

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: P331278-935

Luminaire Tested: **SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331278-935  
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-C290D1080U935-4F0-1E-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**

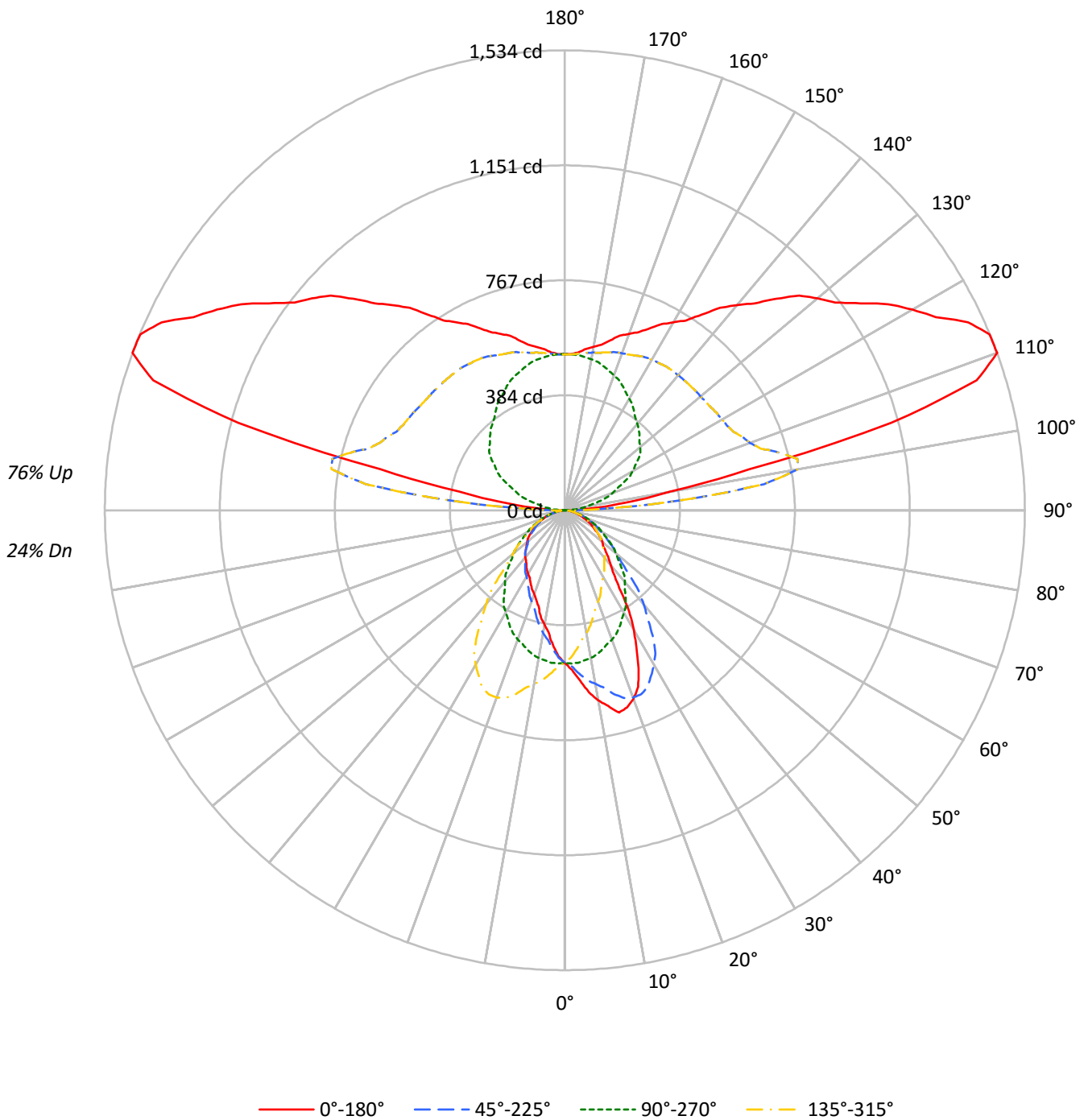
Lumens per Lamp: N/A  
Luminaire Lumens: 4746.7 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.16 / 1.23  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				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°	8217	8217	8217	8217
5°	9211	8271	7329	8271
10°	10557	8202	6342	8202
15°	11677	8052	5605	8052
20°	11500	7892	5108	7892
25°	10368	7675	4794	7675
30°	8569	7333	4566	7333
35°	6244	6974	4401	6974
40°	4989	6551	4312	6551
45°	4359	6060	4190	6060
50°	4099	5586	4107	5586
55°	3775	5103	3997	5103
60°	3462	4592	3830	4592
65°	3156	4130	3660	4130
70°	2861	3682	3418	3682
75°	2539	3188	3026	3188
80°	2185	2631	2436	2631
85°	1964	1964	1445	1964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	1.0
10°-20°	140.9	3.0
20°-30°	204.5	4.3
30°-40°	215.8	4.5
40°-50°	191.1	4.0
50°-60°	152.5	3.2
60°-70°	103.6	2.2
70°-80°	53.1	1.1
80°-90°	17.5	0.4
90°-100°	208.0	4.4
100°-110°	705.7	14.9
110°-120°	749.7	15.8
120°-130°	617.2	13.0
130°-140°	495.6	10.4
140°-150°	374.5	7.9
150°-160°	263.2	5.5
160°-170°	154.9	3.3
170°-180°	50.4	1.1
0°-30°	393.9	8.3
0°-40°	609.7	12.8
0°-60°	953.2	20.1
0°-90°	1127.5	23.8
90°-120°	1663.4	35.0
90°-150°	3150.7	66.4
90°-180°	3619.0	76.2
0°-180°	4746.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	509	509	509	509	509	
5°	568	510	452	510	568	57
15°	699	482	335	482	699	193
25°	582	431	269	431	582	263
35°	317	354	223	354	317	206
45°	191	265	184	265	191	150
55°	134	181	142	181	134	120
65°	83	108	96	108	83	82
75°	41	51	48	51	41	43
85°	11	11	8	11	11	12
90°	33	1	33	1	33	18
95°	114	35	114	35	114	148
105°	1127	122	1127	122	1127	1091
115°	1483	215	1483	215	1483	1453
125°	1203	300	1203	300	1203	1087
135°	997	352	997	352	997	775
145°	796	402	796	402	796	506
155°	669	457	669	457	669	312
165°	587	498	587	498	587	168
175°	529	519	529	519	529	51
180°	520	520	520	520	520	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	532.4	532.5	532.9	530.4	530.0	530.0	527.9	526.0	523.7	520.8	521.2
5°	568.3	570.5	571.3	568.9	565.4	565.1	561.7	556.3	551.1	547.1	544.2
7.5°	611.3	612.2	610.3	607.2	604.6	599.9	593.7	587.6	579.1	571.4	565.6
10°	643.9	645.1	641.7	637.2	633.5	628.0	619.1	609.8	598.7	588.0	579.4
12.5°	668.6	671.5	667.2	666.7	660.3	652.7	642.0	637.4	621.7	606.7	597.4
15°	698.6	698.4	698.9	695.1	690.4	689.2	678.0	665.6	643.5	634.6	619.4
17.5°	689.9	692.9	694.3	694.2	694.1	693.4	689.7	682.0	670.9	656.6	639.0
20°	669.3	673.2	673.8	678.3	680.9	684.2	685.5	683.4	676.6	664.6	649.4
22.5°	637.4	638.5	640.3	647.3	652.8	661.2	665.5	672.8	670.1	664.3	651.5
25°	582.0	580.1	586.9	590.5	603.2	616.5	626.1	636.6	646.0	651.7	648.0
27.5°	515.7	512.7	523.0	532.4	542.6	557.1	572.0	589.6	604.2	622.7	629.0
30°	459.6	461.4	471.1	481.1	496.8	517.1	534.0	553.3	574.3	594.8	609.1
32.5°	399.2	406.0	412.2	427.5	441.3	463.9	488.6	512.8	538.9	562.2	584.4
35°	316.8	324.7	333.3	344.4	363.8	386.2	410.4	443.0	478.6	510.5	536.7
37.5°	266.7	265.4	270.4	278.4	294.1	312.3	340.0	372.2	414.1	451.6	488.6
40°	236.7	235.9	239.4	246.8	258.7	272.1	296.4	324.7	363.6	409.4	453.4
42.5°	216.0	216.5	218.4	223.7	231.9	242.8	261.0	285.1	320.7	363.9	411.1
45°	190.9	192.3	194.4	197.0	201.6	210.7	220.8	238.1	266.2	302.2	348.7
47.5°	172.8	172.9	175.0	177.3	180.0	185.1	193.5	204.2	224.1	253.4	293.4
50°	163.2	161.8	163.3	165.1	168.0	171.5	177.0	187.2	200.4	224.1	257.6
52.5°	151.2	151.3	152.7	153.3	155.9	159.5	164.5	171.5	183.6	202.1	229.5
55°	134.1	135.2	136.0	137.1	139.5	142.0	145.9	150.6	160.0	173.8	194.2
57.5°	118.1	118.5	119.2	121.5	123.0	125.3	129.0	133.3	139.4	149.6	165.0
60°	107.2	107.2	108.7	109.7	111.7	114.0	116.9	121.1	126.6	134.9	147.3
62.5°	97.2	97.0	97.6	99.3	100.7	102.9	105.8	109.3	114.5	122.0	132.1
65°	82.6	82.1	83.3	83.7	85.2	87.4	89.8	93.5	97.6	103.1	112.1
67.5°	68.4	69.0	69.6	70.3	71.1	73.4	75.0	77.6	81.1	85.7	91.7
70°	60.6	60.6	60.6	61.2	62.4	63.5	65.1	67.2	70.6	74.5	80.0
72.5°	51.8	52.5	53.1	52.8	54.2	54.9	56.8	58.0	61.2	63.7	68.5
75°	40.7	40.7	40.7	41.7	42.3	42.8	44.0	45.2	46.8	49.9	52.4
77.5°	30.4	30.3	30.5	30.7	31.3	32.0	32.4	33.4	34.9	36.3	38.5
80°	23.5	23.8	24.0	24.5	24.5	24.8	25.1	26.4	27.4	28.3	29.7
82.5°	18.2	18.3	18.3	18.3	18.5	18.8	19.3	19.7	20.1	20.8	21.9
85°	10.6	10.3	10.3	10.8	10.6	10.6	10.9	11.4	11.4	11.5	12.1
