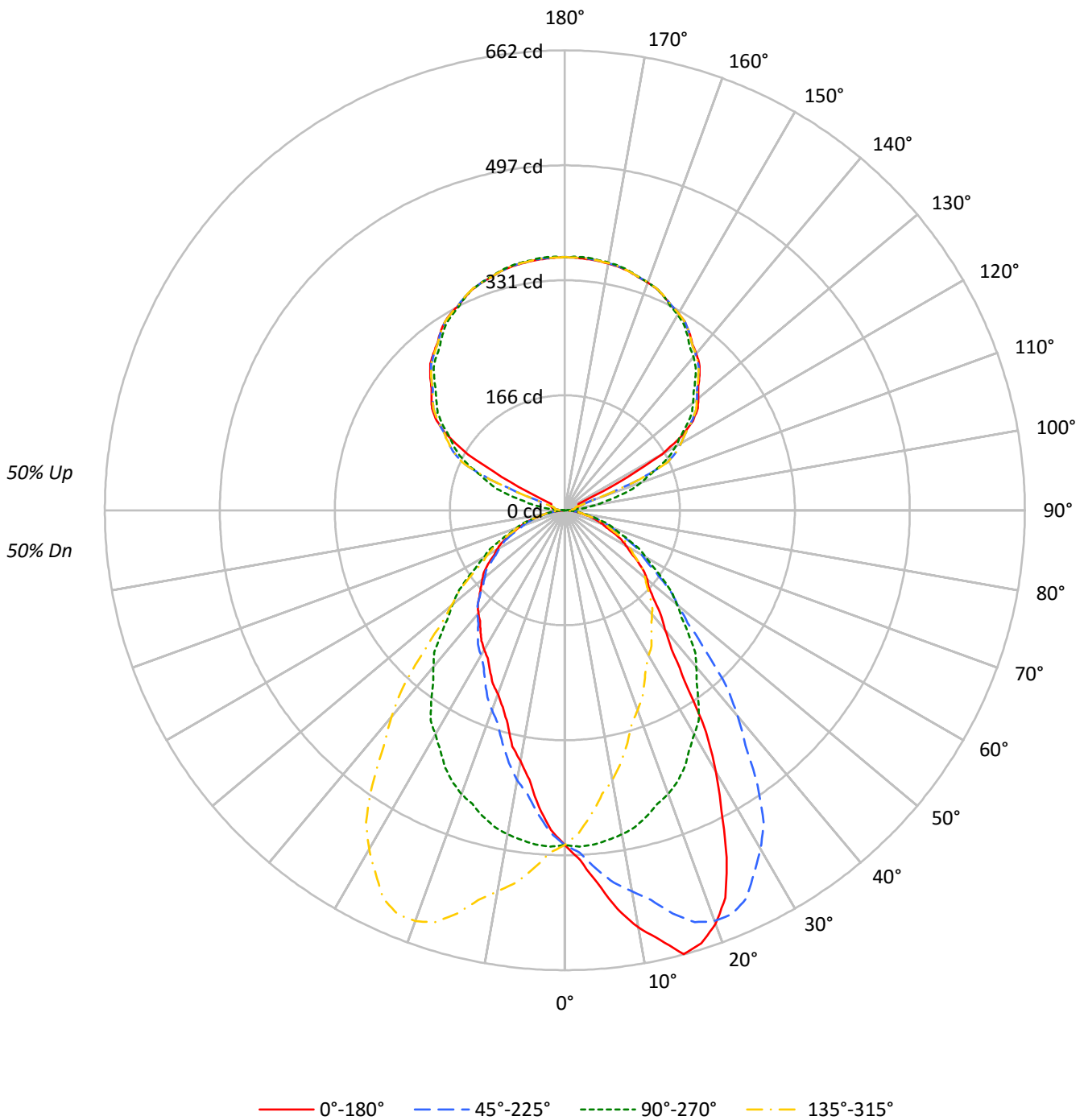
Lumens per Lamp: N/A
Luminaire Lumens: 2131.7 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: General Diffuse

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	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°	7781	7781	7781	7781
5°	8723	7831	6940	7831
10°	9996	7768	6005	7768
15°	11057	7626	5307	7626
20°	10890	7472	4837	7472
25°	9818	7269	4541	7269
30°	8114	6943	4323	6943
35°	5913	6603	4169	6603
40°	4723	6203	4083	6203
45°	4128	5740	3966	5740
50°	3881	5290	3888	5290
55°	3575	4833	3783	4833
60°	3278	4346	3626	4346
65°	2988	3912	3465	3912
70°	2710	3489	3238	3489
75°	2408	3013	2863	3013
80°	2073	2492	2306	2492
85°	1853	1853	1371	1853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	2.2
10°-20°	133.4	6.3
20°-30°	193.6	9.1
30°-40°	204.3	9.6
40°-50°	180.9	8.5
50°-60°	144.4	6.8
60°-70°	98.1	4.6
70°-80°	50.3	2.4
80°-90°	13.0	0.6
90°-100°	12.1	0.6
100°-110°	44.6	2.1
110°-120°	119.1	5.6
120°-130°	196.6	9.2
130°-140°	209.1	9.8
140°-150°	194.4	9.1
150°-160°	156.3	7.3
160°-170°	100.7	4.7
170°-180°	34.7	1.6
0°-30°	373.0	17.5
0°-40°	577.3	27.1
0°-60°	902.6	42.3
0°-90°	1064.1	49.9
90°-120°	175.8	8.2
90°-150°	776.0	36.4
90°-180°	1068.0	50.1
0°-180°	2131.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	482	482	482	482	482	
5°	538	483	428	483	538	54
15°	662	456	318	456	662	183
25°	551	408	255	408	551	249
35°	300	335	212	335	300	195
45°	181	251	174	251	181	142
55°	127	172	134	172	127	114
65°	78	102	91	102	78	78
75°	39	48	46	48	39	41
85°	10	10	7	10	10	11
90°	7	0	7	0	7	4
95°	11	17	11	17	11	11
105°	20	80	20	80	20	21
115°	22	152	22	152	22	54
125°	225	214	225	214	225	195
135°	274	265	274	265	274	211
145°	312	308	312	308	312	195
155°	339	339	339	339	339	156
165°	356	357	356	357	356	101
175°	363	365	363	365	363	35
180°	364	364	364	364	364	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	504.1	504.3	504.6	502.2	501.9	501.9	499.9	498.1	495.9	493.2	493.5
5°	538.2	540.2	541.0	538.7	535.4	535.1	531.9	526.8	521.9	518.0	515.3
7.5°	578.9	579.7	577.9	574.9	572.5	568.0	562.1	556.4	548.4	541.0	535.6
10°	609.7	610.8	607.6	603.4	599.9	594.7	586.2	577.5	567.0	556.8	548.6
12.5°	633.1	635.9	631.8	631.3	625.3	618.1	608.0	603.6	588.7	574.5	565.7
15°	661.5	661.4	661.8	658.2	653.8	652.6	642.0	630.2	609.4	601.0	586.5
17.5°	653.3	656.2	657.5	657.4	657.3	656.6	653.1	645.8	635.3	621.7	605.1
20°	633.8	637.5	638.1	642.3	644.7	647.8	649.1	647.1	640.7	629.3	614.9
22.5°	603.6	604.6	606.3	612.9	618.2	626.1	630.1	637.1	634.5	629.0	616.9
25°	551.1	549.3	555.8	559.1	571.2	583.8	592.9	602.8	611.7	617.1	613.6
27.5°	488.3	485.5	495.2	504.1	513.8	527.5	541.6	558.3	572.2	589.6	595.6
30°	435.2	436.9	446.1	455.6	470.4	489.7	505.6	523.9	543.8	563.2	576.7
32.5°	378.1	384.4	390.3	404.8	417.8	439.3	462.7	485.6	510.3	532.4	553.3
35°	300.0	307.4	315.6	326.1	344.5	365.7	388.6	419.5	453.2	483.4	508.2
37.5°	252.6	251.4	256.0	263.7	278.5	295.7	322.0	352.5	392.2	427.6	462.7
40°	224.1	223.4	226.7	233.7	245.0	257.6	280.6	307.4	344.3	387.7	429.3
42.5°	204.6	205.0	206.8	211.8	219.6	229.9	247.1	269.9	303.7	344.5	389.3
45°	180.8	182.1	184.1	186.5	190.9	199.5	209.1	225.4	252.1	286.2	330.2
47.5°	163.6	163.7	165.8	167.9	170.5	175.3	183.2	193.4	212.2	239.9	277.9
50°	154.5	153.2	154.7	156.3	159.1	162.4	167.6	177.2	189.8	212.2	243.9
52.5°	143.2	143.2	144.6	145.2	147.7	151.0	155.7	162.4	173.8	191.4	217.4
55°	127.0	128.0	128.7	129.8	132.1	134.4	138.2	142.6	151.5	164.6	183.9
57.5°	111.9	112.2	112.9	115.0	116.4	118.6	122.1	126.2	132.0	141.7	156.2
60°	101.5	101.5	103.0	103.9	105.7	107.9	110.7	114.6	119.8	127.8	139.5
62.5°	92.0	91.9	92.5	94.0	95.4	97.4	100.2	103.5	108.4	115.5	125.1
65°	78.2	77.8	78.9	79.2	80.7	82.8	85.0	88.5	92.5	97.6	106.2
67.5°	64.8	65.3	65.9	66.5	67.3	69.5	71.0	73.5	76.8	81.1	86.8
70°	57.4	57.4	57.4	58.0	59.1	60.2	61.6	63.7	66.9	70.5	75.7
72.5°	49.1	49.7	50.3	50.0	51.4	52.0	53.8	55.0	58.0	60.3	64.9
75°	38.6	38.6	38.6	39.5	40.0	40.5	41.7	42.8	44.3	47.2	49.7
77.5°	28.8	28.7	28.9	29.1	29.7	30.3	30.7	31.6	33.0	34.4	36.4
80°	22.3	22.6	22.7	23.2	23.2	23.5	23.7	25.0	25.9	26.8	28.1
82.5°	17.2	17.3	17.3	17.4	17.5	17.8	18.3	18.7	19.0	19.7	20.7
85°	10.0	9.8	9.8	10.2	10.0	10.0	10.4	10.8	10.8	10.9	11.5
87.5°	5.3	5.2	5.4	5.2	5.2	5.3	5.2	5.1	5.1	5.2	5.2
90°	7.1	7.0	6.8	6.8	6.7	6.4	6.1	5.9	5.5	5.3	4.8
92.5°	7.1	7.0	7.0	6.9	6.8	6.7	6.6	6.4	6.3	6.1	5.9
95°	11.3	11.4	11.4	11.5	11.6	11.4	11.2	10.8	10.6	10.3	9.9
