

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: P331278

Luminaire Tested: **SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331278
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-C290D1080U835-4F0-1E-UDD-A4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

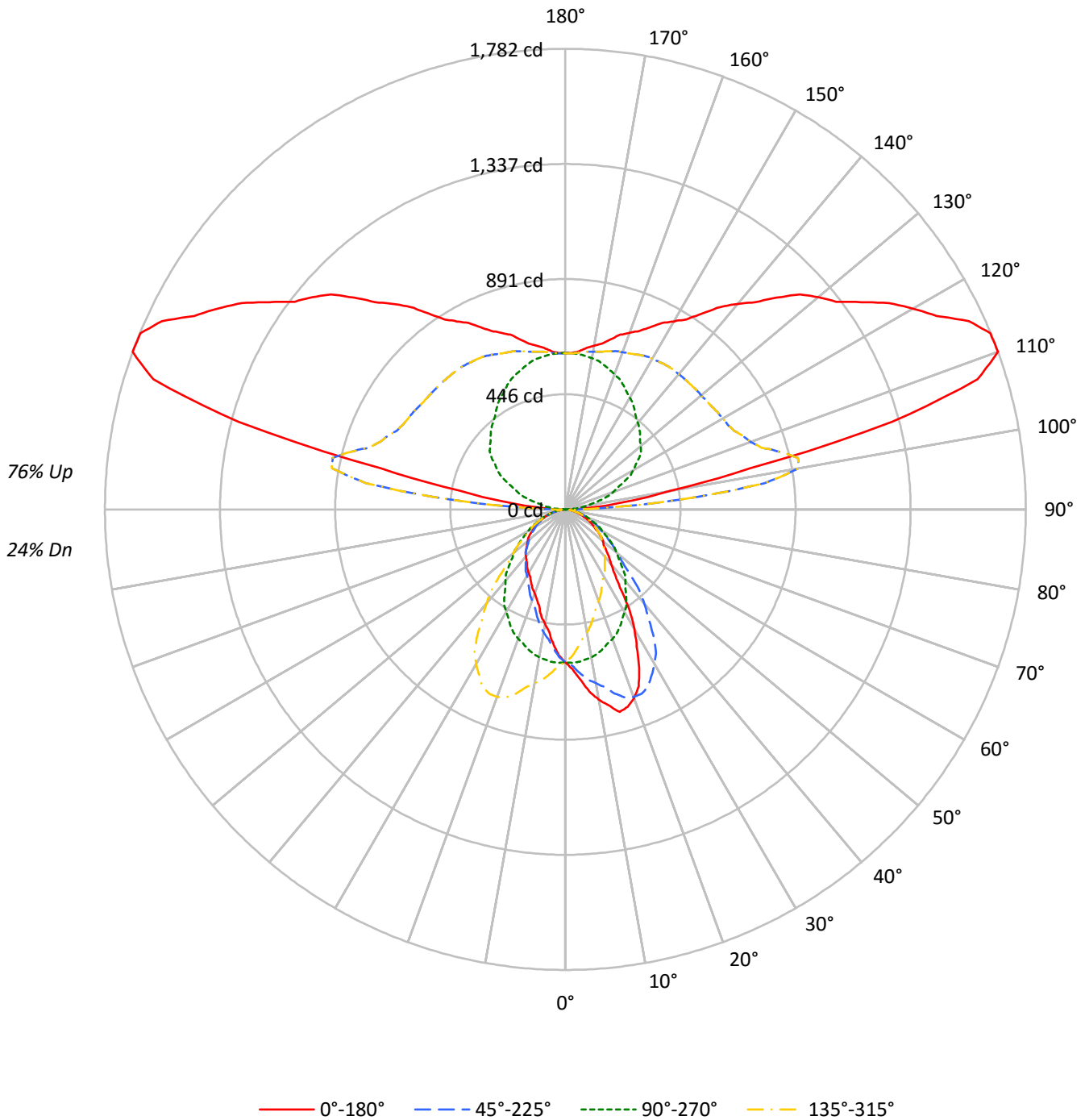
Lumens per Lamp: N/A
Luminaire Lumens: 5513.0 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	73	60	58	57	44	43	42	29	28	27	20
2	84	77	71	66	74	69	64	60	53	50	47	39	37	35	25	24	23	17
3	77	68	61	56	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	53	47	62	54	47	43	42	37	34	31	28	26	20	19	17	13
5	64	53	46	40	57	48	41	37	37	33	29	28	25	22	18	17	15	12
6	59	48	40	35	53	43	36	32	34	29	26	25	22	19	17	15	14	10
7	55	43	36	30	49	39	32	28	30	26	22	23	20	17	15	14	12	9
8	51	39	32	27	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	36	28	24	42	32	26	22	25	21	18	19	16	14	13	11	10	8
10	44	32	26	21	39	29	23	19	23	19	16	18	15	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.0
10°-20°	163.7	3.0
20°-30°	237.5	4.3
30°-40°	250.6	4.5
40°-50°	221.9	4.0
50°-60°	177.1	3.2
60°-70°	120.4	2.2
70°-80°	61.7	1.1
80°-90°	20.3	0.4
90°-100°	241.5	4.4
100°-110°	819.6	14.9
110°-120°	870.7	15.8
120°-130°	716.8	13.0
130°-140°	575.6	10.4
140°-150°	435.0	7.9
150°-160°	305.7	5.5
160°-170°	180.0	3.3
170°-180°	58.6	1.1
0°-30°	457.5	8.3
0°-40°	708.1	12.8
0°-60°	1107.1	20.1
0°-90°	1309.5	23.8
90°-120°	1931.9	35.0
90°-150°	3659.3	66.4
90°-180°	4204.0	76.3
0°-180°	5513.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	591	591	591	591	591	
5°	660	593	525	593	660	66
15°	811	560	389	560	811	224
25°	676	500	313	500	676	306
35°	368	411	259	411	368	239
45°	222	308	213	308	222	174
55°	156	211	165	211	156	140
65°	96	126	111	126	96	95
75°	47	59	56	59	47	51
85°	12	12	9	12	12	14
90°	38	1	38	1	38	21
95°	132	41	132	41	132	172
105°	1309	142	1309	142	1309	1267
115°	1723	250	1723	250	1723	1687
125°	1398	348	1398	348	1398	1263
135°	1158	409	1158	409	1158	900
145°	925	467	925	467	925	587
155°	777	531	777	531	777	363
165°	682	578	682	578	682	195
175°	614	603	614	603	614	60
180°	604	604	604	604	604	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	618.3	618.5	618.9	616.0	615.6	615.6	613.1	610.9	608.3	604.9	605.3
5°	660.1	662.6	663.5	660.8	656.7	656.3	652.4	646.1	640.1	635.4	632.0
7.5°	710.0	711.0	708.8	705.2	702.2	696.7	689.5	682.5	672.6	663.6	656.9
10°	747.8	749.2	745.3	740.1	735.8	729.4	719.0	708.3	695.4	682.9	672.9
12.5°	776.5	779.9	774.9	774.3	766.9	758.1	745.7	740.3	722.1	704.7	693.9
15°	811.4	811.2	811.7	807.3	801.9	800.5	787.4	773.0	747.4	737.1	719.4
17.5°	801.3	804.8	806.4	806.3	806.2	805.3	801.1	792.1	779.2	762.6	742.2
20°	777.4	781.9	782.6	787.8	790.8	794.6	796.2	793.7	785.8	771.9	754.2
22.5°	740.3	741.6	743.7	751.8	758.2	767.9	772.9	781.4	778.3	771.5	756.7
25°	676.0	673.8	681.7	685.8	700.6	716.0	727.2	739.4	750.3	756.9	752.6
27.5°	598.9	595.5	607.4	618.3	630.2	647.0	664.3	684.8	701.8	723.2	730.5
30°	533.8	535.9	547.2	558.8	577.0	600.6	620.2	642.6	667.0	690.8	707.4
32.5°	463.7	471.5	478.7	496.5	512.5	538.8	567.5	595.6	625.9	653.0	678.7
35°	368.0	377.1	387.1	400.0	422.5	448.6	476.6	514.5	555.9	592.9	623.3
37.5°	309.8	308.3	314.0	323.4	341.6	362.7	394.9	432.3	481.0	524.5	567.5
40°	274.9	274.0	278.0	286.7	300.5	316.0	344.2	377.1	422.3	475.5	526.6
42.5°	250.9	251.4	253.7	259.8	269.3	282.0	303.1	331.1	372.5	422.6	477.5
45°	221.7	223.3	225.8	228.8	234.2	244.7	256.5	276.5	309.2	351.0	405.0
47.5°	200.7	200.8	203.3	205.9	209.1	215.0	224.7	237.2	260.3	294.3	340.8
50°	189.5	187.9	189.7	191.7	195.1	199.2	205.6	217.4	232.8	260.3	299.2
52.5°	175.6	175.7	177.3	178.1	181.1	185.2	191.0	199.2	213.2	234.7	266.6
55°	155.8	157.0	157.9	159.2	162.0	164.9	169.5	174.9	185.8	201.9	225.6
57.5°	137.2	137.6	138.5	141.1	142.8	145.5	149.8	154.8	161.9	173.8	191.6
60°	124.5	124.5	126.3	127.4	129.7	132.4	135.8	140.6	147.0	156.7	171.1
62.5°	112.9	112.7	113.4	115.3	117.0	119.5	122.9	127.0	133.0	141.7	153.4
65°	95.9	95.4	96.8	97.2	99.0	101.5	104.3	108.6	113.4	119.7	130.2
67.5°	79.5	80.1	80.8	81.6	82.6	85.3	87.1	90.1	94.2	99.5	106.5
70°	70.4	70.4	70.4	71.1	72.5	73.8	75.6	78.1	82.0	86.5	92.9
72.5°	60.2	61.0	61.7	61.3	63.0	63.8	66.0	67.4	71.1	74.0	79.6
75°	47.3	47.3	47.3	48.4	49.1	49.7	51.1	52.5	54.3	57.9	60.9
77.5°	35.3	35.2	35.4	35.7	36.4	37.2	37.6	38.8	40.5	42.2	44.7
80°	27.3	27.7	27.9	28.4	28.4	28.8	29.1	30.7	31.8	32.9	34.5
82.5°	21.1	21.2	21.2	21.3	21.5	21.8	22.4	22.9	23.3	24.2	25.4
85°	12.3	12.0	12.0	12.5	12.3	12.3	12.7	13.2	13.2	13.4	14.1
87.5°	12.4	12.4	12.6	12.4	12.4	12.3	11.9	12.2	12.6	13.0	12.9