87.5°	10.7	10.7	10.8	10.7	10.7	10.6	10.2	10.5	10.8	11.2	11.1
90°	33.0	33.0	33.0	33.0	33.0	32.0	30.0	32.0	33.0	34.0	33.0
92.5°	55.4	57.0	56.2	59.4	60.2	66.4	74.8	87.2	109.9	130.0	128.2
95°	114.0	113.0	116.1	124.0	137.0	159.0	201.0	262.1	343.1	392.1	347.1
97.5°	224.5	232.8	247.5	272.1	319.9	392.1	500.3	611.5	702.1	669.3	504.1
100°	358.1	376.1	405.1	448.1	531.1	652.1	789.2	913.2	934.2	790.1	544.1
102.5°	630.2	654.5	690.8	764.1	854.4	982.6	1082.8	1110.9	1020.6	794.2	528.9
105°	1127.2	1141.3	1184.2	1246.2	1308.3	1341.3	1328.3	1215.2	1007.2	741.1	499.1
107.5°	1439.9	1458.4	1467.1	1470.5	1462.7	1414.3	1310.3	1140.1	919.4	684.3	484.3
110°	1534.3	1535.3	1526.3	1507.3	1464.3	1382.2	1254.2	1075.2	864.2	657.1	481.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1532.7	1527.3	1510.3	1478.5	1418.7	1324.6	1187.8	1016.0	825.8	639.6	481.9
115°	1483.3	1474.3	1448.3	1402.3	1331.3	1228.2	1097.3	943.2	778.2	620.1	486.1
117.5°	1395.1	1387.5	1360.0	1311.5	1239.1	1142.5	1023.6	888.4	748.1	610.7	493.3
120°	1338.3	1328.3	1299.2	1252.2	1182.2	1091.2	985.2	861.2	732.1	605.1	498.1
122.5°	1279.0	1270.7	1244.8	1198.6	1135.8	1053.6	953.2	839.6	718.5	601.9	503.7
125°	1203.2	1195.2	1170.3	1132.2	1074.2	999.2	911.2	808.1	699.1	596.2	512.1
127.5°	1136.9	1130.4	1108.8	1073.2	1022.6	953.4	870.4	777.1	681.1	592.7	520.7
130°	1099.2	1091.2	1071.3	1037.2	988.2	922.2	843.2	757.2	669.2	591.1	527.1
132.5°	1060.0	1052.8	1034.4	1000.4	952.2	890.2	817.6	738.0	659.5	590.3	533.5
135°	997.2	993.2	975.2	942.2	899.1	843.2	777.1	711.1	646.1	589.1	541.1
137.5°	935.6	929.6	913.8	885.4	846.2	797.4	744.9	689.7	636.7	588.9	547.9
140°	893.2	887.2	872.2	846.2	814.2	770.2	724.2	676.1	631.1	588.1	551.1
142.5°	850.8	849.5	836.2	812.5	782.1	745.4	705.8	665.0	625.5	588.1	553.5
145°	796.2	793.2	783.2	766.1	742.2	713.2	682.2	649.1	618.1	586.1	556.1
147.5°	750.4	748.6	741.8	728.1	708.3	687.2	663.0	637.0	610.5	582.6	556.9
150°	723.2	722.1	716.2	704.1	689.1	671.1	650.1	628.1	604.1	580.1	556.1
152.5°	699.9	699.7	695.3	684.9	673.1	657.5	639.7	619.3	598.5	576.1	554.5
155°	669.2	671.1	667.1	660.1	649.1	638.1	623.1	607.1	588.1	569.1	552.1
157.5°	642.9	642.9	641.1	635.3	627.5	618.9	606.3	592.9	578.3	561.9	547.5
160°	626.1	626.1	625.1	620.1	613.1	606.1	595.1	584.1	571.1	557.2	545.1
162.5°	610.1	610.9	609.9	606.5	599.5	594.1	584.7	575.3	564.7	553.1	542.7
165°	587.1	588.1	588.1	584.1	580.1	576.1	569.1	562.1	554.1	545.1	538.1
167.5°	565.9	567.1	567.3	565.1	563.4	559.7	554.9	549.5	543.7	538.1	533.5
170°	553.1	555.1	556.1	553.1	552.1	550.1	546.1	543.1	538.1	534.1	531.1
172.5°	542.7	543.9	544.9	543.5	542.5	541.3	538.1	535.9	532.5	529.3	527.9
175°	529.1	531.1	532.1	531.1	531.1	530.1	529.1	528.1	525.1	524.1	523.1
177.5°	520.9	522.5	523.3	523.3	523.3	523.3	522.5	522.5	520.9	520.1	520.9
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	522.2	521.0	520.2	517.4	514.9	512.4	511.6	511.9	508.4	505.1	503.8
5°	542.6	538.6	534.9	529.7	523.4	516.5	513.1	510.3	503.4	496.0	491.7
7.5°	560.8	555.2	548.0	538.1	529.0	518.2	511.3	505.3	495.3	484.8	478.4
10°	571.9	564.3	555.1	542.9	531.8	518.7	509.5	500.3	488.6	476.0	468.2
12.5°	581.4	571.2	562.1	546.6	533.4	516.9	506.1	493.1	480.8	465.9	458.2
15°	604.2	585.2	568.0	550.4	534.2	511.3	499.1	481.7	465.5	447.1	438.3
17.5°	621.7	600.4	573.3	551.0	532.0	506.6	488.9	468.0	448.8	427.8	415.9
20°	631.7	607.3	578.2	551.6	528.9	499.9	480.5	459.3	436.8	413.1	400.2
22.5°	637.7	612.0	583.2	549.2	522.6	494.5	470.1	446.7	424.0	398.4	384.9
25°	639.6	616.1	585.6	547.3	514.8	482.9	453.6	430.8	403.3	379.4	359.7
27.5°	630.3	613.5	584.1	543.5	505.8	468.5	435.8	410.1	381.0	355.1	335.2
30°	618.8	609.1	580.5	539.8	498.5	458.5	422.5	393.3	364.4	338.2	317.8
32.5°	601.2	599.1	573.9	534.5	490.9	445.8	408.5	379.1	347.0	321.2	301.9
35°	566.5	575.8	560.0	522.6	476.5	427.7	387.4	353.8	320.6	295.9	277.8
37.5°	519.9	543.2	539.1	505.2	456.9	408.1	363.6	328.5	296.8	271.9	254.1
40°	487.8	517.5	521.9	491.9	443.2	393.0	345.8	310.8	279.9	257.2	239.2
42.5°	453.4	488.1	499.9	476.0	428.2	376.9	329.8	293.6	262.9	240.9	225.0
45°	395.7	441.6	463.0	449.3	403.1	350.7	302.2	265.4	237.6	216.9	204.6
47.5°	341.7	391.9	420.6	415.8	375.2	323.3	275.3	240.0	213.0	196.5	185.5
50°	303.6	355.2	389.8	391.4	355.2	303.8	255.6	222.4	197.5	182.1	173.1
52.5°	270.4	319.7	357.4	365.8	332.8	283.4	238.0	204.8	183.0	168.8	160.7
55°	227.0	268.7	310.6	325.9	299.5	252.5	210.4	181.3	160.7	151.0	144.0
57.5°	188.8	223.5	262.2	279.1	262.8	222.6	183.1	157.8	141.2	132.6	127.2
60°	168.6	196.0	230.4	250.6	236.4	200.7	166.3	142.2	128.5	120.9	115.8
62.5°	149.8	174.1	203.2	221.6	214.0	180.2	149.4	128.1	116.3	109.2	105.5