97.5°	15.2	15.1	15.0	14.9	14.8	14.7	14.4	14.3	14.0	13.8	12.8
100°	17.7	17.5	17.4	17.3	17.2	16.9	16.5	16.0	15.5	15.0	14.0
102.5°	18.9	18.8	18.6	18.4	18.3	17.9	17.3	16.6	16.1	15.4	23.8
105°	20.1	19.8	19.6	19.3	19.1	18.7	18.0	17.4	16.7	16.1	32.0
107.5°	20.6	20.4	20.1	19.9	19.6	19.9	20.5	21.2	21.9	22.5	41.7
110°	20.8	20.6	20.4	20.1	19.9	22.7	28.5	34.4	40.3	46.1	63.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	21.0	20.9	20.6	20.5	20.3	30.9	52.3	73.6	95.0	116.3	120.5
115°	21.6	25.8	30.1	34.2	38.5	54.1	81.3	108.4	135.5	162.7	161.2
117.5°	88.3	102.2	116.0	129.9	143.7	153.9	160.5	167.1	173.6	180.2	179.1
120°	160.8	168.7	176.6	184.5	192.4	196.0	195.3	194.6	194.0	193.2	192.2
122.5°	200.6	202.2	203.7	205.3	206.8	207.3	206.9	206.5	206.1	205.7	204.6
125°	225.3	225.2	225.0	224.9	224.7	224.4	224.0	223.6	223.1	222.7	221.6
127.5°	241.0	240.9	240.9	240.9	240.8	240.5	239.9	239.4	238.7	238.1	237.3
130°	250.7	250.8	250.8	250.9	250.9	250.6	250.0	249.3	248.7	248.1	247.4
132.5°	260.2	260.2	260.3	260.3	260.4	260.2	259.6	259.1	258.5	258.0	257.3
135°	273.9	274.0	274.1	274.3	274.3	274.1	273.5	273.0	272.4	271.8	271.3
137.5°	286.4	286.6	286.8	287.0	287.1	287.0	286.4	285.8	285.3	284.7	284.1
140°	294.2	294.5	294.8	295.1	295.4	295.2	294.7	294.2	293.7	293.1	292.5
142.5°	301.7	302.1	302.4	302.6	303.0	302.9	302.4	301.9	301.4	300.9	300.2
145°	312.3	312.7	313.0	313.2	313.6	313.5	313.1	312.7	312.3	311.9	310.9
147.5°	321.7	322.0	322.2	322.5	322.7	322.7	322.4	322.0	321.7	321.5	320.5
150°	327.4	327.7	328.0	328.3	328.6	328.6	328.2	327.8	327.5	327.2	326.2
152.5°	332.2	332.6	333.0	333.4	333.8	333.8	333.5	333.1	332.7	332.4	331.5
155°	339.0	339.5	340.0	340.4	340.9	341.0	340.6	340.2	339.9	339.5	338.8
157.5°	345.2	345.6	346.1	346.5	347.0	347.0	346.7	346.3	345.8	345.4	345.0
160°	348.8	349.2	349.6	350.0	350.4	350.4	350.1	349.8	349.4	349.0	348.7
162.5°	351.7	352.2	352.7	353.2	353.8	353.8	353.4	352.9	352.6	352.2	351.9
165°	356.1	356.5	356.9	357.3	357.8	357.8	357.3	356.9	356.5	356.1	356.0
167.5°	358.9	359.5	360.0	360.5	361.0	361.1	360.7	360.3	359.9	359.5	359.3
170°	360.6	361.2	361.7	362.2	362.7	362.8	362.4	362.0	361.6	361.2	361.0
172.5°	361.9	362.4	363.0	363.5	364.0	364.0	363.6	363.2	362.8	362.4	362.3
175°	363.0	363.5	364.2	364.8	365.3	365.4	365.0	364.6	364.2	363.8	363.7
177.5°	363.7	364.1	364.5	364.9	365.3	365.4	365.1	364.8	364.4	364.1	364.0
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	494.5	493.3	492.6	489.9	487.5	485.2	484.5	484.7	481.4	478.3	477.0
5°	513.8	510.1	506.5	501.6	495.6	489.1	485.8	483.2	476.7	469.7	465.6
7.5°	531.0	525.7	518.9	509.6	500.9	490.7	484.2	478.5	469.0	459.1	453.0
10°	541.5	534.3	525.6	514.1	503.6	491.1	482.5	473.8	462.7	450.8	443.4
12.5°	550.6	540.9	532.3	517.6	505.1	489.5	479.2	466.9	455.3	441.2	433.9
15°	572.1	554.2	537.9	521.1	505.8	484.1	472.6	456.2	440.8	423.4	415.1
17.5°	588.7	568.5	542.9	521.7	503.8	479.7	462.9	443.2	425.0	405.1	393.8
20°	598.2	575.0	547.5	522.3	500.8	473.4	455.0	434.9	413.6	391.2	379.0
22.5°	603.8	579.5	552.2	520.1	494.9	468.2	445.2	423.0	401.5	377.2	364.4
25°	605.6	583.4	554.5	518.2	487.5	457.3	429.5	408.0	381.9	359.3	340.6
27.5°	596.8	580.9	553.1	514.7	478.9	443.6	412.6	388.3	360.8	336.2	317.4
30°	586.0	576.7	549.7	511.2	472.1	434.1	400.1	372.4	345.0	320.2	300.9
32.5°	569.2	567.3	543.5	506.1	464.8	422.2	386.9	359.0	328.6	304.2	285.8
35°	536.4	545.3	530.3	494.9	451.2	405.0	366.9	335.0	303.5	280.2	263.0
37.5°	492.3	514.4	510.5	478.4	432.7	386.5	344.3	311.0	281.0	257.5	240.6
40°	461.9	490.1	494.2	465.8	419.7	372.1	327.4	294.3	265.1	243.5	226.5
42.5°	429.3	462.2	473.4	450.7	405.4	356.9	312.3	278.0	249.0	228.1	213.0
45°	374.7	418.2	438.4	425.4	381.7	332.1	286.2	251.4	225.0	205.4	193.7
47.5°	323.6	371.1	398.3	393.7	355.3	306.1	260.7	227.3	201.7	186.1	175.6
50°	287.5	336.3	369.1	370.6	336.3	287.6	242.1	210.6	187.0	172.4	163.9
52.5°	256.0	302.7	338.4	346.3	315.1	268.4	225.3	194.0	173.3	159.8	152.2
55°	215.0	254.5	294.1	308.6	283.6	239.1	199.3	171.7	152.2	143.0	136.3
57.5°	178.8	211.7	248.3	264.2	248.8	210.8	173.4	149.4	133.7	125.6	120.4
60°	159.6	185.6	218.2	237.3	223.9	190.0	157.4	134.6	121.6	114.5	109.7
62.5°	141.9	164.9	192.4	209.9	202.6	170.6	141.5	121.3	110.1	103.4	99.9
65°	117.1	135.2	156.5	172.6	167.8	143.6	119.6	102.4	93.5	88.1	85.4
67.5°	96.4	109.5	124.3	138.4	134.5	117.3	98.2	84.7	78.1	73.5	71.7
70°	83.3	93.4	106.5	117.8	114.6	100.6	85.4	73.9	68.2	64.2	62.6
72.5°	70.9	79.1	89.2	98.4	96.3	84.5	71.9	63.3	58.8	55.2	53.9
