

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 1 | 3.86 | 9 | 5.707 | 6.757 | 6.090 | 7.240 | 48 | 0.342 | 0.98 |
| 1 | 3.86 | 9 | 6.789 | 8.039 | 7.200 | 8.650 | 3 | 0.350 | 1.00 |
| 1 | 3.86 | 9 | 7.908 | 9.366 | 8.340 | 10.110 | 82 | 0.505 | 0.98 |
| 1 | 3.86 | 9 | 8.662 | 10.259 | 9.100 | 11.100 | 195 | 0.590 | 0.96 |
| 1 | 3.86 | 9 | 9.513 | 11.267 | 9.960 | 12.220 | 119 | 0.537 | 0.98 |
| 1 | 3.86 | 9 | 10.232 | 12.119 | 10.690 | 13.170 | 250 | 0.609 | 0.96 |
| 1 | 3.86 | 9 | 11.182 | 13.243 | 11.640 | 14.420 | 362 | 0.577 | 0.95 |
| 1 | 3.86 | 9 | 12.367 | 14.643 | 12.830 | 15.970 | 339 | 0.507 | 0.96 |
| 1 | 3.86 | 9 | 13.442 | 15.913 | 13.920 | 17.380 | 474 | 0.665 | 0.95 |
| 1 | 3.86 | 9 | 14.427 | 17.077 | 14.920 | 18.680 | 218 | 0.695 | 0.98 |
| 1 | 3.86 | 9 | 15.479 | 18.317 | 15.990 | 20.050 | 12 | 0.745 | 1.00 |
| 2 | 3.86 | 10 | 3.239 | 22.212 | 18.890 | 25.200 | -450 | 1.482 | 1.03 |
| 2 | 3.86 | 10 | 3.905 | 22.755 | 19.270 | 25.990 | -150 | 1.855 | 1.01 |
| 2 | 3.86 | 10 | 4.943 | 23.597 | 19.850 | 27.260 | -149 | 2.028 | 1.01 |
| 2 | 3.86 | 10 | 6.070 | 24.508 | 20.480 | 28.630 | 4 | 2.112 | 1.00 |
| 2 | 3.86 | 10 | 6.878 | 25.158 | 20.930 | 29.620 | 6 | 2.274 | 1.00 |
| 2 | 3.86 | 10 | 7.961 | 26.026 | 21.540 | 30.960 | 351 | 2.410 | 0.98 |
| 2 | 3.86 | 10 | 9.081 | 26.921 | 22.160 | 32.330 | 537 | 2.233 | 0.97 |
| 2 | 3.86 | 10 | 10.121 | 27.752 | 22.750 | 33.610 | 376 | 2.155 | 0.98 |
| 2 | 3.86 | 10 | 11.244 | 28.649 | 23.390 | 34.990 | -7 | 2.310 | 1.00 |
| 2 | 3.86 | 10 | 12.324 | 29.514 | 24.010 | 36.320 | -3 | 2.407 | 1.00 |
| 2 | 3.86 | 10 | 13.412 | 30.389 | 24.650 | 37.640 | -10 | 2.538 | 1.00 |
| 2 | 3.86 | 10 | 14.505 | 31.272 | 25.290 | 38.960 | -11 | 2.457 | 1.00 |
| 2 | 3.86 | 10 | 15.465 | 32.052 | 25.870 | 40.110 | 5 | 2.609 | 1.00 |
| 3 | 3.86 | 11 | 3.397 | 31.162 | 27.570 | 37.350 | 385 | 1.253 | 0.98 |
| 3 | 3.86 | 11 | 4.793 | 31.756 | 28.150 | 37.760 | 401 | 1.283 | 0.98 |
| 3 | 3.86 | 11 | 5.757 | 32.167 | 28.560 | 38.050 | 402 | 1.404 | 0.98 |
| 3 | 3.86 | 11 | 6.578 | 32.517 | 28.900 | 38.290 | 212 | 1.382 | 0.99 |
| 3 | 3.86 | 11 | 7.516 | 32.916 | 29.300 | 38.570 | 843 | 1.078 | 0.96 |
| 3 | 3.86 | 11 | 8.035 | 33.136 | 29.520 | 38.720 | 853 | 1.021 | 0.96 |
| 3 | 3.86 | 11 | 8.696 | 33.418 | 29.790 | 38.920 | 1073 | 0.861 | 0.95 |
| 3 | 3.86 | 11 | 9.737 | 33.862 | 30.230 | 39.230 | 868 | 0.966 | 0.96 |
| 3 | 3.86 | 11 | 10.855 | 34.342 | 30.710 | 39.570 | 1332 | 0.662 | 0.94 |
| 3 | 3.86 | 11 | 11.939 | 34.810 | 31.170 | 39.900 | 1577 | 0.490 | 0.93 |
| 3 | 3.86 | 11 | 12.992 | 35.270 | 31.630 | 40.220 | 1591 | 0.485 | 0.93 |
| 3 | 3.86 | 11 | 14.107 | 35.764 | 32.120 | 40.580 | 1843 | 0.466 | 0.92 |
| 3 | 3.86 | 11 | 15.187 | 36.251 | 32.610 | 40.920 | 1613 | 0.638 | 0.93 |
| 3 | 3.86 | 11 | 16.236 | 36.733 | 33.090 | 41.270 | 1388 | 0.899 | 0.94 |
| 4 | 3.86 | 12 | 3.550 | 36.075 | 34.540 | 37.560 | 233 | 0.355 | 0.99 |
| 4 | 3.86 | 12 | 4.622 | 36.432 | 34.920 | 37.900 | 467 | 0.406 | 0.98 |
| 4 | 3.86 | 12 | 5.702 | 36.792 | 35.290 | 38.250 | 707 | 0.326 | 0.97 |
| 4 | 3.86 | 12 | 6.726 | 37.133 | 35.650 | 38.570 | 477 | 0.371 | 0.98 |
| 4 | 3.86 | 12 | 8.889 | 37.853 | 36.400 | 39.260 | 249 | 0.341 | 0.99 |
| 4 | 3.86 | 12 | 12.051 | 38.906 | 37.500 | 40.260 | 485 | 0.391 | 0.98 |
| 4 | 3.86 | 12 | 13.132 | 39.268 | 37.880 | 40.610 | 484 | 0.402 | 0.98 |
| 4 | 3.86 | 12 | 14.213 | 39.632 | 38.260 | 40.960 | 728 | 0.352 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 4 | 3.86 | 12 | 15.292 | 39.999 | 38.640 | 41.310 | 729 | 0.307 | 0.97 |
| 5 | 3.86 | 9 | 15.479 | 19.754 | 19.480 | 19.990 | 472 | 0.344 | 0.95 |
| 6 | 3.86 | 10 | 3.239 | 24.982 | 24.570 | 25.370 | -476 | 1.431 | 1.03 |
| 6 | 3.86 | 10 | 3.905 | 25.773 | 25.330 | 26.200 | -6 | 1.920 | 1.00 |
| 6 | 3.86 | 10 | 4.943 | 27.003 | 26.500 | 27.480 | 156 | 2.015 | 0.99 |
| 6 | 3.86 | 10 | 6.070 | 28.337 | 27.770 | 28.880 | 168 | 2.243 | 0.99 |
| 6 | 3.86 | 10 | 6.878 | 29.292 | 28.670 | 29.880 | 174 | 2.416 | 0.99 |
| 6 | 3.86 | 10 | 7.961 | 30.570 | 29.880 | 31.220 | 553 | 2.045 | 0.97 |
| 6 | 3.86 | 10 | 9.081 | 31.889 | 31.120 | 32.590 | 579 | 1.982 | 0.97 |
| 6 | 3.86 | 10 | 10.121 | 33.113 | 32.270 | 33.870 | 594 | 2.185 | 0.97 |
| 6 | 3.86 | 10 | 11.244 | 34.431 | 33.500 | 35.240 | -189 | 1.952 | 1.01 |
| 6 | 3.86 | 10 | 12.324 | 35.694 | 34.690 | 36.550 | 11 | 2.436 | 1.00 |
| 6 | 3.86 | 10 | 13.412 | 36.964 | 35.890 | 37.860 | -203 | 2.135 | 1.01 |
| 6 | 3.86 | 10 | 14.505 | 38.234 | 37.090 | 39.180 | -207 | 2.210 | 1.01 |
| 6 | 3.86 | 10 | 15.465 | 39.345 | 38.140 | 40.320 | 219 | 2.618 | 0.99 |
| 7 | 3.92 | 10 | 10.121 | 12.185 | 10.390 | 13.180 | 4 | 0.369 | 1.00 |
| 7 | 3.92 | 10 | 11.244 | 13.530 | 11.500 | 14.670 | -9 | 0.529 | 1.00 |
| 7 | 3.92 | 10 | 12.324 | 14.820 | 12.570 | 16.090 | 77 | 0.669 | 0.99 |
| 7 | 3.92 | 10 | 13.412 | 16.118 | 13.650 | 17.520 | -108 | 0.878 | 1.01 |
| 7 | 3.92 | 10 | 14.505 | 17.420 | 14.740 | 18.940 | -338 | 0.666 | 1.03 |
| 7 | 3.92 | 10 | 15.465 | 18.562 | 15.700 | 20.190 | -471 | 0.658 | 1.04 |
| 8 | 3.92 | 11 | 3.397 | 23.156 | 19.820 | 25.010 | -446 | 1.847 | 1.03 |
| 8 | 3.92 | 11 | 4.793 | 24.807 | 21.290 | 26.760 | 7 | 2.470 | 1.00 |
| 8 | 3.92 | 11 | 5.757 | 25.941 | 22.290 | 27.960 | 1 | 2.450 | 1.00 |
| 8 | 3.92 | 11 | 6.578 | 26.901 | 23.140 | 28.990 | 345 | 2.494 | 0.98 |
| 8 | 3.92 | 11 | 7.516 | 27.993 | 24.100 | 30.160 | 536 | 2.297 | 0.97 |
| 8 | 3.92 | 11 | 8.035 | 28.595 | 24.630 | 30.810 | 549 | 2.239 | 0.97 |
| 8 | 3.92 | 11 | 8.696 | 29.361 | 25.300 | 31.630 | 741 | 2.061 | 0.96 |
| 8 | 3.92 | 11 | 9.737 | 30.560 | 26.350 | 32.930 | 577 | 2.234 | 0.97 |
| 8 | 3.92 | 11 | 10.855 | 31.841 | 27.480 | 34.310 | 997 | 1.757 | 0.95 |
| 8 | 3.92 | 11 | 11.939 | 33.078 | 28.560 | 35.660 | 1229 | 1.585 | 0.94 |
| 8 | 3.92 | 11 | 12.992 | 34.274 | 29.620 | 36.960 | 1256 | 1.506 | 0.94 |
| 8 | 3.92 | 11 | 14.107 | 35.536 | 30.730 | 38.330 | 1299 | 1.617 | 0.94 |
| 8 | 3.92 | 11 | 15.187 | 36.754 | 31.810 | 39.650 | 444 | 2.549 | 0.98 |
| 8 | 3.92 | 11 | 16.236 | 37.936 | 32.860 | 40.920 | 225 | 2.851 | 0.99 |
| 9 | 3.65 | 10 | 14.505 | 18.454 | 18.190 | 18.910 | -163 | 0.347 | 1.02 |
| 10 | 3.65 | 11 | 3.397 | 24.355 | 24.080 | 24.820 | 138 | 2.899 | 0.99 |
| 10 | 3.65 | 11 | 4.793 | 26.037 | 25.770 | 26.480 | 162 | 2.796 | 0.99 |
| 10 | 3.65 | 11 | 5.757 | 27.199 | 26.950 | 27.620 | 170 | 2.833 | 0.99 |
| 10 | 3.65 | 11 | 6.578 | 28.188 | 27.950 | 28.590 | 349 | 2.593 | 0.98 |
| 10 | 3.65 | 11 | 7.516 | 29.321 | 29.090 | 29.690 | 554 | 2.374 | 0.97 |
| 10 | 3.65 | 11 | 8.035 | 29.947 | 29.730 | 30.300 | 735 | 2.194 | 0.96 |
| 10 | 3.65 | 11 | 8.696 | 30.747 | 30.540 | 31.080 | 760 | 2.367 | 0.96 |
| 10 | 3.65 | 11 | 9.737 | 32.005 | 31.810 | 32.300 | 398 | 2.879 | 0.98 |
| 10 | 3.65 | 11 | 10.855 | 33.356 | 33.180 | 33.610 | 1015 | 2.133 | 0.95 |
| 10 | 3.65 | 11 | 11.939 | 34.665 | 34.510 | 34.880 | 1045 | 2.153 | 0.95 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 10 | 3.65 | 11 | 12.992 | 35.993 | 35.800 | 36.110 | 1075 | 2.144 | 0.95 |
| 10 | 3.65 | 11 | 14.107 | 37.272 | 37.160 | 37.400 | 1109 | 2.127 | 0.95 |
| 10 | 3.65 | 11 | 15.187 | 38.563 | 38.470 | 38.650 | 452 | 3.029 | 0.98 |
| 10 | 3.65 | 11 | 16.236 | 39.810 | 39.690 | 39.890 | 28 | 3.121 | 1.00 |
| 11 | 3.65 | 10 | 11.244 | 14.719 | 14.580 | 14.790 | 15 | 0.994 | 1.00 |
| 11 | 3.65 | 10 | 12.324 | 16.175 | 16.030 | 16.240 | 96 | 1.263 | 0.99 |
| 11 | 3.65 | 10 | 13.412 | 17.637 | 17.490 | 17.700 | -155 | 1.696 | 1.02 |
| 11 | 3.65 | 10 | 14.505 | 19.098 | 18.940 | 19.160 | -285 | 1.956 | 1.03 |
| 11 | 3.65 | 10 | 15.465 | 20.371 | 20.210 | 20.440 | -219 | 2.417 | 1.02 |
| 12 | 3.65 | 11 | 3.397 | 24.982 | 24.800 | 25.100 | -629 | 0.890 | 1.04 |
| 12 | 3.65 | 11 | 4.793 | 26.641 | 26.470 | 26.780 | -157 | 1.292 | 1.01 |
| 12 | 3.65 | 11 | 5.757 | 27.787 | 27.620 | 27.950 | -334 | 1.275 | 1.02 |
| 12 | 3.65 | 11 | 6.578 | 28.760 | 28.600 | 28.950 | 9 | 1.447 | 1.00 |
| 12 | 3.65 | 11 | 7.516 | 29.873 | 29.720 | 30.080 | 199 | 1.671 | 0.99 |
| 12 | 3.65 | 11 | 8.035 | 30.488 | 30.320 | 30.710 | 203 | 1.648 | 0.99 |
| 12 | 3.65 | 11 | 8.696 | 31.272 | 31.080 | 31.520 | 211 | 1.743 | 0.99 |
| 12 | 3.65 | 11 | 9.737 | 32.504 | 32.270 | 32.780 | 405 | 1.711 | 0.98 |
| 12 | 3.65 | 11 | 10.855 | 33.825 | 33.540 | 34.130 | 825 | 1.483 | 0.96 |
| 12 | 3.65 | 11 | 11.939 | 35.103 | 34.770 | 35.440 | 852 | 1.502 | 0.96 |
| 12 | 3.65 | 11 | 12.992 | 36.342 | 35.960 | 36.710 | 661 | 1.595 | 0.97 |
| 12 | 3.65 | 11 | 14.107 | 37.649 | 37.220 | 38.050 | 900 | 1.371 | 0.96 |
| 12 | 3.65 | 11 | 15.187 | 38.911 | 38.440 | 39.350 | 240 | 1.791 | 0.99 |
| 12 | 3.65 | 11 | 16.236 | 40.133 | 39.610 | 40.600 | 244 | 1.758 | 0.99 |
| 13 | 3.92 | 10 | 10.121 | 11.777 | 11.570 | 12.020 | 318 | 0.356 | 0.96 |
| 13 | 3.92 | 10 | 11.244 | 13.040 | 12.810 | 13.310 | 161 | 0.503 | 0.98 |
| 13 | 3.92 | 10 | 12.324 | 14.252 | 14.010 | 14.540 | 375 | 0.551 | 0.96 |
| 13 | 3.92 | 10 | 13.412 | 15.472 | 15.210 | 15.770 | -19 | 0.900 | 1.00 |
| 13 | 3.92 | 10 | 14.505 | 16.698 | 16.430 | 17.010 | -140 | 0.825 | 1.01 |
| 13 | 3.92 | 10 | 15.465 | 17.777 | 17.500 | 18.100 | -10 | 1.038 | 1.00 |
| 14 | 3.92 | 11 | 3.397 | 22.044 | 21.840 | 22.230 | -168 | 1.854 | 1.01 |
| 14 | 3.92 | 11 | 4.793 | 23.555 | 23.210 | 23.930 | 145 | 2.312 | 0.99 |
| 14 | 3.92 | 11 | 5.757 | 24.589 | 24.140 | 25.090 | -6 | 2.214 | 1.00 |
| 14 | 3.92 | 11 | 6.578 | 25.462 | 24.930 | 26.080 | 167 | 2.424 | 0.99 |
| 14 | 3.92 | 11 | 7.516 | 26.453 | 25.820 | 27.200 | 183 | 2.459 | 0.99 |
| 14 | 3.92 | 11 | 8.035 | 26.998 | 26.310 | 27.810 | 183 | 2.416 | 0.99 |
| 14 | 3.92 | 11 | 8.696 | 27.691 | 26.940 | 28.600 | 194 | 2.468 | 0.99 |
| 14 | 3.92 | 11 | 9.737 | 28.775 | 27.920 | 29.820 | 375 | 2.466 | 0.98 |
| 14 | 3.92 | 11 | 10.855 | 29.933 | 28.960 | 31.130 | 407 | 2.367 | 0.98 |
| 14 | 3.92 | 11 | 11.939 | 31.051 | 29.970 | 32.400 | 423 | 2.386 | 0.98 |
| 14 | 3.92 | 11 | 12.992 | 32.132 | 30.950 | 33.620 | 240 | 2.413 | 0.99 |
| 14 | 3.92 | 11 | 14.107 | 33.274 | 31.990 | 34.900 | 450 | 2.371 | 0.98 |
| 14 | 3.92 | 11 | 15.187 | 34.378 | 33.000 | 36.140 | -183 | 2.051 | 1.01 |
| 14 | 3.92 | 11 | 16.236 | 35.450 | 33.980 | 37.330 | -196 | 2.108 | 1.01 |
| 15 | 4.02 | 11 | 8.696 | 10.433 | 9.820 | 11.130 | -69 | 0.315 | 1.02 |
| 15 | 4.02 | 11 | 9.737 | 11.672 | 10.970 | 12.500 | -86 | 0.415 | 1.02 |
| 15 | 4.02 | 11 | 10.855 | 13.000 | 12.190 | 13.960 | 78 | 0.802 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 15 | 4.02 | 11 | 11.939 | 14.286 | 13.380 | 15.390 | -118 | 0.792 | 1.02 |
| 15 | 4.02 | 11 | 12.992 | 15.532 | 14.530 | 16.770 | -143 | 0.962 | 1.02 |
| 15 | 4.02 | 11 | 14.107 | 16.851 | 15.740 | 18.230 | -73 | 1.313 | 1.01 |
| 15 | 4.02 | 11 | 15.187 | 18.128 | 16.920 | 19.640 | -301 | 1.262 | 1.03 |
| 15 | 4.02 | 11 | 16.236 | 19.369 | 18.070 | 21.000 | -342 | 1.290 | 1.03 |
| 16 | 4.02 | 12 | 3.550 | 23.598 | 22.690 | 25.940 | 161 | 0.541 | 0.99 |
| 16 | 4.02 | 12 | 4.622 | 24.678 | 23.750 | 27.220 | 811 | 0.445 | 0.95 |
| 16 | 4.02 | 12 | 5.702 | 25.760 | 24.800 | 28.500 | 1014 | 0.380 | 0.94 |
| 16 | 4.02 | 12 | 6.726 | 26.780 | 25.770 | 29.720 | 1393 | 0.318 | 0.92 |
| 16 | 4.02 | 12 | 8.889 | 28.922 | 27.200 | 32.280 | 1111 | 0.352 | 0.94 |
| 16 | 4.02 | 12 | 10.971 | 30.965 | 28.570 | 34.740 | 980 | 0.441 | 0.95 |
| 16 | 4.02 | 12 | 12.051 | 32.017 | 29.270 | 36.010 | 204 | 0.666 | 0.99 |
| 16 | 4.02 | 12 | 13.132 | 33.067 | 29.970 | 37.280 | 205 | 0.673 | 0.99 |
| 16 | 4.02 | 12 | 14.213 | 34.114 | 30.670 | 38.560 | -202 | 0.579 | 1.01 |
| 16 | 4.02 | 12 | 15.292 | 35.157 | 31.370 | 39.820 | -424 | 0.487 | 1.02 |
| 16 | 4.02 | 12 | 16.374 | 36.199 | 32.070 | 41.080 | -648 | 0.480 | 1.03 |
| 16 | 4.02 | 12 | 17.455 | 37.241 | 32.780 | 42.340 | -443 | 0.459 | 1.02 |
| 16 | 4.02 | 12 | 18.535 | 38.281 | 33.500 | 43.590 | -6 | 0.540 | 1.00 |
| 17 | 4.02 | 13 | 3.911 | 36.714 | 35.340 | 39.370 | -229 | 0.333 | 1.01 |
| 17 | 4.02 | 13 | 4.997 | 37.098 | 35.680 | 39.830 | -228 | 0.368 | 1.01 |
| 17 | 4.02 | 13 | 6.042 | 37.465 | 36.010 | 40.260 | 224 | 0.319 | 0.99 |
| 17 | 4.02 | 13 | 8.244 | 38.231 | 36.710 | 41.170 | 232 | 0.315 | 0.99 |
| 17 | 4.02 | 13 | 9.323 | 38.607 | 37.050 | 41.620 | 231 | 0.317 | 0.99 |
| 17 | 4.02 | 13 | 13.649 | 40.160 | 38.460 | 43.450 | 228 | 0.336 | 0.99 |
| 17 | 4.02 | 13 | 16.893 | 41.404 | 39.590 | 44.920 | 738 | 0.322 | 0.97 |
| 17 | 4.02 | 13 | 17.974 | 41.838 | 39.980 | 45.430 | 491 | 0.316 | 0.98 |
| 18 | 4.02 | 11 | 15.187 | 20.004 | 19.850 | 20.170 | 88 | 0.371 | 0.99 |
| 18 | 4.02 | 11 | 16.236 | 21.442 | 21.270 | 21.620 | -63 | 0.664 | 1.01 |
| 19 | 4.02 | 12 | 4.622 | 25.237 | 24.520 | 27.680 | -451 | 0.346 | 1.03 |
| 19 | 4.02 | 12 | 5.702 | 25.945 | 25.100 | 28.970 | -128 | 0.451 | 1.01 |
| 19 | 4.02 | 12 | 6.726 | 26.612 | 25.640 | 30.190 | 37 | 0.512 | 1.00 |
| 19 | 4.02 | 12 | 7.807 | 27.314 | 26.180 | 31.480 | 30 | 0.514 | 1.00 |
| 19 | 4.02 | 12 | 8.889 | 28.014 | 26.720 | 32.770 | 205 | 0.639 | 0.99 |
| 19 | 4.02 | 12 | 9.971 | 28.710 | 27.250 | 34.060 | 567 | 0.633 | 0.97 |
| 19 | 4.02 | 12 | 10.971 | 29.353 | 27.740 | 35.240 | 214 | 0.721 | 0.99 |
