

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: P331641-927

Luminaire Tested: **SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331641-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 290 LUMENS PER FOOT, ASYMMETRIC DIFFUSER, REGRESSED HOUSING  
UPLIGHT 1080 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4229.3 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')  
CIE Type: Semi-Indirect

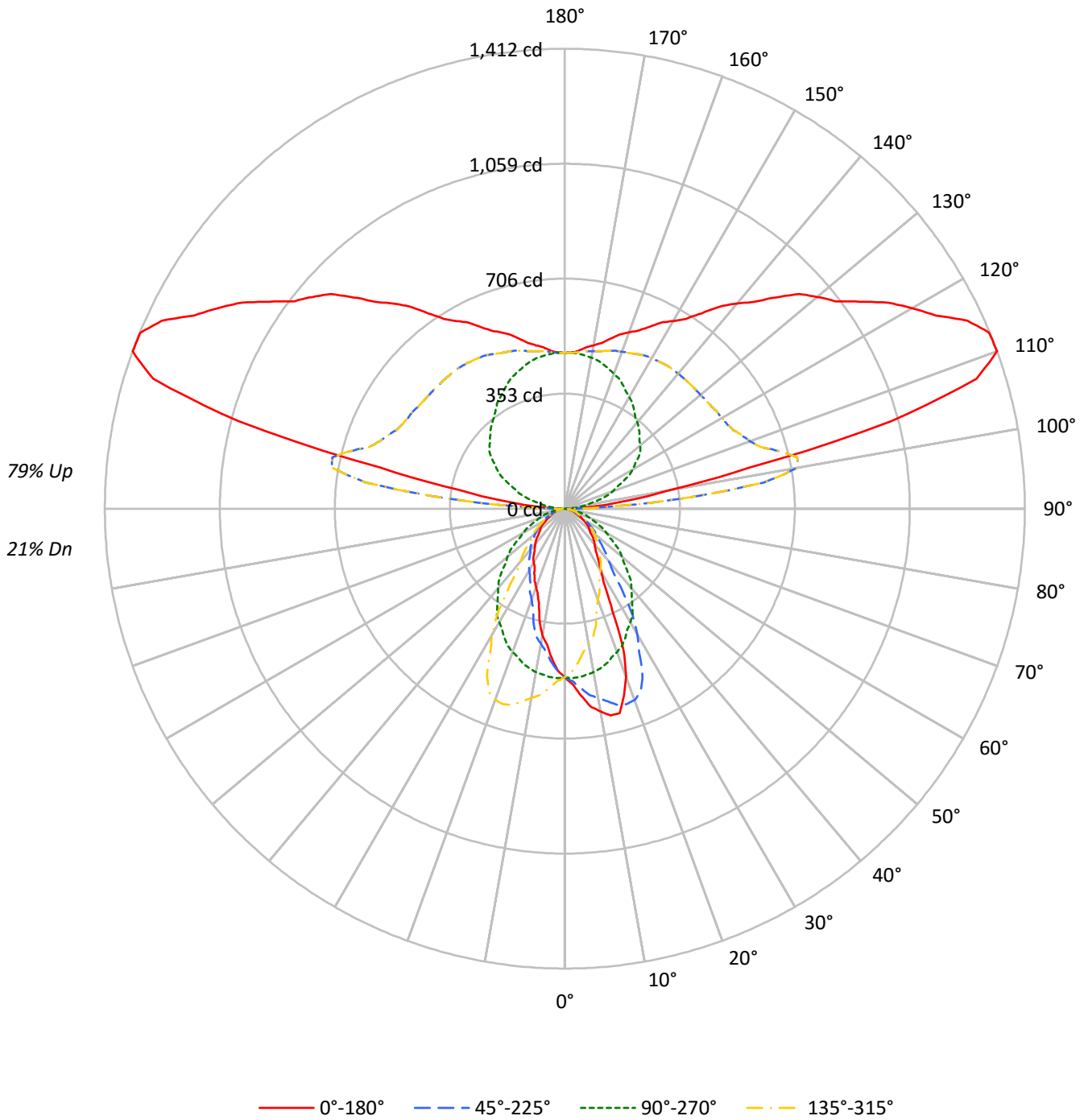
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	18
2	84	77	71	66	74	68	64	60	52	49	47	38	36	34	24	23	22	16
3	77	68	61	56	68	60	55	50	46	43	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	54	46	40	57	48	41	37	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	37	32	33	29	26	24	22	19	16	15	13	10
7	55	43	36	31	48	39	32	28	30	26	23	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	25	28	23	20	20	17	15	14	12	11	8
9	47	36	29	24	42	32	26	22	25	21	18	19	16	14	13	11	10	7
10	44	33	26	21	39	29	24	20	23	19	16	17	14	12	12	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	8360	8360	8360	8360
5°	9339	8413	7460	8413
10°	10362	8355	6466	8355
15°	10870	8232	5095	8232
20°	9424	8052	4409	8052
25°	6180	7803	3935	7803
30°	4161	7500	3563	7500
35°	3370	7121	3213	7121
40°	2995	6709	2974	6709
45°	2710	6224	2653	6224
50°	2467	5745	2459	5745
55°	2320	5210	2291	5210
60°	1941	4724	1918	4724
65°	1639	4290	1857	4290
70°	1511	3829	1751	3829
75°	1416	3337	1616	3337
80°	1302	2743	1432	2743
85°	1204	2167	1260	2167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	1.2
10°-20°	136.8	3.2
20°-30°	176.3	4.2
30°-40°	167.5	4.0
40°-50°	143.5	3.4
50°-60°	109.3	2.6
60°-70°	69.1	1.6
70°-80°	34.5	0.8
80°-90°	13.3	0.3
90°-100°	191.3	4.5
100°-110°	649.3	15.4
110°-120°	689.8	16.3
120°-130°	567.8	13.4
130°-140°	456.0	10.8
140°-150°	344.6	8.1
150°-160°	242.2	5.7
160°-170°	142.6	3.4
170°-180°	46.4	1.1
0°-30°	362.2	8.6
0°-40°	529.7	12.5
0°-60°	782.5	18.5
0°-90°	899.3	21.3
90°-120°	1530.4	36.2
90°-150°	2898.8	68.5
90°-180°	3330.0	78.7
0°-180°	4229.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	518	518	518	518	518	
5°	576	519	460	519	576	57
15°	650	492	305	492	650	175
25°	347	438	221	438	347	165
35°	171	361	163	361	171	109
45°	119	273	116	273	119	92
55°	82	185	81	185	82	72
65°	43	112	49	112	43	44
75°	23	54	26	54	23	24
85°	6	12	7	12	6	8
90°	30	1	30	1	30	16
95°	105	32	105	32	105	136
105°	1037	112	1037	112	1037	1003
115°	1365	198	1365	198	1365	1336
125°	1107	276	1107	276	1107	1000
135°	918	324	918	324	918	713
145°	732	370	732	370	732	465
155°	616	421	616	421	616	287
165°	540	458	540	458	540	154
175°	487	478	487	478	487	47
180°	479	479	479	479	479	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	538.9	539.3	539.8	538.8	538.8	537.9	536.0	534.6	530.5	530.0	530.0
5°	576.2	575.8	576.6	574.2	571.0	570.2	566.8	562.3	557.6	552.5	551.4
7.5°	613.2	612.7	611.2	610.9	608.4	602.9	597.5	591.6	583.8	576.2	572.4
10°	632.0	637.9	634.3	628.0	629.2	620.8	616.3	608.6	602.1	590.7	588.3
12.5°	650.4	652.8	651.6	648.0	646.4	640.6	634.5	627.7	615.8	605.6	596.8
15°	650.3	653.7	654.7	653.6	654.4	654.1	650.9	645.3	634.9	623.7	613.9
17.5°	602.3	604.7	610.6	614.6	619.6	630.3	635.6	637.5	636.0	629.6	622.8
20°	548.5	544.5	561.1	569.5	576.7	594.7	610.2	616.2	625.7	625.5	623.7
22.5°	472.1	473.1	488.8	498.8	519.8	537.9	555.5	577.8	596.3	608.5	615.6
25°	346.9	353.8	369.4	383.1	406.5	440.0	470.4	505.6	538.9	565.2	590.3
27.5°	260.5	261.1	273.5	286.1	300.0	327.4	365.8	407.8	455.3	494.5	539.5
30°	223.2	222.0	227.3	235.0	246.9	268.2	296.9	338.3	385.6	444.7	497.2
32.5°	196.6	196.7	200.7	206.4	216.2	230.5	250.3	283.9	328.6	386.7	448.2
35°	171.0	170.8	173.6	177.8	181.9	191.1	204.6	222.2	253.0	307.1	370.1
37.5°	152.5	153.3	154.7	157.3	161.8	167.0	175.1	187.0	208.8	240.9	293.8
40°	142.1	142.5	144.5	146.6	149.3	153.3	159.9	169.5	185.5	211.0	249.8
42.5°	132.7	133.0	134.4	136.4	138.6	142.5	148.1	156.3	169.3	189.2	221.1
45°	118.7	118.7	120.0	120.9	123.3	126.8	131.3	138.2	147.2	161.9	183.2
47.5°	105.8	105.8	106.6	108.1	109.6	112.4	116.8	122.5	129.0	140.4	158.5
50°	98.2	98.5	98.9	100.2	101.2	103.6	107.1	111.9	118.7	127.6	142.7
52.5°	92.2	92.1	92.8	93.3	94.0	95.7	98.3	102.6	108.7	116.4	128.9
55°	82.4	81.7	82.8	83.7	84.2	84.9	86.3	89.0	94.3	100.8	110.1
57.5°	70.2	69.9	70.7	71.5	73.2	75.1	76.4	78.0	80.7	85.4	94.7
60°	60.1	60.1	61.7	62.3	64.2	66.8	69.3	70.7	73.4	76.4	83.3
62.5°	51.2	51.3	52.0	52.6	53.7	56.8	60.4	63.5	66.1	69.0	73.5
65°	42.9	43.2	43.2	43.6	44.3	45.0	46.4	49.0	53.5	57.6	61.0
67.5°	36.4	36.4	36.6	36.9	37.1	37.9	38.5	39.6	40.6	44.5	48.8
70°	32.0	32.6	32.4	32.7	33.0	33.3	34.0	34.5	36.2	37.1	39.6
72.5°	28.0	28.4	28.4	28.6	29.1	29.2	29.7	30.3	31.3	32.0	33.4
75°	22.7	22.5	22.7	23.1	23.2	23.4	23.4	24.1	24.6	25.3	26.3
77.5°	17.5	17.7	17.7	17.7	17.7	18.1	18.0	18.3	18.9	19.3	19.6
80°	14.0	14.2	14.0	14.2	14.4	14.6	14.4	14.6	15.1	15.4	15.4
82.5°	10.9	10.9	11.0	11.0	11.1	11.1	11.4	11.4	11.8	11.7	11.9
85°	6.5	6.3	6.3	6.3	6.5	6.7	6.5	6.5	6.7	6.7	6.7
87.5°	8.4	8.6	8.6	8.6	8.6	8.3	8.0	8.5	8.6	8.9	8.6
90°	30.3	30.3	30.3	30.3	30.3	29.5	27.6	29.5	30.3	31.3	30.3
92.5°	51.0	52.4	51.7	54.7	55.4	61.1	68.8	80.2	101.1	119.6	118.0
95°	104.9	104.0	106.8	114.1	126.0	146.3	185.0	241.1	315.7	360.8	319.3
97.5°	206.5	214.2	227.7	250.3	294.3	360.8	460.3	562.6	646.0	615.8	463.8
100°	329.5	346.0	372.7	412.3	488.6	600.0	726.1	840.2	859.5	727.0	500.6