75°	53.6	59.8	66.0	72.1	71.5	62.5	55.0	48.3	44.8	42.1	41.5
77.5°	39.5	43.0	47.2	50.8	49.8	44.6	38.8	35.0	32.4	30.6	30.2
80°	30.2	32.2	35.2	37.7	36.5	34.2	29.6	26.8	25.0	23.2	22.4
82.5°	21.9	23.9	25.7	27.1	26.1	24.1	21.2	19.3	18.2	17.0	16.6
85°	11.5	12.6	13.4	13.7	13.4	12.1	10.8	10.0	9.0	8.5	8.3
87.5°	5.3	5.2	5.1	5.3	4.7	4.6	3.9	3.3	3.3	3.3	3.1
90°	4.3	3.8	3.4	2.9	2.2	1.5	0.9	0.2	0.9	1.5	2.2
92.5°	5.6	5.4	5.2	5.1	5.1	5.2	5.3	5.3	5.3	5.2	5.1
95°	9.5	9.0	8.6	9.4	11.3	13.3	15.2	17.1	15.2	13.3	11.3
97.5°	11.8	10.9	9.9	12.2	17.7	23.1	28.5	34.0	28.5	23.1	17.7
100°	13.0	12.1	11.0	14.6	22.6	30.6	38.6	46.6	38.6	30.6	22.6
102.5°	32.1	40.4	48.8	53.8	55.5	57.2	58.9	60.6	58.9	57.2	55.5
105°	48.1	64.1	80.1	87.2	85.4	83.6	81.9	80.1	81.9	83.6	85.4
107.5°	60.9	80.1	99.2	108.1	106.7	105.3	103.9	102.4	103.9	105.3	106.7
110°	80.0	96.9	113.8	121.7	120.5	119.3	118.0	116.8	118.0	119.3	120.5



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	124.7	128.9	133.1	134.6	133.5	132.5	131.3	130.3	131.3	132.5	133.5
115°	159.7	158.2	156.8	155.6	154.6	153.6	152.5	151.6	152.5	153.6	154.6
117.5°	178.1	177.2	176.1	175.0	174.0	172.8	171.7	170.6	171.7	172.8	174.0
120°	191.1	190.0	189.0	188.0	187.2	186.3	185.4	184.5	185.4	186.3	187.2
122.5°	203.3	202.2	201.1	200.1	199.1	198.2	197.3	196.3	197.3	198.2	199.1
125°	220.5	219.4	218.3	217.4	216.6	215.8	215.1	214.3	215.1	215.8	216.6
127.5°	236.5	235.6	234.8	234.0	233.2	232.3	231.5	230.6	231.5	232.3	233.2
130°	246.8	246.1	245.5	244.7	243.8	242.8	241.9	240.9	241.9	242.8	243.8
132.5°	256.7	256.0	255.4	254.7	253.9	253.1	252.3	251.5	252.3	253.1	253.9
135°	270.8	270.2	269.7	269.0	268.0	267.1	266.1	265.2	266.1	267.1	268.0
137.5°	283.5	282.9	282.3	281.7	281.0	280.4	279.7	279.1	279.7	280.4	281.0
140°	291.9	291.2	290.6	290.0	289.5	289.0	288.6	288.1	288.6	289.0	289.5
142.5°	299.5	298.7	298.0	297.4	297.0	296.5	296.1	295.7	296.1	296.5	297.0
145°	309.9	308.8	307.9	307.4	307.4	307.5	307.6	307.6	307.6	307.5	307.4
147.5°	319.5	318.5	317.5	317.2	317.3	317.6	317.8	318.0	317.8	317.6	317.3
150°	325.3	324.3	323.4	323.1	323.5	323.9	324.3	324.7	324.3	323.9	323.5
152.5°	330.6	329.7	328.8	328.6	329.1	329.5	330.0	330.4	330.0	329.5	329.1
155°	338.1	337.5	336.7	336.6	337.1	337.7	338.2	338.8	338.2	337.7	337.1
157.5°	344.5	344.0	343.5	343.4	343.9	344.3	344.8	345.2	344.8	344.3	343.9
160°	348.3	348.0	347.6	347.6	348.0	348.3	348.7	349.0	348.7	348.3	348.0
162.5°	351.6	351.2	351.0	351.0	351.3	351.7	352.0	352.4	352.0	351.7	351.3
165°	355.8	355.6	355.5	355.6	355.9	356.2	356.6	356.9	356.6	356.2	355.9
167.5°	359.1	359.0	358.8	358.9	359.2	359.6	360.0	360.3	360.0	359.6	359.2
170°	360.9	360.8	360.7	360.8	361.2	361.5	361.8	362.2	361.8	361.5	361.2
172.5°	362.2	362.1	361.9	362.1	362.4	362.7	363.1	363.5	363.1	362.7	362.4
175°	363.5	363.5	363.3	363.5	363.9	364.3	364.7	365.1	364.7	364.3	363.9
177.5°	364.0	363.9	363.9	364.0	364.4	364.7	365.0	365.3	365.0	364.7	364.4
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	475.6	474.7	471.6	469.9	467.2	464.7	463.1	463.8	464.4	464.1	463.7
5°	461.9	458.4	453.0	448.4	445.1	439.0	436.3	435.0	433.9	432.7	431.4
7.5°	445.6	440.1	432.4	425.8	419.6	412.0	407.6	405.1	402.4	399.5	396.9
10°	434.1	426.3	418.2	409.0	401.5	394.7	388.6	384.5	380.7	377.2	374.7
12.5°	422.0	413.0	402.9	390.3	382.1	372.3	371.4	364.2	358.4	356.2	353.2
15°	402.7	390.0	377.2	362.2	355.8	346.9	341.4	335.7	330.8	327.3	326.4
17.5°	380.7	364.4	351.6	340.9	330.3	321.1	316.0	311.6	307.4	302.8	302.1
20°	363.9	349.8	336.0	326.5	315.6	306.3	300.0	295.6	292.0	289.3	286.9
22.5°	348.1	332.6	319.9	309.7	298.9	291.4	286.4	282.1	279.2	276.1	273.9
25°	322.6	310.6	296.7	285.0	276.1	271.3	267.3	263.6	261.7	259.7	257.1
27.5°	300.4	287.0	274.0	265.0	257.1	252.9	250.0	247.4	245.7	244.5	243.0
30°	284.7	271.2	261.0	252.1	245.6	241.3	239.5	238.0	235.9	235.2	234.5
32.5°	269.5	257.4	248.7	240.9	234.8	232.0	230.3	228.9	227.4	226.7	225.1
35°	248.2	238.0	229.5	225.2	220.2	217.8	216.5	214.7	213.2	212.5	212.2
37.5°	228.0	219.2	213.6	208.1	206.0	204.6	202.8	201.5	201.1	201.0	200.7
40°	215.0	207.8	202.8	198.4	197.5	195.2	193.7	192.7	192.7	192.8	192.7
42.5°	203.2	196.7	192.2	188.4	187.4	186.1	184.5	184.5	184.7	185.4	184.7
45°	185.2	180.6	177.4	175.6	173.6	172.3	172.0	172.6	172.8	173.0	173.6
47.5°	168.7	165.6	162.7	160.7	159.8	159.6	159.4	160.4	161.3	161.6	162.4
50°	158.9	155.4	153.0	151.6	150.9	150.6	150.9	152.1	152.8	153.7	154.3
52.5°	148.0	145.4	143.8	142.8	142.5	142.8	142.8	144.1	145.2	145.6	145.9
