Len	Wid	Total States	Cycle States	Pct Cycles	Degen Cycles	Min Cycle	Avg Cycle	Avg Arc
4	1	16	11	68.8%	3	8	2.75	1.00
4	2	256	121	47.3%	9	8	5.26	1.00
4	3	4096	1331	32.5%	27	8	7.01	1.00
4	4	65536	14641	22.3%	81	8	7.70	1.00
5	2	1024	36	3.5%	1	5	4.50	9.15
5	3	32768	216	0.7%	1	5	4.91	21.5
6	2	4096	9	0.2%	9	-	1.00	583.9
7	2	16384	8464	51.7%	1	4	29.2	1.75
8	2	65536	2601	4.0%	9	8	30.6	24.4

Figure 1. Exhaustive State Experiments: Cellular Automata

P	Q	Total States	Cycle States	Degen Cycles	Min Cycle	Avg Cycle	Max Cycle	Avg Arc
107	163	17441	4428	4	2	201.3	1404	1.00
107	211	22577	5724	4	2	73.4	156	1.00
127	131	16637	4224	4	2	11.4	12	1.00
127	139	17653	4480	4	2	35.0	66	1.00
139	167	23213	5880	4	2	245.0	902	1.00
139	211	29329	7420	4	2	50.1	132	1.00
151	199	30049	7600	4	2	30.4	60	1.00
151	211	31861	8056	4	2	24.0	60	1.00
163	191	31133	7872	4	2	49.2	108	1.00

Figure 2. Exhaustive State Experiments: Improperly Designed X^2 mod N

P	Q	Total States	Cycle States	Degen Cycles	Min Cycle	Avg Cycle	Max Cycle	Avg Arc
23	47	1081	288	4	10	24.0	110	1.00
23	167	3841	1008	4	10	100.8	410	1.00
23	359	8257	2160	4	10	216.0	890	1.00
23	719	16537	4320	4	10	360.0	1790	1.00
23	1439	33097	8640	4	10	720.0	3590	1.00
47	167	7849	2016	4	11	168.0	902	1.00
47	359	16873	4320	4	11	360.0	1958	1.00
47	719	33793	8640	4	11	540.0	1969	1.00
167	359	59953	15120	4	82	1512.0	7298	1.00

Figure 3. Exhaustive State Experiments: Properly Designed X^2 mod N

Deg	Polys Tested	Wid	States	Pct Cycles	Degen Cycles	Min Cycle	Avg Cycle	Avg Arc
5	6	1	32	100.0%	1	31	16.0	0.00
5	6	2	1024	100.0%	1	31	30.1	0.00
5	6	3	32768	100.0%	1	31	30.97	0.00
7	18	1	128	100.0%	1	127	64.0	0.00
7	18	2	16384	100.0%	1	127	126.0	0.00

Figure 4. Exhaustive State Experiments: General Feedback Shift Register

Deg	Polys Tested	Wid	States	Pct Cycles	Invalid States	Min Cycle	Avg Cycle	Avg Arc
5	6	1	32	96.9%	1	31	31.0	0.00
5	6	2	1024	96.9%	32	62	62.0	0.00
5	6	3	32768	96.9%	1024	124	124.0	0.00
7	18	1	128	99.2%	1	127	127.0	0.00
7	18	2	16384	99.2%	128	254	254.0	0.00

Figure 5. Exhaustive State Experiments: Additive Generator