102.5°	579.8	602.2	635.6	703.1	786.1	904.0	996.2	1022.1	939.1	730.7	486.6
105°	1037.1	1050.0	1089.6	1146.6	1203.7	1234.1	1222.1	1118.1	926.7	681.9	459.2
107.5°	1324.8	1341.9	1349.8	1353.0	1345.8	1301.2	1205.5	1048.9	845.9	629.6	445.6
110°	1411.7	1412.6	1404.3	1386.8	1347.3	1271.8	1154.0	989.3	795.1	604.6	442.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1410.2	1405.3	1389.6	1360.3	1305.3	1218.8	1092.9	934.8	759.8	588.4	443.4
115°	1364.8	1356.5	1332.5	1290.2	1224.9	1130.0	1009.6	867.8	716.0	570.5	447.3
117.5°	1283.6	1276.6	1251.3	1206.7	1140.0	1051.1	941.8	817.4	688.3	561.9	453.8
120°	1231.3	1222.1	1195.4	1152.1	1087.7	1004.0	906.4	792.3	673.6	556.7	458.3
122.5°	1176.8	1169.1	1145.3	1102.8	1045.0	969.4	877.0	772.5	661.1	553.8	463.4
125°	1107.1	1099.7	1076.7	1041.7	988.3	919.3	838.4	743.5	643.3	548.5	471.2
127.5°	1046.0	1040.1	1020.2	987.5	940.9	877.2	800.8	715.0	626.7	545.3	479.1
130°	1011.4	1004.0	985.6	954.3	909.2	848.5	775.8	696.6	615.7	543.8	485.0
132.5°	975.3	968.7	951.7	920.4	876.1	819.0	752.3	679.0	606.8	543.1	490.8
135°	917.5	913.8	897.2	866.9	827.3	775.8	715.0	654.3	594.5	542.0	497.9
137.5°	860.8	855.3	840.7	814.6	778.6	733.6	685.4	634.6	585.8	541.9	504.1
140°	821.8	816.3	802.5	778.6	749.1	708.6	666.3	622.1	580.7	541.1	507.1
142.5°	782.8	781.6	769.4	747.6	719.6	685.8	649.4	611.8	575.5	541.1	509.3
145°	732.5	729.8	720.6	704.9	682.9	656.2	627.6	597.2	568.7	539.2	511.7
147.5°	690.4	688.7	682.5	669.9	651.7	632.2	610.0	586.1	561.7	536.0	512.4
150°	665.4	664.4	658.9	647.8	634.1	617.5	598.2	577.9	555.8	533.8	511.7
152.5°	644.0	643.8	639.8	630.2	619.3	605.0	588.6	569.8	550.6	530.0	510.2
155°	615.7	617.5	613.8	607.4	597.2	587.1	573.3	558.6	541.1	523.6	507.9
157.5°	591.5	591.5	589.9	584.6	577.3	569.4	557.9	545.5	532.1	517.0	503.7
160°	576.1	576.1	575.1	570.5	564.1	557.7	547.6	537.4	525.5	512.6	501.5
162.5°	561.3	562.1	561.2	558.0	551.6	546.6	538.0	529.3	519.6	508.9	499.3
165°	540.2	541.1	541.1	537.4	533.8	530.0	523.6	517.2	509.8	501.5	495.1
167.5°	520.7	521.8	522.0	519.9	518.3	515.0	510.6	505.6	500.3	495.1	490.8
170°	508.9	510.7	511.7	508.9	507.9	506.1	502.5	499.7	495.1	491.4	488.6
172.5°	499.3	500.4	501.4	500.1	499.2	498.0	495.1	493.1	490.0	487.0	485.7
175°	486.8	488.6	489.6	488.6	488.6	487.7	486.8	485.9	483.2	482.2	481.3
177.5°	479.3	480.8	481.5	481.5	481.5	481.5	480.8	480.8	479.3	478.6	479.3
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	530.3	529.1	528.1	525.5	524.2	521.3	520.9	520.8	517.1	513.4	512.4
5°	548.5	545.6	541.3	536.2	531.0	525.6	522.0	519.1	511.9	505.1	501.1
7.5°	566.8	560.6	553.2	543.7	535.7	526.8	520.1	514.2	504.0	494.2	487.6
10°	580.5	570.5	560.5	547.4	537.1	527.0	517.7	509.6	498.1	485.1	475.9
12.5°	589.0	577.9	564.3	551.4	538.1	525.3	512.8	502.4	488.9	475.5	464.6
15°	600.5	588.6	572.0	553.7	536.6	519.8	505.5	492.5	474.9	458.8	445.5
17.5°	609.9	593.5	575.8	554.5	534.7	513.5	495.0	478.4	458.8	439.4	423.7
20°	612.9	596.7	576.2	554.9	531.6	506.5	486.6	468.6	447.5	426.4	408.4
22.5°	611.0	598.4	575.6	550.2	526.2	500.1	477.5	456.6	433.2	411.8	390.9
25°	598.3	594.0	572.4	544.7	517.4	487.0	460.8	438.0	411.4	388.3	365.7
27.5°	568.7	578.1	564.7	535.1	504.7	472.1	442.8	416.8	389.1	363.2	340.6
30°	540.2	561.6	555.9	528.5	494.5	462.5	429.5	402.3	372.9	346.2	323.9
32.5°	501.2	536.5	542.2	519.3	484.1	448.9	414.4	387.4	356.6	328.5	306.7
35°	439.0	491.9	516.3	501.7	466.4	428.4	392.8	361.3	330.3	302.7	281.1
37.5°	365.0	437.0	477.5	478.6	446.2	406.7	367.9	336.6	304.9	277.7	254.4
40°	316.9	395.0	447.7	459.4	432.1	389.4	350.1	318.3	287.4	260.7	233.9
42.5°	273.7	351.5	416.3	436.7	414.9	372.6	333.2	299.9	269.8	244.6	217.2
45°	221.3	289.4	360.8	397.1	385.1	345.9	304.3	272.6	244.4	222.6	196.3
47.5°	186.7	234.6	303.8	352.9	352.8	317.0	276.0	245.7	219.5	199.1	177.8
50°	167.0	208.7	267.2	323.0	327.6	297.6	258.7	228.7	204.2	182.8	165.7
52.5°	149.2	183.7	236.2	289.8	303.1	277.0	239.3	211.6	187.8	168.1	153.5
55°	126.1	152.8	192.7	242.7	262.9	244.5	211.0	185.1	165.9	149.3	136.7
57.5°	106.7	126.7	158.8	199.0	222.4	211.0	183.3	162.2	145.8	130.8	120.9
60°	94.5	110.8	138.0	171.7	197.6	189.5	165.9	146.3	132.3	119.3	110.0
62.5°	82.9	97.0	120.3	147.7	171.3	168.0	148.8	132.3	120.0	108.2	100.3
65°	66.8	77.0	95.2	116.6	135.7	137.3	123.4	112.3	101.3	92.0	84.9
67.5°	53.2	59.9	72.6	90.7	105.0	110.1	101.6	93.1	84.4	77.2	71.1
70°	44.8	50.2	59.6	74.1	87.3	92.7	87.8	81.1	73.6	67.7	62.4
72.5°	36.3	41.6	48.5	59.2	70.4	76.3	74.5	69.8	63.7	58.7	53.8
75°	27.3	29.0	33.7	40.9	49.7	54.7	55.9	53.5	48.6	44.8	41.9
77.5°	20.2	21.2	23.4	27.2	33.0	37.5	39.3	39.0	35.6	33.5	30.7
80°	16.2	16.7	17.8	19.4	23.8	28.3	29.5	29.5	27.2	26.3	23.6
82.5°	12.3	12.7	13.4	14.3	16.2	20.2	21.6	21.9	20.4	19.3	17.1
85°	7.1	6.8	7.2	7.8	8.1	9.2	11.3	11.7	11.3	9.9	9.3
87.5°	7.4	6.3	5.4	4.7	4.4	4.2	4.2	4.4	4.4	4.7	4.8
90°	24.9	18.4	13.8	11.0	9.2	7.4	3.6	1.0	3.6	7.4	9.2
92.5°	91.8	62.6	41.7	33.1	26.9	22.8	16.2	11.2	16.2	22.8	26.9
95°	212.5	132.5	90.2	68.1	53.4	45.1	35.9	32.2	35.9	45.1	53.4
97.5°	286.4	174.8	121.7	96.6	79.7	67.2	57.4	52.4	57.4	67.2	79.7
100°	301.8	189.6	140.8	115.0	96.6	81.9	73.6	70.8	73.6	81.9	96.6
102.5°	302.6	202.8	157.7	132.0	112.8	98.1	89.8	87.8	89.8	98.1	112.8
105°	307.4	225.5	182.2	156.5	136.2	122.4	116.0	112.3	116.0	122.4	136.2
107.5°	320.0	248.7	206.7	180.8	160.7	148.0	141.7	138.8	141.7	148.0	160.7
110°	330.3	264.1	223.6	196.9	177.6	165.6	160.1	156.5	160.1	165.6	177.6





TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	341.4	278.8	239.8	212.4	193.8	182.6	176.3	172.6	176.3	182.6	193.8
115°	358.0	301.8	262.3	237.4	219.0	207.9	202.5	197.9	202.5	207.9	219.0
117.5°	375.7	323.0	286.4	260.6	243.0	233.2	227.7	224.0	227.7	233.2	243.0
120°	387.5	337.7	301.8	276.1	257.7	249.4	243.8	240.2	243.8	249.4	257.7
122.5°	397.8	351.7	318.1	291.5	273.1	264.1	258.6	255.6	258.6	264.1	273.1
125°	414.2	372.7	339.6	313.8	295.4	284.4	278.8	276.1	278.8	284.4	295.4
127.5°	429.4	392.2	360.0	333.5	315.8	303.7	296.0	292.2	296.0	303.7	315.8
130°	438.9	404.0	371.8	346.0	327.6	314.7	305.5	301.8	305.5	314.7	327.6
132.5°	448.5	414.3	383.6	357.8	338.7	325.0	315.1	310.7	315.1	325.0	338.7
135°	461.1	428.8	399.4	373.6	352.4	338.7	327.6	323.9	327.6	338.7	352.4
137.5°	470.6	440.6	411.5	387.6	366.6	351.9	340.9	336.4	340.9	351.9	366.6
140°	475.8	447.3	419.6	395.7	375.5	360.8	349.7	346.0	349.7	360.8	375.5
142.5°	480.2	452.4	425.6	403.1	383.6	368.8	358.5	355.6	358.5	368.8	383.6
145°	485.9	460.1	435.3	415.0	396.6	382.9	373.6	369.9	373.6	382.9	396.6
147.5°	489.0	466.4	443.0	425.0	409.7	397.0	388.2	385.4	388.2	397.0	409.7
150°	490.5	469.4	448.1	431.6	417.8	405.8	398.5	395.7	398.5	405.8	417.8
152.5°	491.2	472.3	453.3	438.2	425.2	414.6	407.3	406.0	407.3	414.6	425.2
155°	492.3	476.7	461.1	447.3	437.1	427.0	421.4	420.6	421.4	427.0	437.1
157.5°	492.3	479.8	466.6	455.0	446.9	438.1	433.6	432.7	433.6	438.1	446.9
160°	492.3	481.3	470.2	460.1	452.7	445.4	441.7	440.8	441.7	445.4	452.7
162.5°	491.6	482.0	472.5	464.5	457.9	452.0	448.4	448.9	448.4	452.0	457.9
165°	489.6	483.2	474.8	469.4	464.7	459.2	457.4	458.3	457.4	459.2	464.7
167.5°	488.3	482.9	476.9	473.4	470.1	466.6	464.9	466.0	464.9	466.6	470.1
170°	486.8	482.2	477.6	474.8	473.0	470.2	469.4	471.2	469.4	470.2	473.0
172.5°	484.6	481.5	478.3	476.3	475.2	472.5	473.0	474.1	473.0	472.5	475.2
175°	482.2	480.4	478.6	477.6	477.6	475.8	476.7	477.6	476.7	475.8	477.6
177.5°	480.8	479.3	478.6	478.6	478.6	477.1	477.8	479.3	477.8	477.1	478.6
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6



TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	510.6	509.5	507.6	504.8	503.0	500.0	498.0	499.2	499.5	499.2	498.9
5°	496.9	493.1	487.8	482.8	478.1	473.1	470.2	469.0	466.4	465.0	464.2
7.5°	480.2	473.7	466.4	457.6	450.1	442.3	438.3	436.3	431.2	428.4	426.0
10°	467.9	457.6	450.2	438.7	431.7	421.4	414.4	414.6	407.6	403.6	400.8
12.5°	454.2	442.9	430.6	420.3	410.5	402.3	393.8	390.4	382.9	379.1	371.4
15°	431.5	418.4	405.4	391.4	381.5	368.7	356.5	341.5	329.5	319.0	316.2
17.5°	406.8	390.5	377.5	361.0	344.0	322.6	308.4	299.7	292.5	286.9	282.8
20°	389.8	373.2	359.3	334.5	311.6	297.1	286.7	280.0	272.4	266.5	263.2
22.5°	371.9	354.7	335.7	308.0	290.2	278.5	269.3	261.6	256.4	251.8	248.8
25°	346.6	327.6	296.5	277.5	263.1	250.8	244.4	239.7	234.3	228.0	225.1
27.5°	319.8	289.8	267.4	253.2	239.5	231.6	225.7	218.7	213.9	211.0	208.0
30°	299.8	269.7	252.3	236.8	227.1	218.2	211.4	207.5	202.8	198.0	196.0
32.5°	277.5	253.5	236.7	223.9	214.0	206.4	201.1	194.6	191.3	188.3	184.2
35°	249.8	231.6	216.3	205.9	196.5	190.4	184.1	180.3	174.2	171.7	170.1
37.5°	226.3	210.6	199.2	188.1	180.7	174.0	170.1	164.1	161.4	157.9	154.5
40°	213.0	197.6	186.6	177.6	169.3	164.3	159.5	154.6	150.6	149.0	144.9
42.5°	199.6	187.0	175.9	166.1	160.6	155.2	149.1	145.5	141.4	138.8	136.3
45°	180.9	169.7	160.3	152.3	146.1	140.5	136.6	130.6	128.3	123.1	120.9
47.5°	164.5	154.1	145.1	137.4	131.5	127.9	122.1	117.4	113.7	110.4	107.7
50°	152.8	144.1	135.5	128.7	123.3	118.0	112.1	109.8	104.0	102.3	100.8
52.5°	142.1	133.9	126.0	119.3	113.9	108.8	103.6	100.5	96.6	95.1	93.9
55°	127.2	119.3	111.8	105.8	100.4	95.2	92.0	88.2	86.3	85.1	83.7
57.5°	112.3	105.1	99.3	93.3	87.9	83.7	80.0	77.7	75.9	74.2	72.5
60°	102.7	95.9	90.7	85.1	79.5	76.1	73.3	70.5	68.4	65.8	65.1
62.5°	92.7	86.7	81.9	76.4	71.6	68.5	65.8	63.2	60.6	57.0	55.9
65°	78.8	74.1	69.1	64.6	60.3	57.2	53.2	50.4	49.3	49.0	48.8
67.5°	66.3	61.9	57.5	52.9	49.0	46.2	44.1	43.7	42.9	42.8	42.2
70°	57.9	53.8	49.5	45.2	41.4	40.9	40.2	39.4	38.5	38.2	37.8
72.5°	50.5	46.2	41.8	38.4	36.8	36.1	35.4	34.6	34.1	33.7	33.5
75°	38.7	34.7	31.8	30.6	29.7	29.2	28.0	27.6	27.2	26.6	26.5
77.5°	27.9	25.6	24.3	23.5	22.6	22.0	21.4	20.8	20.4	20.4	20.0
80°	21.2	20.1	19.3	18.1	17.8	17.1	17.0	16.4	16.6	16.0	16.0
82.5°	16.5	15.1	14.3	13.9	13.5	12.9	12.8	12.5	12.5	12.1	12.1
85°	8.5	8.1	7.8	7.4	7.4	6.8	7.1	6.8	6.8	6.5	6.3
87.5°	4.9	5.4	6.0	7.3	8.4	8.4	8.2	7.9	7.5	7.9	7.9
90°	11.0	13.8	18.4	24.9	30.3	31.3	30.3	29.5	27.6	29.5	30.3
92.5°	33.1	41.7	62.6	91.8	118.0	119.6	101.1	80.2	68.8	61.1	55.4
95°	68.1	90.2	132.5	212.5	319.3	360.8	315.7	241.1	185.0	146.3	126.0
97.5°	96.6	121.7	174.8	286.4	463.8	615.8	646.0	562.6	460.3	360.8	294.3
100°	115.0	140.8	189.6	301.8	500.6	727.0	859.5	840.2	726.1	600.0	488.6
102.5°	132.0	157.7	202.8	302.6	486.6	730.7	939.1	1022.1	996.2	904.0	786.1
105°	156.5	182.2	225.5	307.4	459.2	681.9	926.7	1118.1	1222.1	1234.1	1203.7
107.5°	180.8	206.7	248.7	320.0	445.6	629.6	845.9	1048.9	1205.5	1301.2	1345.8
110°	196.9	223.6	264.1	330.3	442.7	604.6	795.1	989.3	1154.0	1271.8	1347.3



TEST NUMBER: P331641-927

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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	212.4	239.8	278.8	341.4	443.4	588.4	759.8	934.8	1092.9	1218.8	1305.3
115°	237.4	262.3	301.8	358.0	447.3	570.5	716.0	867.8	1009.6	1130.0	1224.9
117.5°	260.6	286.4	323.0	375.7	453.8	561.9	688.3	817.4	941.8	1051.1	1140.0
120°	276.1	301.8	337.7	387.5	458.3	556.7	673.6	792.3	906.4	1004.0	1087.7
122.5°	291.5	318.1	351.7	397.8	463.4	553.8	661.1	772.5	877.0	969.4	1045.0
125°	313.8	339.6	372.7	414.2	471.2	548.5	643.3	743.5	838.4	919.3	988.3
127.5°	333.5	360.0	392.2	429.4	479.1	545.3	626.7	715.0	800.8	877.2	940.9
130°	346.0	371.8	404.0	438.9	485.0	543.8	615.7	696.6	775.8	848.5	909.2
132.5°	357.8	383.6	414.3	448.5	490.8	543.1	606.8	679.0	752.3	819.0	876.1
135°	373.6	399.4	428.8	461.1	497.9	542.0	594.5	654.3	715.0	775.8	827.3
137.5°	387.6	411.5	440.6	470.6	504.1	541.9	585.8	634.6	685.4	733.6	778.6
140°	395.7	419.6	447.3	475.8	507.1	541.1	580.7	622.1	666.3	708.6	749.1
142.5°	403.1	425.6	452.4	480.2	509.3	541.1	575.5	611.8	649.4	685.8	719.6
145°	415.0	435.3	460.1	485.9	511.7	539.2	568.7	597.2	627.6	656.2	682.9
147.5°	425.0	443.0	466.4	489.0	512.4	536.0	561.7	586.1	610.0	632.2	651.7
150°	431.6	448.1	469.4	490.5	511.7	533.8	555.8	577.9	598.2	617.5	634.1
152.5°	438.2	453.3	472.3	491.2	510.2	530.0	550.6	569.8	588.6	605.0	619.3
155°	447.3	461.1	476.7	492.3	507.9	523.6	541.1	558.6	573.3	587.1	597.2
157.5°	455.0	466.6	479.8	492.3	503.7	517.0	532.1	545.5	557.9	569.4	577.3
160°	460.1	470.2	481.3	492.3	501.5	512.6	525.5	537.4	547.6	557.7	564.1
162.5°	464.5	472.5	482.0	491.6	499.3	508.9	519.6	529.3	538.0	546.6	551.6
165°	469.4	474.8	483.2	489.6	495.1	501.5	509.8	517.2	523.6	530.0	533.8
167.5°	473.4	476.9	482.9	488.3	490.8	495.1	500.3	505.6	510.6	515.0	518.3
170°	474.8	477.6	482.2	486.8	488.6	491.4	495.1	499.7	502.5	506.1	507.9
172.5°	476.3	478.3	481.5	484.6	485.7	487.0	490.0	493.1	495.1	498.0	499.2
175°	477.6	478.6	480.4	482.2	481.3	482.2	483.2	485.9	486.8	487.7	488.6
177.5°	478.6	478.6	479.3	480.8	479.3	478.6	479.3	480.8	480.8	481.5	481.5
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6



TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	497.3	497.6	497.2	497.4	497.2	497.6	497.3	498.9	499.2	499.5	499.2
5°	463.3	461.2	460.8	460.3	460.8	461.2	463.3	464.2	465.0	466.4	469.0
7.5°	422.9	422.6	421.6	420.3	421.6	422.6	422.9	426.0	428.4	431.2	436.3
10°	396.8	395.9	395.7	394.4	395.7	395.9	396.8	400.8	403.6	407.6	414.6
12.5°	366.2	360.4	359.9	356.7	359.9	360.4	366.2	371.4	379.1	382.9	390.4
15°	311.9	310.8	307.1	304.8	307.1	310.8	311.9	316.2	319.0	329.5	341.5
17.5°	280.7	277.2	276.1	275.6	276.1	277.2	280.7	282.8	286.9	292.5	299.7
20°	260.7	257.5	257.0	256.6	257.0	257.5	260.7	263.2	266.5	272.4	280.0
22.5°	246.9	243.5	242.2	241.1	242.2	243.5	246.9	248.8	251.8	256.4	261.6
25°	223.3	222.0	221.3	220.9	221.3	222.0	223.3	225.1	228.0	234.3	239.7
27.5°	204.9	202.1	201.5	200.6	201.5	202.1	204.9	208.0	211.0	213.9	218.7
30°	194.3	193.5	192.2	191.1	192.2	193.5	194.3	196.0	198.0	202.8	207.5
32.5°	182.0	181.2	180.1	179.6	180.1	181.2	182.0	184.2	188.3	191.3	194.6
35°	168.3	165.7	164.6	163.0	164.6	165.7	168.3	170.1	171.7	174.2	180.3
37.5°	153.8	152.4	150.9	151.5	150.9	152.4	153.8	154.5	157.9	161.4	164.1
40°	142.5	141.6	141.2	141.1	141.2	141.6	142.5	144.9	149.0	150.6	154.6
42.5°	133.6	131.1	130.2	130.2	130.2	131.1	133.6	136.3	138.8	141.4	145.5
45°	120.0	117.7	116.1	116.2	116.1	117.7	120.0	120.9	123.1	128.3	130.6
47.5°	106.2	106.1	105.0	105.4	105.0	106.1	106.2	107.7	110.4	113.7	117.4
50°	99.5	98.5	97.7	97.9	97.7	98.5	99.5	100.8	102.3	104.0	109.8
52.5°	93.2	92.2	91.7	92.4	91.7	92.2	93.2	93.9	95.1	96.6	100.5
55°	82.8	81.7	81.5	81.4	81.5	81.7	82.8	83.7	85.1	86.3	88.2
57.5°	71.1	70.4	69.3	68.9	69.3	70.4	71.1	72.5	74.2	75.9	77.7
60°	62.8	61.4	59.6	59.4	59.6	61.4	62.8	65.1	65.8	68.4	70.5
62.5°	55.1	54.9	54.5	54.5	54.5	54.9	55.1	55.9	57.0	60.6	63.2
65°	48.4	48.2	48.4	48.6	48.4	48.2	48.4	48.8	49.0	49.3	50.4
67.5°	42.1	41.8	41.5	41.7	41.5	41.8	42.1	42.2	42.8	42.9	43.7
70°	37.4	37.2	37.1	37.1	37.1	37.2	37.4	37.8	38.2	38.5	39.4
72.5°	32.8	32.8	32.6	32.5	32.6	32.8	32.8	33.5	33.7	34.1	34.6
75°	26.3	25.9	25.9	25.9	25.9	25.9	26.3	26.5	26.6	27.2	27.6
77.5°	20.0	19.8	19.6	19.5	19.6	19.8	20.0	20.0	20.4	20.4	20.8
80°	15.8	15.7	15.4	15.4	15.4	15.7	15.8	16.0	16.0	16.6	16.4
82.5°	12.1	11.9	11.9	11.7	11.9	11.9	12.1	12.1	12.1	12.5	12.5
85°	6.5	6.7	6.5	6.8	6.5	6.7	6.5	6.3	6.5	6.8	6.8
87.5°	7.9	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.9	7.5	7.9
90°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	29.5	27.6	29.5
92.5°	54.7	51.7	52.4	51.0	52.4	51.7	54.7	55.4	61.1	68.8	80.2
95°	114.1	106.8	104.0	104.9	104.0	106.8	114.1	126.0	146.3	185.0	241.1
97.5°	250.3	227.7	214.2	206.5	214.2	227.7	250.3	294.3	360.8	460.3	562.6
100°	412.3	372.7	346.0	329.5	346.0	372.7	412.3	488.6	600.0	726.1	840.2
102.5°	703.1	635.6	602.2	579.8	602.2	635.6	703.1	786.1	904.0	996.2	1022.1
105°	1146.6	1089.6	1050.0	1037.1	1050.0	1089.6	1146.6	1203.7	1234.1	1222.1	1118.1
107.5°	1353.0	1349.8	1341.9	1324.8	1341.9	1349.8	1353.0	1345.8	1301.2	1205.5	1048.9
110°	1386.8	1404.3	1412.6	1411.7	1412.6	1404.3	1386.8	1347.3	1271.8	1154.0	989.3



TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	1360.3	1389.6	1405.3	1410.2	1405.3	1389.6	1360.3	1305.3	1218.8	1092.9	934.8
115°	1290.2	1332.5	1356.5	1364.8	1356.5	1332.5	1290.2	1224.9	1130.0	1009.6	867.8
117.5°	1206.7	1251.3	1276.6	1283.6	1276.6	1251.3	1206.7	1140.0	1051.1	941.8	817.4
120°	1152.1	1195.4	1222.1	1231.3	1222.1	1195.4	1152.1	1087.7	1004.0	906.4	792.3
122.5°	1102.8	1145.3	1169.1	1176.8	1169.1	1145.3	1102.8	1045.0	969.4	877.0	772.5
125°	1041.7	1076.7	1099.7	1107.1	1099.7	1076.7	1041.7	988.3	919.3	838.4	743.5
127.5°	987.5	1020.2	1040.1	1046.0	1040.1	1020.2	987.5	940.9	877.2	800.8	715.0
130°	954.3	985.6	1004.0	1011.4	1004.0	985.6	954.3	909.2	848.5	775.8	696.6
132.5°	920.4	951.7	968.7	975.3	968.7	951.7	920.4	876.1	819.0	752.3	679.0
135°	866.9	897.2	913.8	917.5	913.8	897.2	866.9	827.3	775.8	715.0	654.3
137.5°	814.6	840.7	855.3	860.8	855.3	840.7	814.6	778.6	733.6	685.4	634.6
140°	778.6	802.5	816.3	821.8	816.3	802.5	778.6	749.1	708.6	666.3	622.1
142.5°	747.6	769.4	781.6	782.8	781.6	769.4	747.6	719.6	685.8	649.4	611.8
145°	704.9	720.6	729.8	732.5	729.8	720.6	704.9	682.9	656.2	627.6	597.2
147.5°	669.9	682.5	688.7	690.4	688.7	682.5	669.9	651.7	632.2	610.0	586.1
150°	647.8	658.9	664.4	665.4	664.4	658.9	647.8	634.1	617.5	598.2	577.9
152.5°	630.2	639.8	643.8	644.0	643.8	639.8	630.2	619.3	605.0	588.6	569.8
155°	607.4	613.8	617.5	615.7	617.5	613.8	607.4	597.2	587.1	573.3	558.6
157.5°	584.6	589.9	591.5	591.5	591.5	589.9	584.6	577.3	569.4	557.9	545.5
160°	570.5	575.1	576.1	576.1	576.1	575.1	570.5	564.1	557.7	547.6	537.4
162.5°	558.0	561.2	562.1	561.3	562.1	561.2	558.0	551.6	546.6	538.0	529.3
165°	537.4	541.1	541.1	540.2	541.1	541.1	537.4	533.8	530.0	523.6	517.2
167.5°	519.9	522.0	521.8	520.7	521.8	522.0	519.9	518.3	515.0	510.6	505.6
170°	508.9	511.7	510.7	508.9	510.7	511.7	508.9	507.9	506.1	502.5	499.7
172.5°	500.1	501.4	500.4	499.3	500.4	501.4	500.1	499.2	498.0	495.1	493.1
175°	488.6	489.6	488.6	486.8	488.6	489.6	488.6	488.6	487.7	486.8	485.9
177.5°	481.5	481.5	480.8	479.3	480.8	481.5	481.5	481.5	481.5	480.8	480.8
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6



TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	498.0	500.0	503.0	504.8	507.6	509.5	510.6	512.4	513.4	517.1	520.8
5°	470.2	473.1	478.1	482.8	487.8	493.1	496.9	501.1	505.1	511.9	519.1
7.5°	438.3	442.3	450.1	457.6	466.4	473.7	480.2	487.6	494.2	504.0	514.2
10°	414.4	421.4	431.7	438.7	450.2	457.6	467.9	475.9	485.1	498.1	509.6
12.5°	393.8	402.3	410.5	420.3	430.6	442.9	454.2	464.6	475.5	488.9	502.4
15°	356.5	368.7	381.5	391.4	405.4	418.4	431.5	445.5	458.8	474.9	492.5
17.5°	308.4	322.6	344.0	361.0	377.5	390.5	406.8	423.7	439.4	458.8	478.4
20°	286.7	297.1	311.6	334.5	359.3	373.2	389.8	408.4	426.4	447.5	468.6
22.5°	269.3	278.5	290.2	308.0	335.7	354.7	371.9	390.9	411.8	433.2	456.6
25°	244.4	250.8	263.1	277.5	296.5	327.6	346.6	365.7	388.3	411.4	438.0
27.5°	225.7	231.6	239.5	253.2	267.4	289.8	319.8	340.6	363.2	389.1	416.8
30°	211.4	218.2	227.1	236.8	252.3	269.7	299.8	323.9	346.2	372.9	402.3
32.5°	201.1	206.4	214.0	223.9	236.7	253.5	277.5	306.7	328.5	356.6	387.4
35°	184.1	190.4	196.5	205.9	216.3	231.6	249.8	281.1	302.7	330.3	361.3
37.5°	170.1	174.0	180.7	188.1	199.2	210.6	226.3	254.4	277.7	304.9	336.6
40°	159.5	164.3	169.3	177.6	186.6	197.6	213.0	233.9	260.7	287.4	318.3
42.5°	149.1	155.2	160.6	166.1	175.9	187.0	199.6	217.2	244.6	269.8	299.9
45°	136.6	140.5	146.1	152.3	160.3	169.7	180.9	196.3	222.6	244.4	272.6
47.5°	122.1	127.9	131.5	137.4	145.1	154.1	164.5	177.8	199.1	219.5	245.7
50°	112.1	118.0	123.3	128.7	135.5	144.1	152.8	165.7	182.8	204.2	228.7
52.5°	103.6	108.8	113.9	119.3	126.0	133.9	142.1	153.5	168.1	187.8	211.6
55°	92.0	95.2	100.4	105.8	111.8	119.3	127.2	136.7	149.3	165.9	185.1
57.5°	80.0	83.7	87.9	93.3	99.3	105.1	112.3	120.9	130.8	145.8	162.2
60°	73.3	76.1	79.5	85.1	90.7	95.9	102.7	110.0	119.3	132.3	146.3
62.5°	65.8	68.5	71.6	76.4	81.9	86.7	92.7	100.3	108.2	120.0	132.3
65°	53.2	57.2	60.3	64.6	69.1	74.1	78.8	84.9	92.0	101.3	112.3
67.5°	44.1	46.2	49.0	52.9	57.5	61.9	66.3	71.1	77.2	84.4	93.1
70°	40.2	40.9	41.4	45.2	49.5	53.8	57.9	62.4	67.7	73.6	81.1
72.5°	35.4	36.1	36.8	38.4	41.8	46.2	50.5	53.8	58.7	63.7	69.8
75°	28.0	29.2	29.7	30.6	31.8	34.7	38.7	41.9	44.8	48.6	53.5
77.5°	21.4	22.0	22.6	23.5	24.3	25.6	27.9	30.7	33.5	35.6	39.0
80°	17.0	17.1	17.8	18.1	19.3	20.1	21.2	23.6	26.3	27.2	29.5
82.5°	12.8	12.9	13.5	13.9	14.3	15.1	16.5	17.1	19.3	20.4	21.9
85°	7.1	6.8	7.4	7.4	7.8	8.1	8.5	9.3	9.9	11.3	11.7
87.5°	8.2	8.4	8.4	7.3	6.0	5.4	4.9	4.8	4.7	4.4	4.4
90°	30.3	31.3	30.3	24.9	18.4	13.8	11.0	9.2	7.4	3.6	1.0
92.5°	101.1	119.6	118.0	91.8	62.6	41.7	33.1	26.9	22.8	16.2	11.2
95°	315.7	360.8	319.3	212.5	132.5	90.2	68.1	53.4	45.1	35.9	32.2
97.5°	646.0	615.8	463.8	286.4	174.8	121.7	96.6	79.7	67.2	57.4	52.4
100°	859.5	727.0	500.6	301.8	189.6	140.8	115.0	96.6	81.9	73.6	70.8
102.5°	939.1	730.7	486.6	302.6	202.8	157.7	132.0	112.8	98.1	89.8	87.8
105°	926.7	681.9	459.2	307.4	225.5	182.2	156.5	136.2	122.4	116.0	112.3
107.5°	845.9	629.6	445.6	320.0	248.7	206.7	180.8	160.7	148.0	141.7	138.8
110°	795.1	604.6	442.7	330.3	264.1	223.6	196.9	177.6	165.6	160.1	156.5



TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	759.8	588.4	443.4	341.4	278.8	239.8	212.4	193.8	182.6	176.3	172.6
115°	716.0	570.5	447.3	358.0	301.8	262.3	237.4	219.0	207.9	202.5	197.9
117.5°	688.3	561.9	453.8	375.7	323.0	286.4	260.6	243.0	233.2	227.7	224.0
120°	673.6	556.7	458.3	387.5	337.7	301.8	276.1	257.7	249.4	243.8	240.2
122.5°	661.1	553.8	463.4	397.8	351.7	318.1	291.5	273.1	264.1	258.6	255.6
125°	643.3	548.5	471.2	414.2	372.7	339.6	313.8	295.4	284.4	278.8	276.1
127.5°	626.7	545.3	479.1	429.4	392.2	360.0	333.5	315.8	303.7	296.0	292.2
130°	615.7	543.8	485.0	438.9	404.0	371.8	346.0	327.6	314.7	305.5	301.8
132.5°	606.8	543.1	490.8	448.5	414.3	383.6	357.8	338.7	325.0	315.1	310.7
135°	594.5	542.0	497.9	461.1	428.8	399.4	373.6	352.4	338.7	327.6	323.9
137.5°	585.8	541.9	504.1	470.6	440.6	411.5	387.6	366.6	351.9	340.9	336.4
140°	580.7	541.1	507.1	475.8	447.3	419.6	395.7	375.5	360.8	349.7	346.0
142.5°	575.5	541.1	509.3	480.2	452.4	425.6	403.1	383.6	368.8	358.5	355.6
145°	568.7	539.2	511.7	485.9	460.1	435.3	415.0	396.6	382.9	373.6	369.9
147.5°	561.7	536.0	512.4	489.0	466.4	443.0	425.0	409.7	397.0	388.2	385.4
150°	555.8	533.8	511.7	490.5	469.4	448.1	431.6	417.8	405.8	398.5	395.7
152.5°	550.6	530.0	510.2	491.2	472.3	453.3	438.2	425.2	414.6	407.3	406.0
155°	541.1	523.6	507.9	492.3	476.7	461.1	447.3	437.1	427.0	421.4	420.6
157.5°	532.1	517.0	503.7	492.3	479.8	466.6	455.0	446.9	438.1	433.6	432.7
160°	525.5	512.6	501.5	492.3	481.3	470.2	460.1	452.7	445.4	441.7	440.8
162.5°	519.6	508.9	499.3	491.6	482.0	472.5	464.5	457.9	452.0	448.4	448.9
165°	509.8	501.5	495.1	489.6	483.2	474.8	469.4	464.7	459.2	457.4	458.3
167.5°	500.3	495.1	490.8	488.3	482.9	476.9	473.4	470.1	466.6	464.9	466.0
170°	495.1	491.4	488.6	486.8	482.2	477.6	474.8	473.0	470.2	469.4	471.2
172.5°	490.0	487.0	485.7	484.6	481.5	478.3	476.3	475.2	472.5	473.0	474.1
175°	483.2	482.2	481.3	482.2	480.4	478.6	477.6	477.6	475.8	476.7	477.6
177.5°	479.3	478.6	479.3	480.8	479.3	478.6	478.6	478.6	477.1	477.8	479.3
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6





TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	520.9	521.3	524.2	525.5	528.1	529.1	530.3	530.0	530.0	530.5	534.6
5°	522.0	525.6	531.0	536.2	541.3	545.6	548.5	551.4	552.5	557.6	562.3
7.5°	520.1	526.8	535.7	543.7	553.2	560.6	566.8	572.4	576.2	583.8	591.6
10°	517.7	527.0	537.1	547.4	560.5	570.5	580.5	588.3	590.7	602.1	608.6
12.5°	512.8	525.3	538.1	551.4	564.3	577.9	589.0	596.8	605.6	615.8	627.7
15°	505.5	519.8	536.6	553.7	572.0	588.6	600.5	613.9	623.7	634.9	645.3
17.5°	495.0	513.5	534.7	554.5	575.8	593.5	609.9	622.8	629.6	636.0	637.5
20°	486.6	506.5	531.6	554.9	576.2	596.7	612.9	623.7	625.5	625.7	616.2
22.5°	477.5	500.1	526.2	550.2	575.6	598.4	611.0	615.6	608.5	596.3	577.8
25°	460.8	487.0	517.4	544.7	572.4	594.0	598.3	590.3	565.2	538.9	505.6
27.5°	442.8	472.1	504.7	535.1	564.7	578.1	568.7	539.5	494.5	455.3	407.8
30°	429.5	462.5	494.5	528.5	555.9	561.6	540.2	497.2	444.7	385.6	338.3
32.5°	414.4	448.9	484.1	519.3	542.2	536.5	501.2	448.2	386.7	328.6	283.9
35°	392.8	428.4	466.4	501.7	516.3	491.9	439.0	370.1	307.1	253.0	222.2
37.5°	367.9	406.7	446.2	478.6	477.5	437.0	365.0	293.8	240.9	208.8	187.0
40°	350.1	389.4	432.1	459.4	447.7	395.0	316.9	249.8	211.0	185.5	169.5
42.5°	333.2	372.6	414.9	436.7	416.3	351.5	273.7	221.1	189.2	169.3	156.3
45°	304.3	345.9	385.1	397.1	360.8	289.4	221.3	183.2	161.9	147.2	138.2
47.5°	276.0	317.0	352.8	352.9	303.8	234.6	186.7	158.5	140.4	129.0	122.5
50°	258.7	297.6	327.6	323.0	267.2	208.7	167.0	142.7	127.6	118.7	111.9
52.5°	239.3	277.0	303.1	289.8	236.2	183.7	149.2	128.9	116.4	108.7	102.6
55°	211.0	244.5	262.9	242.7	192.7	152.8	126.1	110.1	100.8	94.3	89.0
57.5°	183.3	211.0	222.4	199.0	158.8	126.7	106.7	94.7	85.4	80.7	78.0
60°	165.9	189.5	197.6	171.7	138.0	110.8	94.5	83.3	76.4	73.4	70.7
62.5°	148.8	168.0	171.3	147.7	120.3	97.0	82.9	73.5	69.0	66.1	63.5
65°	123.4	137.3	135.7	116.6	95.2	77.0	66.8	61.0	57.6	53.5	49.0
67.5°	101.6	110.1	105.0	90.7	72.6	59.9	53.2	48.8	44.5	40.6	39.6
70°	87.8	92.7	87.3	74.1	59.6	50.2	44.8	39.6	37.1	36.2	34.5
72.5°	74.5	76.3	70.4	59.2	48.5	41.6	36.3	33.4	32.0	31.3	30.3
75°	55.9	54.7	49.7	40.9	33.7	29.0	27.3	26.3	25.3	24.6	24.1
77.5°	39.3	37.5	33.0	27.2	23.4	21.2	20.2	19.6	19.3	18.9	18.3
80°	29.5	28.3	23.8	19.4	17.8	16.7	16.2	15.4	15.4	15.1	14.6
82.5°	21.6	20.2	16.2	14.3	13.4	12.7	12.3	11.9	11.7	11.8	11.4
85°	11.3	9.2	8.1	7.8	7.2	6.8	7.1	6.7	6.7	6.7	6.5
87.5°	4.2	4.2	4.4	4.7	5.4	6.3	7.4	8.6	8.9	8.6	8.5
90°	3.6	7.4	9.2	11.0	13.8	18.4	24.9	30.3	31.3	30.3	29.5
92.5°	16.2	22.8	26.9	33.1	41.7	62.6	91.8	118.0	119.6	101.1	80.2
95°	35.9	45.1	53.4	68.1	90.2	132.5	212.5	319.3	360.8	315.7	241.1
97.5°	57.4	67.2	79.7	96.6	121.7	174.8	286.4	463.8	615.8	646.0	562.6
100°	73.6	81.9	96.6	115.0	140.8	189.6	301.8	500.6	727.0	859.5	840.2
102.5°	89.8	98.1	112.8	132.0	157.7	202.8	302.6	486.6	730.7	939.1	1022.1
105°	116.0	122.4	136.2	156.5	182.2	225.5	307.4	459.2	681.9	926.7	1118.1
107.5°	141.7	148.0	160.7	180.8	206.7	248.7	320.0	445.6	629.6	845.9	1048.9
110°	160.1	165.6	177.6	196.9	223.6	264.1	330.3	442.7	604.6	795.1	989.3





