

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: P331641-935

Luminaire Tested: **SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331641-935  
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: SA2XXRDIP-C290D1080U935-4F0-1E-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: 4596.7 lumens  
Efficiency: N/A  
Efficacy: 108.9 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

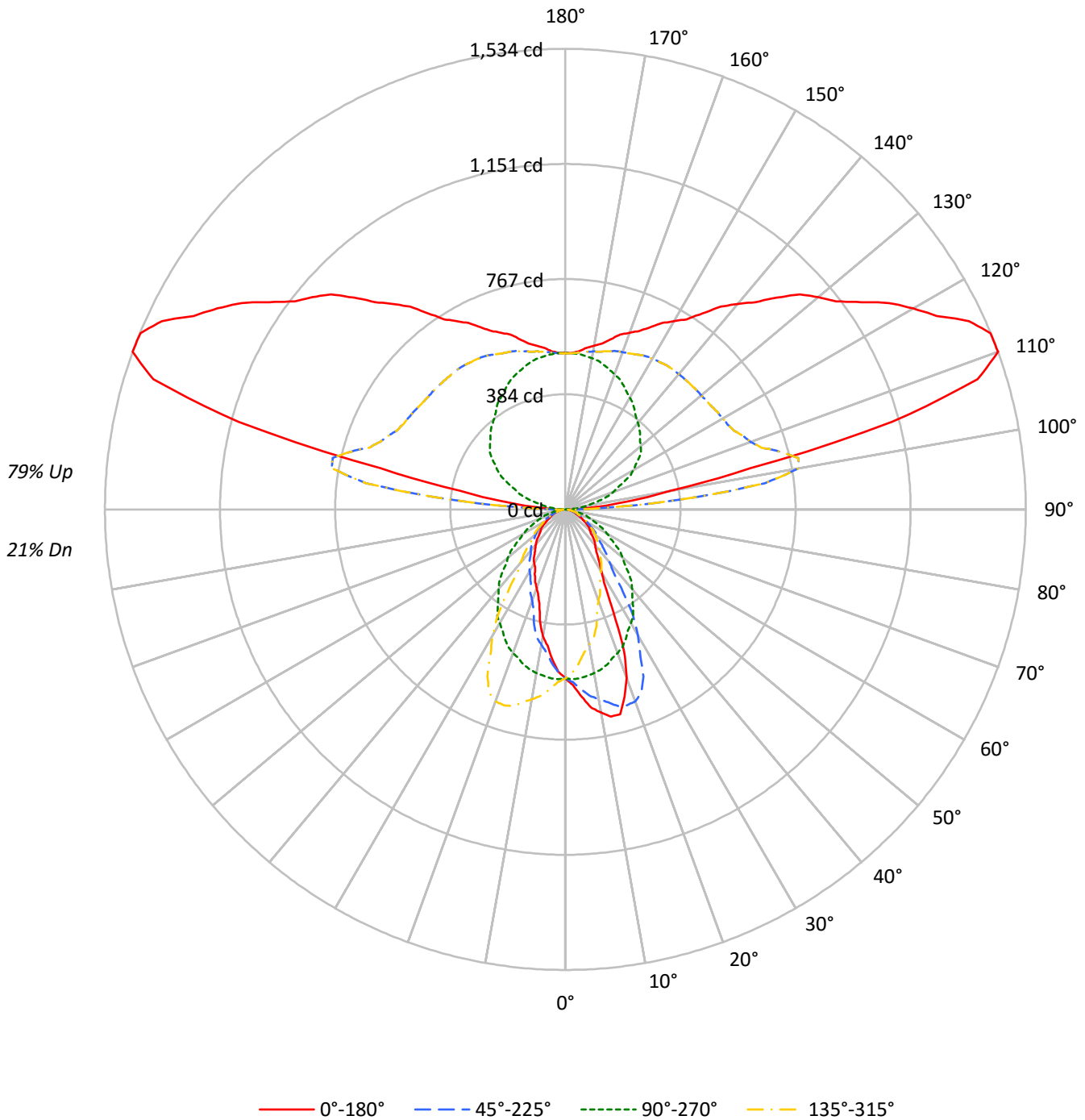
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	9087	9087	9087	9087
5°	10149	9144	8109	9144
10°	11262	9081	7029	9081
15°	11814	8948	5538	8948
20°	10244	8751	4792	8751
25°	6716	8480	4277	8480
30°	4521	8153	3872	8153
35°	3662	7740	3493	7740
40°	3256	7290	3231	7290
45°	2948	6766	2884	6766
50°	2683	6244	2673	6244
55°	2519	5664	2488	5664
60°	2109	5134	2086	5134
65°	1780	4661	2017	4661
70°	1643	4164	1902	4164
75°	1535	3624	1759	3624
80°	1413	2985	1562	2985
85°	1315	2353	1371	2353



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.4	1.2
10°-20°	148.7	3.2
20°-30°	191.6	4.2
30°-40°	182.1	4.0
40°-50°	156.0	3.4
50°-60°	118.8	2.6
60°-70°	75.1	1.6
70°-80°	37.5	0.8
80°-90°	14.4	0.3
90°-100°	208.0	4.5
100°-110°	705.7	15.4
110°-120°	749.7	16.3
120°-130°	617.2	13.4
130°-140°	495.6	10.8
140°-150°	374.5	8.1
150°-160°	263.2	5.7
160°-170°	154.9	3.4
170°-180°	50.4	1.1
0°-30°	393.6	8.6
0°-40°	575.7	12.5
0°-60°	850.4	18.5
0°-90°	977.5	21.3
90°-120°	1663.4	36.2
90°-150°	3150.7	68.5
90°-180°	3619.0	78.7
0°-180°	4596.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	563	563	563	563	563	
5°	626	564	500	564	626	62
15°	707	535	331	535	707	191
25°	377	476	240	476	377	179
35°	186	393	177	393	186	119
45°	129	296	126	296	129	100
55°	90	201	88	201	90	79
65°	47	122	53	122	47	47
75°	25	58	28	58	25	26
85°	7	13	7	13	7	8
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°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	585.7	586.2	586.7	585.6	585.6	584.6	582.6	581.0	576.6	576.0	576.0
5°	626.2	625.9	626.6	624.1	620.6	619.7	616.0	611.1	606.1	600.5	599.3
7.5°	666.5	665.9	664.3	663.9	661.2	655.3	649.4	643.0	634.6	626.3	622.2
10°	686.9	693.4	689.4	682.6	683.9	674.8	669.9	661.4	654.4	642.0	639.4
12.5°	706.9	709.5	708.2	704.3	702.6	696.2	689.6	682.3	669.3	658.2	648.6
15°	706.8	710.5	711.5	710.3	711.3	710.9	707.4	701.4	690.0	677.9	667.3
17.5°	654.6	657.2	663.7	668.0	673.5	685.0	690.8	692.9	691.3	684.3	676.9