| 19 | 4.02 | 12 | 12.051 | 30.045 | 28.270 | 36.530 | 390 | 0.714 | 0.98 |
| 19 | 4.02 | 12 | 13.132 | 30.738 | 28.800 | 37.810 | 393 | 0.764 | 0.98 |
| 19 | 4.02 | 12 | 14.213 | 31.433 | 29.330 | 39.090 | 589 | 0.677 | 0.97 |
| 19 | 4.02 | 12 | 15.292 | 32.128 | 29.860 | 40.360 | 393 | 0.757 | 0.98 |
| 19 | 4.02 | 12 | 16.374 | 32.828 | 30.400 | 41.630 | 798 | 0.555 | 0.96 |
| 19 | 4.02 | 12 | 17.455 | 33.532 | 30.950 | 42.890 | 604 | 0.560 | 0.97 |
| 19 | 4.02 | 12 | 18.535 | 34.242 | 31.510 | 44.150 | 616 | 0.546 | 0.97 |
| 20 | 4.02 | 13 | 3.911 | 34.212 | 34.060 | 34.310 | 845 | 0.434 | 0.96 |
| 20 | 4.02 | 13 | 4.997 | 34.745 | 34.540 | 34.900 | -2 | 0.728 | 1.00 |
| 20 | 4.02 | 13 | 6.042 | 35.253 | 34.990 | 35.460 | 211 | 0.658 | 0.99 |
| 20 | 4.02 | 13 | 7.160 | 35.792 | 35.480 | 36.050 | 656 | 0.583 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 20 | 4.02 | 13 | 8.244 | 36.314 | 35.950 | 36.630 | 440 | 0.676 | 0.98 |
| 20 | 4.02 | 13 | 9.323 | 36.834 | 36.420 | 37.200 | 219 | 0.733 | 0.99 |
| 20 | 4.02 | 13 | 10.406 | 37.358 | 36.890 | 37.770 | 1366 | 0.390 | 0.94 |
| 20 | 4.02 | 13 | 11.487 | 37.886 | 37.370 | 38.350 | 917 | 0.536 | 0.96 |
| 20 | 4.02 | 13 | 12.532 | 38.402 | 37.840 | 38.910 | 1394 | 0.362 | 0.94 |
| 20 | 4.02 | 13 | 13.649 | 38.962 | 38.340 | 39.520 | 1402 | 0.459 | 0.94 |
| 20 | 4.02 | 13 | 14.733 | 39.515 | 38.850 | 40.120 | 1424 | 0.433 | 0.94 |
| 20 | 4.02 | 13 | 15.817 | 40.078 | 39.360 | 40.740 | 1195 | 0.523 | 0.95 |
| 20 | 4.02 | 13 | 16.893 | 40.648 | 39.880 | 41.350 | 1461 | 0.408 | 0.94 |
| 20 | 4.02 | 13 | 17.974 | 41.231 | 40.420 | 41.990 | 1478 | 0.431 | 0.94 |
| 21 | 4.02 | 11 | 15.187 | 19.974 | 19.840 | 20.090 | 104 | 0.345 | 0.99 |
| 21 | 4.02 | 11 | 16.236 | 21.376 | 21.230 | 21.500 | 313 | 0.355 | 0.97 |
| 22 | 4.02 | 12 | 3.550 | 26.341 | 26.160 | 26.500 | 480 | 0.887 | 0.97 |
| 22 | 4.02 | 12 | 4.622 | 27.625 | 27.440 | 27.790 | 838 | 0.856 | 0.95 |
| 22 | 4.02 | 12 | 5.702 | 28.917 | 28.740 | 29.080 | 1222 | 0.644 | 0.93 |
| 22 | 4.02 | 12 | 6.726 | 30.143 | 29.970 | 30.300 | 1091 | 0.829 | 0.94 |
| 22 | 4.02 | 12 | 7.807 | 31.434 | 31.260 | 31.590 | 1106 | 0.916 | 0.94 |
| 22 | 4.02 | 12 | 8.889 | 32.725 | 32.560 | 32.870 | 962 | 1.112 | 0.95 |
| 22 | 4.02 | 12 | 9.971 | 34.015 | 33.860 | 34.150 | 1177 | 1.019 | 0.94 |
| 22 | 4.02 | 12 | 10.971 | 35.208 | 35.070 | 35.330 | 1008 | 1.061 | 0.95 |
| 22 | 4.02 | 12 | 12.051 | 36.494 | 36.370 | 36.600 | 411 | 1.601 | 0.98 |
| 22 | 4.02 | 12 | 13.132 | 37.778 | 37.670 | 37.900 | 216 | 1.632 | 0.99 |
| 22 | 4.02 | 12 | 14.213 | 39.061 | 38.970 | 39.200 | 225 | 1.701 | 0.99 |
| 22 | 4.02 | 12 | 15.292 | 40.337 | 40.240 | 40.490 | -212 | 1.395 | 1.01 |
| 22 | 4.02 | 12 | 16.374 | 41.610 | 41.500 | 41.780 | -431 | 1.105 | 1.02 |
| 22 | 4.02 | 12 | 17.455 | 42.877 | 42.750 | 43.060 | -439 | 1.074 | 1.02 |
| 22 | 4.02 | 12 | 18.535 | 44.137 | 44.000 | 44.340 | -673 | 0.955 | 1.03 |
| 23 | 4.50 | 12 | 12.051 | 14.542 | 12.560 | 15.490 | 122 | 0.318 | 0.97 |
| 23 | 4.50 | 12 | 13.132 | 15.875 | 13.640 | 16.960 | 147 | 0.356 | 0.97 |
| 23 | 4.50 | 12 | 14.213 | 17.209 | 14.710 | 18.450 | 301 | 0.301 | 0.95 |
| 23 | 4.50 | 12 | 15.292 | 18.539 | 15.770 | 19.930 | 210 | 0.451 | 0.97 |
| 23 | 4.50 | 12 | 16.374 | 19.870 | 16.840 | 21.400 | 413 | 0.301 | 0.95 |
| 23 | 4.50 | 12 | 17.455 | 21.197 | 17.900 | 22.880 | 289 | 0.483 | 0.97 |
| 23 | 4.50 | 12 | 18.535 | 22.519 | 18.960 | 24.340 | 104 | 0.917 | 0.99 |
| 24 | 4.50 | 13 | 3.911 | 27.597 | 24.780 | 30.110 | -327 | 0.517 | 1.02 |
| 24 | 4.50 | 13 | 4.997 | 28.696 | 26.140 | 31.330 | -341 | 0.441 | 1.02 |
| 24 | 4.50 | 13 | 6.042 | 29.746 | 27.440 | 32.490 | -528 | 0.373 | 1.03 |
| 24 | 4.50 | 13 | 7.160 | 30.861 | 28.810 | 33.720 | -719 | 0.434 | 1.04 |
| 24 | 4.50 | 13 | 8.244 | 31.936 | 29.710 | 34.900 | -740 | 0.446 | 1.04 |
| 24 | 4.50 | 13 | 9.323 | 33.002 | 30.270 | 36.070 | -572 | 0.474 | 1.03 |
| 24 | 4.50 | 13 | 10.406 | 34.066 | 30.840 | 37.230 | -771 | 0.536 | 1.04 |
| 24 | 4.50 | 13 | 11.487 | 35.125 | 31.400 | 38.390 | -593 | 0.512 | 1.03 |
| 24 | 4.50 | 13 | 12.532 | 36.146 | 31.960 | 39.500 | -815 | 0.428 | 1.04 |
| 24 | 4.50 | 13 | 13.649 | 37.236 | 32.560 | 40.680 | -1048 | 0.457 | 1.05 |
| 24 | 4.50 | 13 | 14.733 | 38.290 | 33.150 | 41.980 | -1075 | 0.501 | 1.05 |
| 24 | 4.50 | 13 | 15.817 | 39.344 | 33.760 | 43.290 | -1097 | 0.467 | 1.05 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 24 | 4.50 | 13 | 16.893 | 40.389 | 34.370 | 44.580 | -666 | 0.527 | 1.03 |
| 24 | 4.50 | 13 | 17.974 | 41.438 | 34.990 | 45.860 | -1134 | 0.412 | 1.05 |
| 24 | 4.50 | 13 | 18.788 | 42.227 | 35.470 | 46.810 | -1382 | 0.341 | 1.06 |
| 25 | 4.50 | 13 | 3.911 | 29.717 | 28.620 | 30.440 | 14 | 3.865 | 1.00 |
| 25 | 4.50 | 13 | 4.997 | 31.020 | 29.980 | 31.790 | 12 | 4.012 | 1.00 |
| 25 | 4.50 | 13 | 6.042 | 32.265 | 31.280 | 33.080 | 11 | 4.040 | 1.00 |
| 25 | 4.50 | 13 | 7.160 | 33.590 | 32.690 | 34.480 | 394 | 3.824 | 0.98 |
| 25 | 4.50 | 13 | 8.244 | 34.867 | 34.060 | 35.820 | 406 | 4.077 | 0.98 |
| 25 | 4.50 | 13 | 9.323 | 36.133 | 35.420 | 37.160 | 211 | 4.333 | 0.99 |
| 25 | 4.50 | 13 | 10.406 | 37.394 | 36.780 | 38.500 | 640 | 3.727 | 0.97 |
| 25 | 4.50 | 13 | 11.487 | 38.646 | 37.880 | 39.830 | 440 | 4.159 | 0.98 |
| 25 | 4.50 | 13 | 12.532 | 39.849 | 38.900 | 41.110 | 446 | 3.993 | 0.98 |
| 25 | 4.50 | 13 | 13.649 | 41.127 | 39.990 | 42.470 | 231 | 4.700 | 0.99 |
| 25 | 4.50 | 13 | 14.733 | 42.358 | 41.040 | 43.770 | 1 | 4.776 | 1.00 |
| 25 | 4.50 | 13 | 15.817 | 43.583 | 42.090 | 45.070 | -1 | 4.806 | 1.00 |
| 25 | 4.50 | 13 | 16.893 | 44.791 | 43.130 | 46.350 | 251 | 4.523 | 0.99 |
| 25 | 4.50 | 13 | 17.974 | 45.996 | 44.160 | 47.620 | 495 | 4.350 | 0.98 |
| 25 | 4.50 | 13 | 18.788 | 46.899 | 44.940 | 48.570 | 734 | 3.690 | 0.97 |
| 26 | 4.50 | 12 | 10.971 | 12.403 | 11.700 | 13.110 | -47 | 0.351 | 1.01 |
| 26 | 4.50 | 12 | 12.051 | 13.557 | 12.790 | 14.330 | -234 | 0.355 | 1.03 |
| 26 | 4.50 | 12 | 13.132 | 14.703 | 13.880 | 15.540 | -173 | 0.467 | 1.02 |
| 26 | 4.50 | 12 | 14.213 | 15.845 | 14.960 | 16.740 | 10 | 0.658 | 1.00 |
| 26 | 4.50 | 12 | 15.292 | 16.982 | 16.040 | 17.930 | -110 | 0.674 | 1.01 |
| 26 | 4.50 | 12 | 16.374 | 18.120 | 17.120 | 19.130 | 108 | 0.728 | 0.99 |
| 26 | 4.50 | 12 | 17.455 | 19.259 | 18.200 | 20.330 | 112 | 0.830 | 0.99 |
| 26 | 4.50 | 12 | 18.535 | 20.399 | 19.280 | 21.530 | -153 | 0.760 | 1.01 |
| 27 | 4.50 | 13 | 3.911 | 25.920 | 24.980 | 27.300 | 831 | 0.816 | 0.95 |
| 27 | 4.50 | 13 | 4.997 | 27.173 | 26.270 | 28.670 | 1027 | 0.794 | 0.94 |
| 27 | 4.50 | 13 | 6.042 | 28.365 | 27.480 | 29.980 | 882 | 0.916 | 0.95 |
| 27 | 4.50 | 13 | 7.160 | 29.628 | 28.760 | 31.390 | 1103 | 0.765 | 0.94 |
| 27 | 4.50 | 13 | 8.244 | 30.843 | 29.990 | 32.760 | 1134 | 0.890 | 0.94 |
| 27 | 4.50 | 13 | 9.323 | 32.045 | 31.190 | 34.120 | 774 | 1.095 | 0.96 |
| 27 | 4.50 | 13 | 10.406 | 33.243 | 32.390 | 35.470 | 1210 | 0.792 | 0.94 |
| 27 | 4.50 | 13 | 11.487 | 34.434 | 33.580 | 36.820 | 1033 | 1.010 | 0.95 |
| 27 | 4.50 | 13 | 12.532 | 35.582 | 34.610 | 38.120 | 846 | 1.050 | 0.96 |
| 27 | 4.50 | 13 | 13.649 | 36.807 | 35.680 | 39.490 | 429 | 1.234 | 0.98 |
| 27 | 4.50 | 13 | 14.733 | 37.992 | 36.720 | 40.810 | 438 | 1.325 | 0.98 |
| 27 | 4.50 | 13 | 15.817 | 39.177 | 37.780 | 42.130 | 447 | 1.361 | 0.98 |
| 27 | 4.50 | 13 | 16.893 | 40.351 | 38.820 | 43.420 | 700 | 1.129 | 0.97 |
| 27 | 4.50 | 13 | 17.974 | 41.529 | 39.880 | 44.710 | 712 | 1.049 | 0.97 |
| 27 | 4.50 | 13 | 18.788 | 42.415 | 40.680 | 45.670 | 725 | 1.043 | 0.97 |
| 28 | 4.31 | 13 | 12.532 | 12.838 | 11.870 | 13.990 | -174 | 0.336 | 1.03 |
| 28 | 4.31 | 13 | 13.649 | 13.988 | 12.930 | 15.250 | -215 | 0.427 | 1.03 |
| 28 | 4.31 | 13 | 14.733 | 15.111 | 13.960 | 16.470 | -390 | 0.377 | 1.05 |
| 28 | 4.31 | 13 | 15.817 | 16.244 | 15.010 | 17.700 | -271 | 0.629 | 1.03 |
| 28 | 4.31 | 13 | 16.893 | 17.378 | 16.060 | 18.930 | -296 | 0.618 | 1.03 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 28 | 4.31 | 13 | 17.974 | 18.526 | 17.130 | 20.170 | -436 | 0.685 | 1.04 |
| 28 | 4.31 | 13 | 18.788 | 19.397 | 17.940 | 21.110 | -672 | 0.495 | 1.06 |
| 29 | 4.31 | 14 | 3.689 | 24.905 | 22.810 | 26.670 | 293 | 1.434 | 0.98 |
| 29 | 4.31 | 14 | 4.771 | 26.108 | 23.890 | 27.900 | 154 | 1.659 | 0.99 |
| 29 | 4.31 | 14 | 5.844 | 27.284 | 24.940 | 29.110 | 3 | 1.651 | 1.00 |
| 29 | 4.31 | 14 | 6.937 | 28.467 | 26.010 | 30.330 | -163 | 1.571 | 1.01 |
| 29 | 4.31 | 14 | 8.019 | 29.627 | 27.060 | 31.540 | -342 | 1.410 | 1.02 |
| 29 | 4.31 | 14 | 9.102 | 30.779 | 28.110 | 32.750 | -357 | 1.393 | 1.02 |
| 29 | 4.31 | 14 | 10.266 | 32.009 | 29.240 | 34.040 | -370 | 1.331 | 1.02 |
| 29 | 4.31 | 14 | 11.161 | 32.952 | 30.110 | 35.030 | -380 | 1.472 | 1.02 |
| 29 | 4.31 | 14 | 12.159 | 33.998 | 31.070 | 36.130 | -393 | 1.336 | 1.02 |
| 29 | 4.31 | 14 | 13.359 | 35.254 | 32.240 | 37.460 | -402 | 1.437 | 1.02 |
| 29 | 4.31 | 14 | 14.441 | 36.386 | 33.290 | 38.650 | -204 | 1.643 | 1.01 |
| 29 | 4.31 | 14 | 15.523 | 37.515 | 34.350 | 39.840 | -209 | 1.582 | 1.01 |
| 29 | 4.31 | 14 | 16.606 | 38.646 | 35.410 | 41.030 | -215 | 1.610 | 1.01 |
| 29 | 4.31 | 14 | 18.287 | 40.403 | 37.070 | 42.870 | -3 | 1.785 | 1.00 |
| 29 | 4.31 | 14 | 19.372 | 41.537 | 38.140 | 44.060 | -2 | 1.733 | 1.00 |
| 30 | 4.31 | 13 | 15.817 | 17.888 | 17.480 | 18.290 | -155 | 0.532 | 1.02 |
| 30 | 4.31 | 13 | 16.893 | 19.143 | 18.720 | 19.570 | 1 | 0.608 | 1.00 |
| 30 | 4.31 | 13 | 17.974 | 20.410 | 19.970 | 20.850 | 206 | 0.430 | 0.98 |
| 30 | 4.31 | 13 | 18.788 | 21.368 | 20.920 | 21.820 | 243 | 0.549 | 0.98 |
| 31 | 4.31 | 14 | 3.689 | 27.175 | 26.730 | 27.640 | 465 | 1.254 | 0.97 |
| 31 | 4.31 | 14 | 4.771 | 28.488 | 28.050 | 28.960 | 322 | 1.507 | 0.98 |
| 31 | 4.31 | 14 | 5.844 | 29.790 | 29.360 | 30.260 | 165 | 1.680 | 0.99 |
| 31 | 4.31 | 14 | 6.937 | 31.114 | 30.690 | 31.590 | -7 | 1.750 | 1.00 |
| 31 | 4.31 | 14 | 8.019 | 32.425 | 32.010 | 32.910 | -192 | 1.551 | 1.01 |
| 31 | 4.31 | 14 | 9.102 | 33.735 | 33.320 | 34.220 | -204 | 1.625 | 1.01 |
| 31 | 4.31 | 14 | 10.266 | 35.139 | 34.730 | 35.630 | -399 | 1.532 | 1.02 |
| 31 | 4.31 | 14 | 11.161 | 36.216 | 35.820 | 36.720 | -410 | 1.424 | 1.02 |
| 31 | 4.31 | 14 | 12.159 | 37.412 | 37.020 | 37.920 | -618 | 1.259 | 1.03 |
| 31 | 4.31 | 14 | 13.359 | 38.845 | 38.460 | 39.360 | -215 | 1.658 | 1.01 |
| 31 | 4.31 | 14 | 14.441 | 40.132 | 39.750 | 40.650 | -6 | 1.781 | 1.00 |
| 31 | 4.31 | 14 | 15.523 | 41.410 | 41.040 | 41.930 | -5 | 1.690 | 1.00 |
| 31 | 4.31 | 14 | 16.606 | 42.684 | 42.320 | 43.210 | -1 | 1.731 | 1.00 |
| 31 | 4.31 | 14 | 18.287 | 44.648 | 44.300 | 45.180 | 0 | 1.777 | 1.00 |
| 31 | 4.31 | 14 | 19.372 | 45.905 | 45.560 | 46.440 | 0 | 1.668 | 1.00 |
| 32 | 3.81 | 13 | 3.911 | 4.495 | 4.410 | 4.620 | 244 | 0.307 | 1.05 |
| 32 | 3.81 | 13 | 4.997 | 5.827 | 5.710 | 5.970 | 104 | 0.539 | 1.02 |
| 32 | 3.81 | 13 | 6.042 | 7.137 | 6.990 | 7.280 | 180 | 0.391 | 1.04 |
| 32 | 3.81 | 13 | 7.160 | 8.562 | 8.380 | 8.710 | 81 | 0.373 | 1.02 |
| 32 | 3.81 | 13 | 13.649 | 17.057 | 16.710 | 17.260 | 58 | 0.379 | 0.99 |
| 32 | 3.81 | 13 | 14.733 | 18.473 | 18.100 | 18.710 | 201 | 0.564 | 0.97 |
| 32 | 3.81 | 13 | 15.817 | 19.883 | 19.480 | 20.140 | 168 | 1.009 | 0.98 |
| 32 | 3.81 | 13 | 16.893 | 21.273 | 20.850 | 21.560 | 116 | 1.496 | 0.99 |
| 32 | 3.81 | 13 | 17.974 | 22.658 | 22.200 | 22.970 | 9 | 2.305 | 1.00 |
| 32 | 3.81 | 13 | 18.788 | 23.694 | 23.220 | 24.020 | -141 | 2.657 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 33 | 3.81 | 14 | 3.689 | 28.522 | 27.090 | 29.420 | 4 | 2.324 | 1.00 |
| 33 | 3.81 | 14 | 4.771 | 29.507 | 27.570 | 30.610 | 2 | 2.706 | 1.00 |
| 33 | 3.81 | 14 | 5.844 | 30.481 | 28.040 | 31.760 | -173 | 2.848 | 1.01 |
| 33 | 3.81 | 14 | 6.937 | 31.468 | 28.520 | 32.970 | -359 | 2.832 | 1.02 |
| 33 | 3.81 | 14 | 8.019 | 32.444 | 29.000 | 34.170 | -370 | 2.606 | 1.02 |
| 33 | 3.81 | 14 | 9.102 | 33.418 | 29.480 | 35.370 | -568 | 2.371 | 1.03 |
| 33 | 3.81 | 14 | 10.266 | 34.464 | 30.000 | 36.650 | -389 | 2.643 | 1.02 |
| 33 | 3.81 | 14 | 11.161 | 35.267 | 30.410 | 37.630 | -396 | 2.681 | 1.02 |
| 33 | 3.81 | 14 | 12.159 | 36.162 | 30.870 | 38.720 | -405 | 2.553 | 1.02 |
| 33 | 3.81 | 14 | 13.359 | 37.238 | 31.430 | 40.030 | -414 | 2.591 | 1.02 |
| 33 | 3.81 | 14 | 14.441 | 38.209 | 31.940 | 41.200 | -417 | 2.583 | 1.02 |
| 33 | 3.81 | 14 | 15.523 | 39.179 | 32.460 | 42.370 | -425 | 2.440 | 1.02 |
| 33 | 3.81 | 14 | 16.606 | 40.152 | 32.990 | 43.540 | -217 | 2.723 | 1.01 |
| 33 | 3.81 | 14 | 18.287 | 41.664 | 33.830 | 45.340 | -222 | 2.616 | 1.01 |
| 33 | 3.81 | 14 | 19.372 | 42.640 | 34.390 | 46.490 | -225 | 2.515 | 1.01 |
| 34 | 3.81 | 15 | 5.290 | 38.196 | 37.080 | 38.800 | -222 | 0.349 | 1.01 |
| 34 | 3.81 | 15 | 6.407 | 38.593 | 37.570 | 39.150 | 221 | 0.473 | 0.99 |
| 34 | 3.81 | 15 | 7.488 | 38.981 | 38.040 | 39.490 | 444 | 0.473 | 0.98 |
| 34 | 3.81 | 15 | 8.568 | 39.372 | 38.530 | 39.840 | 446 | 0.446 | 0.98 |
| 34 | 3.81 | 15 | 9.622 | 39.758 | 39.000 | 40.180 | 451 | 0.453 | 0.98 |
| 34 | 3.81 | 15 | 10.703 | 40.160 | 39.500 | 40.530 | 684 | 0.412 | 0.97 |
| 34 | 3.81 | 15 | 11.785 | 40.568 | 40.000 | 40.890 | 223 | 0.482 | 0.99 |