90°	38.3	38.3	38.3	38.3	38.3	37.2	34.9	37.2	38.3	39.5	38.3
92.5°	64.4	66.2	65.3	69.0	69.9	77.1	86.9	101.3	127.6	151.0	148.9
95°	132.4	131.3	134.8	144.0	159.1	184.7	233.5	304.4	398.5	455.4	403.1
97.5°	260.7	270.4	287.4	316.0	371.5	455.4	581.1	710.2	815.5	777.4	585.5
100°	415.9	436.8	470.5	520.4	616.8	757.4	916.6	1060.6	1085.0	917.7	631.9
102.5°	731.9	760.2	802.3	887.5	992.3	1141.2	1257.6	1290.2	1185.4	922.4	614.3
105°	1309.2	1325.5	1375.4	1447.4	1519.5	1557.8	1542.7	1411.4	1169.8	860.8	579.7
107.5°	1672.3	1693.9	1703.9	1707.9	1698.8	1642.6	1521.8	1324.1	1067.8	794.8	562.5
110°	1782.0	1783.2	1772.7	1750.6	1700.7	1605.4	1456.7	1248.8	1003.7	763.2	558.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1780.1	1773.9	1754.1	1717.2	1647.7	1538.5	1379.6	1180.0	959.1	742.8	559.7
115°	1722.8	1712.3	1682.1	1628.7	1546.2	1426.5	1274.4	1095.5	903.8	720.2	564.6
117.5°	1620.3	1611.5	1579.6	1523.2	1439.1	1326.9	1188.9	1031.8	868.9	709.3	572.9
120°	1554.3	1542.7	1509.0	1454.4	1373.1	1267.4	1144.2	1000.2	850.3	702.8	578.5
122.5°	1485.5	1475.8	1445.8	1392.1	1319.2	1223.7	1107.1	975.1	834.5	699.1	585.0
125°	1397.5	1388.2	1359.2	1315.0	1247.6	1160.5	1058.3	938.6	812.0	692.4	594.8
127.5°	1320.4	1312.9	1287.8	1246.5	1187.7	1107.3	1010.9	902.6	791.1	688.4	604.8
130°	1276.7	1267.4	1244.2	1204.7	1147.7	1071.1	979.3	879.4	777.2	686.5	612.2
132.5°	1231.1	1222.8	1201.4	1161.9	1105.9	1033.9	949.6	857.1	766.0	685.6	619.6
135°	1158.2	1153.5	1132.6	1094.3	1044.3	979.3	902.6	825.9	750.4	684.2	628.5
137.5°	1086.6	1079.7	1061.3	1028.3	982.8	926.1	865.2	801.1	739.5	684.0	636.4
140°	1037.4	1030.4	1013.0	982.8	945.6	894.5	841.1	785.3	733.0	683.1	640.1
142.5°	988.1	986.7	971.2	943.7	908.4	865.7	819.7	772.3	726.5	683.1	642.9
145°	924.7	921.2	909.6	889.8	862.0	828.3	792.3	753.9	717.9	680.7	645.9
147.5°	871.5	869.4	861.5	845.7	822.7	798.1	770.0	739.8	709.1	676.6	646.8
150°	839.9	838.7	831.8	817.8	800.4	779.5	755.1	729.5	701.6	673.8	645.9
152.5°	812.9	812.7	807.6	795.5	781.8	763.7	743.0	719.3	695.1	669.1	644.0
155°	777.2	779.5	774.8	766.7	753.9	741.1	723.7	705.1	683.1	661.0	641.2
157.5°	746.7	746.7	744.6	737.9	728.8	718.8	704.2	688.6	671.7	652.6	635.9
160°	727.2	727.2	726.0	720.2	712.1	704.0	691.2	678.4	663.3	647.1	633.1
162.5°	708.6	709.5	708.4	704.4	696.3	690.0	679.1	668.2	655.9	642.4	630.3
165°	681.9	683.1	683.1	678.4	673.8	669.1	661.0	652.9	643.6	633.1	625.0
167.5°	657.3	658.7	658.9	656.3	654.3	650.1	644.5	638.2	631.5	625.0	619.6
170°	642.4	644.7	645.9	642.4	641.2	638.9	634.3	630.8	625.0	620.3	616.8
172.5°	630.3	631.7	632.9	631.3	630.1	628.7	625.0	622.4	618.5	614.8	613.1
175°	614.5	616.8	618.0	616.8	616.8	615.7	614.5	613.4	609.9	608.7	607.6
177.5°	605.0	606.9	607.8	607.8	607.8	607.8	606.9	606.9	605.0	604.1	605.0
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	606.5	605.1	604.2	600.9	598.0	595.1	594.2	594.5	590.5	586.7	585.1
5°	630.2	625.6	621.3	615.2	607.9	599.9	595.9	592.7	584.7	576.1	571.1
7.5°	651.3	644.8	636.5	625.0	614.4	601.9	593.9	586.9	575.3	563.1	555.6
10°	664.2	655.4	644.7	630.6	617.7	602.4	591.8	581.1	567.5	552.9	543.8
12.5°	675.3	663.4	652.9	634.8	619.5	600.4	587.8	572.7	558.4	541.1	532.2
15°	701.7	679.7	659.7	639.2	620.4	593.8	579.7	559.5	540.7	519.3	509.1
17.5°	722.1	697.3	665.9	639.9	617.9	588.4	567.8	543.6	521.3	496.9	483.0
20°	733.7	705.3	671.5	640.6	614.3	580.6	558.1	533.4	507.3	479.8	464.8
22.5°	740.6	710.8	677.3	637.9	607.0	574.3	546.0	518.8	492.4	462.7	447.0
25°	742.8	715.6	680.1	635.6	597.9	560.9	526.8	500.4	468.4	440.7	417.8
27.5°	732.0	712.5	678.4	631.3	587.4	544.1	506.1	476.3	442.5	412.4	389.3
30°	718.7	707.4	674.2	627.0	579.0	532.5	490.7	456.8	423.2	392.8	369.1
32.5°	698.2	695.8	666.6	620.8	570.1	517.8	474.5	440.3	403.0	373.1	350.6
35°	657.9	668.8	650.4	607.0	553.4	496.8	450.0	410.9	372.3	343.7	322.6
37.5°	603.8	630.9	626.1	586.8	530.7	474.0	422.3	381.5	344.7	315.8	295.1
40°	566.5	601.1	606.1	571.3	514.8	456.4	401.6	361.0	325.1	298.7	277.8
42.5°	526.6	566.9	580.6	552.8	497.3	437.8	383.1	341.0	305.4	279.8	261.3
45°	459.6	512.9	537.7	521.8	468.2	407.3	351.0	308.3	276.0	251.9	237.6
47.5°	396.9	455.2	488.5	482.9	435.8	375.5	319.8	278.8	247.4	228.2	215.4
50°	352.6	412.5	452.7	454.6	412.5	352.8	296.9	258.3	229.4	211.5	201.0
52.5°	314.0	371.3	415.1	424.8	386.5	329.2	276.4	237.9	212.5	196.0	186.7
55°	263.7	312.1	360.7	378.5	347.8	293.3	244.4	210.6	186.7	175.4	167.2
57.5°	219.3	259.6	304.5	324.1	305.2	258.5	212.7	183.3	164.0	154.0	147.7
60°	195.8	227.6	267.6	291.0	274.6	233.1	193.1	165.1	149.2	140.4	134.5
62.5°	174.0	202.2	236.0	257.4	248.5	209.3	173.5	148.8	135.1	126.8	122.5