20°	596.2	591.9	609.8	619.0	626.8	646.4	663.2	669.7	680.0	679.8	677.9
22.5°	513.2	514.2	531.2	542.2	565.0	584.6	603.7	628.0	648.1	661.3	669.1
25°	377.0	384.5	401.5	416.4	441.8	478.2	511.3	549.6	585.7	614.3	641.5
27.5°	283.2	283.8	297.2	311.0	326.1	355.9	397.5	443.2	494.8	537.4	586.3
30°	242.5	241.3	247.0	255.5	268.4	291.4	322.7	367.6	419.1	483.3	540.4
32.5°	213.7	213.8	218.1	224.3	235.0	250.6	272.0	308.6	357.1	420.3	487.2
35°	185.8	185.6	188.7	193.2	197.7	207.7	222.4	241.5	275.0	333.8	402.3
37.5°	165.7	166.6	168.2	171.0	175.9	181.5	190.3	203.2	227.0	261.8	319.3
40°	154.5	154.9	157.0	159.4	162.3	166.6	173.8	184.3	201.6	229.4	271.5
42.5°	144.2	144.6	146.1	148.3	150.6	154.9	160.9	169.9	184.0	205.6	240.3
45°	129.1	129.1	130.4	131.4	134.0	137.8	142.8	150.2	160.0	176.0	199.1
47.5°	114.9	114.9	115.9	117.5	119.2	122.2	127.0	133.1	140.2	152.6	172.3
50°	106.8	107.0	107.5	108.9	109.9	112.6	116.4	121.7	129.1	138.7	155.1
52.5°	100.2	100.1	100.8	101.4	102.1	104.0	106.9	111.5	118.1	126.5	140.1
55°	89.5	88.8	90.0	90.9	91.5	92.3	93.8	96.8	102.5	109.5	119.7
57.5°	76.3	75.9	76.8	77.7	79.6	81.6	83.0	84.8	87.7	92.8	102.9
60°	65.3	65.3	67.1	67.7	69.8	72.6	75.3	76.9	79.8	83.1	90.6
62.5°	55.6	55.8	56.6	57.2	58.4	61.7	65.6	69.1	71.8	75.0	79.9
65°	46.6	46.9	46.9	47.4	48.1	48.9	50.5	53.2	58.1	62.6	66.3
67.5°	39.5	39.6	39.8	40.1	40.3	41.2	41.8	43.0	44.2	48.4	53.0
70°	34.8	35.4	35.2	35.6	35.8	36.2	36.9	37.5	39.3	40.3	43.0
72.5°	30.4	30.8	30.8	31.1	31.6	31.7	32.3	32.9	34.0	34.8	36.3
75°	24.6	24.5	24.6	25.1	25.2	25.4	25.4	26.2	26.8	27.6	28.6
77.5°	19.0	19.2	19.2	19.2	19.3	19.6	19.5	19.9	20.5	20.9	21.4
80°	15.2	15.4	15.2	15.4	15.7	15.8	15.7	15.8	16.4	16.8	16.8
82.5°	11.8	11.9	12.0	12.0	12.1	12.1	12.4	12.4	12.8	12.7	12.9
85°	7.1	6.9	6.9	6.9	7.1	7.2	7.1	7.1	7.2	7.2	7.2
87.5°	9.1	9.3	9.3	9.3	9.3	9.0	8.7	9.2	9.3	9.6	9.3
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°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	576.4	575.1	573.9	571.2	569.7	566.6	566.2	566.0	562.0	558.0	556.9
5°	596.2	593.0	588.3	582.8	577.1	571.3	567.4	564.2	556.4	549.0	544.7
7.5°	616.0	609.3	601.2	590.9	582.2	572.6	565.3	558.9	547.8	537.1	529.9
10°	630.9	620.0	609.2	595.0	583.8	572.8	562.7	553.9	541.4	527.3	517.3
12.5°	640.2	628.1	613.3	599.3	584.9	570.9	557.3	546.0	531.3	516.8	505.0