65°	123.6	142.8	165.3	182.3	177.2	151.6	126.3	108.1	98.8	93.1	90.1
67.5°	101.8	115.6	131.2	146.1	142.1	123.9	103.7	89.5	82.5	77.6	75.8
70°	88.0	98.6	112.4	124.4	121.1	106.2	90.1	78.0	72.0	67.8	66.1
72.5°	74.9	83.5	94.2	103.9	101.7	89.3	75.9	66.8	62.1	58.3	56.9
75°	56.6	63.2	69.7	76.1	75.5	66.0	58.1	51.1	47.4	44.4	43.8
77.5°	41.8	45.5	49.9	53.6	52.6	47.1	41.0	36.9	34.3	32.3	31.9
80°	31.9	34.0	37.2	39.9	38.6	36.2	31.3	28.3	26.4	24.5	23.7
82.5°	23.2	25.2	27.1	28.7	27.6	25.4	22.4	20.4	19.2	17.9	17.6
85°	12.1	13.3	14.1	14.5	14.1	12.7	11.4	10.6	9.6	9.0	8.8
87.5°	10.1	8.7	7.7	7.4	6.5	6.1	4.7	3.6	4.0	4.7	4.8
90°	27.0	20.0	15.0	12.0	10.0	8.0	4.0	1.0	4.0	8.0	10.0
92.5°	99.8	68.0	45.4	36.0	29.2	24.8	17.6	12.2	17.6	24.8	29.2
95°	231.0	144.0	98.0	74.0	58.0	49.0	39.0	35.0	39.0	49.0	58.0
97.5°	311.3	190.0	132.2	105.0	86.6	73.0	62.4	57.0	62.4	73.0	86.6
100°	328.0	206.0	153.0	125.0	105.0	89.0	80.0	77.0	80.0	89.0	105.0
102.5°	328.9	220.4	171.4	143.4	122.6	106.6	97.6	95.4	97.6	106.6	122.6
105°	334.1	245.0	198.0	170.0	148.0	133.0	126.1	122.0	126.1	133.0	148.0
107.5°	347.8	270.3	224.6	196.5	174.6	160.8	154.0	150.8	154.0	160.8	174.6
110°	359.0	287.1	243.1	214.0	193.0	180.0	174.0	170.0	174.0	180.0	193.0





TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	371.1	303.1	260.6	230.8	210.6	198.5	191.7	187.6	191.7	198.5	210.6
115°	389.1	328.0	285.1	258.0	238.1	226.0	220.1	215.1	220.1	226.0	238.1
117.5°	408.3	351.0	311.3	283.3	264.1	253.5	247.5	243.5	247.5	253.5	264.1
120°	421.1	367.0	328.0	300.1	280.1	271.0	265.0	261.1	265.0	271.0	280.1
122.5°	432.3	382.3	345.7	316.8	296.9	287.1	281.0	277.8	281.0	287.1	296.9
125°	450.1	405.1	369.1	341.0	321.1	309.1	303.1	300.1	303.1	309.1	321.1
127.5°	466.7	426.3	391.2	362.5	343.3	330.1	321.7	317.6	321.7	330.1	343.3
130°	477.1	439.1	404.1	376.1	356.1	342.1	332.1	328.0	332.1	342.1	356.1
132.5°	487.5	450.3	416.9	388.9	368.1	353.3	342.5	337.7	342.5	353.3	368.1
135°	501.1	466.1	434.1	406.0	383.1	368.1	356.1	352.1	356.1	368.1	383.1
137.5°	511.5	478.9	447.3	421.3	398.5	382.5	370.5	365.7	370.5	382.5	398.5
140°	517.1	486.1	456.1	430.1	408.1	392.1	380.0	376.1	380.0	392.1	408.1
142.5°	521.9	491.7	462.5	438.1	416.9	400.9	389.7	386.5	389.7	400.9	416.9
145°	528.1	500.1	473.1	451.1	431.1	416.1	406.0	402.1	406.0	416.1	431.1
147.5°	531.5	506.9	481.5	461.9	445.3	431.4	421.9	418.9	421.9	431.4	445.3
150°	533.1	510.1	487.1	469.1	454.1	441.1	433.1	430.1	433.1	441.1	454.1
152.5°	533.9	513.3	492.7	476.3	462.1	450.6	442.7	441.3	442.7	450.6	462.1
155°	535.1	518.1	501.1	486.1	475.1	464.1	458.1	457.1	458.1	464.1	475.1
157.5°	535.1	521.5	507.1	494.5	485.7	476.1	471.3	470.3	471.3	476.1	485.7
160°	535.1	523.1	511.1	500.1	492.1	484.1	480.1	479.1	480.1	484.1	492.1
162.5°	534.3	523.9	513.5	504.9	497.7	491.3	487.3	487.9	487.3	491.3	497.7
165°	532.1	525.1	516.1	510.1	505.1	499.1	497.1	498.1	497.1	499.1	505.1
167.5°	530.7	524.9	518.3	514.5	510.9	507.1	505.3	506.5	505.3	507.1	510.9
170°	529.1	524.1	519.1	516.1	514.1	511.1	510.1	512.1	510.1	511.1	514.1
172.5°	526.7	523.3	519.9	517.7	516.5	513.5	514.1	515.3	514.1	513.5	516.5
175°	524.1	522.1	520.1	519.1	519.1	517.1	518.1	519.1	518.1	517.1	519.1
177.5°	522.5	520.9	520.1	520.1	520.1	518.5	519.3	520.9	519.3	518.5	520.1
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	502.2	501.3	498.0	496.3	493.4	490.8	489.0	489.8	490.4	490.2	489.7
5°	487.8	484.1	478.4	473.6	470.0	463.6	460.8	459.4	458.2	456.9	455.6
7.5°	470.6	464.8	456.7	449.7	443.2	435.1	430.5	427.8	425.0	421.9	419.1
10°	458.5	450.2	441.6	431.9	424.0	416.8	410.4	406.0	402.1	398.4	395.7
12.5°	445.7	436.2	425.5	412.2	403.6	393.1	392.2	384.6	378.5	376.2	373.0
15°	425.2	411.9	398.4	382.5	375.7	366.4	360.5	354.6	349.3	345.6	344.7
17.5°	402.0	384.8	371.3	360.0	348.8	339.1	333.7	329.1	324.7	319.8	319.1
20°	384.4	369.5	354.8	344.8	333.3	323.5	316.8	312.2	308.4	305.5	303.0
22.5°	367.6	351.3	337.9	327.0	315.6	307.7	302.5	297.9	294.8	291.6	289.2
25°	340.7	328.0	313.3	301.0	291.6	286.5	282.2	278.4	276.4	274.2	271.5
27.5°	317.2	303.1	289.4	279.8	271.6	267.1	264.0	261.3	259.5	258.2	256.7
30°	300.7	286.4	275.6	266.2	259.3	254.9	252.9	251.3	249.2	248.4	247.6
32.5°	284.6	271.8	262.6	254.4	248.0	245.0	243.2	241.8	240.1	239.4	237.7
35°	262.1	251.3	242.4	237.8	232.6	230.0	228.7	226.7	225.2	224.4	224.1
37.5°	240.8	231.5	225.6	219.8	217.6	216.0	214.1	212.8	212.3	212.2	212.0
40°	227.0	219.5	214.1	209.5	208.5	206.1	204.6	203.5	203.5	203.6	203.5
42.5°	214.6	207.7	203.0	199.0	197.9	196.5	194.8	194.8	195.1	195.8	195.1
45°	195.6	190.7	187.4	185.5	183.3	181.9	181.7	182.3	182.4	182.7	183.3