| 34 | 3.81 | 15 | 12.899 | 40.995 | 40.520 | 41.270 | 461 | 0.398 | 0.98 |
| 34 | 3.81 | 15 | 13.829 | 41.357 | 40.970 | 41.590 | 942 | 0.314 | 0.96 |
| 34 | 3.81 | 15 | 14.815 | 41.746 | 41.440 | 41.940 | 470 | 0.407 | 0.98 |
| 34 | 3.81 | 15 | 15.900 | 42.182 | 41.970 | 42.330 | 234 | 0.425 | 0.99 |
| 34 | 3.81 | 15 | 16.983 | 42.625 | 42.510 | 42.730 | 977 | 0.302 | 0.96 |
| 34 | 3.81 | 15 | 18.055 | 43.071 | 43.050 | 43.130 | 481 | 0.392 | 0.98 |
| 35 | 4.19 | 14 | 10.266 | 12.971 | 11.810 | 13.680 | -231 | 0.413 | 1.04 |
| 35 | 4.19 | 14 | 11.161 | 14.101 | 12.840 | 14.890 | -266 | 0.556 | 1.04 |
| 35 | 4.19 | 14 | 12.159 | 15.356 | 13.990 | 16.220 | -237 | 0.667 | 1.03 |
| 35 | 4.19 | 14 | 13.359 | 16.862 | 15.360 | 17.820 | -91 | 1.073 | 1.01 |
| 35 | 4.19 | 14 | 14.441 | 18.216 | 16.610 | 19.260 | 4 | 1.335 | 1.00 |
| 35 | 4.19 | 14 | 15.523 | 19.564 | 17.850 | 20.690 | 117 | 1.403 | 0.99 |
| 35 | 4.19 | 14 | 16.606 | 20.912 | 19.090 | 22.110 | 2 | 1.648 | 1.00 |
| 35 | 4.19 | 14 | 18.287 | 22.994 | 21.030 | 24.300 | 2 | 1.779 | 1.00 |
| 35 | 4.19 | 14 | 19.372 | 24.332 | 22.280 | 25.700 | 2 | 1.863 | 1.00 |
| 36 | 4.19 | 15 | 3.212 | 29.113 | 27.040 | 30.390 | -182 | 2.881 | 1.01 |
| 36 | 4.19 | 15 | 4.281 | 30.323 | 28.220 | 31.600 | -186 | 2.903 | 1.01 |
| 36 | 4.19 | 15 | 5.290 | 31.457 | 29.320 | 32.740 | -185 | 3.053 | 1.01 |
| 36 | 4.19 | 15 | 6.407 | 32.705 | 30.520 | 34.020 | 0 | 3.374 | 1.00 |
| 36 | 4.19 | 15 | 7.488 | 33.905 | 31.660 | 35.250 | -186 | 3.169 | 1.01 |
| 36 | 4.19 | 15 | 8.568 | 35.099 | 32.780 | 36.490 | -190 | 3.149 | 1.01 |
| 36 | 4.19 | 15 | 9.622 | 36.260 | 33.870 | 37.700 | 4 | 3.325 | 1.00 |
| 36 | 4.19 | 15 | 10.703 | 37.446 | 34.980 | 38.940 | -202 | 3.092 | 1.01 |
| 36 | 4.19 | 15 | 11.785 | 38.628 | 36.080 | 40.170 | -205 | 3.111 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 36 | 4.19 | 15 | 12.899 | 39.841 | 37.210 | 41.450 | -425 | 2.863 | 1.02 |
| 36 | 4.19 | 15 | 13.829 | 40.851 | 38.150 | 42.500 | -434 | 3.033 | 1.02 |
| 36 | 4.19 | 15 | 14.815 | 41.918 | 39.150 | 43.620 | -218 | 2.978 | 1.01 |
| 36 | 4.19 | 15 | 15.900 | 43.089 | 40.240 | 44.850 | 6 | 3.274 | 1.00 |
| 36 | 4.19 | 15 | 16.983 | 44.253 | 41.330 | 46.070 | 7 | 3.387 | 1.00 |
| 36 | 4.19 | 15 | 18.055 | 45.403 | 42.410 | 47.260 | -226 | 3.228 | 1.01 |
| 37 | 4.46 | 14 | 8.019 | 8.766 | 7.620 | 9.380 | -124 | 0.400 | 1.03 |
| 37 | 4.46 | 14 | 9.102 | 9.947 | 8.640 | 10.660 | -250 | 0.450 | 1.05 |
| 37 | 4.46 | 14 | 10.266 | 11.217 | 9.730 | 12.040 | -192 | 0.717 | 1.03 |
| 37 | 4.46 | 14 | 11.161 | 12.196 | 10.570 | 13.100 | -218 | 0.954 | 1.03 |
| 37 | 4.46 | 14 | 12.159 | 13.287 | 11.520 | 14.280 | -247 | 0.992 | 1.03 |
| 37 | 4.46 | 14 | 13.359 | 14.604 | 12.660 | 15.710 | -109 | 1.648 | 1.01 |
| 37 | 4.46 | 14 | 14.441 | 15.795 | 13.700 | 17.000 | -17 | 1.973 | 1.00 |
| 37 | 4.46 | 14 | 15.523 | 16.988 | 14.740 | 18.290 | -15 | 2.118 | 1.00 |
| 37 | 4.46 | 14 | 16.606 | 18.188 | 15.790 | 19.590 | -14 | 2.403 | 1.00 |
| 37 | 4.46 | 14 | 18.287 | 20.058 | 17.440 | 21.600 | -9 | 2.771 | 1.00 |
| 37 | 4.46 | 14 | 19.372 | 21.268 | 18.510 | 22.900 | -9 | 2.812 | 1.00 |
| 38 | 4.46 | 15 | 3.212 | 26.224 | 23.290 | 27.890 | -296 | 2.984 | 1.02 |
| 38 | 4.46 | 15 | 4.281 | 27.495 | 24.530 | 29.160 | -312 | 3.092 | 1.02 |
| 38 | 4.46 | 15 | 5.290 | 28.677 | 25.670 | 30.350 | -163 | 3.372 | 1.01 |
| 38 | 4.46 | 15 | 6.407 | 29.969 | 26.930 | 31.650 | 1 | 3.684 | 1.00 |
| 38 | 4.46 | 15 | 7.488 | 31.206 | 28.120 | 32.910 | -3 | 3.595 | 1.00 |
| 38 | 4.46 | 15 | 8.568 | 32.431 | 29.310 | 34.150 | -3 | 3.721 | 1.00 |
| 38 | 4.46 | 15 | 9.622 | 33.620 | 30.450 | 35.360 | -1 | 3.886 | 1.00 |
| 38 | 4.46 | 15 | 10.703 | 34.833 | 31.630 | 36.590 | -3 | 3.789 | 1.00 |
| 38 | 4.46 | 15 | 11.785 | 36.042 | 32.800 | 37.820 | -6 | 3.803 | 1.00 |
| 38 | 4.46 | 15 | 12.899 | 37.282 | 34.000 | 39.080 | -9 | 3.723 | 1.00 |
| 38 | 4.46 | 15 | 13.829 | 38.313 | 35.000 | 40.130 | -5 | 3.883 | 1.00 |
| 38 | 4.46 | 15 | 14.815 | 39.406 | 36.070 | 41.240 | -1 | 3.882 | 1.00 |
| 38 | 4.46 | 15 | 15.900 | 40.605 | 37.240 | 42.450 | -1 | 3.769 | 1.00 |
| 38 | 4.46 | 15 | 16.983 | 41.799 | 38.410 | 43.660 | 4 | 3.791 | 1.00 |
| 38 | 4.46 | 15 | 18.055 | 42.980 | 39.570 | 44.850 | 5 | 3.771 | 1.00 |
| 39 | 4.46 | 16 | 3.867 | 43.910 | 41.030 | 45.450 | 481 | 0.559 | 0.98 |
| 39 | 4.46 | 16 | 4.952 | 44.277 | 41.340 | 45.780 | 241 | 0.542 | 0.99 |
| 39 | 4.46 | 16 | 5.989 | 44.629 | 41.630 | 46.100 | -248 | 0.493 | 1.01 |
| 39 | 4.46 | 16 | 7.066 | 44.997 | 41.930 | 46.440 | 489 | 0.634 | 0.98 |
| 39 | 4.46 | 16 | 8.191 | 45.382 | 42.240 | 46.790 | 491 | 0.696 | 0.98 |
| 39 | 4.46 | 16 | 9.275 | 45.756 | 42.540 | 47.130 | 495 | 0.741 | 0.98 |
| 39 | 4.46 | 16 | 10.355 | 46.130 | 42.850 | 47.470 | 246 | 0.787 | 0.99 |
| 39 | 4.46 | 16 | 11.432 | 46.507 | 43.150 | 47.810 | -6 | 0.742 | 1.00 |
| 39 | 4.46 | 16 | 12.513 | 46.889 | 43.460 | 48.150 | -257 | 0.751 | 1.01 |
| 39 | 4.46 | 16 | 13.833 | 47.361 | 43.840 | 48.580 | -258 | 0.836 | 1.01 |
| 39 | 4.46 | 16 | 14.916 | 47.755 | 44.160 | 48.940 | -262 | 0.875 | 1.01 |
| 39 | 4.46 | 16 | 15.996 | 48.154 | 44.480 | 49.300 | 253 | 0.948 | 0.99 |
| 39 | 4.46 | 16 | 17.078 | 48.561 | 44.820 | 49.670 | 259 | 0.902 | 0.99 |
| 39 | 4.46 | 16 | 18.423 | 49.077 | 45.240 | 50.140 | 259 | 0.796 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 40 | 4.19 | 14 | 13.359 | 17.270 | 17.160 | 17.370 | -126 | 0.387 | 1.02 |
| 40 | 4.19 | 14 | 14.441 | 18.723 | 18.600 | 18.830 | 1 | 0.546 | 1.00 |
| 40 | 4.19 | 14 | 15.523 | 20.168 | 20.040 | 20.280 | 2 | 0.699 | 1.00 |
| 40 | 4.19 | 14 | 16.606 | 21.611 | 21.480 | 21.730 | -107 | 0.801 | 1.01 |
| 40 | 4.19 | 14 | 18.287 | 23.834 | 23.700 | 23.960 | 4 | 1.107 | 1.00 |
| 40 | 4.19 | 14 | 19.372 | 25.256 | 25.110 | 25.380 | 4 | 1.166 | 1.00 |
| 41 | 4.19 | 15 | 3.212 | 28.997 | 27.780 | 30.210 | -346 | 1.181 | 1.02 |
| 41 | 4.19 | 15 | 4.281 | 29.870 | 28.300 | 31.440 | -182 | 1.328 | 1.01 |
| 41 | 4.19 | 15 | 5.290 | 30.694 | 28.790 | 32.600 | -5 | 1.511 | 1.00 |
| 41 | 4.19 | 15 | 6.407 | 31.609 | 29.330 | 33.890 | 0 | 1.583 | 1.00 |
| 41 | 4.19 | 15 | 7.488 | 32.495 | 29.850 | 35.140 | -2 | 1.603 | 1.00 |
| 41 | 4.19 | 15 | 8.568 | 33.382 | 30.380 | 36.390 | -2 | 1.562 | 1.00 |
| 41 | 4.19 | 15 | 9.622 | 34.249 | 30.910 | 37.600 | -1 | 1.507 | 1.00 |
| 41 | 4.19 | 15 | 10.703 | 35.140 | 31.450 | 38.840 | -3 | 1.535 | 1.00 |
| 41 | 4.19 | 15 | 11.785 | 36.033 | 32.000 | 40.080 | -2 | 1.561 | 1.00 |
| 41 | 4.19 | 15 | 12.899 | 36.954 | 32.570 | 41.350 | -210 | 1.368 | 1.01 |
| 41 | 4.19 | 15 | 13.829 | 37.723 | 33.050 | 42.410 | -425 | 1.176 | 1.02 |
| 41 | 4.19 | 15 | 14.815 | 38.539 | 33.570 | 43.530 | -216 | 1.243 | 1.01 |
| 41 | 4.19 | 15 | 15.900 | 39.439 | 34.150 | 44.750 | -2 | 1.307 | 1.00 |
| 41 | 4.19 | 15 | 16.983 | 40.338 | 34.730 | 45.960 | -443 | 1.084 | 1.02 |
| 41 | 4.19 | 15 | 18.055 | 41.229 | 35.320 | 47.150 | -2 | 1.323 | 1.00 |
| 42 | 4.19 | 14 | 13.359 | 17.457 | 17.330 | 17.580 | -243 | 0.389 | 1.03 |
| 42 | 4.19 | 14 | 14.441 | 18.903 | 18.760 | 19.040 | -196 | 0.554 | 1.02 |
| 42 | 4.19 | 14 | 15.523 | 20.342 | 20.190 | 20.480 | -116 | 0.728 | 1.01 |
| 42 | 4.19 | 14 | 16.606 | 21.778 | 21.620 | 21.930 | -125 | 0.785 | 1.01 |
| 42 | 4.19 | 14 | 18.287 | 23.996 | 23.830 | 24.160 | -141 | 0.996 | 1.01 |
| 42 | 4.19 | 14 | 19.372 | 25.415 | 25.240 | 25.580 | -151 | 0.957 | 1.01 |
| 43 | 4.19 | 15 | 3.212 | 29.302 | 28.430 | 30.160 | 670 | 1.708 | 0.96 |
| 43 | 4.19 | 15 | 4.281 | 30.204 | 29.020 | 31.400 | 339 | 2.224 | 0.98 |
| 43 | 4.19 | 15 | 5.290 | 31.051 | 29.570 | 32.570 | 172 | 2.592 | 0.99 |
| 43 | 4.19 | 15 | 6.407 | 31.983 | 30.180 | 33.870 | 0 | 2.680 | 1.00 |
| 43 | 4.19 | 15 | 7.488 | 32.881 | 30.780 | 35.110 | 0 | 2.596 | 1.00 |
| 43 | 4.19 | 15 | 8.568 | 33.777 | 31.380 | 36.350 | 1 | 2.495 | 1.00 |
| 43 | 4.19 | 15 | 9.622 | 34.649 | 31.970 | 37.550 | -193 | 2.293 | 1.01 |
| 43 | 4.19 | 15 | 10.703 | 35.544 | 32.580 | 38.790 | -197 | 2.280 | 1.01 |
| 43 | 4.19 | 15 | 11.785 | 36.440 | 33.200 | 40.010 | -202 | 2.284 | 1.01 |
| 43 | 4.19 | 15 | 12.899 | 37.363 | 33.850 | 41.270 | -208 | 2.173 | 1.01 |
| 43 | 4.19 | 15 | 13.829 | 38.135 | 34.390 | 42.310 | 212 | 2.542 | 0.99 |
| 43 | 4.19 | 15 | 14.815 | 38.955 | 34.980 | 43.410 | 5 | 2.367 | 1.00 |
| 43 | 4.19 | 15 | 15.900 | 39.860 | 35.630 | 44.620 | -214 | 2.165 | 1.01 |
| 43 | 4.19 | 15 | 16.983 | 40.766 | 36.290 | 45.820 | 231 | 2.587 | 0.99 |
| 43 | 4.19 | 15 | 18.055 | 41.666 | 36.960 | 47.000 | 230 | 2.488 | 0.99 |
| 44 | 4.18 | 15 | 12.899 | 16.740 | 15.450 | 17.250 | 159 | 0.370 | 0.98 |
| 44 | 4.18 | 15 | 13.829 | 17.955 | 16.600 | 18.480 | -92 | 0.333 | 1.01 |
| 44 | 4.18 | 15 | 14.815 | 19.241 | 17.820 | 19.780 | 2 | 0.396 | 1.00 |
| 44 | 4.18 | 15 | 15.900 | 20.649 | 19.160 | 21.200 | 5 | 0.454 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 44 | 4.18 | 15 | 16.983 | 22.050 | 20.500 | 22.610 | -119 | 0.562 | 1.01 |
| 44 | 4.18 | 15 | 18.055 | 23.430 | 21.810 | 24.000 | 5 | 0.579 | 1.00 |
| 45 | 4.18 | 16 | 3.867 | 28.124 | 26.450 | 29.130 | -161 | 2.201 | 1.01 |
| 45 | 4.18 | 16 | 4.952 | 29.296 | 27.120 | 30.420 | -167 | 2.271 | 1.01 |
| 45 | 4.18 | 16 | 5.989 | 30.412 | 27.760 | 31.650 | -349 | 2.277 | 1.02 |
| 45 | 4.18 | 16 | 7.066 | 31.566 | 28.410 | 32.920 | 1 | 2.718 | 1.00 |
| 45 | 4.18 | 16 | 8.191 | 32.769 | 29.090 | 34.240 | 2 | 2.880 | 1.00 |
| 45 | 4.18 | 16 | 9.275 | 33.925 | 29.740 | 35.520 | 3 | 2.990 | 1.00 |
| 45 | 4.18 | 16 | 10.355 | 35.076 | 30.380 | 36.780 | -194 | 2.823 | 1.01 |
| 45 | 4.18 | 16 | 11.432 | 36.222 | 31.020 | 38.040 | -199 | 2.832 | 1.01 |
| 45 | 4.18 | 16 | 12.513 | 37.369 | 31.670 | 39.300 | -204 | 2.852 | 1.01 |
| 45 | 4.18 | 16 | 13.833 | 38.767 | 32.450 | 40.840 | 3 | 3.134 | 1.00 |
| 45 | 4.18 | 16 | 14.916 | 39.913 | 33.110 | 42.090 | -214 | 2.879 | 1.01 |
| 45 | 4.18 | 16 | 15.996 | 41.052 | 33.760 | 43.330 | -216 | 2.957 | 1.01 |
| 45 | 4.18 | 16 | 17.078 | 42.191 | 34.430 | 44.570 | 5 | 3.137 | 1.00 |
| 45 | 4.18 | 16 | 18.423 | 43.603 | 35.270 | 46.110 | 9 | 2.993 | 1.00 |
| 46 | 4.53 | 15 | 8.568 | 9.922 | 9.160 | 11.190 | 35 | 0.320 | 0.99 |
| 46 | 4.53 | 15 | 9.622 | 11.152 | 10.300 | 12.510 | 95 | 0.386 | 0.98 |
| 46 | 4.53 | 15 | 10.703 | 12.415 | 11.460 | 13.860 | 52 | 0.571 | 0.99 |
| 46 | 4.53 | 15 | 11.785 | 13.679 | 12.630 | 15.200 | 62 | 0.686 | 0.99 |
| 46 | 4.53 | 15 | 12.899 | 14.982 | 13.840 | 16.580 | -11 | 0.849 | 1.00 |
| 46 | 4.53 | 15 | 13.829 | 16.069 | 14.850 | 17.720 | 79 | 0.865 | 0.99 |
| 46 | 4.53 | 15 | 14.815 | 17.224 | 15.930 | 18.940 | 190 | 0.901 | 0.98 |
| 46 | 4.53 | 15 | 15.900 | 18.494 | 17.120 | 20.260 | 102 | 1.055 | 0.99 |
| 46 | 4.53 | 15 | 16.983 | 19.764 | 18.310 | 21.590 | 115 | 1.202 | 0.99 |
| 46 | 4.53 | 15 | 18.055 | 21.022 | 19.500 | 22.900 | 248 | 1.149 | 0.98 |
| 47 | 4.53 | 16 | 3.867 | 26.133 | 24.540 | 28.340 | 154 | 1.169 | 0.99 |
| 47 | 4.53 | 16 | 4.952 | 27.437 | 25.840 | 29.710 | 159 | 1.195 | 0.99 |
| 47 | 4.53 | 16 | 5.989 | 28.681 | 27.090 | 31.000 | -3 | 1.497 | 1.00 |
| 47 | 4.53 | 16 | 7.066 | 29.968 | 28.380 | 32.320 | 2 | 1.630 | 1.00 |
| 47 | 4.53 | 16 | 8.191 | 31.312 | 29.730 | 33.690 | 3 | 1.756 | 1.00 |
| 47 | 4.53 | 16 | 9.275 | 32.603 | 31.030 | 34.990 | 3 | 1.868 | 1.00 |
| 47 | 4.53 | 16 | 10.355 | 33.889 | 32.320 | 36.270 | 0 | 1.853 | 1.00 |
| 47 | 4.53 | 16 | 11.432 | 35.168 | 33.610 | 37.530 | 0 | 1.864 | 1.00 |
| 47 | 4.53 | 16 | 12.513 | 36.450 | 34.900 | 38.780 | 0 | 1.924 | 1.00 |
| 47 | 4.53 | 16 | 13.833 | 38.010 | 36.470 | 40.300 | 3 | 1.949 | 1.00 |
| 47 | 4.53 | 16 | 14.916 | 39.288 | 37.760 | 41.540 | 0 | 1.993 | 1.00 |
| 47 | 4.53 | 16 | 15.996 | 40.558 | 39.040 | 42.770 | 5 | 2.102 | 1.00 |
| 47 | 4.53 | 16 | 17.078 | 41.826 | 40.320 | 43.990 | 7 | 2.154 | 1.00 |
| 47 | 4.53 | 16 | 18.423 | 43.396 | 41.910 | 45.500 | 15 | 1.907 | 1.00 |
| 48 | 4.53 | 17 | 3.308 | 45.234 | 44.310 | 47.010 | -722 | 0.507 | 1.03 |
| 48 | 4.53 | 17 | 4.392 | 45.683 | 44.760 | 47.450 | -724 | 0.556 | 1.03 |
| 48 | 4.53 | 17 | 5.473 | 46.131 | 45.210 | 47.900 | -729 | 0.567 | 1.03 |
| 48 | 4.53 | 17 | 6.558 | 46.582 | 45.660 | 48.340 | -731 | 0.643 | 1.03 |
| 48 | 4.53 | 17 | 7.642 | 47.034 | 46.110 | 48.790 | -495 | 0.781 | 1.02 |
| 48 | 4.53 | 17 | 8.732 | 47.491 | 46.570 | 49.250 | -742 | 0.732 | 1.03 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 48 | 4.53 | 17 | 9.544 | 47.835 | 46.920 | 49.590 | -499 | 0.863 | 1.02 |
| 48 | 4.53 | 17 | 10.897 | 48.412 | 47.500 | 50.160 | -254 | 0.977 | 1.01 |
| 48 | 4.53 | 17 | 11.981 | 48.881 | 47.970 | 50.620 | -4 | 1.104 | 1.00 |
| 48 | 4.53 | 17 | 13.063 | 49.356 | 48.450 | 51.090 | -260 | 1.028 | 1.01 |
| 48 | 4.53 | 17 | 14.146 | 49.838 | 48.930 | 51.570 | -4 | 1.236 | 1.00 |
| 48 | 4.53 | 17 | 15.228 | 50.327 | 49.420 | 52.050 | -4 | 1.243 | 1.00 |
| 48 | 4.53 | 17 | 16.311 | 50.825 | 49.920 | 52.540 | -8 | 1.278 | 1.00 |
| 48 | 4.53 | 17 | 17.391 | 51.331 | 50.430 | 53.040 | -3 | 0.935 | 1.00 |
| 48 | 4.53 | 17 | 18.474 | 51.847 | 50.950 | 53.550 | 7 | 1.034 | 1.00 |
| 49 | 4.53 | 15 | 9.622 | 11.067 | 10.650 | 11.490 | -44 | 0.362 | 1.01 |