15°	652.6	639.7	621.7	601.8	583.2	565.0	549.4	535.3	516.2	498.7	484.2
17.5°	662.9	645.1	625.8	602.7	581.2	558.1	538.0	520.0	498.6	477.6	460.5
20°	666.2	648.5	626.2	603.1	577.7	550.5	528.8	509.3	486.4	463.5	443.9
22.5°	664.1	650.4	625.6	598.0	572.0	543.5	519.0	496.3	470.9	447.5	424.9
25°	650.3	645.6	622.2	592.0	562.3	529.3	500.8	476.0	447.1	422.1	397.4
27.5°	618.1	628.3	613.7	581.6	548.5	513.2	481.2	453.0	422.9	394.8	370.2
30°	587.1	610.4	604.2	574.4	537.4	502.7	466.8	437.3	405.3	376.3	352.1
32.5°	544.8	583.2	589.3	564.4	526.2	487.9	450.4	421.0	387.5	357.1	333.4
35°	477.2	534.7	561.1	545.3	507.0	465.6	427.0	392.7	359.0	329.0	305.5
37.5°	396.7	475.0	519.0	520.1	484.9	442.0	399.8	365.8	331.4	301.9	276.5
40°	344.4	429.3	486.6	499.3	469.6	423.3	380.6	345.9	312.4	283.4	254.3
42.5°	297.5	382.0	452.5	474.6	451.0	404.9	362.1	326.0	293.3	265.9	236.1
45°	240.6	314.5	392.1	431.6	418.5	375.9	330.7	296.3	265.6	241.9	213.4
47.5°	202.9	255.0	330.2	383.6	383.4	344.5	300.0	267.1	238.6	216.4	193.3
50°	181.5	226.9	290.4	351.0	356.1	323.5	281.2	248.6	222.0	198.7	180.1
52.5°	162.2	199.7	256.8	315.0	329.4	301.1	260.1	230.0	204.1	182.7	166.9
55°	137.1	166.1	209.5	263.8	285.8	265.8	229.4	201.2	180.3	162.3	148.6
57.5°	116.0	137.7	172.5	216.3	241.8	229.3	199.2	176.3	158.4	142.2	131.4
60°	102.7	120.5	150.0	186.6	214.7	206.0	180.3	159.0	143.8	129.7	119.5
62.5°	90.1	105.5	130.8	160.5	186.2	182.6	161.7	143.8	130.4	117.6	109.0
65°	72.6	83.7	103.5	126.7	147.5	149.2	134.1	122.0	110.1	100.0	92.3
67.5°	57.8	65.1	79.0	98.6	114.1	119.7	110.5	101.2	91.7	83.9	77.2
70°	48.7	54.6	64.7	80.6	94.9	100.7	95.4	88.2	80.0	73.5	67.8
72.5°	39.4	45.2	52.7	64.3	76.5	82.9	81.0	75.9	69.2	63.8	58.5
75°	29.7	31.5	36.6	44.4	54.0	59.5	60.8	58.1	52.8	48.7	45.5
77.5°	22.0	23.1	25.5	29.5	35.8	40.7	42.7	42.4	38.7	36.4	33.4
80°	17.6	18.2	19.4	21.1	25.8	30.7	32.1	32.1	29.5	28.6	25.7
82.5°	13.3	13.8	14.6	15.5	17.7	22.0	23.5	23.8	22.2	20.9	18.6
85°	7.7	7.4	7.8	8.4	8.8	10.0	12.3	12.7	12.3	10.8	10.2
87.5°	8.1	6.8	5.9	5.1	4.8	4.6	4.6	4.7	4.7	5.1	5.2
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: P331641-935

CATALOG NUMBER: SA2XXRDIP-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: P331641-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	554.9	553.8	551.7	548.6	546.7	543.5	541.3	542.5	542.9	542.5	542.3
5°	540.0	535.9	530.2	524.7	519.6	514.2	511.0	509.7	507.0	505.4	504.5