47.5°	178.1	174.9	171.9	169.7	168.8	168.6	168.3	169.4	170.3	170.7	171.5
50°	167.8	164.1	161.5	160.1	159.4	159.0	159.4	160.6	161.4	162.3	162.9
52.5°	156.3	153.6	151.9	150.8	150.5	150.8	150.8	152.1	153.3	153.8	154.0
55°	140.3	138.3	137.9	136.1	136.9	136.7	137.7	138.4	139.7	140.9	141.0
57.5°	124.2	122.7	121.7	121.8	122.1	123.0	123.7	125.1	126.3	127.6	127.7
60°	113.7	112.9	112.3	112.3	112.6	113.8	114.8	116.1	116.9	117.8	118.3
62.5°	103.9	103.1	102.5	102.9	103.9	104.6	105.7	106.5	107.3	108.1	108.3
65°	88.6	88.3	88.8	89.2	89.4	90.3	91.7	92.3	93.1	93.5	94.9
67.5°	74.5	74.6	74.5	75.0	76.2	76.4	77.7	79.0	79.2	80.0	80.8
70°	64.9	65.3	65.7	66.1	67.1	67.5	68.4	69.1	69.8	70.4	71.0
72.5°	56.1	56.2	56.7	56.6	57.4	58.2	59.1	59.7	60.4	61.2	61.7
75°	43.2	43.2	43.7	43.8	44.8	45.8	45.5	46.0	46.8	47.5	48.0
77.5°	31.6	31.2	31.6	31.8	32.1	32.9	33.1	33.6	34.5	34.3	34.7
80°	24.0	23.5	24.0	24.3	24.3	25.2	25.2	25.7	26.2	25.7	26.2
82.5°	17.1	16.9	17.3	17.4	17.7	17.7	18.0	18.1	18.7	18.4	18.7
85°	8.6	8.4	8.6	8.4	8.6	8.8	8.8	8.6	8.6	9.0	8.4
87.5°	5.1	5.5	6.4	7.7	8.8	8.9	8.4	8.3	7.9	8.0	8.2
90°	12.0	15.0	20.0	27.0	33.0	34.0	33.0	32.0	30.0	32.0	33.0
92.5°	36.0	45.4	68.0	99.8	128.2	130.0	109.9	87.2	74.8	66.4	60.2
95°	74.0	98.0	144.0	231.0	347.1	392.1	343.1	262.1	201.0	159.0	137.0
97.5°	105.0	132.2	190.0	311.3	504.1	669.3	702.1	611.5	500.3	392.1	319.9
100°	125.0	153.0	206.0	328.0	544.1	790.1	934.2	913.2	789.2	652.1	531.1
102.5°	143.4	171.4	220.4	328.9	528.9	794.2	1020.6	1110.9	1082.8	982.6	854.4
105°	170.0	198.0	245.0	334.1	499.1	741.1	1007.2	1215.2	1328.3	1341.3	1308.3
107.5°	196.5	224.6	270.3	347.8	484.3	684.3	919.4	1140.1	1310.3	1414.3	1462.7
110°	214.0	243.1	287.1	359.0	481.1	657.1	864.2	1075.2	1254.2	1382.2	1464.3



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	230.8	260.6	303.1	371.1	481.9	639.6	825.8	1016.0	1187.8	1324.6	1418.7
115°	258.0	285.1	328.0	389.1	486.1	620.1	778.2	943.2	1097.3	1228.2	1331.3
117.5°	283.3	311.3	351.0	408.3	493.3	610.7	748.1	888.4	1023.6	1142.5	1239.1
120°	300.1	328.0	367.0	421.1	498.1	605.1	732.1	861.2	985.2	1091.2	1182.2
122.5°	316.8	345.7	382.3	432.3	503.7	601.9	718.5	839.6	953.2	1053.6	1135.8
125°	341.0	369.1	405.1	450.1	512.1	596.2	699.1	808.1	911.2	999.2	1074.2
127.5°	362.5	391.2	426.3	466.7	520.7	592.7	681.1	777.1	870.4	953.4	1022.6
130°	376.1	404.1	439.1	477.1	527.1	591.1	669.2	757.2	843.2	922.2	988.2
132.5°	388.9	416.9	450.3	487.5	533.5	590.3	659.5	738.0	817.6	890.2	952.2
135°	406.0	434.1	466.1	501.1	541.1	589.1	646.1	711.1	777.1	843.2	899.1
137.5°	421.3	447.3	478.9	511.5	547.9	588.9	636.7	689.7	744.9	797.4	846.2
140°	430.1	456.1	486.1	517.1	551.1	588.1	631.1	676.1	724.2	770.2	814.2
142.5°	438.1	462.5	491.7	521.9	553.5	588.1	625.5	665.0	705.8	745.4	782.1
145°	451.1	473.1	500.1	528.1	556.1	586.1	618.1	649.1	682.2	713.2	742.2
147.5°	461.9	481.5	506.9	531.5	556.9	582.6	610.5	637.0	663.0	687.2	708.3
150°	469.1	487.1	510.1	533.1	556.1	580.1	604.1	628.1	650.1	671.1	689.1
152.5°	476.3	492.7	513.3	533.9	554.5	576.1	598.5	619.3	639.7	657.5	673.1
155°	486.1	501.1	518.1	535.1	552.1	569.1	588.1	607.1	623.1	638.1	649.1
157.5°	494.5	507.1	521.5	535.1	547.5	561.9	578.3	592.9	606.3	618.9	627.5
160°	500.1	511.1	523.1	535.1	545.1	557.2	571.1	584.1	595.1	606.1	613.1
162.5°	504.9	513.5	523.9	534.3	542.7	553.1	564.7	575.3	584.7	594.1	599.5
165°	510.1	516.1	525.1	532.1	538.1	545.1	554.1	562.1	569.1	576.1	580.1
167.5°	514.5	518.3	524.9	530.7	533.5	538.1	543.7	549.5	554.9	559.7	563.4
170°	516.1	519.1	524.1	529.1	531.1	534.1	538.1	543.1	546.1	550.1	552.1
172.5°	517.7	519.9	523.3	526.7	527.9	529.3	532.5	535.9	538.1	541.3	542.5
175°	519.1	520.1	522.1	524.1	523.1	524.1	525.1	528.1	529.1	530.1	531.1
177.5°	520.1	520.1	520.9	522.5	520.9	520.1	520.9	522.5	522.5	523.3	523.3
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	488.1	487.8	487.8	486.4	487.8	487.8	488.1	489.7	490.2	490.4	489.8
5°	452.8	452.2	451.3	452.2	451.3	452.2	452.8	455.6	456.9	458.2	459.4
7.5°	417.8	415.5	415.2	412.8	415.2	415.5	417.8	419.1	421.9	425.0	427.8
10°	392.4	390.8	390.5	386.8	390.5	390.8	392.4	395.7	398.4	402.1	406.0
12.5°	373.0	369.2	370.0	367.8	370.0	369.2	373.0	373.0	376.2	378.5	384.6
15°	339.3	339.3	338.5	335.3	338.5	339.3	339.3	344.7	345.6	349.3	354.6
17.5°	315.2	314.8	313.0	313.9	313.0	314.8	315.2	319.1	319.8	324.7	329.1
20°	300.8	299.6	297.3	297.3	297.3	299.6	300.8	303.0	305.5	308.4	312.2
22.5°	287.2	287.1	284.6	285.4	284.6	287.1	287.2	289.2	291.6	294.8	297.9
25°	271.3	269.8	268.5	269.1	268.5	269.8	271.3	271.5	274.2	276.4	278.4