65°	143.6	165.8	192.0	211.7	205.8	176.1	146.7	125.6	114.7	108.1	104.7
67.5°	118.2	134.3	152.4	169.7	165.0	143.9	120.4	103.9	95.8	90.1	88.0
70°	102.2	114.5	130.6	144.5	140.6	123.4	104.7	90.6	83.6	78.8	76.8
72.5°	87.0	97.0	109.4	120.7	118.1	103.7	88.2	77.6	72.1	67.7	66.1
75°	65.7	73.4	80.9	88.4	87.7	76.6	67.5	59.3	55.0	51.6	50.9
77.5°	48.5	52.8	57.9	62.3	61.1	54.7	47.6	42.9	39.8	37.5	37.1
80°	37.0	39.5	43.2	46.3	44.8	42.0	36.3	32.9	30.7	28.4	27.5
82.5°	26.9	29.3	31.5	33.3	32.0	29.5	26.0	23.7	22.3	20.8	20.4
85°	14.1	15.4	16.4	16.8	16.4	14.8	13.2	12.3	11.1	10.4	10.2
87.5°	11.7	10.1	8.9	8.6	7.6	7.1	5.5	4.2	4.7	5.5	5.6
90°	31.4	23.2	17.4	13.9	11.6	9.3	4.6	1.2	4.6	9.3	11.6
92.5°	115.9	79.0	52.7	41.8	33.9	28.8	20.4	14.2	20.4	28.8	33.9
95°	268.3	167.3	113.8	86.0	67.4	56.9	45.3	40.7	45.3	56.9	67.4
97.5°	361.5	220.7	153.6	122.0	100.6	84.8	72.5	66.2	72.5	84.8	100.6
100°	381.0	239.3	177.7	145.2	122.0	103.4	92.9	89.4	92.9	103.4	122.0
102.5°	382.0	256.0	199.1	166.6	142.4	123.8	113.4	110.8	113.4	123.8	142.4
105°	388.0	284.6	230.0	197.5	171.9	154.5	146.4	141.7	146.4	154.5	171.9
107.5°	404.0	313.9	260.9	228.2	202.8	186.8	178.9	175.2	178.9	186.8	202.8
110°	417.0	333.4	282.3	248.6	224.2	209.1	202.1	197.5	202.1	209.1	224.2



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	431.0	352.0	302.7	268.1	244.6	230.5	222.6	217.9	222.6	230.5	244.6
115°	451.9	381.0	331.1	299.7	276.5	262.5	255.6	249.8	255.6	262.5	276.5
117.5°	474.2	407.7	361.5	329.0	306.7	294.4	287.4	282.8	287.4	294.4	306.7
120°	489.1	426.3	381.0	348.5	325.3	314.8	307.8	303.2	307.8	314.8	325.3
122.5°	502.1	444.0	401.5	368.0	344.8	333.4	326.4	322.7	326.4	333.4	344.8
125°	522.8	470.5	428.7	396.1	372.9	359.0	352.0	348.5	352.0	359.0	372.9
127.5°	542.0	495.1	454.4	421.0	398.7	383.4	373.6	368.9	373.6	383.4	398.7
130°	554.1	510.0	469.3	436.8	413.6	397.3	385.7	381.0	385.7	397.3	413.6
132.5°	566.2	523.0	484.2	451.7	427.5	410.3	397.8	392.2	397.8	410.3	427.5
135°	582.0	541.3	504.2	471.6	444.9	427.5	413.6	408.9	413.6	427.5	444.9
137.5°	594.1	556.2	519.5	489.3	462.8	444.2	430.3	424.7	430.3	444.2	462.8
140°	600.6	564.6	529.7	499.5	474.0	455.4	441.4	436.8	441.4	455.4	474.0
142.5°	606.2	571.1	537.2	508.8	484.2	465.6	452.6	448.9	452.6	465.6	484.2
145°	613.4	580.8	549.5	523.9	500.7	483.3	471.6	467.0	471.6	483.3	500.7
147.5°	617.3	588.7	559.2	536.5	517.2	501.1	490.0	486.5	490.0	501.1	517.2
150°	619.2	592.5	565.7	544.8	527.4	512.3	503.0	499.5	503.0	512.3	527.4
152.5°	620.1	596.2	572.2	553.2	536.7	523.4	514.2	512.5	514.2	523.4	536.7
155°	621.5	601.7	582.0	564.6	551.8	539.0	532.0	530.9	532.0	539.0	551.8
157.5°	621.5	605.7	589.0	574.3	564.1	553.0	547.4	546.2	547.4	553.0	564.1
160°	621.5	607.6	593.6	580.8	571.5	562.2	557.6	556.4	557.6	562.2	571.5
162.5°	620.6	608.5	596.4	586.4	578.0	570.6	566.0	566.7	566.0	570.6	578.0
165°	618.0	609.9	599.4	592.5	586.6	579.7	577.4	578.5	577.4	579.7	586.6
167.5°	616.4	609.6	602.0	597.6	593.4	589.0	586.9	588.3	586.9	589.0	593.4
170°	614.5	608.7	602.9	599.4	597.1	593.6	592.5	594.8	592.5	593.6	597.1
172.5°	611.7	607.8	603.8	601.3	599.9	596.4	597.1	598.5	597.1	596.4	599.9
175°	608.7	606.4	604.1	602.9	602.9	600.6	601.7	602.9	601.7	600.6	602.9
177.5°	606.9	605.0	604.1	604.1	604.1	602.2	603.1	605.0	603.1	602.2	604.1
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	583.3	582.2	578.4	576.4	573.1	570.0	568.0	568.9	569.6	569.3	568.7
5°	566.5	562.2	555.6	550.0	545.9	538.4	535.2	533.6	532.2	530.7	529.1
7.5°	546.6	539.8	530.4	522.3	514.7	505.3	500.0	496.9	493.6	490.0	486.8
10°	532.5	522.9	512.9	501.6	492.5	484.1	476.6	471.6	467.0	462.7	459.6
12.5°	517.6	506.6	494.2	478.7	468.7	456.6	455.5	446.7	439.6	436.9	433.2
15°	493.9	478.4	462.7	444.3	436.4	425.5	418.7	411.8	405.7	401.4	400.3
17.5°	466.9	446.9	431.3	418.1	405.1	393.9	387.6	382.2	377.1	371.4	370.6
20°	446.4	429.1	412.1	400.5	387.1	375.7	368.0	362.6	358.2	354.8	351.9
22.5°	426.9	408.0	392.4	379.8	366.6	357.4	351.3	346.0	342.4	338.7	335.9
25°	395.7	381.0	363.9	349.6	338.7	332.8	327.8	323.3	321.0	318.5	315.3
27.5°	368.4	352.0	336.1	325.0	315.4	310.2	306.6	303.5	301.4	299.9	298.1
30°	349.2	332.6	320.1	309.2	301.2	296.0	293.7	291.9	289.4	288.5	287.6
32.5°	330.6	315.7	305.0	295.5	288.0	284.5	282.5	280.8	278.9	278.0	276.1
35°	304.4	291.9	281.5	276.2	270.1	267.1	265.6	263.3	261.5	260.6	260.3
37.5°	279.7	268.9	262.0	255.3	252.7	250.9	248.7	247.2	246.6	246.5	246.2
40°	263.7	254.9	248.7	243.3	242.2	239.4	237.6	236.3	236.3	236.5	236.3
42.5°	249.2	241.2	235.8	231.1	229.8	228.2	226.3	226.3	226.6	227.4	226.6
45°	227.2	221.5	217.6	215.4	212.9	211.3	211.0	211.7	211.9	212.2	212.9