7.5°	521.9	514.9	506.9	497.3	489.2	480.7	476.4	474.2	468.6	465.6	463.0
10°	508.5	497.3	489.3	476.8	469.2	458.1	450.4	450.6	443.0	438.7	435.6
12.5°	493.6	481.4	468.0	456.8	446.2	437.2	428.0	424.3	416.2	412.1	403.6
15°	469.0	454.7	440.7	425.4	414.7	400.7	387.4	371.2	358.1	346.7	343.6
17.5°	442.1	424.4	410.3	392.4	373.9	350.6	335.2	325.7	317.9	311.9	307.4
20°	423.6	405.6	390.5	363.6	338.7	322.9	311.6	304.3	296.1	289.6	286.1
22.5°	404.2	385.5	364.9	334.8	315.4	302.7	292.7	284.3	278.7	273.7	270.4
25°	376.7	356.1	322.3	301.6	285.9	272.6	265.6	260.5	254.7	247.8	244.7
27.5°	347.6	315.0	290.6	275.2	260.3	251.7	245.3	237.7	232.5	229.4	226.1
30°	325.8	293.2	274.2	257.4	246.8	237.2	229.8	225.5	220.4	215.2	213.0
32.5°	301.6	275.5	257.3	243.3	232.6	224.4	218.5	211.5	207.9	204.7	200.2
35°	271.5	251.7	235.1	223.8	213.5	206.9	200.1	196.0	189.3	186.6	184.9
37.5°	246.0	228.9	216.5	204.5	196.4	189.1	184.9	178.3	175.5	171.6	167.9
40°	231.5	214.7	202.9	193.0	184.0	178.6	173.3	168.0	163.7	162.0	157.5
42.5°	216.9	203.2	191.2	180.6	174.5	168.7	162.0	158.2	153.7	150.8	148.1
45°	196.6	184.4	174.3	165.5	158.8	152.7	148.4	142.0	139.5	133.8	131.4
47.5°	178.7	167.5	157.7	149.4	142.9	139.0	132.7	127.6	123.6	120.0	117.0
50°	166.1	156.6	147.2	139.8	134.0	128.3	121.8	119.3	113.0	111.2	109.5
52.5°	154.5	145.5	137.0	129.7	123.8	118.3	112.6	109.3	105.0	103.3	102.0
55°	138.3	129.7	121.5	115.0	109.2	103.5	100.0	95.8	93.8	92.5	90.9
57.5°	122.0	114.3	108.0	101.4	95.5	91.0	87.0	84.5	82.5	80.7	78.8
60°	111.7	104.3	98.6	92.5	86.4	82.7	79.6	76.6	74.3	71.5	70.8
62.5°	100.7	94.2	89.0	83.1	77.8	74.5	71.5	68.7	65.9	61.9	60.8
65°	85.7	80.6	75.1	70.2	65.5	62.2	57.9	54.8	53.6	53.2	53.0
67.5°	72.1	67.2	62.5	57.5	53.3	50.2	48.0	47.5	46.7	46.5	45.9
70°	62.9	58.5	53.8	49.1	44.9	44.4	43.7	42.8	41.8	41.5	41.1
72.5°	54.8	50.2	45.5	41.8	40.0	39.3	38.5	37.6	37.0	36.6	36.4
75°	42.0	37.7	34.6	33.2	32.3	31.7	30.5	30.0	29.5	28.9	28.8
77.5°	30.3	27.8	26.4	25.6	24.5	23.9	23.2	22.6	22.2	22.1	21.8
80°	23.1	21.9	20.9	19.7	19.4	18.6	18.4	17.8	18.0	17.4	17.4
82.5°	17.9	16.4	15.6	15.1	14.6	14.0	13.9	13.6	13.6	13.2	13.2
85°	9.2	8.8	8.4	8.0	8.0	7.4	7.7	7.4	7.4	7.1	6.9
87.5°	5.3	5.9	6.5	7.9	9.1	9.1	9.0	8.6	8.2	8.6	8.6
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: P331641-935