27.5°	256.1	255.3	255.2	253.7	255.2	255.3	256.1	256.7	258.2	259.5	261.3
30°	247.5	245.5	245.8	244.9	245.8	245.5	247.5	247.6	248.4	249.2	251.3
32.5°	237.4	236.7	236.3	235.5	236.3	236.7	237.4	237.7	239.4	240.1	241.8
35°	223.8	223.9	223.0	223.3	223.0	223.9	223.8	224.1	224.4	225.2	226.7
37.5°	211.8	212.4	212.0	212.1	212.0	212.4	211.8	212.0	212.2	212.3	212.8
40°	204.0	204.0	204.0	204.6	204.0	204.0	204.0	203.5	203.6	203.5	203.5
42.5°	196.5	196.1	195.9	195.8	195.9	196.1	196.5	195.1	195.8	195.1	194.8
45°	183.7	184.3	184.4	183.5	184.4	184.3	183.7	183.3	182.7	182.4	182.3
47.5°	172.0	172.1	172.0	172.9	172.0	172.1	172.0	171.5	170.7	170.3	169.4
50°	163.9	163.5	163.9	163.5	163.9	163.5	163.9	162.9	162.3	161.4	160.6
52.5°	155.3	155.4	155.2	155.1	155.2	155.4	155.3	154.0	153.8	153.3	152.1
55°	141.8	142.2	142.0	142.0	142.0	142.2	141.8	141.0	140.9	139.7	138.4
57.5°	127.9	128.2	128.5	127.6	128.5	128.2	127.9	127.7	127.6	126.3	125.1
60°	118.1	119.1	118.9	118.6	118.9	119.1	118.1	118.3	117.8	116.9	116.1
62.5°	109.2	109.6	109.5	109.4	109.5	109.6	109.2	108.3	108.1	107.3	106.5
65°	95.5	95.8	95.2	95.8	95.2	95.8	95.5	94.9	93.5	93.1	92.3
67.5°	80.6	80.8	81.2	81.5	81.2	80.8	80.6	80.8	80.0	79.2	79.0
70°	71.4	71.2	71.8	72.4	71.8	71.2	71.4	71.0	70.4	69.8	69.1
72.5°	61.6	62.1	61.9	62.3	61.9	62.1	61.6	61.7	61.2	60.4	59.7
75°	47.5	48.1	48.0	48.5	48.0	48.1	47.5	48.0	47.5	46.8	46.0
77.5°	34.4	34.4	34.4	34.7	34.4	34.4	34.4	34.7	34.3	34.5	33.6
80°	26.2	25.8	25.4	26.2	25.4	25.8	26.2	26.2	25.7	26.2	25.7
82.5°	18.3	18.4	18.1	18.1	18.1	18.4	18.3	18.7	18.4	18.7	18.1
85°	8.4	8.2	7.8	7.8	7.8	8.2	8.4	8.4	9.0	8.6	8.6
87.5°	8.2	8.0	8.0	7.8	8.0	8.0	8.2	8.2	8.0	7.9	8.3
90°	33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0	32.0	30.0	32.0
92.5°	59.4	56.2	57.0	55.4	57.0	56.2	59.4	60.2	66.4	74.8	87.2
95°	124.0	116.1	113.0	114.0	113.0	116.1	124.0	137.0	159.0	201.0	262.1
97.5°	272.1	247.5	232.8	224.5	232.8	247.5	272.1	319.9	392.1	500.3	611.5
100°	448.1	405.1	376.1	358.1	376.1	405.1	448.1	531.1	652.1	789.2	913.2
102.5°	764.1	690.8	654.5	630.2	654.5	690.8	764.1	854.4	982.6	1082.8	1110.9
105°	1246.2	1184.2	1141.3	1127.2	1141.3	1184.2	1246.2	1308.3	1341.3	1328.3	1215.2
107.5°	1470.5	1467.1	1458.4	1439.9	1458.4	1467.1	1470.5	1462.7	1414.3	1310.3	1140.1
110°	1507.3	1526.3	1535.3	1534.3	1535.3	1526.3	1507.3	1464.3	1382.2	1254.2	1075.2



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1478.5	1510.3	1527.3	1532.7	1527.3	1510.3	1478.5	1418.7	1324.6	1187.8	1016.0
115°	1402.3	1448.3	1474.3	1483.3	1474.3	1448.3	1402.3	1331.3	1228.2	1097.3	943.2
117.5°	1311.5	1360.0	1387.5	1395.1	1387.5	1360.0	1311.5	1239.1	1142.5	1023.6	888.4
120°	1252.2	1299.2	1328.3	1338.3	1328.3	1299.2	1252.2	1182.2	1091.2	985.2	861.2
122.5°	1198.6	1244.8	1270.7	1279.0	1270.7	1244.8	1198.6	1135.8	1053.6	953.2	839.6
125°	1132.2	1170.3	1195.2	1203.2	1195.2	1170.3	1132.2	1074.2	999.2	911.2	808.1
127.5°	1073.2	1108.8	1130.4	1136.9	1130.4	1108.8	1073.2	1022.6	953.4	870.4	777.1
130°	1037.2	1071.3	1091.2	1099.2	1091.2	1071.3	1037.2	988.2	922.2	843.2	757.2
132.5°	1000.4	1034.4	1052.8	1060.0	1052.8	1034.4	1000.4	952.2	890.2	817.6	738.0
135°	942.2	975.2	993.2	997.2	993.2	975.2	942.2	899.1	843.2	777.1	711.1
137.5°	885.4	913.8	929.6	935.6	929.6	913.8	885.4	846.2	797.4	744.9	689.7
140°	846.2	872.2	887.2	893.2	887.2	872.2	846.2	814.2	770.2	724.2	676.1
142.5°	812.5	836.2	849.5	850.8	849.5	836.2	812.5	782.1	745.4	705.8	665.0
145°	766.1	783.2	793.2	796.2	793.2	783.2	766.1	742.2	713.2	682.2	649.1
147.5°	728.1	741.8	748.6	750.4	748.6	741.8	728.1	708.3	687.2	663.0	637.0
150°	704.1	716.2	722.1	723.2	722.1	716.2	704.1	689.1	671.1	650.1	628.1
152.5°	684.9	695.3	699.7	699.9	699.7	695.3	684.9	673.1	657.5	639.7	619.3
155°	660.1	667.1	671.1	669.2	671.1	667.1	660.1	649.1	638.1	623.1	607.1
157.5°	635.3	641.1	642.9	642.9	642.9	641.1	635.3	627.5	618.9	606.3	592.9
160°	620.1	625.1	626.1	626.1	626.1	625.1	620.1	613.1	606.1	595.1	584.1
162.5°	606.5	609.9	610.9	610.1	610.9	609.9	606.5	599.5	594.1	584.7	575.3
165°	584.1	588.1	588.1	587.1	588.1	588.1	584.1	580.1	576.1	569.1	562.1
167.5°	565.1	567.3	567.1	565.9	567.1	567.3	565.1	563.4	559.7	554.9	549.5
170°	553.1	556.1	555.1	553.1	555.1	556.1	553.1	552.1	550.1	546.1	543.1
172.5°	543.5	544.9	543.9	542.7	543.9	544.9	543.5	542.5	541.3	538.1	535.9
175°	531.1	532.1	531.1	529.1	531.1	532.1	531.1	531.1	530.1	529.1	528.1
177.5°	523.3	523.3	522.5	520.9	522.5	523.3	523.3	523.3	523.3	522.5	522.5
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	489.0	490.8	493.4	496.3	498.0	501.3	502.2	503.8	505.1	508.4	511.9
5°	460.8	463.6	470.0	473.6	478.4	484.1	487.8	491.7	496.0	503.4	510.3