| 49 | 4.53 | 15 | 10.703 | 12.328 | 11.870 | 12.800 | -164 | 0.348 | 1.03 |
| 49 | 4.53 | 15 | 11.785 | 13.594 | 13.090 | 14.110 | -72 | 0.640 | 1.01 |
| 49 | 4.53 | 15 | 12.899 | 14.902 | 14.350 | 15.460 | -234 | 0.554 | 1.03 |
| 49 | 4.53 | 15 | 13.829 | 15.995 | 15.410 | 16.590 | -262 | 0.720 | 1.03 |
| 49 | 4.53 | 15 | 14.815 | 17.160 | 16.540 | 17.790 | -103 | 1.106 | 1.01 |
| 49 | 4.53 | 15 | 15.900 | 18.443 | 17.790 | 19.100 | 95 | 1.071 | 0.99 |
| 49 | 4.53 | 15 | 16.983 | 19.729 | 19.040 | 20.420 | 224 | 1.180 | 0.98 |
| 49 | 4.53 | 15 | 18.055 | 21.004 | 20.290 | 21.720 | -9 | 1.466 | 1.00 |
| 50 | 4.53 | 16 | 3.867 | 26.220 | 25.610 | 26.820 | 603 | 0.557 | 0.96 |
| 50 | 4.53 | 16 | 4.952 | 27.522 | 26.920 | 28.120 | 317 | 0.726 | 0.98 |
| 50 | 4.53 | 16 | 5.989 | 28.752 | 28.140 | 29.350 | 329 | 0.830 | 0.98 |
| 50 | 4.53 | 16 | 7.066 | 30.014 | 29.390 | 30.620 | 174 | 1.083 | 0.99 |
| 50 | 4.53 | 16 | 8.191 | 31.320 | 30.680 | 31.950 | 360 | 1.063 | 0.98 |
| 50 | 4.53 | 16 | 9.275 | 32.567 | 31.910 | 33.210 | 372 | 1.205 | 0.98 |
| 50 | 4.53 | 16 | 10.355 | 33.801 | 33.130 | 34.460 | 384 | 1.272 | 0.98 |
| 50 | 4.53 | 16 | 11.432 | 35.023 | 34.330 | 35.710 | 394 | 1.300 | 0.98 |
| 50 | 4.53 | 16 | 12.513 | 36.242 | 35.520 | 36.950 | 203 | 1.521 | 0.99 |
| 50 | 4.53 | 16 | 13.833 | 37.722 | 36.970 | 38.450 | 421 | 1.458 | 0.98 |
| 50 | 4.53 | 16 | 14.916 | 38.930 | 38.160 | 39.690 | 216 | 1.651 | 0.99 |
| 50 | 4.53 | 16 | 15.996 | 40.132 | 39.340 | 40.910 | 5 | 1.618 | 1.00 |
| 50 | 4.53 | 16 | 17.078 | 41.331 | 40.510 | 42.140 | 6 | 1.562 | 1.00 |
| 50 | 4.53 | 16 | 18.423 | 42.817 | 41.970 | 43.650 | 466 | 1.274 | 0.98 |
| 51 | 4.53 | 17 | 3.308 | 44.884 | 44.180 | 45.570 | -253 | 0.391 | 1.01 |
| 51 | 4.53 | 17 | 4.392 | 45.250 | 44.600 | 45.890 | -10 | 0.469 | 1.00 |
| 51 | 4.53 | 17 | 5.473 | 45.617 | 45.020 | 46.200 | -254 | 0.443 | 1.01 |
| 51 | 4.53 | 17 | 6.558 | 45.987 | 45.440 | 46.520 | -7 | 0.547 | 1.00 |
| 51 | 4.53 | 17 | 7.642 | 46.360 | 45.870 | 46.830 | -500 | 0.509 | 1.02 |
| 51 | 4.53 | 17 | 8.732 | 46.738 | 46.300 | 47.160 | -505 | 0.504 | 1.02 |
| 51 | 4.53 | 17 | 9.544 | 47.022 | 46.630 | 47.400 | -2 | 0.694 | 1.00 |
| 51 | 4.53 | 17 | 10.897 | 47.500 | 47.170 | 47.810 | -509 | 0.589 | 1.02 |
| 51 | 4.53 | 17 | 11.981 | 47.890 | 47.620 | 48.150 | -258 | 0.671 | 1.01 |
| 51 | 4.53 | 17 | 13.063 | 48.285 | 48.070 | 48.490 | -767 | 0.549 | 1.03 |
| 51 | 4.53 | 17 | 14.146 | 48.686 | 48.530 | 48.830 | -261 | 0.747 | 1.01 |
| 51 | 4.53 | 17 | 15.228 | 49.095 | 48.990 | 49.180 | -263 | 0.741 | 1.01 |
| 51 | 4.53 | 17 | 16.311 | 49.512 | 49.470 | 49.540 | -526 | 0.686 | 1.02 |
| 51 | 4.53 | 17 | 17.391 | 49.936 | 49.850 | 50.020 | 0 | 0.613 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 51 | 4.53 | 17 | 18.474 | 50.370 | 50.230 | 50.520 | 277 | 0.790 | 0.99 |
| 52 | 4.18 | 15 | 12.899 | 16.727 | 16.680 | 16.780 | 72 | 0.407 | 0.99 |
| 52 | 4.18 | 15 | 14.815 | 19.292 | 19.250 | 19.330 | 190 | 0.672 | 0.98 |
| 52 | 4.18 | 15 | 15.900 | 20.736 | 20.690 | 20.770 | 111 | 0.923 | 0.99 |
| 52 | 4.18 | 15 | 16.983 | 22.170 | 22.130 | 22.210 | 478 | 0.801 | 0.96 |
| 52 | 4.18 | 15 | 18.055 | 23.581 | 23.540 | 23.630 | 146 | 1.310 | 0.99 |
| 53 | 4.18 | 16 | 3.867 | 27.661 | 26.420 | 28.830 | -317 | 1.029 | 1.02 |
| 53 | 4.18 | 16 | 4.952 | 28.650 | 27.090 | 30.100 | -164 | 1.147 | 1.01 |
| 53 | 4.18 | 16 | 5.989 | 29.584 | 27.720 | 31.290 | -342 | 1.119 | 1.02 |
| 53 | 4.18 | 16 | 7.066 | 30.541 | 28.380 | 32.510 | -172 | 1.259 | 1.01 |
| 53 | 4.18 | 16 | 8.191 | 31.531 | 29.050 | 33.760 | -356 | 1.267 | 1.02 |
| 53 | 4.18 | 16 | 9.275 | 32.477 | 29.700 | 34.950 | -366 | 1.326 | 1.02 |
| 53 | 4.18 | 16 | 10.355 | 33.412 | 30.340 | 36.120 | -378 | 1.389 | 1.02 |
| 53 | 4.18 | 16 | 11.432 | 34.339 | 30.980 | 37.280 | -389 | 1.382 | 1.02 |
| 53 | 4.18 | 16 | 12.513 | 35.266 | 31.630 | 38.440 | -202 | 1.569 | 1.01 |
| 53 | 4.18 | 16 | 13.833 | 36.395 | 32.420 | 39.830 | -408 | 1.478 | 1.02 |
| 53 | 4.18 | 16 | 14.916 | 37.321 | 33.070 | 40.970 | -211 | 1.647 | 1.01 |
| 53 | 4.18 | 16 | 15.996 | 38.245 | 33.730 | 42.130 | -1 | 1.862 | 1.00 |
| 53 | 4.18 | 16 | 17.078 | 39.172 | 34.390 | 43.290 | 4 | 1.809 | 1.00 |
| 53 | 4.18 | 16 | 18.423 | 40.329 | 35.230 | 44.740 | -8 | 1.652 | 1.00 |
| 54 | 4.42 | 16 | 15.996 | 20.433 | 18.700 | 21.230 | 173 | 0.414 | 0.98 |
| 54 | 4.42 | 16 | 17.078 | 21.856 | 20.000 | 22.670 | 203 | 0.497 | 0.98 |
| 54 | 4.42 | 16 | 18.423 | 23.619 | 21.620 | 24.450 | 12 | 0.683 | 1.00 |
| 55 | 4.42 | 17 | 3.308 | 28.746 | 26.730 | 29.520 | -164 | 3.824 | 1.01 |
| 55 | 4.42 | 17 | 4.392 | 30.025 | 28.020 | 30.790 | -168 | 3.992 | 1.01 |
| 55 | 4.42 | 17 | 5.473 | 31.294 | 29.310 | 32.060 | -176 | 4.076 | 1.01 |
| 55 | 4.42 | 17 | 6.558 | 32.562 | 30.600 | 33.330 | -181 | 4.231 | 1.01 |
| 55 | 4.42 | 17 | 7.642 | 33.825 | 31.890 | 34.590 | -186 | 4.337 | 1.01 |
| 55 | 4.42 | 17 | 8.732 | 35.092 | 33.190 | 35.860 | -194 | 4.477 | 1.01 |
| 55 | 4.42 | 17 | 9.544 | 36.034 | 34.150 | 36.800 | -1 | 5.034 | 1.00 |
| 55 | 4.42 | 17 | 10.897 | 37.599 | 35.760 | 38.360 | -2 | 5.106 | 1.00 |
| 55 | 4.42 | 17 | 11.981 | 38.850 | 37.040 | 39.610 | 1 | 5.244 | 1.00 |
| 55 | 4.42 | 17 | 13.063 | 40.096 | 38.320 | 40.860 | 1 | 5.223 | 1.00 |
| 55 | 4.42 | 17 | 14.146 | 41.337 | 39.590 | 42.100 | 2 | 5.355 | 1.00 |
| 55 | 4.42 | 17 | 15.228 | 42.575 | 40.860 | 43.330 | 3 | 5.487 | 1.00 |
| 55 | 4.42 | 17 | 16.311 | 43.809 | 42.120 | 44.560 | 2 | 5.523 | 1.00 |
| 55 | 4.42 | 17 | 17.391 | 45.035 | 43.380 | 45.780 | 9 | 5.141 | 1.00 |
| 55 | 4.42 | 17 | 18.474 | 46.260 | 44.630 | 47.000 | 10 | 5.324 | 1.00 |
| 56 | 4.42 | 18 | 3.348 | 46.894 | 46.590 | 47.190 | 1691 | 0.481 | 0.93 |
| 56 | 4.42 | 18 | 4.238 | 47.200 | 47.010 | 47.390 | 1205 | 0.646 | 0.95 |
| 56 | 4.42 | 18 | 5.324 | 47.572 | 47.520 | 47.620 | 961 | 0.796 | 0.96 |
| 56 | 4.42 | 18 | 6.408 | 47.944 | 47.790 | 48.090 | 724 | 0.932 | 0.97 |
| 56 | 4.42 | 18 | 7.445 | 48.301 | 48.020 | 48.580 | 731 | 0.991 | 0.97 |
| 56 | 4.42 | 18 | 8.300 | 48.597 | 48.210 | 48.980 | 483 | 1.122 | 0.98 |
| 56 | 4.42 | 18 | 8.569 | 48.690 | 48.270 | 49.110 | 483 | 1.071 | 0.98 |
| 56 | 4.42 | 18 | 9.653 | 49.067 | 48.510 | 49.620 | 495 | 1.045 | 0.98 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 56 | 4.42 | 18 | 10.734 | 49.448 | 48.760 | 50.140 | 502 | 1.105 | 0.98 |
| 56 | 4.42 | 18 | 11.817 | 49.834 | 49.010 | 50.660 | 250 | 1.047 | 0.99 |
| 56 | 4.42 | 18 | 12.863 | 50.211 | 49.260 | 51.170 | 253 | 1.166 | 0.99 |
| 56 | 4.42 | 18 | 13.985 | 50.623 | 49.530 | 51.720 | 518 | 1.075 | 0.98 |
| 56 | 4.42 | 18 | 15.030 | 51.013 | 49.790 | 52.240 | 260 | 1.204 | 0.99 |
| 56 | 4.42 | 18 | 15.514 | 51.196 | 49.920 | 52.480 | 264 | 1.334 | 0.99 |
| 56 | 4.42 | 18 | 16.114 | 51.425 | 50.070 | 52.780 | 3 | 0.987 | 1.00 |
| 56 | 4.42 | 18 | 17.237 | 51.860 | 50.370 | 53.360 | 1 | 1.080 | 1.00 |
| 56 | 4.42 | 18 | 18.320 | 52.289 | 50.660 | 53.920 | 6 | 1.145 | 1.00 |
| 56 | 4.42 | 18 | 18.862 | 52.507 | 50.810 | 54.200 | -1 | 0.946 | 1.00 |
| 57 | 4.67 | 16 | 7.066 | 8.387 | 7.940 | 8.860 | 0 | 0.540 | 1.00 |
| 57 | 4.67 | 16 | 8.191 | 9.716 | 9.170 | 10.340 | 43 | 0.779 | 0.99 |
| 57 | 4.67 | 16 | 9.275 | 10.993 | 10.360 | 11.790 | 51 | 0.959 | 0.99 |
| 57 | 4.67 | 16 | 10.355 | 12.261 | 11.520 | 13.240 | -5 | 1.032 | 1.00 |
| 57 | 4.67 | 16 | 11.432 | 13.523 | 12.680 | 14.690 | 65 | 1.156 | 0.99 |
| 57 | 4.67 | 16 | 12.513 | 14.786 | 13.840 | 16.160 | 74 | 1.251 | 0.99 |
| 57 | 4.67 | 16 | 13.833 | 16.325 | 15.260 | 17.960 | 270 | 1.075 | 0.97 |
| 57 | 4.67 | 16 | 14.916 | 17.587 | 16.410 | 19.430 | 94 | 1.423 | 0.99 |
| 57 | 4.67 | 16 | 15.996 | 18.846 | 17.560 | 20.900 | -4 | 1.593 | 1.00 |
| 57 | 4.67 | 16 | 17.078 | 20.107 | 18.720 | 22.370 | 122 | 1.607 | 0.99 |
| 57 | 4.67 | 16 | 18.423 | 21.674 | 20.160 | 24.200 | 259 | 1.385 | 0.98 |
| 58 | 4.67 | 17 | 3.308 | 26.559 | 25.340 | 29.540 | -466 | 1.206 | 1.03 |
| 58 | 4.67 | 17 | 4.392 | 27.782 | 26.100 | 30.830 | -323 | 1.388 | 1.02 |
| 58 | 4.67 | 17 | 5.473 | 28.991 | 26.870 | 32.110 | -336 | 1.422 | 1.02 |
| 58 | 4.67 | 17 | 6.558 | 30.193 | 27.630 | 33.380 | -175 | 1.598 | 1.01 |
| 58 | 4.67 | 17 | 7.642 | 31.386 | 28.400 | 34.640 | -182 | 1.635 | 1.01 |
| 58 | 4.67 | 17 | 8.732 | 32.580 | 29.160 | 35.900 | -188 | 1.724 | 1.01 |
| 58 | 4.67 | 17 | 9.544 | 33.467 | 29.740 | 36.830 | -190 | 1.801 | 1.01 |
| 58 | 4.67 | 17 | 10.897 | 34.940 | 30.700 | 38.390 | -391 | 1.721 | 1.02 |
| 58 | 4.67 | 17 | 11.981 | 36.116 | 31.470 | 39.630 | -200 | 1.957 | 1.01 |
| 58 | 4.67 | 17 | 13.063 | 37.288 | 32.250 | 40.860 | -207 | 1.904 | 1.01 |
| 58 | 4.67 | 17 | 14.146 | 38.457 | 33.030 | 42.100 | -211 | 1.939 | 1.01 |
| 58 | 4.67 | 17 | 15.228 | 39.624 | 33.820 | 43.320 | -217 | 2.024 | 1.01 |
| 58 | 4.67 | 17 | 16.311 | 40.790 | 34.620 | 44.540 | -222 | 2.035 | 1.01 |
| 58 | 4.67 | 17 | 17.391 | 41.951 | 35.430 | 45.760 | 233 | 2.141 | 0.99 |
| 58 | 4.67 | 17 | 18.474 | 43.112 | 36.250 | 46.970 | 467 | 2.126 | 0.98 |
| 59 | 4.67 | 18 | 3.348 | 44.791 | 38.470 | 48.310 | -978 | 0.779 | 1.04 |
| 59 | 4.67 | 18 | 4.238 | 45.151 | 38.980 | 48.580 | -979 | 0.957 | 1.04 |
| 59 | 4.67 | 18 | 5.324 | 45.595 | 39.610 | 48.900 | -505 | 1.149 | 1.02 |
| 59 | 4.67 | 18 | 6.408 | 46.042 | 40.240 | 49.220 | -261 | 1.465 | 1.01 |
| 59 | 4.67 | 18 | 7.445 | 46.473 | 40.830 | 49.530 | -506 | 1.337 | 1.02 |
| 59 | 4.67 | 18 | 8.300 | 46.832 | 41.330 | 49.790 | -507 | 1.516 | 1.02 |
| 59 | 4.67 | 18 | 8.569 | 46.945 | 41.480 | 49.870 | -510 | 1.375 | 1.02 |
| 59 | 4.67 | 18 | 9.653 | 47.405 | 42.110 | 50.200 | -5 | 1.771 | 1.00 |
| 59 | 4.67 | 18 | 10.734 | 47.870 | 42.740 | 50.540 | -6 | 1.846 | 1.00 |
| 59 | 4.67 | 18 | 11.817 | 48.341 | 43.370 | 50.880 | -2 | 1.811 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 59 | 4.67 | 18 | 12.863 | 48.802 | 43.990 | 51.210 | -1 | 1.965 | 1.00 |
| 59 | 4.67 | 18 | 13.985 | 49.304 | 44.660 | 51.580 | 1 | 1.964 | 1.00 |
| 59 | 4.67 | 18 | 15.030 | 49.778 | 45.300 | 51.920 | 262 | 2.171 | 0.99 |
| 59 | 4.67 | 18 | 15.514 | 50.000 | 45.590 | 52.080 | 3 | 2.224 | 1.00 |
| 59 | 4.67 | 18 | 16.114 | 50.278 | 45.960 | 52.280 | 272 | 2.079 | 0.99 |
| 59 | 4.67 | 18 | 17.237 | 50.805 | 46.670 | 52.670 | 277 | 2.260 | 0.99 |
| 59 | 4.67 | 18 | 18.320 | 51.322 | 47.350 | 53.050 | 278 | 2.201 | 0.99 |
| 59 | 4.67 | 18 | 18.862 | 51.584 | 47.700 | 53.240 | 274 | 2.025 | 0.99 |
| 60 | 4.23 | 17 | 9.544 | 11.779 | 9.740 | 12.710 | -69 | 0.324 | 1.02 |
| 60 | 4.23 | 17 | 10.897 | 13.502 | 11.120 | 14.530 | -7 | 0.467 | 1.00 |
| 60 | 4.23 | 17 | 11.981 | 14.886 | 12.240 | 15.990 | -2 | 0.696 | 1.00 |
| 60 | 4.23 | 17 | 13.063 | 16.267 | 13.350 | 17.440 | -2 | 0.789 | 1.00 |
| 60 | 4.23 | 17 | 14.146 | 17.646 | 14.460 | 18.880 | 0 | 1.052 | 1.00 |
| 60 | 4.23 | 17 | 15.228 | 19.023 | 15.580 | 20.320 | 0 | 1.221 | 1.00 |
| 60 | 4.23 | 17 | 16.311 | 20.398 | 16.700 | 21.750 | 0 | 1.437 | 1.00 |
| 60 | 4.23 | 17 | 17.391 | 21.765 | 17.820 | 23.190 | 133 | 1.184 | 0.99 |
| 60 | 4.23 | 17 | 18.474 | 23.132 | 18.960 | 24.630 | 150 | 1.371 | 0.99 |
| 61 | 4.23 | 18 | 3.348 | 27.594 | 23.560 | 29.080 | -317 | 3.568 | 1.02 |
| 61 | 4.23 | 18 | 4.238 | 28.644 | 24.660 | 30.120 | -331 | 3.798 | 1.02 |
| 61 | 4.23 | 18 | 5.324 | 29.918 | 26.000 | 31.380 | -340 | 4.033 | 1.02 |
| 61 | 4.23 | 18 | 6.408 | 31.182 | 27.330 | 32.630 | -175 | 4.620 | 1.01 |
| 61 | 4.23 | 18 | 7.445 | 32.385 | 28.590 | 33.810 | -184 | 4.705 | 1.01 |
| 61 | 4.23 | 18 | 8.300 | 33.373 | 29.640 | 34.790 | -189 | 4.834 | 1.01 |
| 61 | 4.23 | 18 | 8.569 | 33.683 | 29.960 | 35.090 | -190 | 4.849 | 1.01 |
| 61 | 4.23 | 18 | 9.653 | 34.932 | 31.280 | 36.320 | 1 | 5.320 | 1.00 |
| 61 | 4.23 | 18 | 10.734 | 36.174 | 32.590 | 37.540 | 1 | 5.560 | 1.00 |
| 61 | 4.23 | 18 | 11.817 | 37.414 | 33.900 | 38.760 | -1 | 5.456 | 1.00 |
| 61 | 4.23 | 18 | 12.863 | 38.608 | 35.160 | 39.940 | -2 | 5.584 | 1.00 |
| 61 | 4.23 | 18 | 13.985 | 39.886 | 36.510 | 41.200 | 1 | 5.588 | 1.00 |
| 61 | 4.23 | 18 | 15.030 | 41.071 | 37.750 | 42.360 | -2 | 5.818 | 1.00 |
| 61 | 4.23 | 18 | 15.514 | 41.619 | 38.330 | 42.900 | -3 | 5.988 | 1.00 |
| 61 | 4.23 | 18 | 16.114 | 42.298 | 39.050 | 43.570 | 222 | 5.526 | 0.99 |
| 61 | 4.23 | 18 | 17.237 | 43.563 | 40.380 | 44.810 | 230 | 5.750 | 0.99 |
| 61 | 4.23 | 18 | 18.320 | 44.780 | 41.650 | 46.010 | 238 | 5.709 | 0.99 |
| 61 | 4.23 | 18 | 18.862 | 45.387 | 42.290 | 46.600 | 1 | 5.785 | 1.00 |
| 62 | 4.51 | 17 | 7.642 | 9.290 | 9.000 | 9.950 | 21 | 0.366 | 0.99 |
| 62 | 4.51 | 17 | 8.732 | 10.621 | 10.290 | 11.400 | -46 | 0.338 | 1.01 |
| 62 | 4.51 | 17 | 9.544 | 11.612 | 11.250 | 12.490 | 134 | 0.366 | 0.97 |
| 62 | 4.51 | 17 | 10.897 | 13.263 | 12.850 | 14.310 | 172 | 0.417 | 0.97 |
| 62 | 4.51 | 17 | 11.981 | 14.585 | 14.120 | 15.770 | 134 | 0.500 | 0.98 |
| 62 | 4.51 | 17 | 13.063 | 15.904 | 15.400 | 17.230 | 234 | 0.440 | 0.97 |
| 62 | 4.51 | 17 | 14.146 | 17.223 | 16.670 | 18.680 | 269 | 0.525 | 0.97 |
| 62 | 4.51 | 17 | 15.228 | 18.541 | 17.940 | 20.140 | 299 | 0.639 | 0.97 |
| 62 | 4.51 | 17 | 16.311 | 19.860 | 19.220 | 21.590 | 222 | 0.728 | 0.98 |