CATALOG NUMBER: SA2XXRDIP-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: P331641-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	540.5	540.8	540.4	540.6	540.4	540.8	540.5	542.3	542.5	542.9	542.5
5°	503.6	501.3	500.8	500.3	500.8	501.3	503.6	504.5	505.4	507.0	509.7
7.5°	459.6	459.3	458.2	456.8	458.2	459.3	459.6	463.0	465.6	468.6	474.2
10°	431.3	430.2	430.1	428.7	430.1	430.2	431.3	435.6	438.7	443.0	450.6
12.5°	398.0	391.8	391.2	387.7	391.2	391.8	398.0	403.6	412.1	416.2	424.3
15°	339.0	337.8	333.8	331.3	333.8	337.8	339.0	343.6	346.7	358.1	371.2
17.5°	305.1	301.3	300.1	299.5	300.1	301.3	305.1	307.4	311.9	317.9	325.7
20°	283.4	279.9	279.3	278.9	279.3	279.9	283.4	286.1	289.6	296.1	304.3
22.5°	268.4	264.7	263.2	262.0	263.2	264.7	268.4	270.4	273.7	278.7	284.3
25°	242.7	241.3	240.6	240.1	240.6	241.3	242.7	244.7	247.8	254.7	260.5
27.5°	222.7	219.6	219.0	218.0	219.0	219.6	222.7	226.1	229.4	232.5	237.7
30°	211.2	210.3	208.9	207.7	208.9	210.3	211.2	213.0	215.2	220.4	225.5
32.5°	197.8	196.9	195.7	195.2	195.7	196.9	197.8	200.2	204.7	207.9	211.5
35°	182.9	180.1	178.9	177.2	178.9	180.1	182.9	184.9	186.6	189.3	196.0
37.5°	167.1	165.7	164.0	164.6	164.0	165.7	167.1	167.9	171.6	175.5	178.3
40°	154.9	153.9	153.5	153.3	153.5	153.9	154.9	157.5	162.0	163.7	168.0
42.5°	145.2	142.5	141.5	141.5	141.5	142.5	145.2	148.1	150.8	153.7	158.2
45°	130.4	127.9	126.1	126.3	126.1	127.9	130.4	131.4	133.8	139.5	142.0
47.5°	115.4	115.3	114.2	114.5	114.2	115.3	115.4	117.0	120.0	123.6	127.6
50°	108.1	107.0	106.2	106.4	106.2	107.0	108.1	109.5	111.2	113.0	119.3
52.5°	101.3	100.2	99.6	100.5	99.6	100.2	101.3	102.0	103.3	105.0	109.3
55°	90.0	88.8	88.6	88.4	88.6	88.8	90.0	90.9	92.5	93.8	95.8
57.5°	77.3	76.5	75.3	74.9	75.3	76.5	77.3	78.8	80.7	82.5	84.5
60°	68.3	66.7	64.7	64.6	64.7	66.7	68.3	70.8	71.5	74.3	76.6
62.5°	59.9	59.7	59.2	59.2	59.2	59.7	59.9	60.8	61.9	65.9	68.7
65°	52.6	52.4	52.6	52.8	52.6	52.4	52.6	53.0	53.2	53.6	54.8
67.5°	45.8	45.5	45.1	45.3	45.1	45.5	45.8	45.9	46.5	46.7	47.5
70°	40.6	40.5	40.3	40.3	40.3	40.5	40.6	41.1	41.5	41.8	42.8
72.5°	35.6	35.6	35.5	35.3	35.5	35.6	35.6	36.4	36.6	37.0	37.6
75°	28.6	28.2	28.2	28.2	28.2	28.2	28.6	28.8	28.9	29.5	30.0
77.5°	21.8	21.5	21.4	21.2	21.4	21.5	21.8	21.8	22.1	22.2	22.6
80°	17.2	17.0	16.8	16.8	16.8	17.0	17.2	17.4	17.4	18.0	17.8
82.5°	13.2	12.9	12.9	12.7	12.9	12.9	13.2	13.2	13.2	13.6	13.6
85°	7.1	7.2	7.1	7.4	7.1	7.2	7.1	6.9	7.1	7.4	7.4