55°	132.8	130.9	130.6	128.9	129.6	129.5	130.4	131.1	132.2	133.4	133.5
57.5°	117.6	116.2	115.2	115.4	115.6	116.4	117.2	118.5	119.6	120.8	120.9
60°	107.6	106.9	106.3	106.3	106.6	107.8	108.7	110.0	110.7	111.5	112.0
62.5°	98.4	97.7	97.1	97.4	98.4	99.1	100.1	100.9	101.6	102.3	102.6
65°	83.9	83.6	84.1	84.5	84.6	85.5	86.8	87.4	88.1	88.5	89.8
67.5°	70.5	70.6	70.5	71.0	72.2	72.3	73.5	74.8	75.0	75.7	76.6
70°	61.5	61.9	62.2	62.6	63.5	63.9	64.8	65.4	66.1	66.7	67.3
72.5°	53.2	53.2	53.6	53.6	54.4	55.1	55.9	56.5	57.2	58.0	58.5
75°	40.9	40.9	41.3	41.5	42.4	43.4	43.1	43.5	44.3	45.0	45.4
77.5°	29.9	29.5	29.9	30.1	30.4	31.1	31.3	31.8	32.7	32.4	32.9
80°	22.7	22.3	22.7	23.0	23.0	23.9	23.9	24.3	24.8	24.3	24.8
82.5°	16.2	16.0	16.4	16.5	16.7	16.8	17.0	17.1	17.7	17.4	17.7
85°	8.2	8.0	8.2	8.0	8.2	8.3	8.3	8.2	8.2	8.5	8.0
87.5°	3.1	3.0	3.0	3.1	3.0	3.0	2.9	2.9	3.0	2.8	2.8
90°	2.9	3.4	3.8	4.3	4.8	5.3	5.5	5.9	6.1	6.4	6.7
92.5°	5.1	5.2	5.4	5.6	5.9	6.1	6.3	6.4	6.6	6.7	6.8
95°	9.4	8.6	9.0	9.5	9.9	10.3	10.6	10.8	11.2	11.4	11.6
97.5°	12.2	9.9	10.9	11.8	12.8	13.8	14.0	14.3	14.4	14.7	14.8
100°	14.6	11.0	12.1	13.0	14.0	15.0	15.5	16.0	16.5	16.9	17.2
102.5°	53.8	48.8	40.4	32.1	23.8	15.4	16.1	16.6	17.3	17.9	18.3
105°	87.2	80.1	64.1	48.1	32.0	16.1	16.7	17.4	18.0	18.7	19.1
107.5°	108.1	99.2	80.1	60.9	41.7	22.5	21.9	21.2	20.5	19.9	19.6
110°	121.7	113.8	96.9	80.0	63.0	46.1	40.3	34.4	28.5	22.7	19.9



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	134.6	133.1	128.9	124.7	120.5	116.3	95.0	73.6	52.3	30.9	20.3
115°	155.6	156.8	158.2	159.7	161.2	162.7	135.5	108.4	81.3	54.1	38.5
117.5°	175.0	176.1	177.2	178.1	179.1	180.2	173.6	167.1	160.5	153.9	143.7
120°	188.0	189.0	190.0	191.1	192.2	193.2	194.0	194.6	195.3	196.0	192.4
122.5°	200.1	201.1	202.2	203.3	204.6	205.7	206.1	206.5	206.9	207.3	206.8
125°	217.4	218.3	219.4	220.5	221.6	222.7	223.1	223.6	224.0	224.4	224.7
127.5°	234.0	234.8	235.6	236.5	237.3	238.1	238.7	239.4	239.9	240.5	240.8
130°	244.7	245.5	246.1	246.8	247.4	248.1	248.7	249.3	250.0	250.6	250.9
132.5°	254.7	255.4	256.0	256.7	257.3	258.0	258.5	259.1	259.6	260.2	260.4
135°	269.0	269.7	270.2	270.8	271.3	271.8	272.4	273.0	273.5	274.1	274.3
137.5°	281.7	282.3	282.9	283.5	284.1	284.7	285.3	285.8	286.4	287.0	287.1
140°	290.0	290.6	291.2	291.9	292.5	293.1	293.7	294.2	294.7	295.2	295.4
142.5°	297.4	298.0	298.7	299.5	300.2	300.9	301.4	301.9	302.4	302.9	303.0
145°	307.4	307.9	308.8	309.9	310.9	311.9	312.3	312.7	313.1	313.5	313.6
147.5°	317.2	317.5	318.5	319.5	320.5	321.5	321.7	322.0	322.4	322.7	322.7
150°	323.1	323.4	324.3	325.3	326.2	327.2	327.5	327.8	328.2	328.6	328.6
152.5°	328.6	328.8	329.7	330.6	331.5	332.4	332.7	333.1	333.5	333.8	333.8
155°	336.6	336.7	337.5	338.1	338.8	339.5	339.9	340.2	340.6	341.0	340.9
157.5°	343.4	343.5	344.0	344.5	345.0	345.4	345.8	346.3	346.7	347.0	347.0
160°	347.6	347.6	348.0	348.3	348.7	349.0	349.4	349.8	350.1	350.4	350.4
162.5°	351.0	351.0	351.2	351.6	351.9	352.2	352.6	352.9	353.4	353.8	353.8
165°	355.6	355.5	355.6	355.8	356.0	356.1	356.5	356.9	357.3	357.8	357.8
167.5°	358.9	358.8	359.0	359.1	359.3	359.5	359.9	360.3	360.7	361.1	361.0
170°	360.8	360.7	360.8	360.9	361.0	361.2	361.6	362.0	362.4	362.8	362.7
172.5°	362.1	361.9	362.1	362.2	362.3	362.4	362.8	363.2	363.6	364.0	364.0
175°	363.5	363.3	363.5	363.5	363.7	363.8	364.2	364.6	365.0	365.4	365.3
177.5°	364.0	363.9	363.9	364.0	364.0	364.1	364.4	364.8	365.1	365.4	365.3
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	462.2	461.9	461.9	460.6	461.9	461.9	462.2	463.7	464.1	464.4	463.8
5°	428.8	428.2	427.3	428.2	427.3	428.2	428.8	431.4	432.7	433.9	435.0
7.5°	395.7	393.5	393.1	390.9	393.1	393.5	395.7	396.9	399.5	402.4	405.1
10°	371.5	370.1	369.8	366.3	369.8	370.1	371.5	374.7	377.2	380.7	384.5
12.5°	353.2	349.6	350.3	348.3	350.3	349.6	353.2	353.2	356.2	358.4	364.2
15°	321.3	321.3	320.6	317.5	320.6	321.3	321.3	326.4	327.3	330.8	335.7
17.5°	298.5	298.1	296.4	297.3	296.4	298.1	298.5	302.1	302.8	307.4	311.6
20°	284.9	283.7	281.5	281.5	281.5	283.7	284.9	286.9	289.3	292.0	295.6
22.5°	272.0	271.9	269.5	270.3	269.5	271.9	272.0	273.9	276.1	279.2	282.1
25°	256.9	255.4	254.3	254.9	254.3	255.4	256.9	257.1	259.7	261.7	263.6
27.5°	242.6	241.7	241.7	240.2	241.7	241.7	242.6	243.0	244.5	245.7	247.4
30°	234.3	232.4	232.8	231.9	232.8	232.4	234.3	234.5	235.2	235.9	238.0
32.5°	224.8	224.1	223.8	223.0	223.8	224.1	224.8	225.1	226.7	227.4	228.9