| 62 | 4.51 | 17 | 17.391 | 21.174 | 20.490 | 23.030 | 248 | 0.557 | 0.98 |
| 62 | 4.51 | 17 | 18.474 | 22.492 | 21.770 | 24.470 | 397 | 0.572 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 63 | 4.51 | 18 | 3.348 | 27.029 | 26.110 | 30.010 | -618 | 2.396 | 1.04 |
| 63 | 4.51 | 18 | 4.238 | 28.077 | 27.140 | 29.040 | -483 | 2.780 | 1.03 |
| 63 | 4.51 | 18 | 5.324 | 29.338 | 28.390 | 31.280 | -338 | 3.062 | 1.02 |
| 63 | 4.51 | 18 | 6.408 | 30.583 | 29.630 | 32.490 | -345 | 3.267 | 1.02 |
| 63 | 4.51 | 18 | 7.445 | 31.763 | 30.800 | 33.650 | -361 | 3.277 | 1.02 |
| 63 | 4.51 | 18 | 8.300 | 32.731 | 31.760 | 34.590 | -368 | 3.444 | 1.02 |
| 63 | 4.51 | 18 | 8.569 | 33.034 | 32.060 | 34.890 | -373 | 3.398 | 1.02 |
| 63 | 4.51 | 18 | 9.653 | 34.254 | 33.280 | 36.080 | -190 | 3.735 | 1.01 |
| 63 | 4.51 | 18 | 10.734 | 35.467 | 34.480 | 37.270 | -192 | 3.976 | 1.01 |
| 63 | 4.51 | 18 | 11.817 | 36.678 | 35.680 | 38.450 | -192 | 3.953 | 1.01 |
| 63 | 4.51 | 18 | 12.863 | 37.845 | 36.830 | 39.600 | -196 | 4.093 | 1.01 |
| 63 | 4.51 | 18 | 13.985 | 39.095 | 38.070 | 40.820 | 13 | 4.364 | 1.00 |
| 63 | 4.51 | 18 | 15.030 | 40.256 | 39.220 | 41.960 | 11 | 4.505 | 1.00 |
| 63 | 4.51 | 18 | 15.514 | 40.794 | 39.750 | 42.480 | 14 | 4.693 | 1.00 |
| 63 | 4.51 | 18 | 16.114 | 41.459 | 40.410 | 43.130 | -220 | 4.031 | 1.01 |
| 63 | 4.51 | 18 | 17.237 | 42.703 | 41.650 | 44.350 | -215 | 4.289 | 1.01 |
| 63 | 4.51 | 18 | 18.320 | 43.901 | 42.830 | 45.530 | 3 | 4.585 | 1.00 |
| 63 | 4.51 | 18 | 18.862 | 44.499 | 43.430 | 46.110 | 15 | 4.411 | 1.00 |
| 64 | 4.51 | 19 | 3.330 | 46.396 | 45.700 | 47.390 | -485 | 0.334 | 1.02 |
| 64 | 4.51 | 19 | 4.684 | 46.926 | 46.390 | 47.660 | -735 | 0.437 | 1.03 |
| 64 | 4.51 | 19 | 5.762 | 47.354 | 46.950 | 47.890 | -493 | 0.527 | 1.02 |
| 64 | 4.51 | 19 | 6.850 | 47.790 | 47.520 | 48.120 | -501 | 0.590 | 1.02 |
| 65 | 4.51 | 17 | 8.732 | 10.254 | 10.100 | 10.400 | 78 | 0.374 | 0.98 |
| 65 | 4.51 | 17 | 9.544 | 11.210 | 11.050 | 11.360 | 47 | 0.625 | 0.99 |
| 65 | 4.51 | 17 | 10.897 | 12.799 | 12.630 | 12.960 | -4 | 0.917 | 1.00 |
| 65 | 4.51 | 17 | 11.981 | 14.073 | 13.900 | 14.250 | -3 | 1.191 | 1.00 |
| 65 | 4.51 | 17 | 13.063 | 15.344 | 15.160 | 15.530 | 163 | 1.100 | 0.98 |
| 65 | 4.51 | 17 | 14.146 | 16.616 | 16.420 | 16.810 | -3 | 1.557 | 1.00 |
| 65 | 4.51 | 17 | 15.228 | 17.890 | 17.690 | 18.090 | -3 | 1.817 | 1.00 |
| 65 | 4.51 | 17 | 16.311 | 19.166 | 18.960 | 19.370 | 106 | 1.880 | 0.99 |
| 65 | 4.51 | 17 | 17.391 | 20.441 | 20.230 | 20.650 | 246 | 1.601 | 0.98 |
| 65 | 4.51 | 17 | 18.474 | 21.722 | 21.500 | 21.940 | 147 | 2.056 | 0.99 |
| 66 | 4.51 | 18 | 3.348 | 26.212 | 25.960 | 26.460 | -769 | 1.112 | 1.05 |
| 66 | 4.51 | 18 | 4.238 | 27.292 | 27.030 | 27.550 | -640 | 1.431 | 1.04 |
| 66 | 4.51 | 18 | 5.324 | 28.604 | 28.320 | 28.880 | -659 | 1.555 | 1.04 |
| 66 | 4.51 | 18 | 6.408 | 29.908 | 29.610 | 30.200 | -514 | 1.894 | 1.03 |
| 66 | 4.51 | 18 | 7.445 | 31.149 | 30.840 | 31.450 | -533 | 1.961 | 1.03 |
| 66 | 4.51 | 18 | 8.300 | 32.167 | 31.850 | 32.480 | -369 | 2.286 | 1.02 |
| 66 | 4.51 | 18 | 8.569 | 32.485 | 32.160 | 32.800 | -553 | 1.967 | 1.03 |
| 66 | 4.51 | 18 | 9.653 | 33.769 | 33.430 | 34.100 | -188 | 2.427 | 1.01 |
| 66 | 4.51 | 18 | 10.734 | 35.044 | 34.690 | 35.390 | -197 | 2.520 | 1.01 |
| 66 | 4.51 | 18 | 11.817 | 36.315 | 35.940 | 36.680 | -203 | 2.333 | 1.01 |
| 66 | 4.51 | 18 | 12.863 | 37.537 | 37.150 | 37.920 | -208 | 2.518 | 1.01 |
| 66 | 4.51 | 18 | 13.985 | 38.845 | 38.440 | 39.240 | -1 | 2.690 | 1.00 |
| 66 | 4.51 | 18 | 15.030 | 40.058 | 39.640 | 40.470 | -215 | 2.603 | 1.01 |
| 66 | 4.51 | 18 | 15.514 | 40.619 | 40.190 | 41.040 | -3 | 2.616 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 66 | 4.51 | 18 | 16.114 | 41.313 | 40.880 | 41.740 | -217 | 2.388 | 1.01 |
| 66 | 4.51 | 18 | 17.237 | 42.608 | 42.160 | 43.050 | 5 | 2.686 | 1.00 |
| 66 | 4.51 | 18 | 18.320 | 43.854 | 43.390 | 44.310 | 11 | 2.711 | 1.00 |
| 66 | 4.51 | 18 | 18.862 | 44.476 | 44.000 | 44.940 | 2 | 2.498 | 1.00 |
| 67 | 4.51 | 19 | 3.330 | 46.545 | 46.180 | 46.910 | -729 | 0.362 | 1.03 |
| 67 | 4.51 | 19 | 3.601 | 46.662 | 46.300 | 47.010 | -491 | 0.427 | 1.02 |
| 67 | 4.51 | 19 | 4.684 | 47.134 | 46.810 | 47.450 | 259 | 0.798 | 0.99 |
| 67 | 4.51 | 19 | 5.762 | 47.608 | 47.330 | 47.880 | 513 | 0.945 | 0.98 |
| 67 | 4.51 | 19 | 6.850 | 48.091 | 47.850 | 48.330 | -504 | 0.640 | 1.02 |
| 68 | 4.05 | 18 | 11.817 | 15.341 | 15.180 | 15.800 | 163 | 0.314 | 0.97 |
| 68 | 4.05 | 18 | 12.863 | 16.727 | 16.560 | 17.200 | 210 | 0.493 | 0.97 |
| 68 | 4.05 | 18 | 13.985 | 18.212 | 18.050 | 18.700 | 170 | 0.653 | 0.98 |
| 68 | 4.05 | 18 | 15.030 | 19.589 | 19.430 | 20.090 | 199 | 0.911 | 0.98 |
| 68 | 4.05 | 18 | 15.514 | 20.226 | 20.070 | 20.730 | 206 | 1.141 | 0.98 |
| 68 | 4.05 | 18 | 16.114 | 21.014 | 20.860 | 21.520 | 108 | 1.254 | 0.99 |
| 68 | 4.05 | 18 | 17.237 | 22.483 | 22.320 | 22.990 | 246 | 1.565 | 0.98 |
| 68 | 4.05 | 18 | 18.320 | 23.894 | 23.710 | 24.400 | 143 | 1.603 | 0.99 |
| 68 | 4.05 | 18 | 18.862 | 24.598 | 24.410 | 25.110 | 288 | 1.498 | 0.98 |
| 69 | 4.05 | 19 | 3.330 | 29.260 | 29.090 | 29.770 | -10 | 3.280 | 1.00 |
| 69 | 4.05 | 19 | 3.601 | 29.568 | 29.390 | 30.070 | -6 | 3.487 | 1.00 |
| 69 | 4.05 | 19 | 4.684 | 30.794 | 30.630 | 31.280 | 171 | 3.598 | 0.99 |
| 69 | 4.05 | 19 | 5.762 | 32.000 | 31.840 | 32.460 | 181 | 3.815 | 0.99 |
| 69 | 4.05 | 19 | 6.850 | 33.208 | 33.020 | 33.650 | -10 | 4.014 | 1.00 |
| 70 | 4.51 | 18 | 8.300 | 10.076 | 9.680 | 10.860 | 23 | 0.360 | 0.99 |
| 70 | 4.51 | 18 | 8.569 | 10.399 | 9.990 | 11.210 | 23 | 0.345 | 0.99 |
| 70 | 4.51 | 18 | 9.653 | 11.702 | 11.230 | 12.620 | -6 | 0.400 | 1.00 |
| 70 | 4.51 | 18 | 10.734 | 13.001 | 12.470 | 14.040 | -122 | 0.452 | 1.02 |
| 70 | 4.51 | 18 | 11.817 | 14.301 | 13.710 | 15.470 | -65 | 0.509 | 1.01 |
| 70 | 4.51 | 18 | 12.863 | 15.557 | 14.900 | 16.840 | -75 | 0.692 | 1.01 |
| 70 | 4.51 | 18 | 13.985 | 16.906 | 16.190 | 18.320 | -181 | 0.645 | 1.02 |
| 70 | 4.51 | 18 | 15.030 | 18.162 | 17.380 | 19.700 | -299 | 0.692 | 1.03 |
| 70 | 4.51 | 18 | 15.514 | 18.745 | 17.940 | 20.340 | -203 | 0.872 | 1.02 |
| 70 | 4.51 | 18 | 16.114 | 19.467 | 18.620 | 21.130 | 11 | 0.867 | 1.00 |
| 70 | 4.51 | 18 | 17.237 | 20.819 | 19.910 | 22.600 | 261 | 0.879 | 0.98 |
| 70 | 4.51 | 18 | 18.320 | 22.123 | 21.160 | 24.020 | 275 | 1.021 | 0.98 |
| 70 | 4.51 | 18 | 18.862 | 22.776 | 21.780 | 24.730 | 11 | 1.045 | 1.00 |
| 71 | 4.51 | 19 | 3.330 | 27.590 | 26.360 | 29.740 | -9 | 1.080 | 1.00 |
| 71 | 4.51 | 19 | 3.601 | 27.914 | 26.680 | 30.070 | -167 | 1.167 | 1.01 |
| 71 | 4.51 | 19 | 4.684 | 29.200 | 27.950 | 31.380 | -3 | 1.328 | 1.00 |
| 71 | 4.51 | 19 | 5.762 | 30.465 | 29.200 | 32.660 | 174 | 1.312 | 0.99 |
| 71 | 4.51 | 19 | 6.850 | 31.733 | 30.470 | 33.950 | -11 | 1.450 | 1.00 |
| 72 | 4.51 | 18 | 8.300 | 9.766 | 9.670 | 9.820 | -61 | 0.518 | 1.02 |
| 72 | 4.51 | 18 | 8.569 | 10.096 | 9.990 | 10.160 | 27 | 0.496 | 0.99 |
| 72 | 4.51 | 18 | 9.653 | 11.431 | 11.300 | 11.510 | -39 | 0.850 | 1.01 |
| 72 | 4.51 | 18 | 10.734 | 12.766 | 12.610 | 12.870 | -3 | 1.307 | 1.00 |
| 72 | 4.51 | 18 | 11.817 | 14.104 | 13.930 | 14.230 | 2 | 1.526 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 72 | 4.51 | 18 | 12.863 | 15.397 | 15.200 | 15.550 | 5 | 1.912 | 1.00 |
| 72 | 4.51 | 18 | 13.985 | 16.787 | 16.560 | 16.960 | 4 | 2.218 | 1.00 |
| 72 | 4.51 | 18 | 15.030 | 18.081 | 17.830 | 18.270 | 4 | 2.642 | 1.00 |
| 72 | 4.51 | 18 | 15.514 | 18.681 | 18.420 | 18.880 | 5 | 2.835 | 1.00 |
| 72 | 4.51 | 18 | 16.114 | 19.425 | 19.150 | 19.640 | 14 | 2.736 | 1.00 |
| 72 | 4.51 | 18 | 17.237 | 20.815 | 20.510 | 21.050 | 19 | 3.160 | 1.00 |
| 72 | 4.51 | 18 | 18.320 | 22.157 | 21.830 | 22.420 | 147 | 3.398 | 0.99 |
| 72 | 4.51 | 18 | 18.862 | 22.828 | 22.490 | 23.100 | 8 | 3.236 | 1.00 |
| 73 | 4.51 | 19 | 6.850 | 31.836 | 31.460 | 32.140 | -731 | 0.331 | 1.04 |
| 74 | 3.98 | 8 | 12.727 | 14.000 | 13.030 | 15.780 | 356 | 0.356 | 0.95 |
| 74 | 3.98 | 8 | 13.657 | 15.012 | 13.960 | 16.950 | 400 | 0.414 | 0.95 |
| 74 | 3.98 | 8 | 14.881 | 16.347 | 15.170 | 18.500 | 537 | 0.522 | 0.94 |
| 74 | 3.98 | 8 | 15.526 | 17.051 | 15.810 | 19.310 | 383 | 0.808 | 0.96 |
| 74 | 3.98 | 8 | 16.674 | 18.309 | 16.960 | 20.750 | 219 | 1.229 | 0.98 |
| 75 | 3.98 | 9 | 3.950 | 23.244 | 21.660 | 25.900 | -594 | 1.586 | 1.04 |
| 75 | 3.98 | 9 | 5.026 | 24.444 | 22.440 | 27.120 | -309 | 1.976 | 1.02 |
| 75 | 3.98 | 9 | 6.113 | 25.648 | 23.230 | 28.350 | 10 | 2.689 | 1.00 |
| 75 | 3.98 | 9 | 7.181 | 26.825 | 24.000 | 29.550 | 180 | 2.797 | 0.99 |
| 75 | 3.98 | 9 | 8.246 | 27.993 | 24.760 | 30.750 | 364 | 2.592 | 0.98 |
| 75 | 3.98 | 9 | 9.249 | 29.090 | 25.480 | 31.860 | 369 | 2.672 | 0.98 |
| 75 | 3.98 | 9 | 10.412 | 30.358 | 26.310 | 33.150 | 565 | 2.540 | 0.97 |
| 75 | 3.98 | 9 | 11.496 | 31.535 | 27.080 | 34.350 | 580 | 2.549 | 0.97 |
| 75 | 3.98 | 9 | 12.466 | 32.587 | 27.780 | 35.420 | 590 | 2.490 | 0.97 |
| 75 | 3.98 | 9 | 12.582 | 32.713 | 27.860 | 35.550 | 782 | 2.303 | 0.96 |
| 75 | 3.98 | 9 | 13.667 | 33.889 | 28.640 | 36.750 | 599 | 2.440 | 0.97 |
| 75 | 3.98 | 9 | 14.758 | 35.069 | 29.440 | 37.950 | 615 | 2.510 | 0.97 |
| 75 | 3.98 | 9 | 15.833 | 36.232 | 30.220 | 39.140 | 421 | 2.683 | 0.98 |
| 75 | 3.98 | 9 | 16.919 | 37.405 | 31.030 | 40.330 | 651 | 2.618 | 0.97 |
| 75 | 3.98 | 9 | 18.004 | 38.578 | 31.840 | 41.520 | 659 | 2.371 | 0.97 |
| 76 | 3.98 | 8 | 13.657 | 17.156 | 16.750 | 17.480 | 224 | 0.304 | 0.96 |
| 76 | 3.98 | 8 | 14.881 | 18.742 | 18.310 | 19.100 | 348 | 0.376 | 0.95 |
| 76 | 3.98 | 8 | 15.526 | 19.575 | 19.120 | 19.950 | 248 | 0.668 | 0.97 |
| 76 | 3.98 | 8 | 16.674 | 21.055 | 20.560 | 21.460 | 105 | 1.208 | 0.99 |
| 77 | 3.98 | 9 | 3.950 | 25.073 | 23.680 | 26.630 | -482 | 0.747 | 1.03 |
| 77 | 3.98 | 9 | 5.026 | 26.020 | 24.210 | 27.920 | -168 | 1.050 | 1.01 |
| 77 | 3.98 | 9 | 6.113 | 26.976 | 24.750 | 29.230 | 166 | 1.167 | 0.99 |
| 77 | 3.98 | 9 | 7.181 | 27.914 | 25.270 | 30.510 | 346 | 1.161 | 0.98 |
| 77 | 3.98 | 9 | 8.246 | 28.847 | 25.800 | 31.790 | 716 | 0.991 | 0.96 |
| 77 | 3.98 | 9 | 9.249 | 29.725 | 26.300 | 32.980 | 551 | 1.099 | 0.97 |
| 77 | 3.98 | 9 | 10.412 | 30.743 | 26.880 | 34.370 | 569 | 1.168 | 0.97 |
| 77 | 3.98 | 9 | 11.496 | 31.689 | 27.430 | 35.640 | 391 | 1.211 | 0.98 |
| 77 | 3.98 | 9 | 12.466 | 32.536 | 27.920 | 36.780 | 205 | 1.251 | 0.99 |
| 77 | 3.98 | 9 | 12.582 | 32.637 | 27.980 | 36.910 | -183 | 1.036 | 1.01 |
| 77 | 3.98 | 9 | 13.667 | 33.584 | 28.530 | 38.180 | -189 | 0.898 | 1.01 |
| 77 | 3.98 | 9 | 14.758 | 34.536 | 29.100 | 39.430 | -194 | 0.942 | 1.01 |
| 77 | 3.98 | 9 | 15.833 | 35.474 | 29.660 | 40.660 | 7 | 0.951 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 77 | 3.98 | 9 | 16.919 | 36.424 | 30.240 | 41.890 | 9 | 1.020 | 1.00 |
| 77 | 3.98 | 9 | 18.004 | 37.374 | 30.820 | 43.110 | 442 | 1.010 | 0.98 |
| 78 | 3.98 | 10 | 3.123 | 33.593 | 32.490 | 34.650 | 1026 | 0.384 | 0.95 |
| 78 | 3.98 | 10 | 4.175 | 34.137 | 32.960 | 35.780 | 1043 | 0.384 | 0.95 |
| 78 | 3.98 | 10 | 5.256 | 34.697 | 33.430 | 36.940 | 1051 | 0.380 | 0.95 |
| 78 | 3.98 | 10 | 6.337 | 35.257 | 33.910 | 38.090 | 1288 | 0.338 | 0.94 |
| 78 | 3.98 | 10 | 7.375 | 35.795 | 34.370 | 39.190 | 1294 | 0.373 | 0.94 |
| 78 | 3.98 | 10 | 8.457 | 36.357 | 34.850 | 40.340 | 1308 | 0.382 | 0.94 |
| 78 | 3.98 | 10 | 9.268 | 36.778 | 35.210 | 41.200 | 1543 | 0.347 | 0.93 |
| 78 | 3.98 | 10 | 10.350 | 37.340 | 35.690 | 42.350 | 1580 | 0.337 | 0.93 |
| 78 | 3.98 | 10 | 11.431 | 37.903 | 36.170 | 43.490 | 1142 | 0.470 | 0.95 |
| 78 | 3.98 | 10 | 13.499 | 38.984 | 37.100 | 45.680 | 1389 | 0.417 | 0.94 |
| 78 | 3.98 | 10 | 14.595 | 39.560 | 37.590 | 46.830 | 1402 | 0.369 | 0.94 |
| 78 | 3.98 | 10 | 15.392 | 39.982 | 37.950 | 47.670 | 1412 | 0.355 | 0.94 |
| 78 | 3.98 | 10 | 16.471 | 40.555 | 38.400 | 48.810 | 1184 | 0.440 | 0.95 |
| 78 | 3.98 | 10 | 17.050 | 40.866 | 38.600 | 49.420 | 1430 | 0.342 | 0.94 |
| 79 | 4.32 | 9 | 10.412 | 13.176 | 12.800 | 13.600 | 55 | 0.363 | 0.98 |
| 79 | 4.32 | 9 | 11.496 | 14.584 | 14.180 | 15.040 | 125 | 0.390 | 0.96 |
| 79 | 4.32 | 9 | 12.466 | 15.845 | 15.420 | 16.330 | 159 | 0.490 | 0.96 |
| 79 | 4.32 | 9 | 12.582 | 15.995 | 15.570 | 16.480 | 164 | 0.467 | 0.96 |
| 79 | 4.32 | 9 | 13.667 | 17.408 | 16.980 | 17.920 | 156 | 0.819 | 0.97 |
| 79 | 4.32 | 9 | 14.758 | 18.825 | 18.370 | 19.360 | 137 | 1.106 | 0.98 |
| 79 | 4.32 | 9 | 15.833 | 20.218 | 19.740 | 20.760 | 87 | 1.432 | 0.99 |
| 79 | 4.32 | 9 | 16.919 | 21.622 | 21.130 | 22.170 | 96 | 1.516 | 0.99 |
| 79 | 4.32 | 9 | 18.004 | 23.020 | 22.510 | 23.570 | -311 | 1.774 | 1.03 |
| 80 | 4.32 | 10 | 3.123 | 26.985 | 25.170 | 28.070 | 334 | 3.642 | 0.98 |
| 80 | 4.32 | 10 | 4.175 | 28.065 | 25.820 | 29.320 | 523 | 3.254 | 0.97 |
| 80 | 4.32 | 10 | 5.256 | 29.173 | 26.490 | 30.590 | 359 | 3.599 | 0.98 |
| 80 | 4.32 | 10 | 6.337 | 30.275 | 27.170 | 31.870 | 746 | 3.063 | 0.96 |
| 80 | 4.32 | 10 | 7.375 | 31.332 | 27.820 | 33.090 | 186 | 4.048 | 0.99 |
| 80 | 4.32 | 10 | 8.457 | 32.430 | 28.500 | 34.350 | 390 | 3.957 | 0.98 |
| 80 | 4.32 | 10 | 9.268 | 33.251 | 29.010 | 35.300 | 201 | 4.162 | 0.99 |
| 80 | 4.32 | 10 | 10.350 | 34.344 | 29.690 | 36.560 | 1034 | 2.853 | 0.95 |