87.5°	8.6	8.4	8.6	8.4	8.6	8.4	8.6	8.6	8.6	8.2	8.6
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: P331641-935

CATALOG NUMBER: SA2XXRDIP-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: P331641-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	541.3	543.5	546.7	548.6	551.7	553.8	554.9	556.9	558.0	562.0	566.0
5°	511.0	514.2	519.6	524.7	530.2	535.9	540.0	544.7	549.0	556.4	564.2
7.5°	476.4	480.7	489.2	497.3	506.9	514.9	521.9	529.9	537.1	547.8	558.9
10°	450.4	458.1	469.2	476.8	489.3	497.3	508.5	517.3	527.3	541.4	553.9
12.5°	428.0	437.2	446.2	456.8	468.0	481.4	493.6	505.0	516.8	531.3	546.0
15°	387.4	400.7	414.7	425.4	440.7	454.7	469.0	484.2	498.7	516.2	535.3
17.5°	335.2	350.6	373.9	392.4	410.3	424.4	442.1	460.5	477.6	498.6	520.0
20°	311.6	322.9	338.7	363.6	390.5	405.6	423.6	443.9	463.5	486.4	509.3
22.5°	292.7	302.7	315.4	334.8	364.9	385.5	404.2	424.9	447.5	470.9	496.3
25°	265.6	272.6	285.9	301.6	322.3	356.1	376.7	397.4	422.1	447.1	476.0
27.5°	245.3	251.7	260.3	275.2	290.6	315.0	347.6	370.2	394.8	422.9	453.0
30°	229.8	237.2	246.8	257.4	274.2	293.2	325.8	352.1	376.3	405.3	437.3
32.5°	218.5	224.4	232.6	243.3	257.3	275.5	301.6	333.4	357.1	387.5	421.0
35°	200.1	206.9	213.5	223.8	235.1	251.7	271.5	305.5	329.0	359.0	392.7
37.5°	184.9	189.1	196.4	204.5	216.5	228.9	246.0	276.5	301.9	331.4	365.8
40°	173.3	178.6	184.0	193.0	202.9	214.7	231.5	254.3	283.4	312.4	345.9
42.5°	162.0	168.7	174.5	180.6	191.2	203.2	216.9	236.1	265.9	293.3	326.0
45°	148.4	152.7	158.8	165.5	174.3	184.4	196.6	213.4	241.9	265.6	296.3
47.5°	132.7	139.0	142.9	149.4	157.7	167.5	178.7	193.3	216.4	238.6	267.1
50°	121.8	128.3	134.0	139.8	147.2	156.6	166.1	180.1	198.7	222.0	248.6
52.5°	112.6	118.3	123.8	129.7	137.0	145.5	154.5	166.9	182.7	204.1	230.0
55°	100.0	103.5	109.2	115.0	121.5	129.7	138.3	148.6	162.3	180.3	201.2
57.5°	87.0	91.0	95.5	101.4	108.0	114.3	122.0	131.4	142.2	158.4	176.3
60°	79.6	82.7	86.4	92.5	98.6	104.3	111.7	119.5	129.7	143.8	159.0
62.5°	71.5	74.5	77.8	83.1	89.0	94.2	100.7	109.0	117.6	130.4	143.8
65°	57.9	62.2	65.5	70.2	75.1	80.6	85.7	92.3	100.0	110.1	122.0
67.5°	48.0	50.2	53.3	57.5	62.5	67.2	72.1	77.2	83.9	91.7	101.2
70°	43.7	44.4	44.9	49.1	53.8	58.5	62.9	67.8	73.5	80.0	88.2
72.5°	38.5	39.3	40.0	41.8	45.5	50.2	54.8	58.5	63.8	69.2	75.9
75°	30.5	31.7	32.3	33.2	34.6	37.7	42.0	45.5	48.7	52.8	58.1