47.5°	206.9	203.1	199.6	197.1	196.0	195.8	195.5	196.7	197.8	198.2	199.2
50°	194.9	190.6	187.6	186.0	185.1	184.7	185.1	186.5	187.4	188.5	189.2
52.5°	181.5	178.4	176.4	175.1	174.8	175.1	175.1	176.7	178.1	178.6	178.9
55°	162.9	160.6	160.2	158.1	159.0	158.8	159.9	160.8	162.2	163.6	163.8
57.5°	144.3	142.5	141.3	141.5	141.8	142.8	143.7	145.3	146.7	148.2	148.3
60°	132.0	131.1	130.4	130.4	130.8	132.2	133.3	134.9	135.8	136.8	137.4
62.5°	120.7	119.8	119.1	119.5	120.7	121.5	122.8	123.7	124.6	125.5	125.8
65°	102.9	102.5	103.1	103.6	103.8	104.9	106.5	107.2	108.1	108.6	110.2
67.5°	86.5	86.6	86.5	87.1	88.5	88.7	90.2	91.8	92.0	92.9	93.9
70°	75.4	75.9	76.3	76.8	77.9	78.4	79.5	80.2	81.1	81.8	82.5
72.5°	65.2	65.3	65.8	65.7	66.7	67.6	68.6	69.3	70.2	71.1	71.7
75°	50.2	50.2	50.7	50.9	52.0	53.2	52.9	53.4	54.3	55.2	55.7
77.5°	36.7	36.2	36.7	36.9	37.3	38.2	38.4	39.0	40.1	39.8	40.3
80°	27.9	27.3	27.9	28.2	28.2	29.3	29.3	29.8	30.4	29.8	30.4
82.5°	19.9	19.6	20.1	20.2	20.5	20.6	20.9	21.0	21.7	21.4	21.7
85°	10.0	9.8	10.0	9.8	10.0	10.2	10.2	10.0	10.0	10.4	9.8
87.5°	5.9	6.4	7.4	9.0	10.2	10.3	9.8	9.6	9.2	9.3	9.5
90°	13.9	17.4	23.2	31.4	38.3	39.5	38.3	37.2	34.9	37.2	38.3
92.5°	41.8	52.7	79.0	115.9	148.9	151.0	127.6	101.3	86.9	77.1	69.9
95°	86.0	113.8	167.3	268.3	403.1	455.4	398.5	304.4	233.5	184.7	159.1
97.5°	122.0	153.6	220.7	361.5	585.5	777.4	815.5	710.2	581.1	455.4	371.5
100°	145.2	177.7	239.3	381.0	631.9	917.7	1085.0	1060.6	916.6	757.4	616.8
102.5°	166.6	199.1	256.0	382.0	614.3	922.4	1185.4	1290.2	1257.6	1141.2	992.3
105°	197.5	230.0	284.6	388.0	579.7	860.8	1169.8	1411.4	1542.7	1557.8	1519.5
107.5°	228.2	260.9	313.9	404.0	562.5	794.8	1067.8	1324.1	1521.8	1642.6	1698.8
110°	248.6	282.3	333.4	417.0	558.8	763.2	1003.7	1248.8	1456.7	1605.4	1700.7



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	268.1	302.7	352.0	431.0	559.7	742.8	959.1	1180.0	1379.6	1538.5	1647.7
115°	299.7	331.1	381.0	451.9	564.6	720.2	903.8	1095.5	1274.4	1426.5	1546.2
117.5°	329.0	361.5	407.7	474.2	572.9	709.3	868.9	1031.8	1188.9	1326.9	1439.1
120°	348.5	381.0	426.3	489.1	578.5	702.8	850.3	1000.2	1144.2	1267.4	1373.1
122.5°	368.0	401.5	444.0	502.1	585.0	699.1	834.5	975.1	1107.1	1223.7	1319.2
125°	396.1	428.7	470.5	522.8	594.8	692.4	812.0	938.6	1058.3	1160.5	1247.6
127.5°	421.0	454.4	495.1	542.0	604.8	688.4	791.1	902.6	1010.9	1107.3	1187.7
130°	436.8	469.3	510.0	554.1	612.2	686.5	777.2	879.4	979.3	1071.1	1147.7
132.5°	451.7	484.2	523.0	566.2	619.6	685.6	766.0	857.1	949.6	1033.9	1105.9
135°	471.6	504.2	541.3	582.0	628.5	684.2	750.4	825.9	902.6	979.3	1044.3
137.5°	489.3	519.5	556.2	594.1	636.4	684.0	739.5	801.1	865.2	926.1	982.8
140°	499.5	529.7	564.6	600.6	640.1	683.1	733.0	785.3	841.1	894.5	945.6
142.5°	508.8	537.2	571.1	606.2	642.9	683.1	726.5	772.3	819.7	865.7	908.4
145°	523.9	549.5	580.8	613.4	645.9	680.7	717.9	753.9	792.3	828.3	862.0
147.5°	536.5	559.2	588.7	617.3	646.8	676.6	709.1	739.8	770.0	798.1	822.7
150°	544.8	565.7	592.5	619.2	645.9	673.8	701.6	729.5	755.1	779.5	800.4
152.5°	553.2	572.2	596.2	620.1	644.0	669.1	695.1	719.3	743.0	763.7	781.8
155°	564.6	582.0	601.7	621.5	641.2	661.0	683.1	705.1	723.7	741.1	753.9
157.5°	574.3	589.0	605.7	621.5	635.9	652.6	671.7	688.6	704.2	718.8	728.8
160°	580.8	593.6	607.6	621.5	633.1	647.1	663.3	678.4	691.2	704.0	712.1
162.5°	586.4	596.4	608.5	620.6	630.3	642.4	655.9	668.2	679.1	690.0	696.3
165°	592.5	599.4	609.9	618.0	625.0	633.1	643.6	652.9	661.0	669.1	673.8
167.5°	597.6	602.0	609.6	616.4	619.6	625.0	631.5	638.2	644.5	650.1	654.3
170°	599.4	602.9	608.7	614.5	616.8	620.3	625.0	630.8	634.3	638.9	641.2
172.5°	601.3	603.8	607.8	611.7	613.1	614.8	618.5	622.4	625.0	628.7	630.1
175°	602.9	604.1	606.4	608.7	607.6	608.7	609.9	613.4	614.5	615.7	616.8
177.5°	604.1	604.1	605.0	606.9	605.0	604.1	605.0	606.9	606.9	607.8	607.8
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	566.9	566.5	566.5	564.9	566.5	566.5	566.9	568.7	569.3	569.6	568.9
5°	525.9	525.2	524.1	525.2	524.1	525.2	525.9	529.1	530.7	532.2	533.6
7.5°	485.3	482.6	482.2	479.5	482.2	482.6	485.3	486.8	490.0	493.6	496.9
10°	455.7	453.9	453.6	449.3	453.6	453.9	455.7	459.6	462.7	467.0	471.6
12.5°	433.2	428.8	429.7	427.2	429.7	428.8	433.2	433.2	436.9	439.6	446.7
15°	394.1	394.1	393.2	389.4	393.2	394.1	394.1	400.3	401.4	405.7	411.8
17.5°	366.1	365.6	363.5	364.6	363.5	365.6	366.1	370.6	371.4	377.1	382.2
20°	349.4	348.0	345.3	345.3	345.3	348.0	349.4	351.9	354.8	358.2	362.6
22.5°	333.6	333.5	330.6	331.5	330.6	333.5	333.6	335.9	338.7	342.4	346.0
25°	315.1	313.3	311.9	312.6	311.9	313.3	315.1	315.3	318.5	321.0	323.3
27.5°	297.5	296.5	296.4	294.6	296.4	296.5	297.5	298.1	299.9	301.4	303.5