7.5°	430.5	435.1	443.2	449.7	456.7	464.8	470.6	478.4	484.8	495.3	505.3
10°	410.4	416.8	424.0	431.9	441.6	450.2	458.5	468.2	476.0	488.6	500.3
12.5°	392.2	393.1	403.6	412.2	425.5	436.2	445.7	458.2	465.9	480.8	493.1
15°	360.5	366.4	375.7	382.5	398.4	411.9	425.2	438.3	447.1	465.5	481.7
17.5°	333.7	339.1	348.8	360.0	371.3	384.8	402.0	415.9	427.8	448.8	468.0
20°	316.8	323.5	333.3	344.8	354.8	369.5	384.4	400.2	413.1	436.8	459.3
22.5°	302.5	307.7	315.6	327.0	337.9	351.3	367.6	384.9	398.4	424.0	446.7
25°	282.2	286.5	291.6	301.0	313.3	328.0	340.7	359.7	379.4	403.3	430.8
27.5°	264.0	267.1	271.6	279.8	289.4	303.1	317.2	335.2	355.1	381.0	410.1
30°	252.9	254.9	259.3	266.2	275.6	286.4	300.7	317.8	338.2	364.4	393.3
32.5°	243.2	245.0	248.0	254.4	262.6	271.8	284.6	301.9	321.2	347.0	379.1
35°	228.7	230.0	232.6	237.8	242.4	251.3	262.1	277.8	295.9	320.6	353.8
37.5°	214.1	216.0	217.6	219.8	225.6	231.5	240.8	254.1	271.9	296.8	328.5
40°	204.6	206.1	208.5	209.5	214.1	219.5	227.0	239.2	257.2	279.9	310.8
42.5°	194.8	196.5	197.9	199.0	203.0	207.7	214.6	225.0	240.9	262.9	293.6
45°	181.7	181.9	183.3	185.5	187.4	190.7	195.6	204.6	216.9	237.6	265.4
47.5°	168.3	168.6	168.8	169.7	171.9	174.9	178.1	185.5	196.5	213.0	240.0
50°	159.4	159.0	159.4	160.1	161.5	164.1	167.8	173.1	182.1	197.5	222.4
52.5°	150.8	150.8	150.5	150.8	151.9	153.6	156.3	160.7	168.8	183.0	204.8
55°	137.7	136.7	136.9	136.1	137.9	138.3	140.3	144.0	151.0	160.7	181.3
57.5°	123.7	123.0	122.1	121.8	121.7	122.7	124.2	127.2	132.6	141.2	157.8
60°	114.8	113.8	112.6	112.3	112.3	112.9	113.7	115.8	120.9	128.5	142.2
62.5°	105.7	104.6	103.9	102.9	102.5	103.1	103.9	105.5	109.2	116.3	128.1
65°	91.7	90.3	89.4	89.2	88.8	88.3	88.6	90.1	93.1	98.8	108.1
67.5°	77.7	76.4	76.2	75.0	74.5	74.6	74.5	75.8	77.6	82.5	89.5
70°	68.4	67.5	67.1	66.1	65.7	65.3	64.9	66.1	67.8	72.0	78.0
72.5°	59.1	58.2	57.4	56.6	56.7	56.2	56.1	56.9	58.3	62.1	66.8
75°	45.5	45.8	44.8	43.8	43.7	43.2	43.2	43.8	44.4	47.4	51.1
77.5°	33.1	32.9	32.1	31.8	31.6	31.2	31.6	31.9	32.3	34.3	36.9
80°	25.2	25.2	24.3	24.3	24.0	23.5	24.0	23.7	24.5	26.4	28.3
82.5°	18.0	17.7	17.7	17.4	17.3	16.9	17.1	17.6	17.9	19.2	20.4
85°	8.8	8.8	8.6	8.4	8.6	8.4	8.6	8.8	9.0	9.6	10.6
87.5°	8.4	8.9	8.8	7.7	6.4	5.5	5.1	4.8	4.7	4.0	3.6
90°	33.0	34.0	33.0	27.0	20.0	15.0	12.0	10.0	8.0	4.0	1.0
92.5°	109.9	130.0	128.2	99.8	68.0	45.4	36.0	29.2	24.8	17.6	12.2
95°	343.1	392.1	347.1	231.0	144.0	98.0	74.0	58.0	49.0	39.0	35.0
97.5°	702.1	669.3	504.1	311.3	190.0	132.2	105.0	86.6	73.0	62.4	57.0
100°	934.2	790.1	544.1	328.0	206.0	153.0	125.0	105.0	89.0	80.0	77.0
102.5°	1020.6	794.2	528.9	328.9	220.4	171.4	143.4	122.6	106.6	97.6	95.4
105°	1007.2	741.1	499.1	334.1	245.0	198.0	170.0	148.0	133.0	126.1	122.0
107.5°	919.4	684.3	484.3	347.8	270.3	224.6	196.5	174.6	160.8	154.0	150.8
110°	864.2	657.1	481.1	359.0	287.1	243.1	214.0	193.0	180.0	174.0	170.0



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	825.8	639.6	481.9	371.1	303.1	260.6	230.8	210.6	198.5	191.7	187.6
115°	778.2	620.1	486.1	389.1	328.0	285.1	258.0	238.1	226.0	220.1	215.1
117.5°	748.1	610.7	493.3	408.3	351.0	311.3	283.3	264.1	253.5	247.5	243.5
120°	732.1	605.1	498.1	421.1	367.0	328.0	300.1	280.1	271.0	265.0	261.1
122.5°	718.5	601.9	503.7	432.3	382.3	345.7	316.8	296.9	287.1	281.0	277.8
125°	699.1	596.2	512.1	450.1	405.1	369.1	341.0	321.1	309.1	303.1	300.1
127.5°	681.1	592.7	520.7	466.7	426.3	391.2	362.5	343.3	330.1	321.7	317.6
130°	669.2	591.1	527.1	477.1	439.1	404.1	376.1	356.1	342.1	332.1	328.0
132.5°	659.5	590.3	533.5	487.5	450.3	416.9	388.9	368.1	353.3	342.5	337.7
135°	646.1	589.1	541.1	501.1	466.1	434.1	406.0	383.1	368.1	356.1	352.1
137.5°	636.7	588.9	547.9	511.5	478.9	447.3	421.3	398.5	382.5	370.5	365.7
140°	631.1	588.1	551.1	517.1	486.1	456.1	430.1	408.1	392.1	380.0	376.1
142.5°	625.5	588.1	553.5	521.9	491.7	462.5	438.1	416.9	400.9	389.7	386.5
145°	618.1	586.1	556.1	528.1	500.1	473.1	451.1	431.1	416.1	406.0	402.1
147.5°	610.5	582.6	556.9	531.5	506.9	481.5	461.9	445.3	431.4	421.9	418.9
150°	604.1	580.1	556.1	533.1	510.1	487.1	469.1	454.1	441.1	433.1	430.1
152.5°	598.5	576.1	554.5	533.9	513.3	492.7	476.3	462.1	450.6	442.7	441.3
155°	588.1	569.1	552.1	535.1	518.1	501.1	486.1	475.1	464.1	458.1	457.1
157.5°	578.3	561.9	547.5	535.1	521.5	507.1	494.5	485.7	476.1	471.3	470.3
160°	571.1	557.2	545.1	535.1	523.1	511.1	500.1	492.1	484.1	480.1	479.1
162.5°	564.7	553.1	542.7	534.3	523.9	513.5	504.9	497.7	491.3	487.3	487.9
165°	554.1	545.1	538.1	532.1	525.1	516.1	510.1	505.1	499.1	497.1	498.1
167.5°	543.7	538.1	533.5	530.7	524.9	518.3	514.5	510.9	507.1	505.3	506.5