| 80 | 4.32 | 10 | 11.431 | 35.432 | 30.370 | 37.810 | 847 | 3.225 | 0.96 |
| 80 | 4.32 | 10 | 13.499 | 37.508 | 31.670 | 40.200 | 446 | 4.068 | 0.98 |
| 80 | 4.32 | 10 | 14.595 | 38.604 | 32.370 | 41.460 | 455 | 4.048 | 0.98 |
| 80 | 4.32 | 10 | 15.392 | 39.399 | 32.870 | 42.390 | 239 | 4.247 | 0.99 |
| 80 | 4.32 | 10 | 16.471 | 40.473 | 33.560 | 43.630 | 16 | 4.078 | 1.00 |
| 80 | 4.32 | 10 | 17.050 | 41.049 | 33.940 | 44.300 | 15 | 3.890 | 1.00 |
| 81 | 4.42 | 9 | 15.833 | 17.833 | 16.550 | 20.330 | 3 | 0.333 | 1.00 |
| 81 | 4.42 | 9 | 16.919 | 19.028 | 17.660 | 21.710 | 7 | 0.381 | 1.00 |
| 82 | 4.42 | 10 | 3.123 | 24.021 | 22.400 | 27.200 | 11 | 1.712 | 1.00 |
| 82 | 4.42 | 10 | 4.175 | 25.074 | 23.420 | 28.320 | 180 | 1.724 | 0.99 |
| 82 | 4.42 | 10 | 5.256 | 26.151 | 24.460 | 29.460 | 178 | 1.810 | 0.99 |
| 82 | 4.42 | 10 | 6.337 | 27.219 | 25.500 | 30.590 | 195 | 1.729 | 0.99 |
| 82 | 4.42 | 10 | 7.375 | 28.241 | 26.490 | 31.670 | 193 | 1.898 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 82 | 4.42 | 10 | 8.457 | 29.297 | 27.520 | 32.780 | 377 | 1.904 | 0.98 |
| 82 | 4.42 | 10 | 9.268 | 30.085 | 28.280 | 33.610 | 389 | 1.904 | 0.98 |
| 82 | 4.42 | 10 | 10.350 | 31.131 | 29.300 | 34.710 | 810 | 1.422 | 0.96 |
| 82 | 4.42 | 10 | 11.431 | 32.169 | 30.310 | 35.800 | 228 | 2.015 | 0.99 |
| 82 | 4.42 | 10 | 13.499 | 34.145 | 32.240 | 37.870 | 437 | 1.879 | 0.98 |
| 82 | 4.42 | 10 | 14.595 | 35.188 | 33.260 | 38.960 | 1096 | 1.289 | 0.95 |
| 82 | 4.42 | 10 | 15.392 | 35.946 | 34.000 | 39.760 | 892 | 1.508 | 0.96 |
| 82 | 4.42 | 10 | 16.471 | 36.972 | 35.000 | 40.830 | 679 | 1.641 | 0.97 |
| 82 | 4.42 | 10 | 17.050 | 37.523 | 35.540 | 41.400 | 915 | 1.355 | 0.96 |
| 83 | 4.42 | 9 | 11.496 | 13.220 | 13.130 | 13.320 | 5 | 0.420 | 1.00 |
| 83 | 4.42 | 9 | 12.466 | 14.304 | 14.210 | 14.410 | 0 | 0.512 | 1.00 |
| 83 | 4.42 | 9 | 12.582 | 14.434 | 14.340 | 14.540 | -255 | 0.357 | 1.03 |
| 83 | 4.42 | 9 | 13.667 | 15.647 | 15.550 | 15.760 | -191 | 0.549 | 1.02 |
| 83 | 4.42 | 9 | 14.758 | 16.865 | 16.760 | 16.990 | -211 | 0.592 | 1.02 |
| 83 | 4.42 | 9 | 15.833 | 18.067 | 17.960 | 18.200 | -6 | 0.728 | 1.00 |
| 83 | 4.42 | 9 | 16.919 | 19.283 | 19.170 | 19.420 | -364 | 0.583 | 1.03 |
| 84 | 4.42 | 10 | 3.123 | 24.025 | 22.980 | 25.090 | 10 | 1.722 | 1.00 |
| 84 | 4.42 | 10 | 4.175 | 24.983 | 23.640 | 26.350 | 180 | 1.804 | 0.99 |
| 84 | 4.42 | 10 | 5.256 | 25.962 | 24.310 | 27.640 | 10 | 1.647 | 1.00 |
| 84 | 4.42 | 10 | 6.337 | 26.934 | 24.970 | 28.910 | 540 | 1.533 | 0.97 |
| 84 | 4.42 | 10 | 7.375 | 27.863 | 25.610 | 30.130 | -515 | 1.228 | 1.03 |
| 84 | 4.42 | 10 | 8.457 | 28.825 | 26.270 | 31.400 | -172 | 1.652 | 1.01 |
| 84 | 4.42 | 10 | 9.268 | 29.543 | 26.770 | 32.340 | -542 | 1.294 | 1.03 |
| 84 | 4.42 | 10 | 10.350 | 30.496 | 27.420 | 33.590 | 417 | 1.968 | 0.98 |
| 84 | 4.42 | 10 | 11.431 | 31.443 | 28.080 | 34.830 | 815 | 1.686 | 0.96 |
| 84 | 4.42 | 10 | 13.499 | 33.248 | 29.330 | 37.190 | 19 | 1.930 | 1.00 |
| 84 | 4.42 | 10 | 14.595 | 34.201 | 29.990 | 38.430 | -598 | 1.367 | 1.03 |
| 84 | 4.42 | 10 | 15.392 | 34.894 | 30.480 | 39.330 | -612 | 1.324 | 1.03 |
| 84 | 4.42 | 10 | 16.471 | 35.831 | 31.140 | 40.540 | -633 | 1.338 | 1.03 |
| 84 | 4.42 | 10 | 17.050 | 36.335 | 31.490 | 41.200 | -855 | 1.152 | 1.04 |
| 85 | 4.32 | 9 | 18.004 | 23.229 | 23.150 | 23.320 | -336 | 0.415 | 1.03 |
| 86 | 4.32 | 10 | 3.123 | 27.735 | 27.620 | 27.880 | 16 | 2.049 | 1.00 |
| 86 | 4.32 | 10 | 4.175 | 28.986 | 28.820 | 29.150 | 362 | 1.898 | 0.98 |
| 86 | 4.32 | 10 | 5.256 | 30.265 | 30.050 | 30.440 | 194 | 2.002 | 0.99 |
| 86 | 4.32 | 10 | 6.337 | 31.535 | 31.270 | 31.730 | 576 | 1.565 | 0.97 |
| 86 | 4.32 | 10 | 7.375 | 32.749 | 32.440 | 32.960 | 195 | 2.232 | 0.99 |
| 86 | 4.32 | 10 | 8.457 | 34.009 | 33.650 | 34.240 | 214 | 2.034 | 0.99 |
| 86 | 4.32 | 10 | 9.268 | 34.950 | 34.560 | 35.190 | 405 | 2.172 | 0.98 |
| 86 | 4.32 | 10 | 10.350 | 36.200 | 35.760 | 36.460 | 1254 | 1.368 | 0.94 |
| 86 | 4.32 | 10 | 11.431 | 37.443 | 36.960 | 37.720 | 1064 | 1.446 | 0.95 |
| 86 | 4.32 | 10 | 13.499 | 39.805 | 39.230 | 40.120 | 882 | 1.542 | 0.96 |
| 86 | 4.32 | 10 | 14.595 | 41.049 | 40.420 | 41.380 | 1122 | 1.472 | 0.95 |
| 86 | 4.32 | 10 | 15.392 | 41.950 | 41.290 | 42.290 | 1130 | 1.582 | 0.95 |
| 86 | 4.32 | 10 | 16.471 | 43.163 | 42.450 | 43.520 | 911 | 1.633 | 0.96 |
| 86 | 4.32 | 10 | 17.050 | 43.813 | 43.080 | 44.180 | 925 | 1.424 | 0.96 |
| 87 | 4.54 | 10 | 17.050 | 16.137 | 16.080 | 16.210 | -9 | 0.315 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 88 | 4.54 | 11 | 3.129 | 20.435 | 20.340 | 20.570 | 527 | 0.776 | 0.96 |
| 88 | 4.54 | 11 | 4.211 | 21.819 | 21.720 | 21.950 | 555 | 0.871 | 0.96 |
| 88 | 4.54 | 11 | 5.293 | 23.198 | 23.100 | 23.330 | 279 | 1.057 | 0.98 |
| 88 | 4.54 | 11 | 6.373 | 24.571 | 24.480 | 24.690 | 289 | 1.111 | 0.98 |
| 88 | 4.54 | 11 | 7.455 | 25.940 | 25.860 | 26.040 | 303 | 1.236 | 0.98 |
| 88 | 4.54 | 11 | 8.462 | 27.208 | 27.140 | 27.280 | 313 | 1.286 | 0.98 |
| 88 | 4.54 | 11 | 9.582 | 28.613 | 28.560 | 28.670 | 152 | 1.203 | 0.99 |
| 88 | 4.54 | 11 | 10.702 | 30.011 | 29.980 | 30.090 | 339 | 1.363 | 0.98 |
| 88 | 4.54 | 11 | 11.784 | 31.354 | 31.280 | 31.450 | 165 | 1.245 | 0.99 |
| 88 | 4.54 | 11 | 13.859 | 33.909 | 33.760 | 34.050 | 180 | 1.277 | 0.99 |
| 88 | 4.54 | 11 | 14.941 | 35.230 | 35.040 | 35.390 | -15 | 1.235 | 1.00 |
| 88 | 4.54 | 11 | 16.061 | 36.588 | 36.360 | 36.770 | -19 | 1.126 | 1.00 |
| 88 | 4.54 | 11 | 17.140 | 37.888 | 37.630 | 38.080 | 424 | 1.167 | 0.98 |
| 88 | 4.54 | 11 | 18.221 | 39.184 | 38.900 | 39.390 | 436 | 1.134 | 0.98 |
| 88 | 4.54 | 11 | 19.187 | 40.334 | 40.030 | 40.560 | -12 | 1.075 | 1.00 |
| 88 | 4.54 | 11 | 12.811 | 32.628 | 32.510 | 32.740 | 172 | 1.340 | 0.99 |
| 89 | 4.54 | 10 | 16.471 | 20.674 | 19.870 | 20.980 | 69 | 0.349 | 0.99 |
| 89 | 4.54 | 10 | 17.050 | 21.416 | 20.580 | 21.730 | 77 | 0.451 | 0.99 |
| 90 | 4.54 | 11 | 3.129 | 25.243 | 23.690 | 26.000 | 19 | 6.729 | 1.00 |
| 90 | 4.54 | 11 | 4.211 | 26.414 | 24.250 | 27.300 | 22 | 6.859 | 1.00 |
| 90 | 4.54 | 11 | 5.293 | 27.577 | 24.810 | 28.590 | -145 | 6.411 | 1.01 |
| 90 | 4.54 | 11 | 6.373 | 28.731 | 25.370 | 29.850 | -146 | 6.467 | 1.01 |
| 90 | 4.54 | 11 | 7.455 | 29.883 | 25.930 | 31.100 | -155 | 6.461 | 1.01 |
| 90 | 4.54 | 11 | 8.462 | 30.949 | 26.450 | 32.270 | -159 | 6.553 | 1.01 |
| 90 | 4.54 | 11 | 9.582 | 32.133 | 27.030 | 33.590 | -164 | 6.680 | 1.01 |
| 90 | 4.54 | 11 | 10.702 | 33.313 | 27.610 | 34.920 | -171 | 6.653 | 1.01 |
| 90 | 4.54 | 11 | 11.784 | 34.448 | 28.190 | 36.190 | -177 | 6.687 | 1.01 |
| 90 | 4.54 | 11 | 13.859 | 36.619 | 29.300 | 38.610 | -188 | 6.918 | 1.01 |
| 90 | 4.54 | 11 | 14.941 | 37.746 | 29.900 | 39.860 | -196 | 6.765 | 1.01 |
| 90 | 4.54 | 11 | 16.061 | 38.910 | 30.530 | 41.150 | -199 | 6.776 | 1.01 |
| 90 | 4.54 | 11 | 17.140 | 40.028 | 31.140 | 42.380 | 16 | 7.326 | 1.00 |
| 90 | 4.54 | 11 | 18.221 | 41.147 | 31.770 | 43.610 | 19 | 7.349 | 1.00 |
| 90 | 4.54 | 11 | 19.187 | 42.144 | 32.340 | 44.700 | -221 | 6.951 | 1.01 |
| 90 | 4.54 | 11 | 12.811 | 35.531 | 28.730 | 37.390 | -185 | 6.723 | 1.01 |
| 91 | 4.54 | 11 | 3.129 | 22.803 | 22.630 | 22.920 | 574 | 0.953 | 0.96 |
| 91 | 4.54 | 11 | 4.211 | 24.125 | 23.950 | 24.230 | 750 | 0.874 | 0.95 |
| 91 | 4.54 | 11 | 5.293 | 25.443 | 25.280 | 25.600 | 457 | 1.089 | 0.97 |
| 91 | 4.54 | 11 | 6.373 | 26.754 | 26.620 | 26.990 | 636 | 1.073 | 0.96 |
| 91 | 4.54 | 11 | 7.455 | 28.064 | 27.910 | 28.380 | 491 | 1.129 | 0.97 |
| 91 | 4.54 | 11 | 8.462 | 29.277 | 29.050 | 29.680 | 508 | 1.209 | 0.97 |
| 91 | 4.54 | 11 | 9.582 | 30.623 | 30.300 | 31.130 | 707 | 1.162 | 0.96 |
| 91 | 4.54 | 11 | 10.702 | 31.963 | 31.550 | 32.570 | 357 | 1.302 | 0.98 |
| 91 | 4.54 | 11 | 11.784 | 33.252 | 32.740 | 33.960 | 562 | 1.215 | 0.97 |
| 91 | 4.54 | 11 | 13.859 | 35.710 | 35.020 | 36.600 | 392 | 1.359 | 0.98 |
| 91 | 4.54 | 11 | 14.941 | 36.983 | 36.200 | 37.970 | 195 | 1.302 | 0.99 |
| 91 | 4.54 | 11 | 16.061 | 38.296 | 37.420 | 39.370 | 413 | 1.228 | 0.98 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 91 | 4.54 | 11 | 17.140 | 39.553 | 38.600 | 40.710 | 214 | 1.198 | 0.99 |
| 91 | 4.54 | 11 | 18.221 | 40.809 | 39.780 | 42.040 | 445 | 1.020 | 0.98 |
| 91 | 4.54 | 11 | 19.187 | 41.925 | 40.830 | 43.220 | 448 | 1.129 | 0.98 |
| 91 | 4.54 | 11 | 12.811 | 34.481 | 33.870 | 35.270 | 380 | 1.288 | 0.98 |
| 92 | 4.20 | 11 | 7.455 | 7.973 | 7.450 | 8.530 | -27 | 0.312 | 1.01 |
| 92 | 4.20 | 11 | 8.462 | 9.016 | 8.380 | 9.710 | -35 | 0.362 | 1.01 |
| 92 | 4.20 | 11 | 9.582 | 10.172 | 9.410 | 11.040 | -45 | 0.364 | 1.01 |
| 92 | 4.20 | 11 | 10.702 | 11.324 | 10.430 | 12.370 | -56 | 0.398 | 1.01 |
| 92 | 4.20 | 11 | 11.784 | 12.436 | 11.420 | 13.660 | -65 | 0.490 | 1.01 |
| 92 | 4.20 | 11 | 13.859 | 14.574 | 13.300 | 16.140 | 79 | 0.630 | 0.99 |
| 92 | 4.20 | 11 | 14.941 | 15.694 | 14.290 | 17.440 | 181 | 0.554 | 0.98 |
| 92 | 4.20 | 11 | 16.061 | 16.858 | 15.330 | 18.780 | 205 | 0.498 | 0.98 |
| 92 | 4.20 | 11 | 17.140 | 17.984 | 16.330 | 20.070 | 227 | 0.600 | 0.98 |
| 92 | 4.20 | 11 | 18.221 | 19.120 | 17.340 | 21.360 | 243 | 0.670 | 0.98 |
| 92 | 4.20 | 11 | 19.187 | 20.138 | 18.250 | 22.510 | 122 | 0.838 | 0.99 |
| 92 | 4.20 | 11 | 12.811 | 13.491 | 12.350 | 14.890 | -74 | 0.567 | 1.01 |
| 93 | 4.20 | 12 | 3.822 | 25.335 | 23.520 | 27.600 | 6 | 2.497 | 1.00 |
| 93 | 4.20 | 12 | 4.905 | 26.561 | 24.820 | 28.770 | 7 | 2.679 | 1.00 |
| 93 | 4.20 | 12 | 5.986 | 27.771 | 26.110 | 29.910 | 0 | 2.722 | 1.00 |
| 93 | 4.20 | 12 | 7.073 | 28.977 | 27.400 | 31.060 | 1 | 2.826 | 1.00 |
| 93 | 4.20 | 12 | 8.156 | 30.171 | 28.600 | 32.190 | -5 | 2.818 | 1.00 |
| 93 | 4.20 | 12 | 8.389 | 30.427 | 28.840 | 32.430 | -4 | 2.608 | 1.00 |
| 93 | 4.20 | 12 | 9.395 | 31.529 | 29.890 | 33.470 | -5 | 2.913 | 1.00 |
| 93 | 4.20 | 12 | 10.285 | 32.502 | 30.820 | 34.390 | -5 | 2.957 | 1.00 |
| 93 | 4.20 | 12 | 11.408 | 33.724 | 31.990 | 35.550 | -4 | 3.000 | 1.00 |
| 93 | 4.20 | 12 | 12.491 | 34.901 | 33.110 | 36.670 | -4 | 3.027 | 1.00 |
| 93 | 4.20 | 12 | 13.576 | 36.076 | 34.230 | 37.790 | -4 | 3.077 | 1.00 |
| 93 | 4.20 | 12 | 14.626 | 37.211 | 35.310 | 38.870 | 209 | 3.218 | 0.99 |
| 93 | 4.20 | 12 | 15.593 | 38.256 | 36.310 | 39.860 | 215 | 3.343 | 0.99 |
| 93 | 4.20 | 12 | 16.793 | 39.550 | 37.550 | 41.120 | 216 | 3.246 | 0.99 |
| 93 | 4.20 | 12 | 18.070 | 40.925 | 38.870 | 42.540 | 222 | 3.288 | 0.99 |
| 94 | 4.20 | 11 | 10.702 | 12.276 | 11.880 | 12.680 | -13 | 0.328 | 1.00 |
| 94 | 4.20 | 11 | 11.784 | 13.500 | 13.090 | 13.910 | -70 | 0.451 | 1.01 |
| 94 | 4.20 | 11 | 13.859 | 15.854 | 15.430 | 16.280 | -173 | 0.551 | 1.02 |
| 94 | 4.20 | 11 | 14.941 | 17.083 | 16.660 | 17.510 | -102 | 0.791 | 1.01 |
| 94 | 4.20 | 11 | 16.061 | 18.361 | 17.940 | 18.790 | -213 | 0.807 | 1.02 |
| 94 | 4.20 | 11 | 17.140 | 19.594 | 19.170 | 20.020 | 110 | 0.888 | 0.99 |
| 94 | 4.20 | 11 | 18.221 | 20.834 | 20.410 | 21.260 | -4 | 1.039 | 1.00 |
| 94 | 4.20 | 11 | 19.187 | 21.944 | 21.520 | 22.370 | -538 | 0.719 | 1.04 |
| 94 | 4.20 | 11 | 12.811 | 14.662 | 14.250 | 15.080 | -80 | 0.596 | 1.01 |
| 95 | 4.20 | 12 | 3.822 | 27.104 | 26.780 | 27.450 | 326 | 1.976 | 0.98 |
| 95 | 4.20 | 12 | 4.905 | 28.346 | 28.050 | 28.660 | 339 | 2.051 | 0.98 |
| 95 | 4.20 | 12 | 5.986 | 29.582 | 29.310 | 29.870 | 0 | 2.230 | 1.00 |
| 95 | 4.20 | 12 | 7.073 | 30.822 | 30.580 | 31.080 | 178 | 2.415 | 0.99 |
| 95 | 4.20 | 12 | 8.156 | 32.057 | 31.850 | 32.280 | -190 | 2.058 | 1.01 |
| 95 | 4.20 | 12 | 8.389 | 32.322 | 32.120 | 32.540 | -6 | 2.307 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 95 | 4.20 | 12 | 9.395 | 33.465 | 33.290 | 33.660 | -197 | 2.094 | 1.01 |
| 95 | 4.20 | 12 | 10.285 | 34.475 | 34.320 | 34.640 | -201 | 2.171 | 1.01 |
| 95 | 4.20 | 12 | 11.408 | 35.746 | 35.620 | 35.880 | -206 | 2.127 | 1.01 |
| 95 | 4.20 | 12 | 12.491 | 36.969 | 36.870 | 37.080 | -212 | 2.066 | 1.01 |
| 95 | 4.20 | 12 | 13.576 | 38.192 | 38.120 | 38.280 | -217 | 1.997 | 1.01 |
| 95 | 4.20 | 12 | 14.626 | 39.371 | 39.330 | 39.430 | -214 | 2.085 | 1.01 |
| 95 | 4.20 | 12 | 15.593 | 40.456 | 40.430 | 40.490 | 5 | 2.138 | 1.00 |
| 95 | 4.20 | 12 | 16.793 | 41.798 | 41.740 | 41.830 | 5 | 1.995 | 1.00 |
| 95 | 4.20 | 12 | 18.070 | 43.222 | 43.140 | 43.280 | 6 | 1.902 | 1.00 |
| 96 | 3.90 | 11 | 4.211 | 4.771 | 4.520 | 4.960 | -272 | 0.329 | 0.94 |
| 96 | 3.90 | 11 | 14.941 | 18.679 | 17.920 | 18.960 | 144 | 0.380 | 0.98 |
| 96 | 3.90 | 11 | 16.061 | 20.157 | 19.380 | 20.430 | 170 | 0.713 | 0.98 |
| 96 | 3.90 | 11 | 17.140 | 21.573 | 20.780 | 21.840 | 108 | 0.858 | 0.99 |
| 96 | 3.90 | 11 | 18.221 | 22.984 | 22.170 | 23.250 | 3 | 1.161 | 1.00 |
| 96 | 3.90 | 11 | 19.187 | 24.235 | 23.420 | 24.490 | -139 | 1.281 | 1.01 |
| 97 | 3.90 | 12 | 3.822 | 28.842 | 27.560 | 29.720 | 170 | 4.928 | 0.99 |
| 97 | 3.90 | 12 | 4.905 | 29.886 | 28.210 | 30.940 | 175 | 5.291 | 0.99 |
| 97 | 3.90 | 12 | 5.986 | 30.919 | 28.850 | 32.140 | 0 | 5.156 | 1.00 |
| 97 | 3.90 | 12 | 7.073 | 31.952 | 29.490 | 33.340 | 3 | 5.273 | 1.00 |
| 97 | 3.90 | 12 | 8.156 | 32.977 | 30.140 | 34.530 | -185 | 5.019 | 1.01 |
| 97 | 3.90 | 12 | 8.389 | 33.196 | 30.280 | 34.780 | -183 | 5.065 | 1.01 |