35°	211.9	212.1	211.2	211.5	211.2	212.1	211.9	212.2	212.5	213.2	214.7
37.5°	200.6	201.1	200.7	200.8	200.7	201.1	200.6	200.7	201.0	201.1	201.5
40°	193.1	193.1	193.1	193.7	193.1	193.1	193.1	192.7	192.8	192.7	192.7
42.5°	186.1	185.7	185.5	185.4	185.5	185.7	186.1	184.7	185.4	184.7	184.5
45°	173.9	174.5	174.6	173.7	174.6	174.5	173.9	173.6	173.0	172.8	172.6
47.5°	162.9	163.0	162.9	163.7	162.9	163.0	162.9	162.4	161.6	161.3	160.4
50°	155.2	154.8	155.2	154.8	155.2	154.8	155.2	154.3	153.7	152.8	152.1
52.5°	147.1	147.2	146.9	146.8	146.9	147.2	147.1	145.9	145.6	145.2	144.1
55°	134.3	134.6	134.4	134.4	134.4	134.6	134.3	133.5	133.4	132.2	131.1
57.5°	121.1	121.4	121.6	120.8	121.6	121.4	121.1	120.9	120.8	119.6	118.5
60°	111.9	112.8	112.6	112.3	112.6	112.8	111.9	112.0	111.5	110.7	110.0
62.5°	103.4	103.8	103.7	103.6	103.7	103.8	103.4	102.6	102.3	101.6	100.9
65°	90.4	90.7	90.2	90.7	90.2	90.7	90.4	89.8	88.5	88.1	87.4
67.5°	76.3	76.5	76.9	77.1	76.9	76.5	76.3	76.6	75.7	75.0	74.8
70°	67.6	67.4	68.0	68.6	68.0	67.4	67.6	67.3	66.7	66.1	65.4
72.5°	58.4	58.8	58.6	59.0	58.6	58.8	58.4	58.5	58.0	57.2	56.5
75°	45.0	45.6	45.4	45.9	45.4	45.6	45.0	45.4	45.0	44.3	43.5
77.5°	32.5	32.6	32.5	32.9	32.5	32.6	32.5	32.9	32.4	32.7	31.8
80°	24.8	24.5	24.1	24.8	24.1	24.5	24.8	24.8	24.3	24.8	24.3
82.5°	17.3	17.4	17.1	17.1	17.1	17.4	17.3	17.7	17.4	17.7	17.1
85°	8.0	7.7	7.4	7.4	7.4	7.7	8.0	8.0	8.5	8.2	8.2
87.5°	2.9	2.7	2.8	2.6	2.8	2.7	2.9	2.8	2.8	3.0	2.9
90°	6.8	6.8	7.0	7.1	7.0	6.8	6.8	6.7	6.4	6.1	5.9
92.5°	6.9	7.0	7.0	7.1	7.0	7.0	6.9	6.8	6.7	6.6	6.4
95°	11.5	11.4	11.4	11.3	11.4	11.4	11.5	11.6	11.4	11.2	10.8
97.5°	14.9	15.0	15.1	15.2	15.1	15.0	14.9	14.8	14.7	14.4	14.3
100°	17.3	17.4	17.5	17.7	17.5	17.4	17.3	17.2	16.9	16.5	16.0
102.5°	18.4	18.6	18.8	18.9	18.8	18.6	18.4	18.3	17.9	17.3	16.6
105°	19.3	19.6	19.8	20.1	19.8	19.6	19.3	19.1	18.7	18.0	17.4
107.5°	19.9	20.1	20.4	20.6	20.4	20.1	19.9	19.6	19.9	20.5	21.2
110°	20.1	20.4	20.6	20.8	20.6	20.4	20.1	19.9	22.7	28.5	34.4



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	20.5	20.6	20.9	21.0	20.9	20.6	20.5	20.3	30.9	52.3	73.6
115°	34.2	30.1	25.8	21.6	25.8	30.1	34.2	38.5	54.1	81.3	108.4
117.5°	129.9	116.0	102.2	88.3	102.2	116.0	129.9	143.7	153.9	160.5	167.1
120°	184.5	176.6	168.7	160.8	168.7	176.6	184.5	192.4	196.0	195.3	194.6
122.5°	205.3	203.7	202.2	200.6	202.2	203.7	205.3	206.8	207.3	206.9	206.5
125°	224.9	225.0	225.2	225.3	225.2	225.0	224.9	224.7	224.4	224.0	223.6
127.5°	240.9	240.9	240.9	241.0	240.9	240.9	240.9	240.8	240.5	239.9	239.4
130°	250.9	250.8	250.8	250.7	250.8	250.8	250.9	250.9	250.6	250.0	249.3
132.5°	260.3	260.3	260.2	260.2	260.2	260.3	260.3	260.4	260.2	259.6	259.1
135°	274.3	274.1	274.0	273.9	274.0	274.1	274.3	274.3	274.1	273.5	273.0
137.5°	287.0	286.8	286.6	286.4	286.6	286.8	287.0	287.1	287.0	286.4	285.8
140°	295.1	294.8	294.5	294.2	294.5	294.8	295.1	295.4	295.2	294.7	294.2
142.5°	302.6	302.4	302.1	301.7	302.1	302.4	302.6	303.0	302.9	302.4	301.9
145°	313.2	313.0	312.7	312.3	312.7	313.0	313.2	313.6	313.5	313.1	312.7
147.5°	322.5	322.2	322.0	321.7	322.0	322.2	322.5	322.7	322.7	322.4	322.0
150°	328.3	328.0	327.7	327.4	327.7	328.0	328.3	328.6	328.6	328.2	327.8
152.5°	333.4	333.0	332.6	332.2	332.6	333.0	333.4	333.8	333.8	333.5	333.1
155°	340.4	340.0	339.5	339.0	339.5	340.0	340.4	340.9	341.0	340.6	340.2
157.5°	346.5	346.1	345.6	345.2	345.6	346.1	346.5	347.0	347.0	346.7	346.3
160°	350.0	349.6	349.2	348.8	349.2	349.6	350.0	350.4	350.4	350.1	349.8
162.5°	353.2	352.7	352.2	351.7	352.2	352.7	353.2	353.8	353.8	353.4	352.9
165°	357.3	356.9	356.5	356.1	356.5	356.9	357.3	357.8	357.8	357.3	356.9
167.5°	360.5	360.0	359.5	358.9	359.5	360.0	360.5	361.0	361.1	360.7	360.3
170°	362.2	361.7	361.2	360.6	361.2	361.7	362.2	362.7	362.8	362.4	362.0
172.5°	363.5	363.0	362.4	361.9	362.4	363.0	363.5	364.0	364.0	363.6	363.2
175°	364.8	364.2	363.5	363.0	363.5	364.2	364.8	365.3	365.4	365.0	364.6
177.5°	364.9	364.5	364.1	363.7	364.1	364.5	364.9	365.3	365.4	365.1	364.8
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	463.1	464.7	467.2	469.9	471.6	474.7	475.6	477.0	478.3	481.4	484.7
5°	436.3	439.0	445.1	448.4	453.0	458.4	461.9	465.6	469.7	476.7	483.2
7.5°	407.6	412.0	419.6	425.8	432.4	440.1	445.6	453.0	459.1	469.0	478.5
10°	388.6	394.7	401.5	409.0	418.2	426.3	434.1	443.4	450.8	462.7	473.8
12.5°	371.4	372.3	382.1	390.3	402.9	413.0	422.0	433.9	441.2	455.3	466.9
15°	341.4	346.9	355.8	362.2	377.2	390.0	402.7	415.1	423.4	440.8	456.2