170°	538.1	534.1	531.1	529.1	524.1	519.1	516.1	514.1	511.1	510.1	512.1
172.5°	532.5	529.3	527.9	526.7	523.3	519.9	517.7	516.5	513.5	514.1	515.3
175°	525.1	524.1	523.1	524.1	522.1	520.1	519.1	519.1	517.1	518.1	519.1
177.5°	520.9	520.1	520.9	522.5	520.9	520.1	520.1	520.1	518.5	519.3	520.9
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	511.6	512.4	514.9	517.4	520.2	521.0	522.2	521.2	520.8	523.7	526.0
5°	513.1	516.5	523.4	529.7	534.9	538.6	542.6	544.2	547.1	551.1	556.3
7.5°	511.3	518.2	529.0	538.1	548.0	555.2	560.8	565.6	571.4	579.1	587.6
10°	509.5	518.7	531.8	542.9	555.1	564.3	571.9	579.4	588.0	598.7	609.8
12.5°	506.1	516.9	533.4	546.6	562.1	571.2	581.4	597.4	606.7	621.7	637.4
15°	499.1	511.3	534.2	550.4	568.0	585.2	604.2	619.4	634.6	643.5	665.6
17.5°	488.9	506.6	532.0	551.0	573.3	600.4	621.7	639.0	656.6	670.9	682.0
20°	480.5	499.9	528.9	551.6	578.2	607.3	631.7	649.4	664.6	676.6	683.4
22.5°	470.1	494.5	522.6	549.2	583.2	612.0	637.7	651.5	664.3	670.1	672.8
25°	453.6	482.9	514.8	547.3	585.6	616.1	639.6	648.0	651.7	646.0	636.6
27.5°	435.8	468.5	505.8	543.5	584.1	613.5	630.3	629.0	622.7	604.2	589.6
30°	422.5	458.5	498.5	539.8	580.5	609.1	618.8	609.1	594.8	574.3	553.3
32.5°	408.5	445.8	490.9	534.5	573.9	599.1	601.2	584.4	562.2	538.9	512.8
35°	387.4	427.7	476.5	522.6	560.0	575.8	566.5	536.7	510.5	478.6	443.0
37.5°	363.6	408.1	456.9	505.2	539.1	543.2	519.9	488.6	451.6	414.1	372.2
40°	345.8	393.0	443.2	491.9	521.9	517.5	487.8	453.4	409.4	363.6	324.7
42.5°	329.8	376.9	428.2	476.0	499.9	488.1	453.4	411.1	363.9	320.7	285.1
45°	302.2	350.7	403.1	449.3	463.0	441.6	395.7	348.7	302.2	266.2	238.1
47.5°	275.3	323.3	375.2	415.8	420.6	391.9	341.7	293.4	253.4	224.1	204.2
50°	255.6	303.8	355.2	391.4	389.8	355.2	303.6	257.6	224.1	200.4	187.2
52.5°	238.0	283.4	332.8	365.8	357.4	319.7	270.4	229.5	202.1	183.6	171.5
55°	210.4	252.5	299.5	325.9	310.6	268.7	227.0	194.2	173.8	160.0	150.6
57.5°	183.1	222.6	262.8	279.1	262.2	223.5	188.8	165.0	149.6	139.4	133.3
60°	166.3	200.7	236.4	250.6	230.4	196.0	168.6	147.3	134.9	126.6	121.1
62.5°	149.4	180.2	214.0	221.6	203.2	174.1	149.8	132.1	122.0	114.5	109.3
65°	126.3	151.6	177.2	182.3	165.3	142.8	123.6	112.1	103.1	97.6	93.5
67.5°	103.7	123.9	142.1	146.1	131.2	115.6	101.8	91.7	85.7	81.1	77.6
70°	90.1	106.2	121.1	124.4	112.4	98.6	88.0	80.0	74.5	70.6	67.2
72.5°	75.9	89.3	101.7	103.9	94.2	83.5	74.9	68.5	63.7	61.2	58.0
75°	58.1	66.0	75.5	76.1	69.7	63.2	56.6	52.4	49.9	46.8	45.2
77.5°	41.0	47.1	52.6	53.6	49.9	45.5	41.8	38.5	36.3	34.9	33.4
80°	31.3	36.2	38.6	39.9	37.2	34.0	31.9	29.7	28.3	27.4	26.4
82.5°	22.4	25.4	27.6	28.7	27.1	25.2	23.2	21.9	20.8	20.1	19.7
85°	11.4	12.7	14.1	14.5	14.1	13.3	12.1	12.1	11.5	11.4	11.4
87.5°	4.7	6.1	6.5	7.4	7.7	8.7	10.1	11.1	11.2	10.8	10.5
90°	4.0	8.0	10.0	12.0	15.0	20.0	27.0	33.0	34.0	33.0	32.0
92.5°	17.6	24.8	29.2	36.0	45.4	68.0	99.8	128.2	130.0	109.9	87.2
95°	39.0	49.0	58.0	74.0	98.0	144.0	231.0	347.1	392.1	343.1	262.1
97.5°	62.4	73.0	86.6	105.0	132.2	190.0	311.3	504.1	669.3	702.1	611.5
100°	80.0	89.0	105.0	125.0	153.0	206.0	328.0	544.1	790.1	934.2	913.2
102.5°	97.6	106.6	122.6	143.4	171.4	220.4	328.9	528.9	794.2	1020.6	1110.9
105°	126.1	133.0	148.0	170.0	198.0	245.0	334.1	499.1	741.1	1007.2	1215.2
107.5°	154.0	160.8	174.6	196.5	224.6	270.3	347.8	484.3	684.3	919.4	1140.1
110°	174.0	180.0	193.0	214.0	243.1	287.1	359.0	481.1	657.1	864.2	1075.2





TEST NUMBER: P331278-935

CATALOG NUMBER: SA2XXDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	191.7	198.5	210.6	230.8	260.6	303.1	371.1	481.9	639.6	825.8	1016.0
115°	220.1	226.0	238.1	258.0	285.1	328.0	389.1	486.1	620.1	778.2	943.2
117.5°	247.5	253.5	264.1	283.3	311.3	351.0	408.3	493.3	610.7	748.1	888.4
120°	265.0	271.0	280.1	300.1	328.0	367.0	421.1	498.1	605.1	732.1	861.2
122.5°	281.0	287.1	296.9	316.8	345.7	382.3	432.3	503.7	601.9	718.5	839.6
125°	303.1	309.1	321.1	341.0	369.1	405.1	450.1	512.1	596.2	699.1	808.1
127.5°	321.7	330.1	343.3	362.5	391.2	426.3	466.7	520.7	592.7	681.1	777.1
130°	332.1	342.1	356.1	376.1	404.1	439.1	477.1	527.1	591.1	669.2	757.2
132.5°	342.5	353.3	368.1	388.9	416.9	450.3	487.5	533.5	590.3	659.5	738.0
135°	356.1	368.1	383.1	406.0	434.1	466.1	501.1	541.1	589.1	646.1	711.1
137.5°	370.5	382.5	398.5	421.3	447.3	478.9	511.5	547.9	588.9	636.7	689.7
140°	380.0	392.1	408.1	430.1	456.1	486.1	517.1	551.1	588.1	631.1	676.1
142.5°	389.7	400.9	416.9	438.1	462.5	491.7	521.9	553.5	588.1	625.5	665.0
145°	406.0	416.1	431.1	451.1	473.1	500.1	528.1	556.1	586.1	618.1	649.1
147.5°	421.9	431.4	445.3	461.9	481.5	506.9	531.5	556.9	582.6	610.5	637.0