| 97 | 3.90 | 12 | 9.395 | 34.142 | 30.880 | 35.870 | -190 | 4.952 | 1.01 |
| 97 | 3.90 | 12 | 10.285 | 34.977 | 31.410 | 36.830 | -193 | 4.965 | 1.01 |
| 97 | 3.90 | 12 | 11.408 | 36.029 | 32.090 | 38.030 | -198 | 4.977 | 1.01 |
| 97 | 3.90 | 12 | 12.491 | 37.042 | 32.740 | 39.180 | -202 | 4.886 | 1.01 |
| 97 | 3.90 | 12 | 13.576 | 38.055 | 33.410 | 40.340 | -206 | 4.820 | 1.01 |
| 97 | 3.90 | 12 | 14.626 | 39.035 | 34.050 | 41.450 | 8 | 5.096 | 1.00 |
| 97 | 3.90 | 12 | 15.593 | 39.939 | 34.650 | 42.470 | 3 | 5.019 | 1.00 |
| 97 | 3.90 | 12 | 16.793 | 41.060 | 35.410 | 43.740 | 4 | 4.841 | 1.00 |
| 97 | 3.90 | 12 | 18.070 | 42.255 | 36.220 | 45.080 | 4 | 4.764 | 1.00 |
| 98 | 4.35 | 12 | 9.395 | 11.737 | 10.760 | 12.410 | 5 | 0.422 | 1.00 |
| 98 | 4.35 | 12 | 10.285 | 12.860 | 11.820 | 13.590 | 5 | 0.669 | 1.00 |
| 98 | 4.35 | 12 | 11.408 | 14.275 | 13.170 | 15.060 | 6 | 0.994 | 1.00 |
| 98 | 4.35 | 12 | 12.491 | 15.637 | 14.470 | 16.480 | 7 | 1.317 | 1.00 |
| 98 | 4.35 | 12 | 13.576 | 16.999 | 15.770 | 17.890 | 7 | 1.639 | 1.00 |
| 98 | 4.35 | 12 | 14.626 | 18.314 | 17.030 | 19.250 | 209 | 1.640 | 0.98 |
| 98 | 4.35 | 12 | 15.593 | 19.524 | 18.200 | 20.510 | 119 | 2.055 | 0.99 |
| 98 | 4.35 | 12 | 16.793 | 21.021 | 19.640 | 22.060 | 128 | 2.334 | 0.99 |
| 98 | 4.35 | 12 | 18.070 | 22.610 | 21.170 | 23.700 | 140 | 2.586 | 0.99 |
| 99 | 4.35 | 13 | 3.853 | 27.750 | 26.330 | 28.650 | 8 | 1.044 | 1.00 |
| 99 | 4.35 | 13 | 4.769 | 28.813 | 27.420 | 29.710 | -163 | 1.016 | 1.01 |
| 99 | 4.35 | 13 | 5.851 | 30.057 | 28.680 | 30.930 | -347 | 1.119 | 1.02 |
| 99 | 4.35 | 13 | 6.933 | 31.291 | 29.940 | 32.150 | -534 | 1.172 | 1.03 |
| 99 | 4.35 | 13 | 8.017 | 32.518 | 31.200 | 33.360 | -733 | 1.163 | 1.04 |
| 99 | 4.35 | 13 | 9.103 | 33.741 | 32.450 | 34.560 | -755 | 1.277 | 1.04 |
| 99 | 4.35 | 13 | 9.896 | 34.629 | 33.360 | 35.440 | -770 | 1.232 | 1.04 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 99 | 4.35 | 13 | 11.249 | 36.140 | 34.900 | 36.930 | -592 | 1.251 | 1.03 |
| 99 | 4.35 | 13 | 12.332 | 37.344 | 36.140 | 38.140 | -806 | 1.203 | 1.04 |
| 99 | 4.35 | 13 | 13.415 | 38.544 | 37.370 | 39.300 | -407 | 1.408 | 1.02 |
| 99 | 4.35 | 13 | 14.381 | 39.610 | 38.470 | 40.350 | -418 | 1.378 | 1.02 |
| 99 | 4.35 | 13 | 15.581 | 40.930 | 39.820 | 41.650 | -428 | 1.344 | 1.02 |
| 99 | 4.35 | 13 | 16.664 | 42.119 | 41.040 | 42.820 | -211 | 1.459 | 1.01 |
| 99 | 4.35 | 13 | 17.747 | 43.303 | 42.260 | 43.990 | -211 | 1.469 | 1.01 |
| 99 | 4.35 | 13 | 18.792 | 44.443 | 43.430 | 45.110 | -445 | 1.391 | 1.02 |
| 99 | 4.35 | 13 | 20.107 | 45.873 | 44.900 | 46.520 | 18 | 1.665 | 1.00 |
| 100 | 4.66 | 12 | 8.156 | 9.270 | 8.460 | 10.020 | 32 | 0.571 | 0.99 |
| 100 | 4.66 | 12 | 8.389 | 9.536 | 8.690 | 10.310 | -9 | 0.714 | 1.00 |
| 100 | 4.66 | 12 | 9.395 | 10.690 | 9.710 | 11.560 | 43 | 0.788 | 0.99 |
| 100 | 4.66 | 12 | 10.285 | 11.712 | 10.610 | 12.680 | 50 | 1.007 | 0.99 |
| 100 | 4.66 | 12 | 11.408 | 13.001 | 11.750 | 14.080 | 60 | 1.278 | 0.99 |
| 100 | 4.66 | 12 | 12.491 | 14.244 | 12.840 | 15.440 | 71 | 1.482 | 0.99 |
| 100 | 4.66 | 12 | 13.576 | 15.489 | 13.940 | 16.790 | 78 | 1.753 | 0.99 |
| 100 | 4.66 | 12 | 14.626 | 16.695 | 15.000 | 18.100 | 301 | 1.532 | 0.97 |
| 100 | 4.66 | 12 | 15.593 | 17.806 | 15.980 | 19.310 | 217 | 1.894 | 0.98 |
| 100 | 4.66 | 12 | 16.793 | 19.186 | 17.210 | 20.800 | 121 | 2.247 | 0.99 |
| 100 | 4.66 | 12 | 18.070 | 20.654 | 18.510 | 22.390 | 132 | 2.524 | 0.99 |
| 101 | 4.66 | 13 | 3.853 | 25.982 | 23.590 | 27.740 | -139 | 2.248 | 1.01 |
| 101 | 4.66 | 13 | 4.769 | 27.085 | 24.660 | 28.840 | -151 | 2.328 | 1.01 |
| 101 | 4.66 | 13 | 5.851 | 28.372 | 25.900 | 30.120 | -162 | 2.684 | 1.01 |
| 101 | 4.66 | 13 | 6.933 | 29.647 | 27.130 | 31.390 | -169 | 2.989 | 1.01 |
| 101 | 4.66 | 13 | 8.017 | 30.913 | 28.350 | 32.660 | -3 | 3.310 | 1.00 |
| 101 | 4.66 | 13 | 9.103 | 32.173 | 29.570 | 33.910 | -183 | 3.368 | 1.01 |
| 101 | 4.66 | 13 | 9.896 | 33.088 | 30.450 | 34.820 | -186 | 3.403 | 1.01 |
| 101 | 4.66 | 13 | 11.249 | 34.642 | 31.960 | 36.360 | -189 | 3.356 | 1.01 |
| 101 | 4.66 | 13 | 12.332 | 35.881 | 33.150 | 37.600 | -194 | 3.521 | 1.01 |
| 101 | 4.66 | 13 | 13.415 | 37.113 | 34.350 | 38.820 | 5 | 3.807 | 1.00 |
| 101 | 4.66 | 13 | 14.381 | 38.209 | 35.420 | 39.910 | 2 | 3.599 | 1.00 |
| 101 | 4.66 | 13 | 15.581 | 39.565 | 36.740 | 41.250 | 3 | 3.607 | 1.00 |
| 101 | 4.66 | 13 | 16.664 | 40.784 | 37.930 | 42.460 | 225 | 3.895 | 0.99 |
| 101 | 4.66 | 13 | 17.747 | 41.999 | 39.120 | 43.670 | 12 | 3.691 | 1.00 |
| 101 | 4.66 | 13 | 18.792 | 43.167 | 40.270 | 44.820 | 241 | 4.013 | 0.99 |
| 101 | 4.66 | 13 | 20.107 | 44.632 | 41.720 | 46.280 | 252 | 4.042 | 0.99 |
| 102 | 4.66 | 14 | 8.338 | 46.406 | 45.930 | 46.780 | 482 | 0.313 | 0.98 |
| 102 | 4.66 | 14 | 10.504 | 47.111 | 46.940 | 47.340 | -513 | 0.304 | 1.02 |
| 102 | 4.66 | 14 | 11.587 | 47.468 | 47.450 | 47.620 | -261 | 0.379 | 1.01 |
| 102 | 4.66 | 14 | 12.671 | 47.830 | 47.800 | 48.010 | -261 | 0.391 | 1.01 |
| 102 | 4.66 | 14 | 13.754 | 48.196 | 48.090 | 48.530 | 255 | 0.323 | 0.99 |
| 102 | 4.66 | 14 | 15.916 | 48.943 | 48.690 | 49.580 | 530 | 0.324 | 0.98 |
| 102 | 4.66 | 14 | 18.084 | 49.721 | 49.320 | 50.660 | 537 | 0.321 | 0.98 |
| 103 | 4.35 | 12 | 13.576 | 17.629 | 17.550 | 17.700 | -8 | 0.397 | 1.00 |
| 103 | 4.35 | 12 | 14.626 | 19.037 | 18.940 | 19.120 | 246 | 0.366 | 0.97 |
| 103 | 4.35 | 12 | 15.593 | 20.332 | 20.220 | 20.430 | -94 | 0.726 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 103 | 4.35 | 12 | 16.793 | 21.933 | 21.810 | 22.040 | -2 | 0.847 | 1.00 |
| 103 | 4.35 | 12 | 18.070 | 23.629 | 23.490 | 23.760 | -2 | 0.986 | 1.00 |
| 104 | 4.35 | 13 | 3.853 | 26.206 | 26.040 | 26.260 | 318 | 0.441 | 0.98 |
| 104 | 4.35 | 13 | 4.769 | 26.685 | 26.470 | 26.780 | -161 | 0.357 | 1.01 |
| 104 | 4.35 | 13 | 5.851 | 27.250 | 26.990 | 27.390 | -497 | 0.335 | 1.03 |
| 104 | 4.35 | 13 | 6.933 | 27.817 | 27.510 | 28.000 | -518 | 0.380 | 1.03 |
| 104 | 4.35 | 13 | 8.017 | 28.387 | 28.040 | 28.610 | -364 | 0.408 | 1.02 |
| 104 | 4.35 | 13 | 9.103 | 28.962 | 28.570 | 29.230 | -551 | 0.381 | 1.03 |
| 104 | 4.35 | 13 | 9.896 | 29.383 | 28.960 | 29.680 | -561 | 0.412 | 1.03 |
| 104 | 4.35 | 13 | 11.249 | 30.109 | 29.640 | 30.460 | 1058 | 0.366 | 0.94 |
| 104 | 4.35 | 13 | 12.332 | 30.697 | 30.190 | 31.090 | 700 | 0.527 | 0.96 |
| 104 | 4.35 | 13 | 13.415 | 31.291 | 30.740 | 31.720 | 915 | 0.477 | 0.95 |
| 104 | 4.35 | 13 | 14.381 | 31.827 | 31.240 | 32.300 | 933 | 0.457 | 0.95 |
| 104 | 4.35 | 13 | 15.581 | 32.502 | 31.870 | 33.020 | 760 | 0.498 | 0.96 |
| 104 | 4.35 | 13 | 16.664 | 33.121 | 32.450 | 33.680 | 1187 | 0.311 | 0.94 |
| 104 | 4.35 | 13 | 17.747 | 33.749 | 33.040 | 34.350 | 1210 | 0.348 | 0.94 |
| 104 | 4.35 | 13 | 18.792 | 34.363 | 33.610 | 35.010 | 1238 | 0.368 | 0.94 |
| 104 | 4.35 | 13 | 20.107 | 35.150 | 34.350 | 35.850 | 1491 | 0.401 | 0.93 |
| 105 | 4.35 | 14 | 4.053 | 37.211 | 36.460 | 37.850 | -885 | 0.394 | 1.04 |
| 105 | 4.35 | 14 | 5.136 | 37.706 | 36.980 | 38.330 | -676 | 0.444 | 1.03 |
| 105 | 4.35 | 14 | 6.218 | 38.204 | 37.490 | 38.810 | -899 | 0.442 | 1.04 |
| 105 | 4.35 | 14 | 7.263 | 38.687 | 38.000 | 39.270 | -241 | 0.664 | 1.01 |
| 105 | 4.35 | 14 | 8.338 | 39.187 | 38.510 | 39.750 | -472 | 0.666 | 1.02 |
| 105 | 4.35 | 14 | 9.420 | 39.693 | 39.040 | 40.240 | 218 | 0.911 | 0.99 |
| 105 | 4.35 | 14 | 10.504 | 40.203 | 39.570 | 40.730 | -10 | 0.907 | 1.00 |
| 105 | 4.35 | 14 | 11.587 | 40.718 | 40.100 | 41.230 | -12 | 0.964 | 1.00 |
| 105 | 4.35 | 14 | 12.671 | 41.237 | 40.630 | 41.730 | -14 | 0.971 | 1.00 |
| 105 | 4.35 | 14 | 13.754 | 41.761 | 41.170 | 42.240 | -2 | 1.015 | 1.00 |
| 105 | 4.35 | 14 | 14.839 | 42.291 | 41.720 | 42.750 | 231 | 1.099 | 0.99 |
| 105 | 4.35 | 14 | 15.916 | 42.823 | 42.270 | 43.270 | 238 | 1.087 | 0.99 |
| 105 | 4.35 | 14 | 17.000 | 43.366 | 42.830 | 43.800 | 245 | 1.140 | 0.99 |
| 105 | 4.35 | 14 | 18.084 | 43.916 | 43.400 | 44.330 | 751 | 0.853 | 0.97 |
| 105 | 4.35 | 14 | 19.168 | 44.473 | 43.970 | 44.880 | 507 | 1.020 | 0.98 |
| 106 | 4.35 | 12 | 11.408 | 14.994 | 14.710 | 15.090 | 9 | 0.308 | 1.00 |
| 106 | 4.35 | 12 | 12.491 | 16.442 | 16.150 | 16.540 | 74 | 0.494 | 0.99 |
| 106 | 4.35 | 12 | 13.576 | 17.890 | 17.600 | 18.000 | 11 | 0.732 | 1.00 |
| 106 | 4.35 | 12 | 14.626 | 19.286 | 18.990 | 19.400 | 204 | 0.686 | 0.98 |
| 106 | 4.35 | 12 | 15.593 | 20.569 | 20.270 | 20.690 | 115 | 1.151 | 0.99 |
| 106 | 4.35 | 12 | 16.793 | 22.154 | 21.850 | 22.280 | 11 | 1.227 | 1.00 |
| 106 | 4.35 | 12 | 18.070 | 23.832 | 23.520 | 23.960 | 12 | 1.370 | 1.00 |
| 107 | 4.35 | 13 | 3.853 | 28.905 | 28.620 | 28.990 | 988 | 0.589 | 0.94 |
| 107 | 4.35 | 13 | 4.769 | 29.961 | 29.650 | 30.050 | 506 | 0.820 | 0.97 |
| 107 | 4.35 | 13 | 5.851 | 31.200 | 30.850 | 31.310 | -6 | 1.137 | 1.00 |
| 107 | 4.35 | 13 | 6.933 | 32.432 | 32.040 | 32.560 | -367 | 1.109 | 1.02 |
| 107 | 4.35 | 13 | 8.017 | 33.658 | 33.210 | 33.810 | -743 | 1.001 | 1.04 |
| 107 | 4.35 | 13 | 9.103 | 34.880 | 34.370 | 35.050 | -767 | 1.003 | 1.04 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 107 | 4.35 | 13 | 9.896 | 35.768 | 35.210 | 35.950 | -781 | 0.937 | 1.04 |
| 107 | 4.35 | 13 | 11.249 | 37.276 | 36.640 | 37.490 | -799 | 0.912 | 1.04 |
| 107 | 4.35 | 13 | 12.332 | 38.479 | 37.780 | 38.720 | -612 | 1.036 | 1.03 |
| 107 | 4.35 | 13 | 13.415 | 39.675 | 38.910 | 39.930 | -199 | 1.272 | 1.01 |
| 107 | 4.35 | 13 | 14.381 | 40.739 | 39.920 | 41.020 | -417 | 1.161 | 1.02 |
| 107 | 4.35 | 13 | 15.581 | 42.055 | 41.170 | 42.360 | -209 | 1.216 | 1.01 |
| 107 | 4.35 | 13 | 16.664 | 43.240 | 42.290 | 43.570 | -206 | 1.214 | 1.01 |
| 107 | 4.35 | 13 | 17.747 | 44.420 | 43.410 | 44.770 | 14 | 1.244 | 1.00 |
| 107 | 4.35 | 13 | 18.792 | 45.555 | 44.480 | 45.930 | 16 | 1.222 | 1.00 |
| 107 | 4.35 | 13 | 20.107 | 46.980 | 45.840 | 47.390 | 256 | 1.470 | 0.99 |
| 108 | 4.40 | 13 | 12.332 | 15.854 | 15.860 | 16.080 | -313 | 0.345 | 1.04 |
| 108 | 4.40 | 13 | 14.381 | 18.503 | 18.490 | 18.710 | -505 | 0.426 | 1.05 |
| 108 | 4.40 | 13 | 15.581 | 20.043 | 20.010 | 20.230 | -450 | 0.521 | 1.04 |
| 108 | 4.40 | 13 | 16.664 | 21.426 | 21.380 | 21.600 | -357 | 0.615 | 1.03 |
| 108 | 4.40 | 13 | 17.747 | 22.801 | 22.740 | 22.970 | -252 | 0.717 | 1.02 |
| 108 | 4.40 | 13 | 18.792 | 24.120 | 24.040 | 24.270 | -118 | 0.877 | 1.01 |
| 108 | 4.40 | 13 | 20.107 | 25.772 | 25.670 | 25.910 | -135 | 0.945 | 1.01 |
| 109 | 4.40 | 14 | 11.587 | 35.000 | 32.850 | 38.790 | -608 | 0.302 | 1.03 |
| 109 | 4.40 | 14 | 12.671 | 35.794 | 33.450 | 39.920 | -823 | 0.355 | 1.04 |
| 109 | 4.40 | 14 | 13.754 | 36.591 | 34.060 | 41.050 | -626 | 0.374 | 1.03 |
| 109 | 4.40 | 14 | 14.839 | 37.391 | 34.670 | 42.170 | -633 | 0.396 | 1.03 |
| 109 | 4.40 | 14 | 15.916 | 38.189 | 35.280 | 43.290 | -424 | 0.431 | 1.02 |
| 109 | 4.40 | 14 | 17.000 | 38.997 | 35.910 | 44.410 | -207 | 0.513 | 1.01 |
| 109 | 4.40 | 14 | 18.084 | 39.810 | 36.540 | 45.540 | 17 | 0.487 | 1.00 |
| 109 | 4.40 | 14 | 19.168 | 40.628 | 37.180 | 46.660 | 249 | 0.547 | 0.99 |
| 110 | 4.45 | 13 | 11.249 | 13.909 | 12.900 | 14.730 | -335 | 0.341 | 1.06 |
| 110 | 4.45 | 13 | 13.415 | 16.655 | 15.500 | 17.570 | -481 | 0.463 | 1.06 |
| 110 | 4.45 | 13 | 14.381 | 17.878 | 16.660 | 18.840 | -367 | 0.691 | 1.04 |
| 110 | 4.45 | 13 | 15.581 | 19.396 | 18.100 | 20.400 | -315 | 0.900 | 1.03 |
| 110 | 4.45 | 13 | 16.664 | 20.765 | 19.400 | 21.810 | -341 | 0.974 | 1.03 |
| 110 | 4.45 | 13 | 17.747 | 22.130 | 20.700 | 23.210 | -249 | 1.219 | 1.02 |
| 110 | 4.45 | 13 | 18.792 | 23.445 | 21.950 | 24.560 | -129 | 1.363 | 1.01 |
| 110 | 4.45 | 13 | 20.107 | 25.096 | 23.530 | 26.260 | -285 | 1.397 | 1.02 |
| 111 | 4.45 | 14 | 4.053 | 29.883 | 28.690 | 31.370 | -17 | 0.679 | 1.00 |
| 111 | 4.45 | 14 | 5.136 | 31.015 | 29.940 | 32.620 | -13 | 0.629 | 1.00 |
| 111 | 4.45 | 14 | 6.218 | 32.142 | 30.970 | 33.880 | -15 | 0.693 | 1.00 |
| 111 | 4.45 | 14 | 7.263 | 33.227 | 31.660 | 35.090 | -8 | 0.752 | 1.00 |
| 111 | 4.45 | 14 | 8.338 | 34.341 | 32.370 | 36.340 | 184 | 0.944 | 0.99 |
| 111 | 4.45 | 14 | 9.420 | 35.461 | 33.080 | 37.610 | 396 | 0.912 | 0.98 |
| 111 | 4.45 | 14 | 10.504 | 36.581 | 33.790 | 38.870 | 405 | 0.928 | 0.98 |
| 111 | 4.45 | 14 | 11.587 | 37.699 | 34.500 | 40.140 | 205 | 0.907 | 0.99 |
| 111 | 4.45 | 14 | 12.671 | 38.816 | 35.210 | 41.400 | 209 | 0.907 | 0.99 |
| 111 | 4.45 | 14 | 13.754 | 39.932 | 35.930 | 42.660 | 438 | 1.018 | 0.98 |
| 111 | 4.45 | 14 | 14.839 | 41.047 | 36.650 | 43.910 | -218 | 0.837 | 1.01 |
| 111 | 4.45 | 14 | 15.916 | 42.154 | 37.380 | 45.150 | 6 | 0.923 | 1.00 |
| 111 | 4.45 | 14 | 17.000 | 43.266 | 38.110 | 46.400 | 235 | 0.931 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 111 | 4.45 | 14 | 18.084 | 44.377 | 38.850 | 47.630 | 483 | 0.941 | 0.98 |
| 111 | 4.45 | 14 | 19.168 | 45.487 | 39.600 | 48.870 | 487 | 0.970 | 0.98 |
| 112 | 4.75 | 13 | 13.415 | 14.666 | 14.270 | 15.450 | -180 | 0.390 | 1.02 |
| 112 | 4.75 | 13 | 14.381 | 15.750 | 15.310 | 16.620 | -366 | 0.333 | 1.04 |
| 112 | 4.75 | 13 | 15.581 | 17.100 | 16.600 | 18.070 | -604 | 0.306 | 1.06 |
| 112 | 4.75 | 13 | 16.664 | 18.322 | 17.780 | 19.390 | -435 | 0.513 | 1.04 |