17.5°	316.0	321.1	330.3	340.9	351.6	364.4	380.7	393.8	405.1	425.0	443.2
20°	300.0	306.3	315.6	326.5	336.0	349.8	363.9	379.0	391.2	413.6	434.9
22.5°	286.4	291.4	298.9	309.7	319.9	332.6	348.1	364.4	377.2	401.5	423.0
25°	267.3	271.3	276.1	285.0	296.7	310.6	322.6	340.6	359.3	381.9	408.0
27.5°	250.0	252.9	257.1	265.0	274.0	287.0	300.4	317.4	336.2	360.8	388.3
30°	239.5	241.3	245.6	252.1	261.0	271.2	284.7	300.9	320.2	345.0	372.4
32.5°	230.3	232.0	234.8	240.9	248.7	257.4	269.5	285.8	304.2	328.6	359.0
35°	216.5	217.8	220.2	225.2	229.5	238.0	248.2	263.0	280.2	303.5	335.0
37.5°	202.8	204.6	206.0	208.1	213.6	219.2	228.0	240.6	257.5	281.0	311.0
40°	193.7	195.2	197.5	198.4	202.8	207.8	215.0	226.5	243.5	265.1	294.3
42.5°	184.5	186.1	187.4	188.4	192.2	196.7	203.2	213.0	228.1	249.0	278.0
45°	172.0	172.3	173.6	175.6	177.4	180.6	185.2	193.7	205.4	225.0	251.4
47.5°	159.4	159.6	159.8	160.7	162.7	165.6	168.7	175.6	186.1	201.7	227.3
50°	150.9	150.6	150.9	151.6	153.0	155.4	158.9	163.9	172.4	187.0	210.6
52.5°	142.8	142.8	142.5	142.8	143.8	145.4	148.0	152.2	159.8	173.3	194.0
55°	130.4	129.5	129.6	128.9	130.6	130.9	132.8	136.3	143.0	152.2	171.7
57.5°	117.2	116.4	115.6	115.4	115.2	116.2	117.6	120.4	125.6	133.7	149.4
60°	108.7	107.8	106.6	106.3	106.3	106.9	107.6	109.7	114.5	121.6	134.6
62.5°	100.1	99.1	98.4	97.4	97.1	97.7	98.4	99.9	103.4	110.1	121.3
65°	86.8	85.5	84.6	84.5	84.1	83.6	83.9	85.4	88.1	93.5	102.4
67.5°	73.5	72.3	72.2	71.0	70.5	70.6	70.5	71.7	73.5	78.1	84.7
70°	64.8	63.9	63.5	62.6	62.2	61.9	61.5	62.6	64.2	68.2	73.9
72.5°	55.9	55.1	54.4	53.6	53.6	53.2	53.2	53.9	55.2	58.8	63.3
75°	43.1	43.4	42.4	41.5	41.3	40.9	40.9	41.5	42.1	44.8	48.3
77.5°	31.3	31.1	30.4	30.1	29.9	29.5	29.9	30.2	30.6	32.4	35.0
80°	23.9	23.9	23.0	23.0	22.7	22.3	22.7	22.4	23.2	25.0	26.8
82.5°	17.0	16.8	16.7	16.5	16.4	16.0	16.2	16.6	17.0	18.2	19.3
85°	8.3	8.3	8.2	8.0	8.2	8.0	8.2	8.3	8.5	9.0	10.0
87.5°	2.9	3.0	3.0	3.1	3.0	3.0	3.1	3.1	3.3	3.3	3.3
90°	5.5	5.3	4.8	4.3	3.8	3.4	2.9	2.2	1.5	0.9	0.2
92.5°	6.3	6.1	5.9	5.6	5.4	5.2	5.1	5.1	5.2	5.3	5.3
95°	10.6	10.3	9.9	9.5	9.0	8.6	9.4	11.3	13.3	15.2	17.1
97.5°	14.0	13.8	12.8	11.8	10.9	9.9	12.2	17.7	23.1	28.5	34.0
100°	15.5	15.0	14.0	13.0	12.1	11.0	14.6	22.6	30.6	38.6	46.6
102.5°	16.1	15.4	23.8	32.1	40.4	48.8	53.8	55.5	57.2	58.9	60.6
105°	16.7	16.1	32.0	48.1	64.1	80.1	87.2	85.4	83.6	81.9	80.1
107.5°	21.9	22.5	41.7	60.9	80.1	99.2	108.1	106.7	105.3	103.9	102.4
110°	40.3	46.1	63.0	80.0	96.9	113.8	121.7	120.5	119.3	118.0	116.8



TEST NUMBER: P331240-930
 CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	95.0	116.3	120.5	124.7	128.9	133.1	134.6	133.5	132.5	131.3	130.3
115°	135.5	162.7	161.2	159.7	158.2	156.8	155.6	154.6	153.6	152.5	151.6
117.5°	173.6	180.2	179.1	178.1	177.2	176.1	175.0	174.0	172.8	171.7	170.6
120°	194.0	193.2	192.2	191.1	190.0	189.0	188.0	187.2	186.3	185.4	184.5
122.5°	206.1	205.7	204.6	203.3	202.2	201.1	200.1	199.1	198.2	197.3	196.3
125°	223.1	222.7	221.6	220.5	219.4	218.3	217.4	216.6	215.8	215.1	214.3
127.5°	238.7	238.1	237.3	236.5	235.6	234.8	234.0	233.2	232.3	231.5	230.6
130°	248.7	248.1	247.4	246.8	246.1	245.5	244.7	243.8	242.8	241.9	240.9
132.5°	258.5	258.0	257.3	256.7	256.0	255.4	254.7	253.9	253.1	252.3	251.5
135°	272.4	271.8	271.3	270.8	270.2	269.7	269.0	268.0	267.1	266.1	265.2
137.5°	285.3	284.7	284.1	283.5	282.9	282.3	281.7	281.0	280.4	279.7	279.1
140°	293.7	293.1	292.5	291.9	291.2	290.6	290.0	289.5	289.0	288.6	288.1
142.5°	301.4	300.9	300.2	299.5	298.7	298.0	297.4	297.0	296.5	296.1	295.7
145°	312.3	311.9	310.9	309.9	308.8	307.9	307.4	307.4	307.5	307.6	307.6
147.5°	321.7	321.5	320.5	319.5	318.5	317.5	317.2	317.3	317.6	317.8	318.0
150°	327.5	327.2	326.2	325.3	324.3	323.4	323.1	323.5	323.9	324.3	324.7
152.5°	332.7	332.4	331.5	330.6	329.7	328.8	328.6	329.1	329.5	330.0	330.4
155°	339.9	339.5	338.8	338.1	337.5	336.7	336.6	337.1	337.7	338.2	338.8
157.5°	345.8	345.4	345.0	344.5	344.0	343.5	343.4	343.9	344.3	344.8	345.2
160°	349.4	349.0	348.7	348.3	348.0	347.6	347.6	348.0	348.3	348.7	349.0
162.5°	352.6	352.2	351.9	351.6	351.2	351.0	351.0	351.3	351.7	352.0	352.4
165°	356.5	356.1	356.0	355.8	355.6	355.5	355.6	355.9	356.2	356.6	356.9
167.5°	359.9	359.5	359.3	359.1	359.0	358.8	358.9	359.2	359.6	360.0	360.3
170°	361.6	361.2	361.0	360.9	360.8	360.7	360.8	361.2	361.5	361.8	362.2
172.5°	362.8	362.4	362.3	362.2	362.1	361.9	362.1	362.4	362.7	363.1	363.5
175°	364.2	363.8	363.7	363.5	363.5	363.3	363.5	363.9	364.3	364.7	365.1