TEST NUMBER: P331641-927

CATALOG NUMBER: SA2XXRDIP-C290D1080U927-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	176.3	182.6	193.8	212.4	239.8	278.8	341.4	443.4	588.4	759.8	934.8
115°	202.5	207.9	219.0	237.4	262.3	301.8	358.0	447.3	570.5	716.0	867.8
117.5°	227.7	233.2	243.0	260.6	286.4	323.0	375.7	453.8	561.9	688.3	817.4
120°	243.8	249.4	257.7	276.1	301.8	337.7	387.5	458.3	556.7	673.6	792.3
122.5°	258.6	264.1	273.1	291.5	318.1	351.7	397.8	463.4	553.8	661.1	772.5
125°	278.8	284.4	295.4	313.8	339.6	372.7	414.2	471.2	548.5	643.3	743.5
127.5°	296.0	303.7	315.8	333.5	360.0	392.2	429.4	479.1	545.3	626.7	715.0
130°	305.5	314.7	327.6	346.0	371.8	404.0	438.9	485.0	543.8	615.7	696.6
132.5°	315.1	325.0	338.7	357.8	383.6	414.3	448.5	490.8	543.1	606.8	679.0
135°	327.6	338.7	352.4	373.6	399.4	428.8	461.1	497.9	542.0	594.5	654.3
137.5°	340.9	351.9	366.6	387.6	411.5	440.6	470.6	504.1	541.9	585.8	634.6
140°	349.7	360.8	375.5	395.7	419.6	447.3	475.8	507.1	541.1	580.7	622.1
142.5°	358.5	368.8	383.6	403.1	425.6	452.4	480.2	509.3	541.1	575.5	611.8
145°	373.6	382.9	396.6	415.0	435.3	460.1	485.9	511.7	539.2	568.7	597.2
147.5°	388.2	397.0	409.7	425.0	443.0	466.4	489.0	512.4	536.0	561.7	586.1
150°	398.5	405.8	417.8	431.6	448.1	469.4	490.5	511.7	533.8	555.8	577.9
152.5°	407.3	414.6	425.2	438.2	453.3	472.3	491.2	510.2	530.0	550.6	569.8
155°	421.4	427.0	437.1	447.3	461.1	476.7	492.3	507.9	523.6	541.1	558.6
157.5°	433.6	438.1	446.9	455.0	466.6	479.8	492.3	503.7	517.0	532.1	545.5
160°	441.7	445.4	452.7	460.1	470.2	481.3	492.3	501.5	512.6	525.5	537.4
162.5°	448.4	452.0	457.9	464.5	472.5	482.0	491.6	499.3	508.9	519.6	529.3
165°	457.4	459.2	464.7	469.4	474.8	483.2	489.6	495.1	501.5	509.8	517.2
167.5°	464.9	466.6	470.1	473.4	476.9	482.9	488.3	490.8	495.1	500.3	505.6
170°	469.4	470.2	473.0	474.8	477.6	482.2	486.8	488.6	491.4	495.1	499.7
172.5°	473.0	472.5	475.2	476.3	478.3	481.5	484.6	485.7	487.0	490.0	493.1
175°	476.7	475.8	477.6	477.6	478.6	480.4	482.2	481.3	482.2	483.2	485.9
177.5°	477.8	477.1	478.6	478.6	478.6	479.3	480.8	479.3	478.6	479.3	480.8
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6	478.6



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	517.8	517.8	517.8	517.8	517.8	517.8	517.8
2.5°	536.0	537.9	538.8	538.8	539.8	539.3	538.9
5°	566.8	570.2	571.0	574.2	576.6	575.8	576.2
7.5°	597.5	602.9	608.4	610.9	611.2	612.7	613.2
10°	616.3	620.8	629.2	628.0	634.3	637.9	632.0
12.5°	634.5	640.6	646.4	648.0	651.6	652.8	650.4
15°	650.9	654.1	654.4	653.6	654.7	653.7	650.3
17.5°	635.6	630.3	619.6	614.6	610.6	604.7	602.3
20°	610.2	594.7	576.7	569.5	561.1	544.5	548.5
22.5°	555.5	537.9	519.8	498.8	488.8	473.1	472.1
25°	470.4	440.0	406.5	383.1	369.4	353.8	346.9
27.5°	365.8	327.4	300.0	286.1	273.5	261.1	260.5
30°	296.9	268.2	246.9	235.0	227.3	222.0	223.2
32.5°	250.3	230.5	216.2	206.4	200.7	196.7	196.6
35°	204.6	191.1	181.9	177.8	173.6	170.8	171.0
37.5°	175.1	167.0	161.8	157.3	154.7	153.3	152.5
40°	159.9	153.3	149.3	146.6	144.5	142.5	142.1
42.5°	148.1	142.5	138.6	136.4	134.4	133.0	132.7
45°	131.3	126.8	123.3	120.9	120.0	118.7	118.7
47.5°	116.8	112.4	109.6	108.1	106.6	105.8	105.8
50°	107.1	103.6	101.2	100.2	98.9	98.5	98.2
52.5°	98.3	95.7	94.0	93.3	92.8	92.1	92.2
55°	86.3	84.9	84.2	83.7	82.8	81.7	82.4
57.5°	76.4	75.1	73.2	71.5	70.7	69.9	70.2
60°	69.3	66.8	64.2	62.3	61.7	60.1	60.1
62.5°	60.4	56.8	53.7	52.6	52.0	51.3	51.2
65°	46.4	45.0	44.3	43.6	43.2	43.2	42.9
67.5°	38.5	37.9	37.1	36.9	36.6	36.4	36.4
70°	34.0	33.3	33.0	32.7	32.4	32.6	32.0
72.5°	29.7	29.2	29.1	28.6	28.4	28.4	28.0
75°	23.4	23.4	23.2	23.1	22.7	22.5	22.7
77.5°	18.0	18.1	17.7	17.7	17.7	17.7	17.5
80°	14.4	14.6	14.4	14.2	14.0	14.2	14.0
82.5°	11.4	11.1	11.1	11.0	11.0	10.9	10.9
85°	6.5	6.7	6.5	6.3	6.3	6.3	6.5
87.5°	8.0	8.3	8.6	8.6	8.6	8.6	8.4
90°	27.6	29.5	30.3	30.3	30.3	30.3	30.3
92.5°	68.8	61.1	55.4	54.7	51.7	52.4	51.0
95°	185.0	146.3	126.0	114.1	106.8	104.0	104.9
97.5°	460.3	360.8	294.3	250.3	227.7	214.2	206.5
100°	726.1	600.0	488.6	412.3	372.7	346.0	329.5
102.5°	996.2	904.0	786.1	703.1	635.6	602.2	579.8
105°	1222.1	1234.1	1203.7	1146.6	1089.6	1050.0	1037.1
107.5°	1205.5	1301.2	1345.8	1353.0	1349.8	1341.9	1324.8
110°	1154.0	1271.8	1347.3	1386.8	1404.3	1412.6	1411.7



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	1092.9	1218.8	1305.3	1360.3	1389.6	1405.3	1410.2
115°	1009.6	1130.0	1224.9	1290.2	1332.5	1356.5	1364.8
117.5°	941.8	1051.1	1140.0	1206.7	1251.3	1276.6	1283.6
120°	906.4	1004.0	1087.7	1152.1	1195.4	1222.1	1231.3
122.5°	877.0	969.4	1045.0	1102.8	1145.3	1169.1	1176.8
125°	838.4	919.3	988.3	1041.7	1076.7	1099.7	1107.1
127.5°	800.8	877.2	940.9	987.5	1020.2	1040.1	1046.0
130°	775.8	848.5	909.2	954.3	985.6	1004.0	1011.4
132.5°	752.3	819.0	876.1	920.4	951.7	968.7	975.3
135°	715.0	775.8	827.3	866.9	897.2	913.8	917.5
137.5°	685.4	733.6	778.6	814.6	840.7	855.3	860.8
140°	666.3	708.6	749.1	778.6	802.5	816.3	821.8
142.5°	649.4	685.8	719.6	747.6	769.4	781.6	782.8
145°	627.6	656.2	682.9	704.9	720.6	729.8	732.5
147.5°	610.0	632.2	651.7	669.9	682.5	688.7	690.4
150°	598.2	617.5	634.1	647.8	658.9	664.4	665.4
152.5°	588.6	605.0	619.3	630.2	639.8	643.8	644.0
155°	573.3	587.1	597.2	607.4	613.8	617.5	615.7
157.5°	557.9	569.4	577.3	584.6	589.9	591.5	591.5
160°	547.6	557.7	564.1	570.5	575.1	576.1	576.1
162.5°	538.0	546.6	551.6	558.0	561.2	562.1	561.3
165°	523.6	530.0	533.8	537.4	541.1	541.1	540.2
167.5°	510.6	515.0	518.3	519.9	522.0	521.8	520.7
170°	502.5	506.1	507.9	508.9	511.7	510.7	508.9
172.5°	495.1	498.0	499.2	500.1	501.4	500.4	499.3
175°	486.8	487.7	488.6	488.6	489.6	488.6	486.8
177.5°	480.8	481.5	481.5	481.5	481.5	480.8	479.3
180°	478.6	478.6	478.6	478.6	478.6	478.6	478.6

(END OF REPORT)