150°	433.1	441.1	454.1	469.1	487.1	510.1	533.1	556.1	580.1	604.1	628.1
152.5°	442.7	450.6	462.1	476.3	492.7	513.3	533.9	554.5	576.1	598.5	619.3
155°	458.1	464.1	475.1	486.1	501.1	518.1	535.1	552.1	569.1	588.1	607.1
157.5°	471.3	476.1	485.7	494.5	507.1	521.5	535.1	547.5	561.9	578.3	592.9
160°	480.1	484.1	492.1	500.1	511.1	523.1	535.1	545.1	557.2	571.1	584.1
162.5°	487.3	491.3	497.7	504.9	513.5	523.9	534.3	542.7	553.1	564.7	575.3
165°	497.1	499.1	505.1	510.1	516.1	525.1	532.1	538.1	545.1	554.1	562.1
167.5°	505.3	507.1	510.9	514.5	518.3	524.9	530.7	533.5	538.1	543.7	549.5
170°	510.1	511.1	514.1	516.1	519.1	524.1	529.1	531.1	534.1	538.1	543.1
172.5°	514.1	513.5	516.5	517.7	519.9	523.3	526.7	527.9	529.3	532.5	535.9
175°	518.1	517.1	519.1	519.1	520.1	522.1	524.1	523.1	524.1	525.1	528.1
177.5°	519.3	518.5	520.1	520.1	520.1	520.9	522.5	520.9	520.1	520.9	522.5
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1	520.1



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	508.9	508.9	508.9	508.9	508.9	508.9	508.9
2.5°	527.9	530.0	530.0	530.4	532.9	532.5	532.4
5°	561.7	565.1	565.4	568.9	571.3	570.5	568.3
7.5°	593.7	599.9	604.6	607.2	610.3	612.2	611.3
10°	619.1	628.0	633.5	637.2	641.7	645.1	643.9
12.5°	642.0	652.7	660.3	666.7	667.2	671.5	668.6
15°	678.0	689.2	690.4	695.1	698.9	698.4	698.6
17.5°	689.7	693.4	694.1	694.2	694.3	692.9	689.9
20°	685.5	684.2	680.9	678.3	673.8	673.2	669.3
22.5°	665.5	661.2	652.8	647.3	640.3	638.5	637.4
25°	626.1	616.5	603.2	590.5	586.9	580.1	582.0
27.5°	572.0	557.1	542.6	532.4	523.0	512.7	515.7
30°	534.0	517.1	496.8	481.1	471.1	461.4	459.6
32.5°	488.6	463.9	441.3	427.5	412.2	406.0	399.2
35°	410.4	386.2	363.8	344.4	333.3	324.7	316.8
37.5°	340.0	312.3	294.1	278.4	270.4	265.4	266.7
40°	296.4	272.1	258.7	246.8	239.4	235.9	236.7
42.5°	261.0	242.8	231.9	223.7	218.4	216.5	216.0
45°	220.8	210.7	201.6	197.0	194.4	192.3	190.9
47.5°	193.5	185.1	180.0	177.3	175.0	172.9	172.8
50°	177.0	171.5	168.0	165.1	163.3	161.8	163.2
52.5°	164.5	159.5	155.9	153.3	152.7	151.3	151.2
55°	145.9	142.0	139.5	137.1	136.0	135.2	134.1
57.5°	129.0	125.3	123.0	121.5	119.2	118.5	118.1
60°	116.9	114.0	111.7	109.7	108.7	107.2	107.2
62.5°	105.8	102.9	100.7	99.3	97.6	97.0	97.2
65°	89.8	87.4	85.2	83.7	83.3	82.1	82.6
67.5°	75.0	73.4	71.1	70.3	69.6	69.0	68.4
70°	65.1	63.5	62.4	61.2	60.6	60.6	60.6
72.5°	56.8	54.9	54.2	52.8	53.1	52.5	51.8
75°	44.0	42.8	42.3	41.7	40.7	40.7	40.7
77.5°	32.4	32.0	31.3	30.7	30.5	30.3	30.4
80°	25.1	24.8	24.5	24.5	24.0	23.8	23.5
82.5°	19.3	18.8	18.5	18.3	18.3	18.3	18.2
85°	10.9	10.6	10.6	10.8	10.3	10.3	10.6
87.5°	10.2	10.6	10.7	10.7	10.8	10.7	10.7
90°	30.0	32.0	33.0	33.0	33.0	33.0	33.0
92.5°	74.8	66.4	60.2	59.4	56.2	57.0	55.4
95°	201.0	159.0	137.0	124.0	116.1	113.0	114.0
97.5°	500.3	392.1	319.9	272.1	247.5	232.8	224.5
100°	789.2	652.1	531.1	448.1	405.1	376.1	358.1
102.5°	1082.8	982.6	854.4	764.1	690.8	654.5	630.2
105°	1328.3	1341.3	1308.3	1246.2	1184.2	1141.3	1127.2
107.5°	1310.3	1414.3	1462.7	1470.5	1467.1	1458.4	1439.9
110°	1254.2	1382.2	1464.3	1507.3	1526.3	1535.3	1534.3



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1187.8	1324.6	1418.7	1478.5	1510.3	1527.3	1532.7
115°	1097.3	1228.2	1331.3	1402.3	1448.3	1474.3	1483.3
117.5°	1023.6	1142.5	1239.1	1311.5	1360.0	1387.5	1395.1
120°	985.2	1091.2	1182.2	1252.2	1299.2	1328.3	1338.3
122.5°	953.2	1053.6	1135.8	1198.6	1244.8	1270.7	1279.0
125°	911.2	999.2	1074.2	1132.2	1170.3	1195.2	1203.2
127.5°	870.4	953.4	1022.6	1073.2	1108.8	1130.4	1136.9
130°	843.2	922.2	988.2	1037.2	1071.3	1091.2	1099.2
132.5°	817.6	890.2	952.2	1000.4	1034.4	1052.8	1060.0
135°	777.1	843.2	899.1	942.2	975.2	993.2	997.2
137.5°	744.9	797.4	846.2	885.4	913.8	929.6	935.6
140°	724.2	770.2	814.2	846.2	872.2	887.2	893.2
142.5°	705.8	745.4	782.1	812.5	836.2	849.5	850.8
145°	682.2	713.2	742.2	766.1	783.2	793.2	796.2
147.5°	663.0	687.2	708.3	728.1	741.8	748.6	750.4
150°	650.1	671.1	689.1	704.1	716.2	722.1	723.2
152.5°	639.7	657.5	673.1	684.9	695.3	699.7	699.9
155°	623.1	638.1	649.1	660.1	667.1	671.1	669.2
157.5°	606.3	618.9	627.5	635.3	641.1	642.9	642.9
160°	595.1	606.1	613.1	620.1	625.1	626.1	626.1
162.5°	584.7	594.1	599.5	606.5	609.9	610.9	610.1
165°	569.1	576.1	580.1	584.1	588.1	588.1	587.1
167.5°	554.9	559.7	563.4	565.1	567.3	567.1	565.9
170°	546.1	550.1	552.1	553.1	556.1	555.1	553.1
172.5°	538.1	541.3	542.5	543.5	544.9	543.9	542.7
175°	529.1	530.1	531.1	531.1	532.1	531.1	529.1
177.5°	522.5	523.3	523.3	523.3	523.3	522.5	520.9
180°	520.1	520.1	520.1	520.1	520.1	520.1	520.1

(END OF REPORT)