

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: P331277-930

Luminaire Tested: **SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331277-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

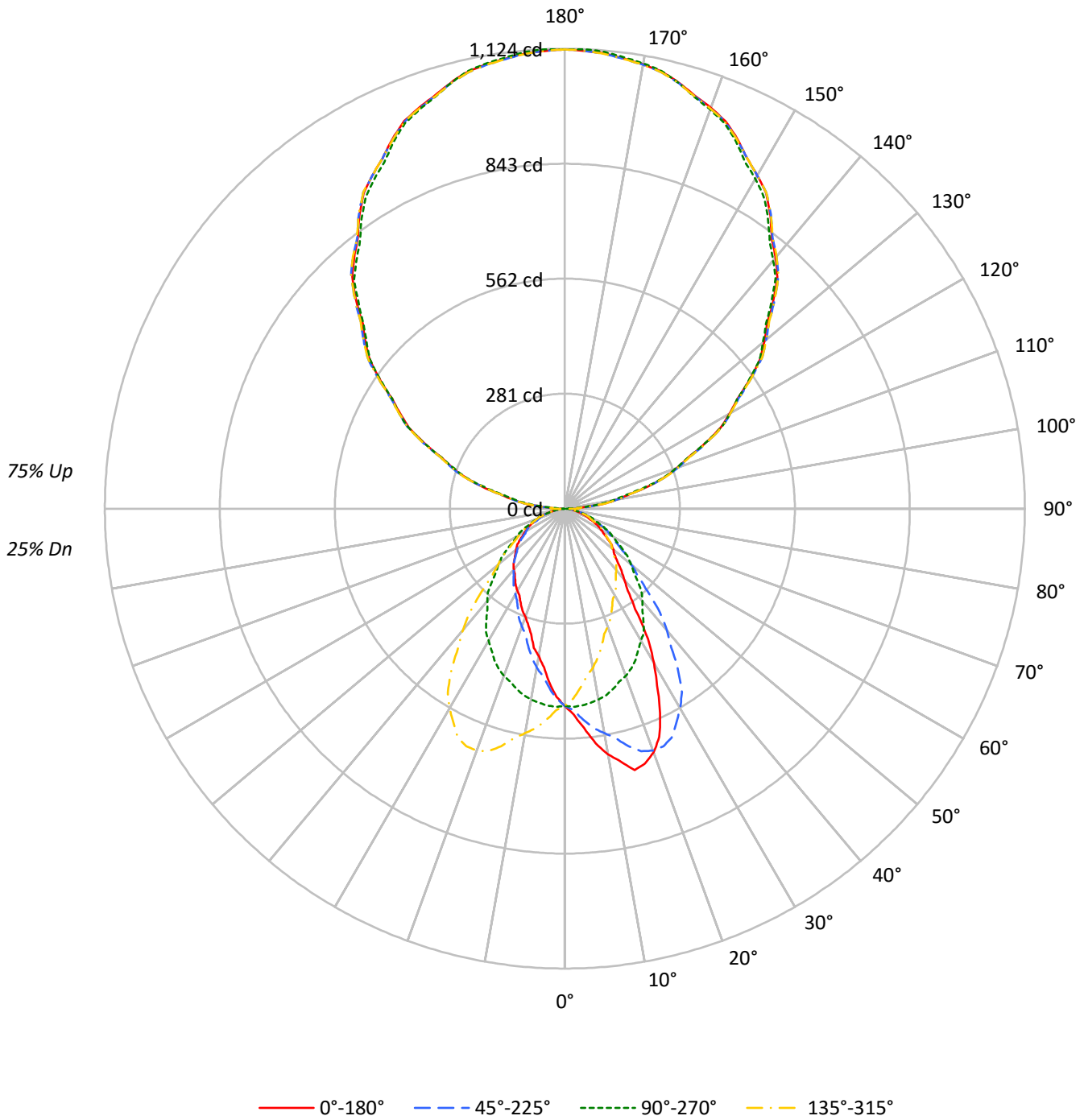
Lumens per Lamp: N/A  
Luminaire Lumens: 4205.6 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 42.2  
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: P331277-930  
CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