77.5°	23.2	23.9	24.5	25.6	26.4	27.8	30.3	33.4	36.4	38.7	42.4
80°	18.4	18.6	19.4	19.7	20.9	21.9	23.1	25.7	28.6	29.5	32.1
82.5°	13.9	14.0	14.6	15.1	15.6	16.4	17.9	18.6	20.9	22.2	23.8
85°	7.7	7.4	8.0	8.0	8.4	8.8	9.2	10.2	10.8	12.3	12.7
87.5°	9.0	9.1	9.1	7.9	6.5	5.9	5.3	5.2	5.1	4.7	4.7
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: P331641-935

CATALOG NUMBER: SA2XXRDIP-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: P331641-935

CATALOG NUMBER: SA2XXRDIP-C290D1080U935-4F0-1E-UDD-A4

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	566.2	566.6	569.7	571.2	573.9	575.1	576.4	576.0	576.0	576.6	581.0
5°	567.4	571.3	577.1	582.8	588.3	593.0	596.2	599.3	600.5	606.1	611.1
7.5°	565.3	572.6	582.2	590.9	601.2	609.3	616.0	622.2	626.3	634.6	643.0
10°	562.7	572.8	583.8	595.0	609.2	620.0	630.9	639.4	642.0	654.4	661.4
12.5°	557.3	570.9	584.9	599.3	613.3	628.1	640.2	648.6	658.2	669.3	682.3
15°	549.4	565.0	583.2	601.8	621.7	639.7	652.6	667.3	677.9	690.0	701.4
17.5°	538.0	558.1	581.2	602.7	625.8	645.1	662.9	676.9	684.3	691.3	692.9
20°	528.8	550.5	577.7	603.1	626.2	648.5	666.2	677.9	679.8	680.0	669.7
22.5°	519.0	543.5	572.0	598.0	625.6	650.4	664.1	669.1	661.3	648.1	628.0
25°	500.8	529.3	562.3	592.0	622.2	645.6	650.3	641.5	614.3	585.7	549.6
27.5°	481.2	513.2	548.5	581.6	613.7	628.3	618.1	586.3	537.4	494.8	443.2
30°	466.8	502.7	537.4	574.4	604.2	610.4	587.1	540.4	483.3	419.1	367.6
32.5°	450.4	487.9	526.2	564.4	589.3	583.2	544.8	487.2	420.3	357.1	308.6
35°	427.0	465.6	507.0	545.3	561.1	534.7	477.2	402.3	333.8	275.0	241.5
37.5°	399.8	442.0	484.9	520.1	519.0	475.0	396.7	319.3	261.8	227.0	203.2
40°	380.6	423.3	469.6	499.3	486.6	429.3	344.4	271.5	229.4	201.6	184.3
42.5°	362.1	404.9	451.0	474.6	452.5	382.0	297.5	240.3	205.6	184.0	169.9
45°	330.7	375.9	418.5	431.6	392.1	314.5	240.6	199.1	176.0	160.0	150.2
47.5°	300.0	344.5	383.4	383.6	330.2	255.0	202.9	172.3	152.6	140.2	133.1
50°	281.2	323.5	356.1	351.0	290.4	226.9	181.5	155.1	138.7	129.1	121.7
52.5°	260.1	301.1	329.4	315.0	256.8	199.7	162.2	140.1	126.5	118.1	111.5
55°	229.4	265.8	285.8	263.8	209.5	166.1	137.1	119.7	109.5	102.5	96.8
57.5°	199.2	229.3	241.8	216.3	172.5	137.7	116.0	102.9	92.8	87.7	84.8
60°	180.3	206.0	214.7	186.6	150.0	120.5	102.7	90.6	83.1	79.8	76.9
62.5°	161.7	182.6	186.2	160.5	130.8	105.5	90.1	79.9	75.0	71.8	69.1
65°	134.1	149.2	147.5	126.7	103.5	83.7	72.6	66.3	62.6	58.1	53.2