177.5°	364.4	364.1	364.0	364.0	363.9	363.9	364.0	364.4	364.7	365.0	365.3
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



TEST NUMBER: P331240-930
 CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	484.5	485.2	487.5	489.9	492.6	493.3	494.5	493.5	493.2	495.9	498.1
5°	485.8	489.1	495.6	501.6	506.5	510.1	513.8	515.3	518.0	521.9	526.8
7.5°	484.2	490.7	500.9	509.6	518.9	525.7	531.0	535.6	541.0	548.4	556.4
10°	482.5	491.1	503.6	514.1	525.6	534.3	541.5	548.6	556.8	567.0	577.5
12.5°	479.2	489.5	505.1	517.6	532.3	540.9	550.6	565.7	574.5	588.7	603.6
15°	472.6	484.1	505.8	521.1	537.9	554.2	572.1	586.5	601.0	609.4	630.2
17.5°	462.9	479.7	503.8	521.7	542.9	568.5	588.7	605.1	621.7	635.3	645.8
20°	455.0	473.4	500.8	522.3	547.5	575.0	598.2	614.9	629.3	640.7	647.1
22.5°	445.2	468.2	494.9	520.1	552.2	579.5	603.8	616.9	629.0	634.5	637.1
25°	429.5	457.3	487.5	518.2	554.5	583.4	605.6	613.6	617.1	611.7	602.8
27.5°	412.6	443.6	478.9	514.7	553.1	580.9	596.8	595.6	589.6	572.2	558.3
30°	400.1	434.1	472.1	511.2	549.7	576.7	586.0	576.7	563.2	543.8	523.9
32.5°	386.9	422.2	464.8	506.1	543.5	567.3	569.2	553.3	532.4	510.3	485.6
35°	366.9	405.0	451.2	494.9	530.3	545.3	536.4	508.2	483.4	453.2	419.5
37.5°	344.3	386.5	432.7	478.4	510.5	514.4	492.3	462.7	427.6	392.2	352.5
40°	327.4	372.1	419.7	465.8	494.2	490.1	461.9	429.3	387.7	344.3	307.4
42.5°	312.3	356.9	405.4	450.7	473.4	462.2	429.3	389.3	344.5	303.7	269.9
45°	286.2	332.1	381.7	425.4	438.4	418.2	374.7	330.2	286.2	252.1	225.4
47.5°	260.7	306.1	355.3	393.7	398.3	371.1	323.6	277.9	239.9	212.2	193.4
50°	242.1	287.6	336.3	370.6	369.1	336.3	287.5	243.9	212.2	189.8	177.2
52.5°	225.3	268.4	315.1	346.3	338.4	302.7	256.0	217.4	191.4	173.8	162.4
55°	199.3	239.1	283.6	308.6	294.1	254.5	215.0	183.9	164.6	151.5	142.6
57.5°	173.4	210.8	248.8	264.2	248.3	211.7	178.8	156.2	141.7	132.0	126.2
60°	157.4	190.0	223.9	237.3	218.2	185.6	159.6	139.5	127.8	119.8	114.6
62.5°	141.5	170.6	202.6	209.9	192.4	164.9	141.9	125.1	115.5	108.4	103.5
65°	119.6	143.6	167.8	172.6	156.5	135.2	117.1	106.2	97.6	92.5	88.5
67.5°	98.2	117.3	134.5	138.4	124.3	109.5	96.4	86.8	81.1	76.8	73.5
70°	85.4	100.6	114.6	117.8	106.5	93.4	83.3	75.7	70.5	66.9	63.7
72.5°	71.9	84.5	96.3	98.4	89.2	79.1	70.9	64.9	60.3	58.0	55.0
75°	55.0	62.5	71.5	72.1	66.0	59.8	53.6	49.7	47.2	44.3	42.8
77.5°	38.8	44.6	49.8	50.8	47.2	43.0	39.5	36.4	34.4	33.0	31.6
80°	29.6	34.2	36.5	37.7	35.2	32.2	30.2	28.1	26.8	25.9	25.0
82.5°	21.2	24.1	26.1	27.1	25.7	23.9	21.9	20.7	19.7	19.0	18.7
85°	10.8	12.1	13.4	13.7	13.4	12.6	11.5	11.5	10.9	10.8	10.8
87.5°	3.9	4.6	4.7	5.3	5.1	5.2	5.3	5.2	5.2	5.1	5.1
90°	0.9	1.5	2.2	2.9	3.4	3.8	4.3	4.8	5.3	5.5	5.9
92.5°	5.3	5.2	5.1	5.1	5.2	5.4	5.6	5.9	6.1	6.3	6.4
95°	15.2	13.3	11.3	9.4	8.6	9.0	9.5	9.9	10.3	10.6	10.8
97.5°	28.5	23.1	17.7	12.2	9.9	10.9	11.8	12.8	13.8	14.0	14.3
100°	38.6	30.6	22.6	14.6	11.0	12.1	13.0	14.0	15.0	15.5	16.0
102.5°	58.9	57.2	55.5	53.8	48.8	40.4	32.1	23.8	15.4	16.1	16.6
105°	81.9	83.6	85.4	87.2	80.1	64.1	48.1	32.0	16.1	16.7	17.4
107.5°	103.9	105.3	106.7	108.1	99.2	80.1	60.9	41.7	22.5	21.9	21.2
110°	118.0	119.3	120.5	121.7	113.8	96.9	80.0	63.0	46.1	40.3	34.4



TEST NUMBER: P331240-930

CATALOG NUMBER: SA2XXDIP-C290D330U930-4F0-1E-UDD-A

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	131.3	132.5	133.5	134.6	133.1	128.9	124.7	120.5	116.3	95.0	73.6
115°	152.5	153.6	154.6	155.6	156.8	158.2	159.7	161.2	162.7	135.5	108.4
117.5°	171.7	172.8	174.0	175.0	176.1	177.2	178.1	179.1	180.2	173.6	167.1
120°	185.4	186.3	187.2	188.0	189.0	190.0	191.1	192.2	193.2	194.0	194.6
122.5°	197.3	198.2	199.1	200.1	201.1	202.2	203.3	204.6	205.7	206.1	206.5
125°	215.1	215.8	216.6	217.4	218.3	219.4	220.5	221.6	222.7	223.1	223.6
127.5°	231.5	232.3	233.2	234.0	234.8	235.6	236.5	237.3	238.1	238.7	239.4
130°	241.9	242.8	243.8	244.7	245.5	246.1	246.8	247.4	248.1	248.7	249.3
132.5°	252.3	253.1	253.9	254.7	255.4	256.0	256.7	257.3	258.0	258.5	259.1
135°	266.1	267.1	268.0	269.0	269.7	270.2	270.8	271.3	271.8	272.4	273.0
137.5°	279.7	280.4	281.0	281.7	282.3	282.9	283.5	284.1	284.7	285.3	285.8
140°	288.6	289.0	289.5	290.0	290.6	291.2	291.9	292.5	293.1	293.7	294.2
142.5°	296.1	296.5	297.0	297.4	298.0	298.7	299.5	300.2	300.9	301.4	301.9
145°	307.6	307.5	307.4	307.4	307.9	308.8	309.9	310.9	311.9	312.3	312.7
147.5°	317.8	317.6	317.3	317.2	317.5	318.5	319.5	320.5	321.5	321.7	322.0
150°	324.3	323.9	323.5	323.1	323.4	324.3	325.3	326.2	327.2	327.5	327.8