### Luminous Intensity Polar Plot





TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	25
1	92	88	85	81	82	79	76	73	61	59	57	45	44	43	30	29	29	22
2	84	77	72	67	75	69	64	60	54	51	48	40	38	36	27	25	24	19
3	77	68	61	56	68	61	55	51	48	44	40	35	33	31	24	22	21	16
4	71	60	53	47	63	54	48	43	42	38	35	32	29	26	21	20	18	14
5	65	54	46	40	57	48	42	37	38	33	30	28	25	23	19	18	16	12
6	60	48	41	35	53	43	37	32	34	29	26	26	22	20	18	16	14	11
7	55	43	36	31	49	39	33	28	31	26	23	23	20	18	16	14	13	10
8	51	39	32	27	45	35	29	25	28	24	20	21	18	16	15	13	11	9
9	47	36	29	24	42	32	26	22	26	21	18	20	16	14	14	12	10	8
10	44	33	26	21	39	30	24	20	24	19	16	18	15	13	13	11	9	7

**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



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.9	1.1
10°-20°	133.4	3.2
20°-30°	193.6	4.6
30°-40°	204.3	4.9
40°-50°	180.9	4.3
50°-60°	144.4	3.4
60°-70°	98.1	2.3
70°-80°	50.3	1.2
80°-90°	16.6	0.4
90°-100°	71.1	1.7
100°-110°	220.9	5.3
110°-120°	377.5	9.0
120°-130°	496.5	11.8
130°-140°	557.2	13.2
140°-150°	546.4	13.0
150°-160°	458.3	10.9
160°-170°	304.0	7.2
170°-180°	106.2	2.5
0°-30°	373.0	8.9
0°-40°	577.3	13.7
0°-60°	902.6	21.5
0°-90°	1067.7	25.4
90°-120°	669.5	15.9
90°-150°	2269.5	54.0
90°-180°	3138.0	74.6
0°-180°	4205.6	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	12
90°	32	1	32	1	32	14
95°	59	49	59	49	59	65
105°	210	204	210	204	210	221
115°	379	379	379	379	379	374
125°	553	551	553	551	553	493
135°	722	713	722	713	722	555
145°	875	866	875	866	875	546
155°	997	990	997	990	997	459
165°	1078	1077	1078	1077	1078	304
175°	1117	1120	1117	1120	1117	106
180°	1122	1122	1122	1122	1122	



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	10.3	10.3	10.4	10.2	10.1	10.3	10.4	10.3	10.5	10.8	10.0
90°	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3	32.7	33.2	28.5
92.5°	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2	30.2	30.1	29.0
95°	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6	60.6	60.6	60.2
97.5°	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9	101.9	101.9	101.1
100°	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7	130.7	130.7	130.0
102.5°	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1	161.9	161.8	160.9
105°	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2	208.8	208.3	207.9
107.5°	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0	259.8	259.7	259.7
110°	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6	294.6	294.6	294.6



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1	329.6	330.1	330.3
115°	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2	382.4	382.6	383.0
117.5°	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5	434.0	434.5	435.7
120°	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8	467.8	467.8	469.5
122.5°	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2	503.7	504.2	505.4
125°	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6	556.2	556.8	557.5
127.5°	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5	607.2	608.0	608.8
130°	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2	641.6	642.1	642.5
132.5°	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1	676.0	676.9	676.9
135°	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0	725.2	725.5	725.0
137.5°	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8	773.0	773.1	772.6
140°	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9	804.9	804.9	804.0
142.5°	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1	834.0	833.8	833.1
145°	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3	878.1	877.9	876.6
147.5°	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1	916.6	916.2	915.3
150°	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7	941.0	940.4	939.6
152.5°	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3	965.5	964.7	963.7
155°	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4	996.4	995.3	994.7
157.5°	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2	1024.8	1023.4	1023.0
160°	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3	1042.0	1040.8	1040.6
162.5°	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8	1057.4	1056.0	1055.7
165°	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8	1077.3	1075.9	1075.9
167.5°	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3	1093.8	1092.3	1092.3
170°	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3	1102.9	1101.4	1101.6
172.5°	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2	1109.7	1108.2	1108.4
175°	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6	1117.1	1115.6	1116.1
177.5°	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0	1120.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	9.2	8.3	7.3	6.9	6.0	5.5	4.4	3.4	3.8	4.2	4.4
90°	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0	3.5	6.0	8.6
92.5°	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9	18.7	20.5	22.4
95°	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2	51.4	53.5	55.5
97.5°	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0	91.8	93.7	95.6
100°	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3	122.0	123.7	125.3
102.5°	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1	153.4	154.8	156.1
105°	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6	204.2	204.9	205.5
107.5°	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5	256.4	257.4	258.3
110°	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9	290.1	291.4	292.6





TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2	326.4	327.8	329.0
115°	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8	380.1	381.3	382.6
117.5°	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2	433.9	435.6	437.2
120°	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	469.5	471.2	472.9
122.5°	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4	502.5	504.4	506.5
125°	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1	553.1	555.0	556.8
127.5°	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6	603.0	605.4	607.8
130°	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7	634.4	637.2	639.8
132.5°	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5	668.8	671.0	673.2
135°	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1	715.4	717.8	720.1
137.5°	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1	764.1	766.0	767.8
140°	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7	793.6	795.5	797.4
142.5°	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1	823.9	825.8	827.7
145°	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6	867.1	868.5	870.0
147.5°	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4	906.2	907.9	909.7
150°	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9	932.2	933.4	934.7
152.5°	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4	955.7	956.9	958.2
155°	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7	990.3	990.9	991.6
157.5°	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8	1020.2	1020.6	1021.0
160°	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0	1038.4	1038.8	1039.2
162.5°	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6	1054.7	1054.8	1054.8
165°	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8	1076.6	1076.4	1076.1
167.5°	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4	1094.7	1094.1	1093.5
170°	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2	1104.6	1103.9	1103.3
172.5°	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0	1111.4	1110.8	1110.1
175°	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4	1119.7	1119.1	1118.4
177.5°	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7	1123.2	1122.7	1122.3
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	4.7	5.3	6.0	7.0	7.7	8.6	8.3	8.2	8.2	7.7	7.7
90°	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3	31.9	31.5	31.4
92.5°	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2	30.3	30.5	30.5
95°	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6	60.6	60.6	60.4
97.5°	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9	101.9	101.9	101.9
100°	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7	130.7	130.7	130.6
102.5°	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1	162.2	162.4	162.4
105°	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2	209.6	210.0	210.3
107.5°	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0	260.2	260.3	259.9
110°	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.6	294.2



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1	328.6	328.2	327.7
115°	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2	382.0	381.7	381.3
117.5°	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5	433.0	432.5	431.9
120°	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8	467.8	467.8	467.5
122.5°	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2	502.7	502.1	501.7
125°	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6	555.0	554.3	553.9
127.5°	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5	605.7	605.0	604.2
130°	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2	640.8	640.4	639.8
132.5°	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1	674.2	673.3	672.5
135°	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0	724.8	724.6	724.1
137.5°	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8	772.7	772.5	772.0
140°	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9	804.9	804.9	804.5
142.5°	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1	834.3	834.5	834.1
145°	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3	878.6	878.7	878.4
147.5°	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1	917.5	918.0	917.9
150°	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7	942.3	943.0	943.0
152.5°	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3	967.0	967.8	967.8
155°	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4	998.5	999.6	999.7
157.5°	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2	1027.7	1029.1	1029.3
160°	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3	1044.6	1045.9	1046.0
162.5°	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8	1060.2	1061.7	1061.8
165°	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8	1080.3	1081.7	1081.9
167.5°	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3	1096.7	1098.2	1098.4
170°	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3	1105.8	1107.3	1107.4
172.5°	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2	1112.6	1114.1	1114.2
175°	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6	1120.1	1121.5	1121.6
177.5°	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	7.8	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7	8.2	8.2
90°	31.6	31.8	32.0	32.2	32.0	31.8	31.6	31.4	31.5	31.9	32.3
92.5°	30.6	30.6	30.7	30.7	30.7	30.6	30.6	30.5	30.5	30.3	30.2
95°	60.0	59.6	59.1	58.7	59.1	59.6	60.0	60.4	60.6	60.6	60.6
97.5°	101.8	101.8	101.7	101.7	101.7	101.8	101.8	101.9	101.9	101.9	101.9
100°	130.4	130.2	130.0	129.7	130.0	130.2	130.4	130.6	130.7	130.7	130.7
102.5°	162.2	162.0	161.8	161.6	161.8	162.0	162.2	162.4	162.4	162.2	162.1
105°	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.0	209.6	209.2
107.5°	259.0	258.0	257.1	256.1	257.1	258.0	259.0	259.9	260.3	260.2	260.0
110°	293.6	292.9	292.3	291.7	292.3	292.9	293.6	294.2	294.6	294.6	294.6