30°	287.4	285.1	285.5	284.4	285.5	285.1	287.4	287.6	288.5	289.4	291.9
32.5°	275.7	274.9	274.5	273.5	274.5	274.9	275.7	276.1	278.0	278.9	280.8
35°	259.9	260.1	259.0	259.4	259.0	260.1	259.9	260.3	260.6	261.5	263.3
37.5°	246.0	246.7	246.2	246.3	246.2	246.7	246.0	246.2	246.5	246.6	247.2
40°	236.9	236.9	236.9	237.6	236.9	236.9	236.9	236.3	236.5	236.3	236.3
42.5°	228.2	227.8	227.5	227.4	227.5	227.8	228.2	226.6	227.4	226.6	226.3
45°	213.3	214.0	214.2	213.1	214.2	214.0	213.3	212.9	212.2	211.9	211.7
47.5°	199.8	199.9	199.8	200.8	199.8	199.9	199.8	199.2	198.2	197.8	196.7
50°	190.4	189.9	190.4	189.9	190.4	189.9	190.4	189.2	188.5	187.4	186.5
52.5°	180.4	180.5	180.2	180.1	180.2	180.5	180.4	178.9	178.6	178.1	176.7
55°	164.7	165.1	164.9	164.9	164.9	165.1	164.7	163.8	163.6	162.2	160.8
57.5°	148.5	148.9	149.2	148.2	149.2	148.9	148.5	148.3	148.2	146.7	145.3
60°	137.2	138.3	138.1	137.7	138.1	138.3	137.2	137.4	136.8	135.8	134.9
62.5°	126.8	127.3	127.2	127.1	127.2	127.3	126.8	125.8	125.5	124.6	123.7
65°	110.9	111.3	110.6	111.3	110.6	111.3	110.9	110.2	108.6	108.1	107.2
67.5°	93.6	93.8	94.3	94.6	94.3	93.8	93.6	93.9	92.9	92.0	91.8
70°	82.9	82.7	83.4	84.1	83.4	82.7	82.9	82.5	81.8	81.1	80.2
72.5°	71.6	72.1	71.9	72.4	71.9	72.1	71.6	71.7	71.1	70.2	69.3
75°	55.2	55.9	55.7	56.3	55.7	55.9	55.2	55.7	55.2	54.3	53.4
77.5°	39.9	40.0	39.9	40.3	39.9	40.0	39.9	40.3	39.8	40.1	39.0
80°	30.4	30.0	29.5	30.4	29.5	30.0	30.4	30.4	29.8	30.4	29.8
82.5°	21.2	21.4	21.0	21.0	21.0	21.4	21.2	21.7	21.4	21.7	21.0
85°	9.8	9.5	9.1	9.1	9.1	9.5	9.8	9.8	10.4	10.0	10.0
87.5°	9.5	9.3	9.3	9.1	9.3	9.3	9.5	9.5	9.3	9.2	9.6
90°	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	37.2	34.9	37.2
92.5°	69.0	65.3	66.2	64.4	66.2	65.3	69.0	69.9	77.1	86.9	101.3
95°	144.0	134.8	131.3	132.4	131.3	134.8	144.0	159.1	184.7	233.5	304.4
97.5°	316.0	287.4	270.4	260.7	270.4	287.4	316.0	371.5	455.4	581.1	710.2
100°	520.4	470.5	436.8	415.9	436.8	470.5	520.4	616.8	757.4	916.6	1060.6
102.5°	887.5	802.3	760.2	731.9	760.2	802.3	887.5	992.3	1141.2	1257.6	1290.2
105°	1447.4	1375.4	1325.5	1309.2	1325.5	1375.4	1447.4	1519.5	1557.8	1542.7	1411.4
107.5°	1707.9	1703.9	1693.9	1672.3	1693.9	1703.9	1707.9	1698.8	1642.6	1521.8	1324.1
110°	1750.6	1772.7	1783.2	1782.0	1783.2	1772.7	1750.6	1700.7	1605.4	1456.7	1248.8



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1717.2	1754.1	1773.9	1780.1	1773.9	1754.1	1717.2	1647.7	1538.5	1379.6	1180.0
115°	1628.7	1682.1	1712.3	1722.8	1712.3	1682.1	1628.7	1546.2	1426.5	1274.4	1095.5
117.5°	1523.2	1579.6	1611.5	1620.3	1611.5	1579.6	1523.2	1439.1	1326.9	1188.9	1031.8
120°	1454.4	1509.0	1542.7	1554.3	1542.7	1509.0	1454.4	1373.1	1267.4	1144.2	1000.2
122.5°	1392.1	1445.8	1475.8	1485.5	1475.8	1445.8	1392.1	1319.2	1223.7	1107.1	975.1
125°	1315.0	1359.2	1388.2	1397.5	1388.2	1359.2	1315.0	1247.6	1160.5	1058.3	938.6
127.5°	1246.5	1287.8	1312.9	1320.4	1312.9	1287.8	1246.5	1187.7	1107.3	1010.9	902.6
130°	1204.7	1244.2	1267.4	1276.7	1267.4	1244.2	1204.7	1147.7	1071.1	979.3	879.4
132.5°	1161.9	1201.4	1222.8	1231.1	1222.8	1201.4	1161.9	1105.9	1033.9	949.6	857.1
135°	1094.3	1132.6	1153.5	1158.2	1153.5	1132.6	1094.3	1044.3	979.3	902.6	825.9
137.5°	1028.3	1061.3	1079.7	1086.6	1079.7	1061.3	1028.3	982.8	926.1	865.2	801.1
140°	982.8	1013.0	1030.4	1037.4	1030.4	1013.0	982.8	945.6	894.5	841.1	785.3
142.5°	943.7	971.2	986.7	988.1	986.7	971.2	943.7	908.4	865.7	819.7	772.3
145°	889.8	909.6	921.2	924.7	921.2	909.6	889.8	862.0	828.3	792.3	753.9
147.5°	845.7	861.5	869.4	871.5	869.4	861.5	845.7	822.7	798.1	770.0	739.8
150°	817.8	831.8	838.7	839.9	838.7	831.8	817.8	800.4	779.5	755.1	729.5
152.5°	795.5	807.6	812.7	812.9	812.7	807.6	795.5	781.8	763.7	743.0	719.3
155°	766.7	774.8	779.5	777.2	779.5	774.8	766.7	753.9	741.1	723.7	705.1
157.5°	737.9	744.6	746.7	746.7	746.7	744.6	737.9	728.8	718.8	704.2	688.6
160°	720.2	726.0	727.2	727.2	727.2	726.0	720.2	712.1	704.0	691.2	678.4
162.5°	704.4	708.4	709.5	708.6	709.5	708.4	704.4	696.3	690.0	679.1	668.2
165°	678.4	683.1	683.1	681.9	683.1	683.1	678.4	673.8	669.1	661.0	652.9
167.5°	656.3	658.9	658.7	657.3	658.7	658.9	656.3	654.3	650.1	644.5	638.2
170°	642.4	645.9	644.7	642.4	644.7	645.9	642.4	641.2	638.9	634.3	630.8
172.5°	631.3	632.9	631.7	630.3	631.7	632.9	631.3	630.1	628.7	625.0	622.4
175°	616.8	618.0	616.8	614.5	616.8	618.0	616.8	616.8	615.7	614.5	613.4
177.5°	607.8	607.8	606.9	605.0	606.9	607.8	607.8	607.8	607.8	606.9	606.9
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	568.0	570.0	573.1	576.4	578.4	582.2	583.3	585.1	586.7	590.5	594.5
5°	535.2	538.4	545.9	550.0	555.6	562.2	566.5	571.1	576.1	584.7	592.7