67.5°	110.5	119.7	114.1	98.6	79.0	65.1	57.8	53.0	48.4	44.2	43.0
70°	95.4	100.7	94.9	80.6	64.7	54.6	48.7	43.0	40.3	39.3	37.5
72.5°	81.0	82.9	76.5	64.3	52.7	45.2	39.4	36.3	34.8	34.0	32.9
75°	60.8	59.5	54.0	44.4	36.6	31.5	29.7	28.6	27.6	26.8	26.2
77.5°	42.7	40.7	35.8	29.5	25.5	23.1	22.0	21.4	20.9	20.5	19.9
80°	32.1	30.7	25.8	21.1	19.4	18.2	17.6	16.8	16.8	16.4	15.8
82.5°	23.5	22.0	17.7	15.5	14.6	13.8	13.3	12.9	12.7	12.8	12.4
85°	12.3	10.0	8.8	8.4	7.8	7.4	7.7	7.2	7.2	7.2	7.1
87.5°	4.6	4.6	4.8	5.1	5.9	6.8	8.1	9.3	9.6	9.3	9.2
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: P331641-935

CATALOG NUMBER: SA2XXRDIP-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°	562.8	562.8	562.8	562.8	562.8	562.8	562.8
2.5°	582.6	584.6	585.6	585.6	586.7	586.2	585.7
5°	616.0	619.7	620.6	624.1	626.6	625.9	626.2
7.5°	649.4	655.3	661.2	663.9	664.3	665.9	666.5
10°	669.9	674.8	683.9	682.6	689.4	693.4	686.9
12.5°	689.6	696.2	702.6	704.3	708.2	709.5	706.9
15°	707.4	710.9	711.3	710.3	711.5	710.5	706.8
17.5°	690.8	685.0	673.5	668.0	663.7	657.2	654.6
20°	663.2	646.4	626.8	619.0	609.8	591.9	596.2
22.5°	603.7	584.6	565.0	542.2	531.2	514.2	513.2
25°	511.3	478.2	441.8	416.4	401.5	384.5	377.0
27.5°	397.5	355.9	326.1	311.0	297.2	283.8	283.2
30°	322.7	291.4	268.4	255.5	247.0	241.3	242.5
32.5°	272.0	250.6	235.0	224.3	218.1	213.8	213.7
35°	222.4	207.7	197.7	193.2	188.7	185.6	185.8
37.5°	190.3	181.5	175.9	171.0	168.2	166.6	165.7
40°	173.8	166.6	162.3	159.4	157.0	154.9	154.5
42.5°	160.9	154.9	150.6	148.3	146.1	144.6	144.2
45°	142.8	137.8	134.0	131.4	130.4	129.1	129.1
47.5°	127.0	122.2	119.2	117.5	115.9	114.9	114.9
50°	116.4	112.6	109.9	108.9	107.5	107.0	106.8
52.5°	106.9	104.0	102.1	101.4	100.8	100.1	100.2
55°	93.8	92.3	91.5	90.9	90.0	88.8	89.5
57.5°	83.0	81.6	79.6	77.7	76.8	75.9	76.3
60°	75.3	72.6	69.8	67.7	67.1	65.3	65.3
62.5°	65.6	61.7	58.4	57.2	56.6	55.8	55.6
65°	50.5	48.9	48.1	47.4	46.9	46.9	46.6
67.5°	41.8	41.2	40.3	40.1	39.8	39.6	39.5
70°	36.9	36.2	35.8	35.6	35.2	35.4	34.8
72.5°	32.3	31.7	31.6	31.1	30.8	30.8	30.4
75°	25.4	25.4	25.2	25.1	24.6	24.5	24.6
77.5°	19.5	19.6	19.3	19.2	19.2	19.2	19.0
80°	15.7	15.8	15.7	15.4	15.2	15.4	15.2
82.5°	12.4	12.1	12.1	12.0	12.0	11.9	11.8
85°	7.1	7.2	7.1	6.9	6.9	6.9	7.1
87.5°	8.7	9.0	9.3	9.3	9.3	9.3	9.1
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)