

CA Non-linear Rule Replacement Analyzer Results

Summary Table

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|---------------------------|-----------------------|------------------------|-----------------------------|---|
| 4 | 15 | 90 150 90 150 | 1 | 8 | 2 | • 90 30 90 150 • 90 75 90 150 |
| 4 | 15 | 150 150 90 150 | 1 | 8 | 2 | • 150 150 210 150 • 150 150 225 150 |
| 5 | 31 | 150 150 90 90 90 | 1 | 8 | 0 | None |
| 5 | 31 | 90 150 150 90 90 | 1 | 8 | 0 | None |
| 5 | 31 | 150 150 150 90 90 | 1 | 8 | 0 | None |
| 5 | 31 | 90 90 150 150 90 | 1 | 8 | 0 | None |
| 5 | 31 | 150 150 150 150 90 | 1 | 8 | 2 | • 150 150 75 150 90 • 150 150 210 150 90 |
| 5 | 31 | 90 90 90 90 150 | 2 | 64 | 0 | None |
| 5 | 31 | 150 150 90 90 150 | 1 | 8 | 0 | None |
| 5 | 31 | 90 90 90 150 150 | 2 | 64 | 0 | None |
| 5 | 31 | 90 90 150 150 150 | 1 | 8 | 0 | None |
| 5 | 31 | 90 150 150 150 150 | 1 | 8 | 0 | None |
| 6 | 63 | 90 150 150 90 90 90 | 1 | 8 | 0 | None |
| 6 | 63 | 150 90 150 90 150 90 | 1 | 8 | 0 | None |
| 6 | 63 | 90 150 150 90 150 90 | 1 | 8 | 2 | • 90 30 150 90 150 90 • 90 75 150 90 150 90 |
| 6 | 63 | 90 90 90 150 150 90 | 2 | 64 | 0 | None |
| 6 | 63 | 90 150 90 150 150 90 | 2 | 64 | 0 | None |

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|-----------------------------|-----------------------|------------------------|-----------------------------|--|
| 6 | 63 | 150 90 150 150 150 90 | 1 | 8 | 0 | None |
| 6 | 63 | 90 90 90 90 90 150 | 2 | 64 | 0 | None |
| 6 | 63 | 150 90 150 90 90 150 | 1 | 8 | 4 | • 150 90 150 30 90 150 • 150 90 150 45 90 150 • 150 90 150 210 90 150 • 150 90 150 225 90 150 |
| 6 | 63 | 150 90 90 150 90 150 | 1 | 8 | 0 | None |
| 6 | 63 | 90 150 90 150 90 150 | 2 | 64 | 0 | None |
| 6 | 63 | 90 150 150 150 90 150 | 2 | 64 | 4 | • 90 30 150 150 30 150 • 90 30 150 150 45 150 • 90 75 150 150 210 150 • 90 75 150 150 225 150 |
| 7 | 127 | 90 90 150 90 90 90 90 | 1 | 8 | 0 | None |
| 7 | 127 | 150 90 90 150 90 90 90 | 1 | 8 | 0 | None |
| 7 | 127 | 150 150 90 150 90 90 90 | 1 | 8 | 0 | None |
| 7 | 127 | 90 150 150 150 90 90 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 90 90 90 150 90 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 150 90 90 150 90 90 | 2 | 64 | 0 | None |
| 7 | 127 | 150 90 150 90 150 90 90 | 1 | 8 | 2 | • 150 90 150 30 150 90 90 • 150 90 150 225 150 90 90 |
| 7 | 127 | 150 150 150 90 150 90 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 90 150 90 90 150 90 | 1 | 8 | 0 | None |
| 7 | 127 | 90 150 150 90 90 150 90 | 1 | 8 | 0 | None |

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|------------------------------|-----------------------|------------------------|-----------------------------|--|
| 7 | 127 | 150 150 90 150 90 150 90 | 1 | 8 | 0 | None |
| 7 | 127 | 90 150 150 150 90 150 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 150 90 90 150 150 90 | 2 | 64 | 0 | None |
| 7 | 127 | 150 150 150 90 150 150 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 90 90 150 150 150 90 | 2 | 64 | 0 | None |
| 7 | 127 | 90 150 90 150 150 150 90 | 2 | 64 | 0 | None |
| 7 | 127 | 150 90 150 150 150 150 90 | 1 | 8 | 0 | None |
| 7 | 127 | 90 150 90 90 90 90 150 | 3 | 512 | 0 | None |
| 7 | 127 | 150 90 150 90 90 90 150 | 2 | 64 | 8 | • 150 90 150 30 90 30 150 • 150 90 150 30 90 45 150 • 150 90 150 45 90 30 150 • 150 90 150 45 90 45 150 • 150 90 150 210 90 30 150 • 150 90 150 210 90 45 150 • 150 90 150 225 90 30 150 • 150 90 150 225 90 45 150 |
| 7 | 127 | 150 150 150 90 90 90 150 | 2 | 64 | 0 | None |
| 7 | 127 | 90 90 90 150 90 90 150 | 3 | 512 | 0 | None |
| 7 | 127 | 150 90 150 150 90 90 150 | 2 | 64 | 8 | • 150 90 150 30 90 30 150 • 150 90 150 30 90 45 150 • 150 90 150 45 90 30 150 • 150 90 150 45 90 45 150 • 150 90 150 210 90 30 150 • 150 90 150 210 90 45 150 • 150 90 150 225 90 30 150 • 150 90 150 225 90 45 150 |
| 7 | 127 | 150 90 90 90 150 90 150 | 1 | 8 | 0 | None |