7.5°	500.0	505.3	514.7	522.3	530.4	539.8	546.6	555.6	563.1	575.3	586.9
10°	476.6	484.1	492.5	501.6	512.9	522.9	532.5	543.8	552.9	567.5	581.1
12.5°	455.5	456.6	468.7	478.7	494.2	506.6	517.6	532.2	541.1	558.4	572.7
15°	418.7	425.5	436.4	444.3	462.7	478.4	493.9	509.1	519.3	540.7	559.5
17.5°	387.6	393.9	405.1	418.1	431.3	446.9	466.9	483.0	496.9	521.3	543.6
20°	368.0	375.7	387.1	400.5	412.1	429.1	446.4	464.8	479.8	507.3	533.4
22.5°	351.3	357.4	366.6	379.8	392.4	408.0	426.9	447.0	462.7	492.4	518.8
25°	327.8	332.8	338.7	349.6	363.9	381.0	395.7	417.8	440.7	468.4	500.4
27.5°	306.6	310.2	315.4	325.0	336.1	352.0	368.4	389.3	412.4	442.5	476.3
30°	293.7	296.0	301.2	309.2	320.1	332.6	349.2	369.1	392.8	423.2	456.8
32.5°	282.5	284.5	288.0	295.5	305.0	315.7	330.6	350.6	373.1	403.0	440.3
35°	265.6	267.1	270.1	276.2	281.5	291.9	304.4	322.6	343.7	372.3	410.9
37.5°	248.7	250.9	252.7	255.3	262.0	268.9	279.7	295.1	315.8	344.7	381.5
40°	237.6	239.4	242.2	243.3	248.7	254.9	263.7	277.8	298.7	325.1	361.0
42.5°	226.3	228.2	229.8	231.1	235.8	241.2	249.2	261.3	279.8	305.4	341.0
45°	211.0	211.3	212.9	215.4	217.6	221.5	227.2	237.6	251.9	276.0	308.3
47.5°	195.5	195.8	196.0	197.1	199.6	203.1	206.9	215.4	228.2	247.4	278.8
50°	185.1	184.7	185.1	186.0	187.6	190.6	194.9	201.0	211.5	229.4	258.3
52.5°	175.1	175.1	174.8	175.1	176.4	178.4	181.5	186.7	196.0	212.5	237.9
55°	159.9	158.8	159.0	158.1	160.2	160.6	162.9	167.2	175.4	186.7	210.6
57.5°	143.7	142.8	141.8	141.5	141.3	142.5	144.3	147.7	154.0	164.0	183.3
60°	133.3	132.2	130.8	130.4	130.4	131.1	132.0	134.5	140.4	149.2	165.1
62.5°	122.8	121.5	120.7	119.5	119.1	119.8	120.7	122.5	126.8	135.1	148.8
65°	106.5	104.9	103.8	103.6	103.1	102.5	102.9	104.7	108.1	114.7	125.6
67.5°	90.2	88.7	88.5	87.1	86.5	86.6	86.5	88.0	90.1	95.8	103.9
70°	79.5	78.4	77.9	76.8	76.3	75.9	75.4	76.8	78.8	83.6	90.6
72.5°	68.6	67.6	66.7	65.7	65.8	65.3	65.2	66.1	67.7	72.1	77.6
75°	52.9	53.2	52.0	50.9	50.7	50.2	50.2	50.9	51.6	55.0	59.3
77.5°	38.4	38.2	37.3	36.9	36.7	36.2	36.7	37.1	37.5	39.8	42.9
80°	29.3	29.3	28.2	28.2	27.9	27.3	27.9	27.5	28.4	30.7	32.9
82.5°	20.9	20.6	20.5	20.2	20.1	19.6	19.9	20.4	20.8	22.3	23.7
85°	10.2	10.2	10.0	9.8	10.0	9.8	10.0	10.2	10.4	11.1	12.3
87.5°	9.8	10.3	10.2	9.0	7.4	6.4	5.9	5.6	5.5	4.7	4.2
90°	38.3	39.5	38.3	31.4	23.2	17.4	13.9	11.6	9.3	4.6	1.2
92.5°	127.6	151.0	148.9	115.9	79.0	52.7	41.8	33.9	28.8	20.4	14.2
95°	398.5	455.4	403.1	268.3	167.3	113.8	86.0	67.4	56.9	45.3	40.7
97.5°	815.5	777.4	585.5	361.5	220.7	153.6	122.0	100.6	84.8	72.5	66.2
100°	1085.0	917.7	631.9	381.0	239.3	177.7	145.2	122.0	103.4	92.9	89.4
102.5°	1185.4	922.4	614.3	382.0	256.0	199.1	166.6	142.4	123.8	113.4	110.8
105°	1169.8	860.8	579.7	388.0	284.6	230.0	197.5	171.9	154.5	146.4	141.7
107.5°	1067.8	794.8	562.5	404.0	313.9	260.9	228.2	202.8	186.8	178.9	175.2
110°	1003.7	763.2	558.8	417.0	333.4	282.3	248.6	224.2	209.1	202.1	197.5



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	959.1	742.8	559.7	431.0	352.0	302.7	268.1	244.6	230.5	222.6	217.9
115°	903.8	720.2	564.6	451.9	381.0	331.1	299.7	276.5	262.5	255.6	249.8
117.5°	868.9	709.3	572.9	474.2	407.7	361.5	329.0	306.7	294.4	287.4	282.8
120°	850.3	702.8	578.5	489.1	426.3	381.0	348.5	325.3	314.8	307.8	303.2
122.5°	834.5	699.1	585.0	502.1	444.0	401.5	368.0	344.8	333.4	326.4	322.7
125°	812.0	692.4	594.8	522.8	470.5	428.7	396.1	372.9	359.0	352.0	348.5
127.5°	791.1	688.4	604.8	542.0	495.1	454.4	421.0	398.7	383.4	373.6	368.9
130°	777.2	686.5	612.2	554.1	510.0	469.3	436.8	413.6	397.3	385.7	381.0
132.5°	766.0	685.6	619.6	566.2	523.0	484.2	451.7	427.5	410.3	397.8	392.2
135°	750.4	684.2	628.5	582.0	541.3	504.2	471.6	444.9	427.5	413.6	408.9
137.5°	739.5	684.0	636.4	594.1	556.2	519.5	489.3	462.8	444.2	430.3	424.7
140°	733.0	683.1	640.1	600.6	564.6	529.7	499.5	474.0	455.4	441.4	436.8
142.5°	726.5	683.1	642.9	606.2	571.1	537.2	508.8	484.2	465.6	452.6	448.9
145°	717.9	680.7	645.9	613.4	580.8	549.5	523.9	500.7	483.3	471.6	467.0
147.5°	709.1	676.6	646.8	617.3	588.7	559.2	536.5	517.2	501.1	490.0	486.5
150°	701.6	673.8	645.9	619.2	592.5	565.7	544.8	527.4	512.3	503.0	499.5
152.5°	695.1	669.1	644.0	620.1	596.2	572.2	553.2	536.7	523.4	514.2	512.5
155°	683.1	661.0	641.2	621.5	601.7	582.0	564.6	551.8	539.0	532.0	530.9
157.5°	671.7	652.6	635.9	621.5	605.7	589.0	574.3	564.1	553.0	547.4	546.2
160°	663.3	647.1	633.1	621.5	607.6	593.6	580.8	571.5	562.2	557.6	556.4
162.5°	655.9	642.4	630.3	620.6	608.5	596.4	586.4	578.0	570.6	566.0	566.7
165°	643.6	633.1	625.0	618.0	609.9	599.4	592.5	586.6	579.7	577.4	578.5
167.5°	631.5	625.0	619.6	616.4	609.6	602.0	597.6	593.4	589.0	586.9	588.3