152.5°	330.0	329.5	329.1	328.6	328.8	329.7	330.6	331.5	332.4	332.7	333.1
155°	338.2	337.7	337.1	336.6	336.7	337.5	338.1	338.8	339.5	339.9	340.2
157.5°	344.8	344.3	343.9	343.4	343.5	344.0	344.5	345.0	345.4	345.8	346.3
160°	348.7	348.3	348.0	347.6	347.6	348.0	348.3	348.7	349.0	349.4	349.8
162.5°	352.0	351.7	351.3	351.0	351.0	351.2	351.6	351.9	352.2	352.6	352.9
165°	356.6	356.2	355.9	355.6	355.5	355.6	355.8	356.0	356.1	356.5	356.9
167.5°	360.0	359.6	359.2	358.9	358.8	359.0	359.1	359.3	359.5	359.9	360.3
170°	361.8	361.5	361.2	360.8	360.7	360.8	360.9	361.0	361.2	361.6	362.0
172.5°	363.1	362.7	362.4	362.1	361.9	362.1	362.2	362.3	362.4	362.8	363.2
175°	364.7	364.3	363.9	363.5	363.3	363.5	363.5	363.7	363.8	364.2	364.6
177.5°	365.0	364.7	364.4	364.0	363.9	363.9	364.0	364.0	364.1	364.4	364.8
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3	364.3



TEST NUMBER: P331240-930

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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	481.9	481.9	481.9	481.9	481.9	481.9	481.9
2.5°	499.9	501.9	501.9	502.2	504.6	504.3	504.1
5°	531.9	535.1	535.4	538.7	541.0	540.2	538.2
7.5°	562.1	568.0	572.5	574.9	577.9	579.7	578.9
10°	586.2	594.7	599.9	603.4	607.6	610.8	609.7
12.5°	608.0	618.1	625.3	631.3	631.8	635.9	633.1
15°	642.0	652.6	653.8	658.2	661.8	661.4	661.5
17.5°	653.1	656.6	657.3	657.4	657.5	656.2	653.3
20°	649.1	647.8	644.7	642.3	638.1	637.5	633.8
22.5°	630.1	626.1	618.2	612.9	606.3	604.6	603.6
25°	592.9	583.8	571.2	559.1	555.8	549.3	551.1
27.5°	541.6	527.5	513.8	504.1	495.2	485.5	488.3
30°	505.6	489.7	470.4	455.6	446.1	436.9	435.2
32.5°	462.7	439.3	417.8	404.8	390.3	384.4	378.1
35°	388.6	365.7	344.5	326.1	315.6	307.4	300.0
37.5°	322.0	295.7	278.5	263.7	256.0	251.4	252.6
40°	280.6	257.6	245.0	233.7	226.7	223.4	224.1
42.5°	247.1	229.9	219.6	211.8	206.8	205.0	204.6
45°	209.1	199.5	190.9	186.5	184.1	182.1	180.8
47.5°	183.2	175.3	170.5	167.9	165.8	163.7	163.6
50°	167.6	162.4	159.1	156.3	154.7	153.2	154.5
52.5°	155.7	151.0	147.7	145.2	144.6	143.2	143.2
55°	138.2	134.4	132.1	129.8	128.7	128.0	127.0
57.5°	122.1	118.6	116.4	115.0	112.9	112.2	111.9
60°	110.7	107.9	105.7	103.9	103.0	101.5	101.5
62.5°	100.2	97.4	95.4	94.0	92.5	91.9	92.0
65°	85.0	82.8	80.7	79.2	78.9	77.8	78.2
67.5°	71.0	69.5	67.3	66.5	65.9	65.3	64.8
70°	61.6	60.2	59.1	58.0	57.4	57.4	57.4
72.5°	53.8	52.0	51.4	50.0	50.3	49.7	49.1
75°	41.7	40.5	40.0	39.5	38.6	38.6	38.6
77.5°	30.7	30.3	29.7	29.1	28.9	28.7	28.8
80°	23.7	23.5	23.2	23.2	22.7	22.6	22.3
82.5°	18.3	17.8	17.5	17.4	17.3	17.3	17.2
85°	10.4	10.0	10.0	10.2	9.8	9.8	10.0
87.5°	5.2	5.3	5.2	5.2	5.4	5.2	5.3
90°	6.1	6.4	6.7	6.8	6.8	7.0	7.1
92.5°	6.6	6.7	6.8	6.9	7.0	7.0	7.1
95°	11.2	11.4	11.6	11.5	11.4	11.4	11.3
97.5°	14.4	14.7	14.8	14.9	15.0	15.1	15.2
100°	16.5	16.9	17.2	17.3	17.4	17.5	17.7
102.5°	17.3	17.9	18.3	18.4	18.6	18.8	18.9
105°	18.0	18.7	19.1	19.3	19.6	19.8	20.1
107.5°	20.5	19.9	19.6	19.9	20.1	20.4	20.6
110°	28.5	22.7	19.9	20.1	20.4	20.6	20.8



TEST NUMBER: P331240-930
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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	52.3	30.9	20.3	20.5	20.6	20.9	21.0
115°	81.3	54.1	38.5	34.2	30.1	25.8	21.6
117.5°	160.5	153.9	143.7	129.9	116.0	102.2	88.3
120°	195.3	196.0	192.4	184.5	176.6	168.7	160.8
122.5°	206.9	207.3	206.8	205.3	203.7	202.2	200.6
125°	224.0	224.4	224.7	224.9	225.0	225.2	225.3
127.5°	239.9	240.5	240.8	240.9	240.9	240.9	241.0
130°	250.0	250.6	250.9	250.9	250.8	250.8	250.7
132.5°	259.6	260.2	260.4	260.3	260.3	260.2	260.2
135°	273.5	274.1	274.3	274.3	274.1	274.0	273.9
137.5°	286.4	287.0	287.1	287.0	286.8	286.6	286.4
140°	294.7	295.2	295.4	295.1	294.8	294.5	294.2
142.5°	302.4	302.9	303.0	302.6	302.4	302.1	301.7
145°	313.1	313.5	313.6	313.2	313.0	312.7	312.3
147.5°	322.4	322.7	322.7	322.5	322.2	322.0	321.7
150°	328.2	328.6	328.6	328.3	328.0	327.7	327.4
152.5°	333.5	333.8	333.8	333.4	333.0	332.6	332.2
155°	340.6	341.0	340.9	340.4	340.0	339.5	339.0
157.5°	346.7	347.0	347.0	346.5	346.1	345.6	345.2
160°	350.1	350.4	350.4	350.0	349.6	349.2	348.8
162.5°	353.4	353.8	353.8	353.2	352.7	352.2	351.7
165°	357.3	357.8	357.8	357.3	356.9	356.5	356.1
167.5°	360.7	361.1	361.0	360.5	360.0	359.5	358.9
170°	362.4	362.8	362.7	362.2	361.7	361.2	360.6
172.5°	363.6	364.0	364.0	363.5	363.0	362.4	361.9
175°	365.0	365.4	365.3	364.8	364.2	363.5	363.0
177.5°	365.1	365.4	365.3	364.9	364.5	364.1	363.7
180°	364.3	364.3	364.3	364.3	364.3	364.3	364.3

(END OF REPORT)