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|--------------------------------|-----------------------|------------------------|-----------------------------|--|
| 7 | 127 | 90 90 150 90 150 90 150 | 2 | 64 | 0 | None |
| 7 | 127 | 150 90 90 150 150 90 150 | 1 | 8 | 0 | None |
| 7 | 127 | 150 150 90 150 150 90 150 | 2 | 64 | 0 | None |
| 7 | 127 | 90 150 150 150 150 90 150 | 2 | 64 | 0 | None |
| 7 | 127 | 90 90 90 150 90 150 150 | 3 | 512 | 0 | None |
| 7 | 127 | 90 150 90 150 90 150 150 | 3 | 512 | 0 | None |
| 7 | 127 | 150 90 150 150 90 150 150 | 2 | 64 | 8 | <ul style="list-style-type: none"> • 150 90 150 30 90 30 150 • 150 90 150 30 90 45 150 • 150 90 150 45 90 30 150 • 150 90 150 45 90 45 150 • 150 90 150 210 90 30 150 • 150 90 150 210 90 45 150 • 150 90 150 225 90 30 150 • 150 90 150 225 90 45 150 |
| 7 | 127 | 150 150 150 150 90 150 150 | 1 | 8 | 0 | None |
| 7 | 127 | 150 90 90 90 150 150 150 | 1 | 8 | 0 | None |
| 7 | 127 | 90 90 150 90 150 150 150 | 2 | 64 | 0 | None |
| 7 | 127 | 90 150 150 90 150 150 150 | 2 | 64 | 0 | None |
| 7 | 127 | 150 150 90 150 150 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 90 150 150 90 90 90 90 90 | 1 | 8 | 0 | None |
| 8 | 255 | 150 150 150 150 90 90 90 90 | 1 | 8 | 0 | None |
| 8 | 255 | 90 150 90 150 90 150 90 90 | 3 | 512 | 0 | None |

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|----------------------------------|-----------------------|------------------------|-----------------------------|------------------------|
| 8 | 255 | 150 90 150 150 90 150 90 90 | 2 | 64 | 0 | None |
| 8 | 255 | 90 150 150 90 150 150 90 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 90 90 150 150 150 90 90 | 1 | 8 | 0 | None |
| 8 | 255 | 150 90 150 90 90 90 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 90 150 90 90 150 90 | 1 | 8 | 0 | None |
| 8 | 255 | 90 90 150 90 150 90 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 90 150 150 90 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 90 150 150 150 90 150 90 | 1 | 8 | 0 | None |
| 8 | 255 | 150 150 150 150 150 90 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 90 90 90 90 90 150 150 90 | 3 | 512 | 0 | None |
| 8 | 255 | 90 90 150 150 90 150 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 150 90 150 150 150 90 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 90 90 150 90 90 150 | 3 | 512 | 0 | None |
| 8 | 255 | 90 90 150 150 150 90 90 150 | 3 | 512 | 0 | None |
| 8 | 255 | 90 150 90 90 90 150 90 150 | 3 | 512 | 0 | None |
| 8 | 255 | 150 150 90 150 90 150 90 150 | 2 | 64 | 0 | None |
| 8 | 255 | 90 90 150 90 150 150 90 150 | 2 | 64 | 0 | None |

| N | Target Max Cycle | Original Configuration | Positions Replaced | Combinations Tested | Maximal Configs Found | Maximal Configurations |
|---|------------------------|-----------------------------------|-----------------------|------------------------|-----------------------------|--|
| 8 | 255 | 90 150 90 150 150 150 90 150 | 3 | 512 | 0 | None |
| 8 | 255 | 150 90 90 150 90 90 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 90 150 90 90 150 150 | 1 | 8 | 0 | None |
| 8 | 255 | 90 150 90 90 150 90 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 90 90 150 90 150 150 | 3 | 512 | 0 | None |
| 8 | 255 | 150 90 150 90 150 90 150 150 | 1 | 8 | 2 | • 150 90 150 30 150 90 150 150 • 150 90 150 225 150 90 150 150 |
| 8 | 255 | 90 150 90 150 150 90 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 90 150 150 150 90 150 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 150 150 150 150 90 150 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 90 90 90 90 150 150 150 150 | 3 | 512 | 0 | None |
| 8 | 255 | 150 150 150 90 150 150 150 150 | 2 | 64 | 0 | None |
| 8 | 255 | 90 150 90 150 150 150 150 150 | 3 | 512 | 0 | None |

Statistics by N

| N | Total Configs Tested | Configs with Maximal Results | Success Rate | Total Maximal Configs Found |
|---|----------------------|------------------------------|--------------|-----------------------------|
| 4 | 2 | 2 | 100.0% | 4 |
| 5 | 10 | 1 | 10.0% | 2 |
| 6 | 11 | 3 | 27.3% | 10 |
| 7 | 33 | 4 | 12.1% | 26 |
| 8 | 32 | 1 | 3.1% | 2 |