170°	625.0	620.3	616.8	614.5	608.7	602.9	599.4	597.1	593.6	592.5	594.8
172.5°	618.5	614.8	613.1	611.7	607.8	603.8	601.3	599.9	596.4	597.1	598.5
175°	609.9	608.7	607.6	608.7	606.4	604.1	602.9	602.9	600.6	601.7	602.9
177.5°	605.0	604.1	605.0	606.9	605.0	604.1	604.1	604.1	602.2	603.1	605.0
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	594.2	595.1	598.0	600.9	604.2	605.1	606.5	605.3	604.9	608.3	610.9
5°	595.9	599.9	607.9	615.2	621.3	625.6	630.2	632.0	635.4	640.1	646.1
7.5°	593.9	601.9	614.4	625.0	636.5	644.8	651.3	656.9	663.6	672.6	682.5
10°	591.8	602.4	617.7	630.6	644.7	655.4	664.2	672.9	682.9	695.4	708.3
12.5°	587.8	600.4	619.5	634.8	652.9	663.4	675.3	693.9	704.7	722.1	740.3
15°	579.7	593.8	620.4	639.2	659.7	679.7	701.7	719.4	737.1	747.4	773.0
17.5°	567.8	588.4	617.9	639.9	665.9	697.3	722.1	742.2	762.6	779.2	792.1
20°	558.1	580.6	614.3	640.6	671.5	705.3	733.7	754.2	771.9	785.8	793.7
22.5°	546.0	574.3	607.0	637.9	677.3	710.8	740.6	756.7	771.5	778.3	781.4
25°	526.8	560.9	597.9	635.6	680.1	715.6	742.8	752.6	756.9	750.3	739.4
27.5°	506.1	544.1	587.4	631.3	678.4	712.5	732.0	730.5	723.2	701.8	684.8
30°	490.7	532.5	579.0	627.0	674.2	707.4	718.7	707.4	690.8	667.0	642.6
32.5°	474.5	517.8	570.1	620.8	666.6	695.8	698.2	678.7	653.0	625.9	595.6
35°	450.0	496.8	553.4	607.0	650.4	668.8	657.9	623.3	592.9	555.9	514.5
37.5°	422.3	474.0	530.7	586.8	626.1	630.9	603.8	567.5	524.5	481.0	432.3
40°	401.6	456.4	514.8	571.3	606.1	601.1	566.5	526.6	475.5	422.3	377.1
42.5°	383.1	437.8	497.3	552.8	580.6	566.9	526.6	477.5	422.6	372.5	331.1
45°	351.0	407.3	468.2	521.8	537.7	512.9	459.6	405.0	351.0	309.2	276.5
47.5°	319.8	375.5	435.8	482.9	488.5	455.2	396.9	340.8	294.3	260.3	237.2
50°	296.9	352.8	412.5	454.6	452.7	412.5	352.6	299.2	260.3	232.8	217.4
52.5°	276.4	329.2	386.5	424.8	415.1	371.3	314.0	266.6	234.7	213.2	199.2
55°	244.4	293.3	347.8	378.5	360.7	312.1	263.7	225.6	201.9	185.8	174.9
57.5°	212.7	258.5	305.2	324.1	304.5	259.6	219.3	191.6	173.8	161.9	154.8
60°	193.1	233.1	274.6	291.0	267.6	227.6	195.8	171.1	156.7	147.0	140.6
62.5°	173.5	209.3	248.5	257.4	236.0	202.2	174.0	153.4	141.7	133.0	127.0
65°	146.7	176.1	205.8	211.7	192.0	165.8	143.6	130.2	119.7	113.4	108.6
67.5°	120.4	143.9	165.0	169.7	152.4	134.3	118.2	106.5	99.5	94.2	90.1
70°	104.7	123.4	140.6	144.5	130.6	114.5	102.2	92.9	86.5	82.0	78.1
72.5°	88.2	103.7	118.1	120.7	109.4	97.0	87.0	79.6	74.0	71.1	67.4
75°	67.5	76.6	87.7	88.4	80.9	73.4	65.7	60.9	57.9	54.3	52.5
77.5°	47.6	54.7	61.1	62.3	57.9	52.8	48.5	44.7	42.2	40.5	38.8
80°	36.3	42.0	44.8	46.3	43.2	39.5	37.0	34.5	32.9	31.8	30.7
82.5°	26.0	29.5	32.0	33.3	31.5	29.3	26.9	25.4	24.2	23.3	22.9
85°	13.2	14.8	16.4	16.8	16.4	15.4	14.1	14.1	13.4	13.2	13.2
87.5°	5.5	7.1	7.6	8.6	8.9	10.1	11.7	12.9	13.0	12.6	12.2
90°	4.6	9.3	11.6	13.9	17.4	23.2	31.4	38.3	39.5	38.3	37.2
92.5°	20.4	28.8	33.9	41.8	52.7	79.0	115.9	148.9	151.0	127.6	101.3
95°	45.3	56.9	67.4	86.0	113.8	167.3	268.3	403.1	455.4	398.5	304.4
97.5°	72.5	84.8	100.6	122.0	153.6	220.7	361.5	585.5	777.4	815.5	710.2
100°	92.9	103.4	122.0	145.2	177.7	239.3	381.0	631.9	917.7	1085.0	1060.6
102.5°	113.4	123.8	142.4	166.6	199.1	256.0	382.0	614.3	922.4	1185.4	1290.2
105°	146.4	154.5	171.9	197.5	230.0	284.6	388.0	579.7	860.8	1169.8	1411.4
107.5°	178.9	186.8	202.8	228.2	260.9	313.9	404.0	562.5	794.8	1067.8	1324.1
110°	202.1	209.1	224.2	248.6	282.3	333.4	417.0	558.8	763.2	1003.7	1248.8



TEST NUMBER: P331278

CATALOG NUMBER: SA2XXDIP-C290D1080U835-4F0-1E-UDD-A4

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	222.6	230.5	244.6	268.1	302.7	352.0	431.0	559.7	742.8	959.1	1180.0
115°	255.6	262.5	276.5	299.7	331.1	381.0	451.9	564.6	720.2	903.8	1095.5
117.5°	287.4	294.4	306.7	329.0	361.5	407.7	474.2	572.9	709.3	868.9	1031.8
120°	307.8	314.8	325.3	348.5	381.0	426.3	489.1	578.5	702.8	850.3	1000.2
122.5°	326.4	333.4	344.8	368.0	401.5	444.0	502.1	585.0	699.1	834.5	975.1
125°	352.0	359.0	372.9	396.1	428.7	470.5	522.8	594.8	692.4	812.0	938.6
127.5°	373.6	383.4	398.7	421.0	454.4	495.1	542.0	604.8	688.4	791.1	902.6
130°	385.7	397.3	413.6	436.8	469.3	510.0	554.1	612.2	686.5	777.2	879.4
132.5°	397.8	410.3	427.5	451.7	484.2	523.0	566.2	619.6	685.6	766.0	857.1
135°	413.6	427.5	444.9	471.6	504.2	541.3	582.0	628.5	684.2	750.4	825.9
137.5°	430.3	444.2	462.8	489.3	519.5	556.2	594.1	636.4	684.0	739.5	801.1
140°	441.4	455.4	474.0	499.5	529.7	564.6	600.6	640.1	683.1	733.0	785.3
142.5°	452.6	465.6	484.2	508.8	537.2	571.1	606.2	642.9	683.1	726.5	772.3
145°	471.6	483.3	500.7	523.9	549.5	580.8	613.4	645.9	680.7	717.9	753.9
147.5°	490.0	501.1	517.2	536.5	559.2	588.7	617.3	646.8	676.6	709.1	739.8