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	327.2	326.7	326.3	325.8	326.3	326.7	327.2	327.7	328.2	328.6	329.1
115°	380.7	380.1	379.4	378.8	379.4	380.1	380.7	381.3	381.7	382.0	382.2
117.5°	431.3	430.6	430.0	429.4	430.0	430.6	431.3	431.9	432.5	433.0	433.5
120°	466.9	466.3	465.6	465.0	465.6	466.3	466.9	467.5	467.8	467.8	467.8
122.5°	501.2	500.8	500.3	499.9	500.3	500.8	501.2	501.7	502.1	502.7	503.2
125°	553.7	553.5	553.3	553.1	553.3	553.5	553.7	553.9	554.3	555.0	555.6
127.5°	603.6	602.9	602.3	601.5	602.3	602.9	603.6	604.2	605.0	605.7	606.5
130°	639.0	638.1	637.2	636.4	637.2	638.1	639.0	639.8	640.4	640.8	641.2
132.5°	671.8	671.1	670.4	669.8	670.4	671.1	671.8	672.5	673.3	674.2	675.1
135°	723.5	722.9	722.3	721.6	722.3	722.9	723.5	724.1	724.6	724.8	725.0
137.5°	771.1	770.3	769.5	768.6	769.5	770.3	771.1	772.0	772.5	772.7	772.8
140°	803.7	802.9	802.0	801.2	802.0	802.9	803.7	804.5	804.9	804.9	804.9
142.5°	833.2	832.4	831.6	830.7	831.6	832.4	833.2	834.1	834.5	834.3	834.1
145°	877.6	876.8	875.9	875.1	875.9	876.8	877.6	878.4	878.7	878.6	878.3
147.5°	917.0	916.2	915.4	914.7	915.4	916.2	917.0	917.9	918.0	917.5	917.1
150°	942.3	941.7	941.0	940.4	941.0	941.7	942.3	943.0	943.0	942.3	941.7
152.5°	967.0	966.3	965.5	964.7	965.5	966.3	967.0	967.8	967.8	967.0	966.3
155°	999.1	998.5	997.8	997.2	997.8	998.5	999.1	999.7	999.6	998.5	997.4
157.5°	1028.3	1027.3	1026.3	1025.2	1026.3	1027.3	1028.3	1029.3	1029.1	1027.7	1026.2
160°	1045.2	1044.4	1043.5	1042.7	1043.5	1044.4	1045.2	1046.0	1045.9	1044.6	1043.3
162.5°	1060.9	1059.9	1058.8	1057.9	1058.8	1059.9	1060.9	1061.8	1061.7	1060.2	1058.8
165°	1080.9	1079.9	1078.8	1077.7	1078.8	1079.9	1080.9	1081.9	1081.7	1080.3	1078.8
167.5°	1097.3	1096.2	1095.1	1094.1	1095.1	1096.2	1097.3	1098.4	1098.2	1096.7	1095.3
170°	1106.1	1104.9	1103.6	1102.4	1103.6	1104.9	1106.1	1107.4	1107.3	1105.8	1104.3
172.5°	1113.0	1111.7	1110.4	1109.1	1110.4	1111.7	1113.0	1114.2	1114.1	1112.6	1111.2
175°	1120.4	1119.1	1117.9	1116.6	1117.9	1119.1	1120.4	1121.6	1121.5	1120.1	1118.6
177.5°	1123.0	1122.0	1121.0	1120.0	1121.0	1122.0	1123.0	1124.0	1124.0	1123.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	8.3	8.6	7.7	7.0	6.0	5.3	4.7	4.4	4.2	3.8	3.4
90°	32.7	33.2	28.5	23.9	19.2	14.6	11.1	8.6	6.0	3.5	1.0
92.5°	30.2	30.1	29.0	28.0	26.8	25.8	24.3	22.4	20.5	18.7	16.9
95°	60.6	60.6	60.2	59.8	59.4	58.9	57.6	55.5	53.5	51.4	49.2
97.5°	101.9	101.9	101.1	100.3	99.5	98.7	97.3	95.6	93.7	91.8	90.0
100°	130.7	130.7	130.0	129.4	128.8	128.2	127.0	125.3	123.7	122.0	120.3
102.5°	161.9	161.8	160.9	160.1	159.4	158.6	157.5	156.1	154.8	153.4	152.1
105°	208.8	208.3	207.9	207.5	207.1	206.7	206.1	205.5	204.9	204.2	203.6
107.5°	259.8	259.7	259.7	259.7	259.7	259.7	259.2	258.3	257.4	256.4	255.5
110°	294.6	294.6	294.6	294.6	294.6	294.6	293.9	292.6	291.4	290.1	288.9



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	329.6	330.1	330.3	330.4	330.6	330.8	330.3	329.0	327.8	326.4	325.2
115°	382.4	382.6	383.0	383.4	383.8	384.3	383.8	382.6	381.3	380.1	378.8
117.5°	434.0	434.5	435.7	436.8	438.1	439.2	439.0	437.2	435.6	433.9	432.2
120°	467.8	467.8	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8
122.5°	503.7	504.2	505.4	506.5	507.8	508.9	508.5	506.5	504.4	502.5	500.4
125°	556.2	556.8	557.5	558.2	558.7	559.4	558.7	556.8	555.0	553.1	551.1
127.5°	607.2	608.0	608.8	609.5	610.3	611.1	610.2	607.8	605.4	603.0	600.6
130°	641.6	642.1	642.5	642.9	643.4	643.8	642.6	639.8	637.2	634.4	631.7
132.5°	676.0	676.9	676.9	676.8	676.7	676.6	675.5	673.2	671.0	668.8	666.5
135°	725.2	725.5	725.0	724.6	724.1	723.7	722.4	720.1	717.8	715.4	713.1
137.5°	773.0	773.1	772.6	772.1	771.5	770.9	769.7	767.8	766.0	764.1	762.1
140°	804.9	804.9	804.0	802.9	801.8	800.8	799.3	797.4	795.5	793.6	791.7
142.5°	834.0	833.8	833.1	832.3	831.6	830.9	829.6	827.7	825.8	823.9	822.1
145°	878.1	877.9	876.6	875.4	874.1	872.9	871.5	870.0	868.5	867.1	865.6
147.5°	916.6	916.2	915.3	914.5	913.6	912.8	911.5	909.7	907.9	906.2	904.4
150°	941.0	940.4	939.6	938.7	937.9	937.0	936.0	934.7	933.4	932.2	930.9
152.5°	965.5	964.7	963.7	962.6	961.6	960.6	959.4	958.2	956.9	955.7	954.4
155°	996.4	995.3	994.7	994.1	993.4	992.8	992.2	991.6	990.9	990.3	989.7
157.5°	1024.8	1023.4	1023.0	1022.6	1022.2	1021.8	1021.5	1021.0	1020.6	1020.2	1019.8
160°	1042.0	1040.8	1040.6	1040.4	1040.2	1039.9	1039.7	1039.2	1038.8	1038.4	1038.0
162.5°	1057.4	1056.0	1055.7	1055.5	1055.3	1055.1	1055.0	1054.8	1054.8	1054.7	1054.6
165°	1077.3	1075.9	1075.9	1075.9	1075.9	1075.9	1076.0	1076.1	1076.4	1076.6	1076.8
167.5°	1093.8	1092.3	1092.3	1092.4	1092.4	1092.5	1092.8	1093.5	1094.1	1094.7	1095.4
170°	1102.9	1101.4	1101.6	1101.8	1102.0	1102.3	1102.7	1103.3	1103.9	1104.6	1105.2
172.5°	1109.7	1108.2	1108.4	1108.6	1108.9	1109.1	1109.5	1110.1	1110.8	1111.4	1112.0
175°	1117.1	1115.6	1116.1	1116.5	1116.9	1117.3	1117.9	1118.4	1119.1	1119.7	1120.4
177.5°	1121.0	1120.0	1120.3	1120.6	1121.0	1121.3	1121.8	1122.3	1122.7	1123.2	1123.7
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	4.4	5.5	6.0	6.9	7.3	8.3	9.2	10.0	10.8	10.5	10.3
90°	3.5	6.0	8.6	11.1	14.6	19.2	23.9	28.5	33.2	32.7	32.3
92.5°	18.7	20.5	22.4	24.3	25.8	26.8	28.0	29.0	30.1	30.2	30.2
95°	51.4	53.5	55.5	57.6	58.9	59.4	59.8	60.2	60.6	60.6	60.6
97.5°	91.8	93.7	95.6	97.3	98.7	99.5	100.3	101.1	101.9	101.9	101.9
100°	122.0	123.7	125.3	127.0	128.2	128.8	129.4	130.0	130.7	130.7	130.7
102.5°	153.4	154.8	156.1	157.5	158.6	159.4	160.1	160.9	161.8	161.9	162.1
105°	204.2	204.9	205.5	206.1	206.7	207.1	207.5	207.9	208.3	208.8	209.2
107.5°	256.4	257.4	258.3	259.2	259.7	259.7	259.7	259.7	259.7	259.8	260.0
110°	290.1	291.4	292.6	293.9	294.6	294.6	294.6	294.6	294.6	294.6	294.6





TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	326.4	327.8	329.0	330.3	330.8	330.6	330.4	330.3	330.1	329.6	329.1
115°	380.1	381.3	382.6	383.8	384.3	383.8	383.4	383.0	382.6	382.4	382.2
117.5°	433.9	435.6	437.2	439.0	439.2	438.1	436.8	435.7	434.5	434.0	433.5
120°	469.5	471.2	472.9	474.6	474.6	472.9	471.2	469.5	467.8	467.8	467.8
122.5°	502.5	504.4	506.5	508.5	508.9	507.8	506.5	505.4	504.2	503.7	503.2
125°	553.1	555.0	556.8	558.7	559.4	558.7	558.2	557.5	556.8	556.2	555.6
127.5°	603.0	605.4	607.8	610.2	611.1	610.3	609.5	608.8	608.0	607.2	606.5
130°	634.4	637.2	639.8	642.6	643.8	643.4	642.9	642.5	642.1	641.6	641.2
132.5°	668.8	671.0	673.2	675.5	676.6	676.7	676.8	676.9	676.9	676.0	675.1
135°	715.4	717.8	720.1	722.4	723.7	724.1	724.6	725.0	725.5	725.2	725.0
137.5°	764.1	766.0	767.8	769.7	770.9	771.5	772.1	772.6	773.1	773.0	772.8
140°	793.6	795.5	797.4	799.3	800.8	801.8	802.9	804.0	804.9	804.9	804.9
142.5°	823.9	825.8	827.7	829.6	830.9	831.6	832.3	833.1	833.8	834.0	834.1
145°	867.1	868.5	870.0	871.5	872.9	874.1	875.4	876.6	877.9	878.1	878.3
147.5°	906.2	907.9	909.7	911.5	912.8	913.6	914.5	915.3	916.2	916.6	917.1
150°	932.2	933.4	934.7	936.0	937.0	937.9	938.7	939.6	940.4	941.0	941.7
152.5°	955.7	956.9	958.2	959.4	960.6	961.6	962.6	963.7	964.7	965.5	966.3
155°	990.3	990.9	991.6	992.2	992.8	993.4	994.1	994.7	995.3	996.4	997.4
157.5°	1020.2	1020.6	1021.0	1021.5	1021.8	1022.2	1022.6	1023.0	1023.4	1024.8	1026.2
160°	1038.4	1038.8	1039.2	1039.7	1039.9	1040.2	1040.4	1040.6	1040.8	1042.0	1043.3
162.5°	1054.7	1054.8	1054.8	1055.0	1055.1	1055.3	1055.5	1055.7	1056.0	1057.4	1058.8
165°	1076.6	1076.4	1076.1	1076.0	1075.9	1075.9	1075.9	1075.9	1075.9	1077.3	1078.8
167.5°	1094.7	1094.1	1093.5	1092.8	1092.5	1092.4	1092.4	1092.3	1092.3	1093.8	1095.3
170°	1104.6	1103.9	1103.3	1102.7	1102.3	1102.0	1101.8	1101.6	1101.4	1102.9	1104.3
172.5°	1111.4	1110.8	1110.1	1109.5	1109.1	1108.9	1108.6	1108.4	1108.2	1109.7	1111.2
175°	1119.7	1119.1	1118.4	1117.9	1117.3	1116.9	1116.5	1116.1	1115.6	1117.1	1118.6
177.5°	1123.2	1122.7	1122.3	1121.8	1121.3	1121.0	1120.6	1120.3	1120.0	1121.0	1122.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**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°	10.4	10.3	10.1	10.2	10.4	10.3	10.3
90°	31.9	31.5	31.4	31.6	31.8	32.0	32.2
92.5°	30.3	30.5	30.5	30.6	30.6	30.7	30.7
95°	60.6	60.6	60.4	60.0	59.6	59.1	58.7
97.5°	101.9	101.9	101.9	101.8	101.8	101.7	101.7
100°	130.7	130.7	130.6	130.4	130.2	130.0	129.7
102.5°	162.2	162.4	162.4	162.2	162.0	161.8	161.6
105°	209.6	210.0	210.3	210.3	210.3	210.3	210.3
107.5°	260.2	260.3	259.9	259.0	258.0	257.1	256.1
110°	294.6	294.6	294.2	293.6	292.9	292.3	291.7