150°	503.0	512.3	527.4	544.8	565.7	592.5	619.2	645.9	673.8	701.6	729.5
152.5°	514.2	523.4	536.7	553.2	572.2	596.2	620.1	644.0	669.1	695.1	719.3
155°	532.0	539.0	551.8	564.6	582.0	601.7	621.5	641.2	661.0	683.1	705.1
157.5°	547.4	553.0	564.1	574.3	589.0	605.7	621.5	635.9	652.6	671.7	688.6
160°	557.6	562.2	571.5	580.8	593.6	607.6	621.5	633.1	647.1	663.3	678.4
162.5°	566.0	570.6	578.0	586.4	596.4	608.5	620.6	630.3	642.4	655.9	668.2
165°	577.4	579.7	586.6	592.5	599.4	609.9	618.0	625.0	633.1	643.6	652.9
167.5°	586.9	589.0	593.4	597.6	602.0	609.6	616.4	619.6	625.0	631.5	638.2
170°	592.5	593.6	597.1	599.4	602.9	608.7	614.5	616.8	620.3	625.0	630.8
172.5°	597.1	596.4	599.9	601.3	603.8	607.8	611.7	613.1	614.8	618.5	622.4
175°	601.7	600.6	602.9	602.9	604.1	606.4	608.7	607.6	608.7	609.9	613.4
177.5°	603.1	602.2	604.1	604.1	604.1	605.0	606.9	605.0	604.1	605.0	606.9
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1	604.1



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	591.1	591.1	591.1	591.1	591.1	591.1	591.1
2.5°	613.1	615.6	615.6	616.0	618.9	618.5	618.3
5°	652.4	656.3	656.7	660.8	663.5	662.6	660.1
7.5°	689.5	696.7	702.2	705.2	708.8	711.0	710.0
10°	719.0	729.4	735.8	740.1	745.3	749.2	747.8
12.5°	745.7	758.1	766.9	774.3	774.9	779.9	776.5
15°	787.4	800.5	801.9	807.3	811.7	811.2	811.4
17.5°	801.1	805.3	806.2	806.3	806.4	804.8	801.3
20°	796.2	794.6	790.8	787.8	782.6	781.9	777.4
22.5°	772.9	767.9	758.2	751.8	743.7	741.6	740.3
25°	727.2	716.0	700.6	685.8	681.7	673.8	676.0
27.5°	664.3	647.0	630.2	618.3	607.4	595.5	598.9
30°	620.2	600.6	577.0	558.8	547.2	535.9	533.8
32.5°	567.5	538.8	512.5	496.5	478.7	471.5	463.7
35°	476.6	448.6	422.5	400.0	387.1	377.1	368.0
37.5°	394.9	362.7	341.6	323.4	314.0	308.3	309.8
40°	344.2	316.0	300.5	286.7	278.0	274.0	274.9
42.5°	303.1	282.0	269.3	259.8	253.7	251.4	250.9
45°	256.5	244.7	234.2	228.8	225.8	223.3	221.7
47.5°	224.7	215.0	209.1	205.9	203.3	200.8	200.7
50°	205.6	199.2	195.1	191.7	189.7	187.9	189.5
52.5°	191.0	185.2	181.1	178.1	177.3	175.7	175.6
55°	169.5	164.9	162.0	159.2	157.9	157.0	155.8
57.5°	149.8	145.5	142.8	141.1	138.5	137.6	137.2
60°	135.8	132.4	129.7	127.4	126.3	124.5	124.5
62.5°	122.9	119.5	117.0	115.3	113.4	112.7	112.9
65°	104.3	101.5	99.0	97.2	96.8	95.4	95.9
67.5°	87.1	85.3	82.6	81.6	80.8	80.1	79.5
70°	75.6	73.8	72.5	71.1	70.4	70.4	70.4
72.5°	66.0	63.8	63.0	61.3	61.7	61.0	60.2
75°	51.1	49.7	49.1	48.4	47.3	47.3	47.3
77.5°	37.6	37.2	36.4	35.7	35.4	35.2	35.3
80°	29.1	28.8	28.4	28.4	27.9	27.7	27.3
82.5°	22.4	21.8	21.5	21.3	21.2	21.2	21.1
85°	12.7	12.3	12.3	12.5	12.0	12.0	12.3
87.5°	11.9	12.3	12.4	12.4	12.6	12.4	12.4
90°	34.9	37.2	38.3	38.3	38.3	38.3	38.3
92.5°	86.9	77.1	69.9	69.0	65.3	66.2	64.4
95°	233.5	184.7	159.1	144.0	134.8	131.3	132.4
97.5°	581.1	455.4	371.5	316.0	287.4	270.4	260.7
100°	916.6	757.4	616.8	520.4	470.5	436.8	415.9
102.5°	1257.6	1141.2	992.3	887.5	802.3	760.2	731.9
105°	1542.7	1557.8	1519.5	1447.4	1375.4	1325.5	1309.2
107.5°	1521.8	1642.6	1698.8	1707.9	1703.9	1693.9	1672.3
110°	1456.7	1605.4	1700.7	1750.6	1772.7	1783.2	1782.0



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	1379.6	1538.5	1647.7	1717.2	1754.1	1773.9	1780.1
115°	1274.4	1426.5	1546.2	1628.7	1682.1	1712.3	1722.8
117.5°	1188.9	1326.9	1439.1	1523.2	1579.6	1611.5	1620.3
120°	1144.2	1267.4	1373.1	1454.4	1509.0	1542.7	1554.3
122.5°	1107.1	1223.7	1319.2	1392.1	1445.8	1475.8	1485.5
125°	1058.3	1160.5	1247.6	1315.0	1359.2	1388.2	1397.5
127.5°	1010.9	1107.3	1187.7	1246.5	1287.8	1312.9	1320.4
130°	979.3	1071.1	1147.7	1204.7	1244.2	1267.4	1276.7
132.5°	949.6	1033.9	1105.9	1161.9	1201.4	1222.8	1231.1
135°	902.6	979.3	1044.3	1094.3	1132.6	1153.5	1158.2
137.5°	865.2	926.1	982.8	1028.3	1061.3	1079.7	1086.6
140°	841.1	894.5	945.6	982.8	1013.0	1030.4	1037.4
142.5°	819.7	865.7	908.4	943.7	971.2	986.7	988.1
145°	792.3	828.3	862.0	889.8	909.6	921.2	924.7
147.5°	770.0	798.1	822.7	845.7	861.5	869.4	871.5
150°	755.1	779.5	800.4	817.8	831.8	838.7	839.9
152.5°	743.0	763.7	781.8	795.5	807.6	812.7	812.9
155°	723.7	741.1	753.9	766.7	774.8	779.5	777.2
157.5°	704.2	718.8	728.8	737.9	744.6	746.7	746.7
160°	691.2	704.0	712.1	720.2	726.0	727.2	727.2
162.5°	679.1	690.0	696.3	704.4	708.4	709.5	708.6
165°	661.0	669.1	673.8	678.4	683.1	683.1	681.9
167.5°	644.5	650.1	654.3	656.3	658.9	658.7	657.3
170°	634.3	638.9	641.2	642.4	645.9	644.7	642.4
172.5°	625.0	628.7	630.1	631.3	632.9	631.7	630.3
175°	614.5	615.7	616.8	616.8	618.0	616.8	614.5
177.5°	606.9	607.8	607.8	607.8	607.8	606.9	605.0
180°	604.1	604.1	604.1	604.1	604.1	604.1	604.1

(END OF REPORT)