TEST NUMBER: P331277-930

CATALOG NUMBER: SA2XXDIP-C290D1080U930-4F0-1E-UDD-A1

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	328.6	328.2	327.7	327.2	326.7	326.3	325.8
115°	382.0	381.7	381.3	380.7	380.1	379.4	378.8
117.5°	433.0	432.5	431.9	431.3	430.6	430.0	429.4
120°	467.8	467.8	467.5	466.9	466.3	465.6	465.0
122.5°	502.7	502.1	501.7	501.2	500.8	500.3	499.9
125°	555.0	554.3	553.9	553.7	553.5	553.3	553.1
127.5°	605.7	605.0	604.2	603.6	602.9	602.3	601.5
130°	640.8	640.4	639.8	639.0	638.1	637.2	636.4
132.5°	674.2	673.3	672.5	671.8	671.1	670.4	669.8
135°	724.8	724.6	724.1	723.5	722.9	722.3	721.6
137.5°	772.7	772.5	772.0	771.1	770.3	769.5	768.6
140°	804.9	804.9	804.5	803.7	802.9	802.0	801.2
142.5°	834.3	834.5	834.1	833.2	832.4	831.6	830.7
145°	878.6	878.7	878.4	877.6	876.8	875.9	875.1
147.5°	917.5	918.0	917.9	917.0	916.2	915.4	914.7
150°	942.3	943.0	943.0	942.3	941.7	941.0	940.4
152.5°	967.0	967.8	967.8	967.0	966.3	965.5	964.7
155°	998.5	999.6	999.7	999.1	998.5	997.8	997.2
157.5°	1027.7	1029.1	1029.3	1028.3	1027.3	1026.3	1025.2
160°	1044.6	1045.9	1046.0	1045.2	1044.4	1043.5	1042.7
162.5°	1060.2	1061.7	1061.8	1060.9	1059.9	1058.8	1057.9
165°	1080.3	1081.7	1081.9	1080.9	1079.9	1078.8	1077.7
167.5°	1096.7	1098.2	1098.4	1097.3	1096.2	1095.1	1094.1
170°	1105.8	1107.3	1107.4	1106.1	1104.9	1103.6	1102.4
172.5°	1112.6	1114.1	1114.2	1113.0	1111.7	1110.4	1109.1
175°	1120.1	1121.5	1121.6	1120.4	1119.1	1117.9	1116.6
177.5°	1123.0	1124.0	1124.0	1123.0	1122.0	1121.0	1120.0
180°	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3	1122.3

(END OF REPORT)