| 112 | 4.75 | 13 | 17.747 | 19.546 | 18.950 | 20.700 | -361 | 0.565 | 1.03 |
| 112 | 4.75 | 13 | 18.792 | 20.730 | 20.090 | 21.970 | -380 | 0.563 | 1.03 |
| 112 | 4.75 | 13 | 20.107 | 22.224 | 21.530 | 23.560 | -137 | 0.856 | 1.01 |
| 113 | 4.75 | 14 | 4.053 | 27.537 | 26.830 | 28.890 | -1455 | 0.302 | 1.09 |
| 113 | 4.75 | 14 | 5.136 | 28.820 | 28.120 | 30.150 | -1179 | 0.471 | 1.07 |
| 113 | 4.75 | 14 | 6.218 | 30.094 | 29.410 | 31.400 | -1054 | 0.602 | 1.06 |
| 113 | 4.75 | 14 | 7.263 | 31.319 | 30.640 | 32.590 | -727 | 0.885 | 1.04 |
| 113 | 4.75 | 14 | 8.338 | 32.572 | 31.910 | 33.810 | -936 | 0.878 | 1.05 |
| 113 | 4.75 | 14 | 9.420 | 33.827 | 33.180 | 35.030 | -384 | 1.190 | 1.02 |
| 113 | 4.75 | 14 | 10.504 | 35.080 | 34.450 | 36.250 | -400 | 1.238 | 1.02 |
| 113 | 4.75 | 14 | 11.587 | 36.326 | 35.720 | 37.460 | -210 | 1.434 | 1.01 |
| 113 | 4.75 | 14 | 12.671 | 37.568 | 36.980 | 38.660 | -215 | 1.473 | 1.01 |
| 113 | 4.75 | 14 | 13.754 | 38.805 | 38.230 | 39.860 | 214 | 1.820 | 0.99 |
| 113 | 4.75 | 14 | 14.839 | 40.039 | 39.480 | 41.050 | 219 | 1.774 | 0.99 |
| 113 | 4.75 | 14 | 15.916 | 41.260 | 40.720 | 42.240 | 230 | 1.799 | 0.99 |
| 113 | 4.75 | 14 | 17.000 | 42.485 | 41.970 | 43.430 | -219 | 1.523 | 1.01 |
| 113 | 4.75 | 14 | 18.084 | 43.707 | 43.200 | 44.610 | 248 | 1.735 | 0.99 |
| 113 | 4.75 | 14 | 19.168 | 44.925 | 44.440 | 45.800 | -456 | 1.328 | 1.02 |
| 114 | 4.75 | 13 | 11.249 | 12.909 | 12.440 | 13.200 | -254 | 0.339 | 1.04 |
| 114 | 4.75 | 13 | 12.332 | 14.168 | 13.660 | 14.510 | -176 | 0.483 | 1.02 |
| 114 | 4.75 | 13 | 13.415 | 15.429 | 14.880 | 15.810 | 188 | 0.490 | 0.97 |
| 114 | 4.75 | 13 | 14.381 | 16.555 | 15.980 | 16.980 | 217 | 0.594 | 0.97 |
| 114 | 4.75 | 13 | 15.581 | 17.957 | 17.340 | 18.430 | 349 | 0.620 | 0.96 |
| 114 | 4.75 | 13 | 16.664 | 19.227 | 18.580 | 19.730 | 398 | 0.701 | 0.96 |
| 114 | 4.75 | 13 | 17.747 | 20.498 | 19.820 | 21.040 | 439 | 0.785 | 0.96 |
| 114 | 4.75 | 13 | 18.792 | 21.728 | 21.030 | 22.300 | 481 | 0.917 | 0.96 |
| 114 | 4.75 | 13 | 20.107 | 23.279 | 22.550 | 23.890 | 259 | 1.272 | 0.98 |
| 115 | 4.75 | 14 | 4.053 | 28.721 | 27.980 | 29.330 | -174 | 3.580 | 1.01 |
| 115 | 4.75 | 14 | 5.136 | 29.965 | 29.300 | 30.550 | -173 | 3.879 | 1.01 |
| 115 | 4.75 | 14 | 6.218 | 31.185 | 30.490 | 31.750 | -178 | 3.938 | 1.01 |
| 115 | 4.75 | 14 | 7.263 | 32.346 | 31.620 | 32.890 | -178 | 3.978 | 1.01 |
| 115 | 4.75 | 14 | 8.338 | 33.527 | 32.750 | 34.040 | -181 | 4.157 | 1.01 |
| 115 | 4.75 | 14 | 9.420 | 34.707 | 33.880 | 35.200 | 9 | 4.563 | 1.00 |
| 115 | 4.75 | 14 | 10.504 | 35.880 | 35.010 | 36.350 | 10 | 4.326 | 1.00 |
| 115 | 4.75 | 14 | 11.587 | 37.048 | 36.130 | 37.490 | 9 | 4.594 | 1.00 |
| 115 | 4.75 | 14 | 12.671 | 38.211 | 37.250 | 38.630 | 9 | 4.779 | 1.00 |
| 115 | 4.75 | 14 | 13.754 | 39.372 | 38.370 | 39.770 | 227 | 5.063 | 0.99 |
| 115 | 4.75 | 14 | 14.839 | 40.533 | 39.490 | 40.910 | 233 | 5.162 | 0.99 |
| 115 | 4.75 | 14 | 15.916 | 41.685 | 40.600 | 42.050 | 244 | 5.104 | 0.99 |
| 115 | 4.75 | 14 | 17.000 | 42.845 | 41.730 | 43.240 | 237 | 5.359 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 115 | 4.75 | 14 | 18.084 | 44.005 | 42.860 | 44.470 | 487 | 5.468 | 0.98 |
| 115 | 4.75 | 14 | 19.168 | 45.165 | 44.000 | 45.690 | 248 | 5.469 | 0.99 |
| 116 | 4.75 | 15 | 3.277 | 46.740 | 45.710 | 47.100 | 1008 | 0.531 | 0.96 |
| 116 | 4.75 | 15 | 4.361 | 47.152 | 46.170 | 47.530 | 504 | 0.712 | 0.98 |
| 116 | 4.75 | 15 | 5.444 | 47.566 | 46.640 | 47.970 | 1022 | 0.582 | 0.96 |
| 116 | 4.75 | 15 | 6.489 | 47.966 | 47.090 | 48.390 | 510 | 0.806 | 0.98 |
| 116 | 4.75 | 15 | 7.188 | 48.235 | 47.390 | 48.670 | -2 | 0.780 | 1.00 |
| 116 | 4.75 | 15 | 8.617 | 48.784 | 48.010 | 49.250 | -514 | 0.607 | 1.02 |
| 116 | 4.75 | 15 | 9.738 | 49.217 | 48.490 | 49.700 | -514 | 0.634 | 1.02 |
| 116 | 4.75 | 15 | 10.822 | 49.638 | 48.960 | 50.150 | -773 | 0.580 | 1.03 |
| 116 | 4.75 | 15 | 11.903 | 50.061 | 49.440 | 50.590 | -1293 | 0.461 | 1.05 |
| 116 | 4.75 | 15 | 12.984 | 50.487 | 49.910 | 51.040 | -1563 | 0.422 | 1.06 |
| 116 | 4.75 | 15 | 14.067 | 50.919 | 50.270 | 51.490 | -263 | 0.748 | 1.01 |
| 116 | 4.75 | 15 | 15.073 | 51.326 | 50.590 | 51.920 | -266 | 0.683 | 1.01 |
| 116 | 4.75 | 15 | 16.209 | 51.792 | 50.960 | 52.410 | -267 | 0.744 | 1.01 |
| 116 | 4.75 | 15 | 17.293 | 52.243 | 51.320 | 52.880 | -1069 | 0.708 | 1.04 |
| 116 | 4.75 | 15 | 18.376 | 52.703 | 51.690 | 53.370 | -806 | 0.683 | 1.03 |
| 117 | 4.45 | 13 | 13.415 | 17.340 | 16.960 | 17.550 | -41 | 0.478 | 1.01 |
| 117 | 4.45 | 13 | 14.381 | 18.610 | 18.200 | 18.840 | 87 | 0.591 | 0.99 |
| 117 | 4.45 | 13 | 15.581 | 20.183 | 19.750 | 20.450 | 13 | 1.022 | 1.00 |
| 117 | 4.45 | 13 | 16.664 | 21.599 | 21.140 | 21.890 | 14 | 1.310 | 1.00 |
| 117 | 4.45 | 13 | 17.747 | 23.008 | 22.520 | 23.320 | 250 | 1.314 | 0.98 |
| 117 | 4.45 | 13 | 18.792 | 24.361 | 23.850 | 24.700 | 276 | 1.461 | 0.98 |
| 117 | 4.45 | 13 | 20.107 | 26.055 | 25.520 | 26.430 | 18 | 1.983 | 1.00 |
| 118 | 4.45 | 14 | 4.053 | 31.261 | 30.880 | 31.510 | -1056 | 1.470 | 1.06 |
| 118 | 4.45 | 14 | 5.136 | 32.482 | 32.070 | 32.750 | -903 | 1.684 | 1.05 |
| 118 | 4.45 | 14 | 6.218 | 33.693 | 33.230 | 33.990 | -928 | 1.784 | 1.05 |
| 118 | 4.45 | 14 | 7.263 | 34.858 | 34.330 | 35.190 | -570 | 2.328 | 1.03 |
| 118 | 4.45 | 14 | 8.338 | 36.052 | 35.450 | 36.440 | -778 | 2.299 | 1.04 |
| 118 | 4.45 | 14 | 9.420 | 37.251 | 36.560 | 37.690 | -395 | 2.851 | 1.02 |
| 118 | 4.45 | 14 | 10.504 | 38.450 | 37.660 | 38.950 | -402 | 2.660 | 1.02 |
| 118 | 4.45 | 14 | 11.587 | 39.646 | 38.750 | 40.210 | -203 | 3.239 | 1.01 |
| 118 | 4.45 | 14 | 12.671 | 40.840 | 39.850 | 41.470 | -208 | 3.353 | 1.01 |
| 118 | 4.45 | 14 | 13.754 | 42.032 | 40.940 | 42.730 | 14 | 3.676 | 1.00 |
| 118 | 4.45 | 14 | 14.839 | 43.223 | 42.030 | 43.980 | -218 | 3.240 | 1.01 |
| 118 | 4.45 | 14 | 15.916 | 44.404 | 43.110 | 45.230 | 13 | 3.453 | 1.00 |
| 118 | 4.45 | 14 | 17.000 | 45.590 | 44.210 | 46.470 | -231 | 3.384 | 1.01 |
| 118 | 4.45 | 14 | 18.084 | 46.775 | 45.300 | 47.710 | -220 | 3.061 | 1.01 |
| 118 | 4.45 | 14 | 19.168 | 47.956 | 46.400 | 48.950 | 5 | 3.626 | 1.00 |
| 119 | 4.45 | 14 | 14.839 | 18.729 | 17.570 | 19.850 | 410 | 0.358 | 0.95 |
| 119 | 4.45 | 14 | 15.916 | 20.126 | 18.880 | 21.320 | 388 | 0.463 | 0.96 |
| 119 | 4.45 | 14 | 17.000 | 21.529 | 20.190 | 22.800 | 442 | 0.534 | 0.96 |
| 119 | 4.45 | 14 | 18.084 | 22.927 | 21.510 | 24.270 | 381 | 0.640 | 0.97 |
| 119 | 4.45 | 14 | 19.168 | 24.321 | 22.820 | 25.720 | 413 | 0.827 | 0.97 |
| 120 | 4.45 | 15 | 3.277 | 28.342 | 27.110 | 29.480 | -154 | 3.812 | 1.01 |
| 120 | 4.45 | 15 | 4.361 | 29.505 | 28.350 | 30.730 | -163 | 3.966 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 120 | 4.45 | 15 | 5.444 | 30.660 | 29.270 | 31.970 | -167 | 4.138 | 1.01 |
| 120 | 4.45 | 15 | 6.489 | 31.768 | 29.870 | 33.160 | -176 | 4.313 | 1.01 |
| 120 | 4.45 | 15 | 7.188 | 32.506 | 30.270 | 33.950 | -180 | 4.419 | 1.01 |
| 120 | 4.45 | 15 | 8.617 | 34.010 | 31.080 | 35.570 | 4 | 4.741 | 1.00 |
| 120 | 4.45 | 15 | 9.738 | 35.186 | 31.720 | 36.830 | 3 | 4.824 | 1.00 |
| 120 | 4.45 | 15 | 10.822 | 36.320 | 32.330 | 38.050 | 3 | 4.806 | 1.00 |
| 120 | 4.45 | 15 | 11.903 | 37.449 | 32.950 | 39.260 | -202 | 4.612 | 1.01 |
| 120 | 4.45 | 15 | 12.984 | 38.575 | 33.570 | 40.510 | -425 | 4.443 | 1.02 |
| 120 | 4.45 | 15 | 14.067 | 39.703 | 34.190 | 41.810 | 4 | 4.924 | 1.00 |
| 120 | 4.45 | 15 | 15.073 | 40.748 | 34.780 | 43.010 | 7 | 4.970 | 1.00 |
| 120 | 4.45 | 15 | 16.209 | 41.928 | 35.450 | 44.360 | 9 | 5.008 | 1.00 |
| 120 | 4.45 | 15 | 17.293 | 43.051 | 36.100 | 45.650 | -229 | 4.856 | 1.01 |
| 120 | 4.45 | 15 | 18.376 | 44.173 | 36.750 | 46.920 | -229 | 4.990 | 1.01 |
| 121 | 4.45 | 16 | 3.178 | 45.165 | 38.960 | 48.010 | 239 | 1.389 | 0.99 |
| 121 | 4.45 | 16 | 4.222 | 45.537 | 39.500 | 48.320 | 729 | 1.521 | 0.97 |
| 121 | 4.45 | 16 | 5.343 | 45.935 | 40.070 | 48.650 | 737 | 1.502 | 0.97 |
| 121 | 4.45 | 16 | 6.426 | 46.318 | 40.620 | 48.970 | 994 | 1.285 | 0.96 |
| 121 | 4.45 | 16 | 7.509 | 46.699 | 41.160 | 49.280 | 1001 | 1.300 | 0.96 |
| 121 | 4.45 | 16 | 8.592 | 47.080 | 41.700 | 49.600 | 1017 | 1.254 | 0.96 |
| 121 | 4.45 | 16 | 9.676 | 47.462 | 42.230 | 49.910 | 256 | 1.464 | 0.99 |
| 121 | 4.45 | 16 | 10.758 | 47.845 | 42.770 | 50.230 | 518 | 1.476 | 0.98 |
| 121 | 4.45 | 16 | 11.842 | 48.232 | 43.310 | 50.550 | 262 | 1.538 | 0.99 |
| 121 | 4.45 | 16 | 12.925 | 48.621 | 43.850 | 50.870 | -246 | 1.312 | 1.01 |
| 121 | 4.45 | 16 | 14.011 | 49.017 | 44.400 | 51.200 | -256 | 1.388 | 1.01 |
| 121 | 4.45 | 16 | 15.092 | 49.417 | 44.950 | 51.530 | -255 | 1.397 | 1.01 |
| 121 | 4.45 | 16 | 15.247 | 49.475 | 45.030 | 51.580 | 10 | 1.515 | 1.00 |
| 121 | 4.45 | 16 | 15.285 | 49.489 | 45.050 | 51.590 | 528 | 1.499 | 0.98 |
| 121 | 4.45 | 16 | 16.176 | 49.825 | 45.510 | 51.880 | 534 | 1.391 | 0.98 |
| 122 | 4.75 | 14 | 10.504 | 12.857 | 12.630 | 13.070 | 234 | 0.383 | 0.96 |
| 122 | 4.75 | 14 | 11.587 | 14.173 | 13.910 | 14.430 | 276 | 0.459 | 0.96 |
| 122 | 4.75 | 14 | 12.671 | 15.485 | 15.170 | 15.790 | 234 | 0.693 | 0.97 |
| 122 | 4.75 | 14 | 13.754 | 16.794 | 16.440 | 17.140 | 368 | 0.760 | 0.96 |
| 122 | 4.75 | 14 | 14.839 | 18.101 | 17.700 | 18.490 | 100 | 1.027 | 0.99 |
| 122 | 4.75 | 14 | 15.916 | 19.396 | 18.950 | 19.830 | 343 | 0.985 | 0.97 |
| 122 | 4.75 | 14 | 17.000 | 20.697 | 20.210 | 21.170 | 131 | 1.304 | 0.99 |
| 122 | 4.75 | 14 | 18.084 | 21.997 | 21.470 | 22.510 | 137 | 1.413 | 0.99 |
| 122 | 4.75 | 14 | 19.168 | 23.295 | 22.730 | 23.850 | 441 | 1.229 | 0.97 |
| 123 | 4.75 | 15 | 3.277 | 27.697 | 27.080 | 28.290 | 469 | 2.864 | 0.97 |
| 123 | 4.75 | 15 | 4.361 | 28.996 | 28.370 | 29.560 | 322 | 3.324 | 0.98 |
| 123 | 4.75 | 15 | 5.444 | 30.286 | 29.640 | 30.860 | 333 | 3.686 | 0.98 |
| 123 | 4.75 | 15 | 6.489 | 31.525 | 30.870 | 32.100 | 169 | 4.107 | 0.99 |
| 123 | 4.75 | 15 | 7.188 | 32.350 | 31.680 | 32.930 | 172 | 4.217 | 0.99 |
| 123 | 4.75 | 15 | 8.617 | 34.032 | 33.340 | 34.610 | 380 | 4.019 | 0.98 |
| 123 | 4.75 | 15 | 9.738 | 35.345 | 34.640 | 35.920 | 194 | 4.381 | 0.99 |
| 123 | 4.75 | 15 | 10.822 | 36.611 | 35.890 | 37.170 | 202 | 4.337 | 0.99 |
| 123 | 4.75 | 15 | 11.903 | 37.868 | 37.130 | 38.410 | 196 | 4.218 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 123 | 4.75 | 15 | 12.984 | 39.121 | 38.370 | 39.650 | -229 | 3.860 | 1.01 |
| 123 | 4.75 | 15 | 14.067 | 40.373 | 39.610 | 40.880 | 214 | 4.286 | 0.99 |
| 123 | 4.75 | 15 | 15.073 | 41.533 | 40.760 | 42.010 | 221 | 4.322 | 0.99 |
| 123 | 4.75 | 15 | 16.209 | 42.839 | 42.060 | 43.290 | 225 | 4.290 | 0.99 |
| 123 | 4.75 | 15 | 17.293 | 44.079 | 43.290 | 44.540 | -19 | 4.110 | 1.00 |
| 123 | 4.75 | 15 | 18.376 | 45.316 | 44.520 | 45.870 | 220 | 4.412 | 0.99 |
| 124 | 4.40 | 15 | 5.444 | 6.516 | 5.710 | 6.990 | 15 | 0.316 | 1.04 |
| 124 | 4.40 | 15 | 6.489 | 7.799 | 6.800 | 8.340 | -7 | 0.423 | 1.03 |
| 124 | 4.40 | 15 | 7.188 | 8.659 | 7.520 | 9.240 | -2 | 0.648 | 1.00 |
| 124 | 4.40 | 15 | 8.617 | 10.427 | 8.990 | 11.090 | 118 | 0.303 | 0.92 |
| 124 | 4.40 | 15 | 9.738 | 11.818 | 10.140 | 12.550 | 105 | 0.607 | 0.96 |
| 124 | 4.40 | 15 | 10.822 | 13.167 | 11.250 | 13.970 | 146 | 0.572 | 0.96 |
| 124 | 4.40 | 15 | 11.903 | 14.514 | 12.350 | 15.380 | 229 | 0.488 | 0.95 |
| 124 | 4.40 | 15 | 12.984 | 15.862 | 13.450 | 16.830 | 109 | 0.854 | 0.98 |
| 124 | 4.40 | 15 | 14.067 | 17.213 | 14.560 | 18.280 | 220 | 0.599 | 0.97 |
| 124 | 4.40 | 15 | 15.073 | 18.467 | 15.580 | 19.630 | 349 | 0.576 | 0.96 |
| 124 | 4.40 | 15 | 16.209 | 19.882 | 16.740 | 21.150 | 494 | 0.527 | 0.95 |
| 124 | 4.40 | 15 | 17.293 | 21.228 | 17.850 | 22.590 | 217 | 0.847 | 0.98 |
| 124 | 4.40 | 15 | 18.376 | 22.573 | 18.970 | 24.030 | 245 | 0.939 | 0.98 |
| 125 | 4.40 | 16 | 3.178 | 27.498 | 24.030 | 29.020 | 3 | 3.803 | 1.00 |
| 125 | 4.40 | 16 | 4.222 | 28.737 | 25.330 | 30.260 | 6 | 4.129 | 1.00 |
| 125 | 4.40 | 16 | 5.343 | 30.057 | 26.700 | 31.550 | 179 | 3.894 | 0.99 |
| 125 | 4.40 | 16 | 6.426 | 31.327 | 28.010 | 32.780 | 186 | 4.041 | 0.99 |
| 125 | 4.40 | 16 | 7.509 | 32.589 | 29.300 | 34.000 | 193 | 4.115 | 0.99 |
| 125 | 4.40 | 16 | 8.592 | 33.847 | 30.590 | 35.270 | 391 | 3.916 | 0.98 |
| 125 | 4.40 | 16 | 9.676 | 35.101 | 31.870 | 36.590 | 201 | 4.058 | 0.99 |
| 125 | 4.40 | 16 | 10.758 | 36.350 | 33.140 | 37.920 | 416 | 3.979 | 0.98 |
| 125 | 4.40 | 16 | 11.842 | 37.598 | 34.410 | 39.250 | 215 | 4.208 | 0.99 |
| 125 | 4.40 | 16 | 12.925 | 38.840 | 35.670 | 40.580 | 220 | 4.240 | 0.99 |
| 125 | 4.40 | 16 | 14.011 | 40.081 | 36.930 | 41.910 | 3 | 4.696 | 1.00 |
| 125 | 4.40 | 16 | 15.092 | 41.314 | 38.180 | 43.230 | 0 | 4.655 | 1.00 |
| 125 | 4.40 | 16 | 15.247 | 41.489 | 38.360 | 43.420 | 226 | 4.413 | 0.99 |
| 125 | 4.40 | 16 | 15.285 | 41.533 | 38.400 | 43.470 | 231 | 4.467 | 0.99 |
| 125 | 4.40 | 16 | 16.176 | 42.545 | 39.430 | 44.550 | 235 | 4.403 | 0.99 |
| 126 | 4.40 | 17 | 3.655 | 44.377 | 43.460 | 45.140 | 719 | 0.875 | 0.97 |
| 126 | 4.40 | 17 | 4.737 | 44.843 | 43.930 | 45.570 | 726 | 0.786 | 0.97 |
| 126 | 4.40 | 17 | 5.821 | 45.311 | 44.400 | 46.000 | -11 | 0.871 | 1.00 |
| 126 | 4.40 | 17 | 6.904 | 45.780 | 44.880 | 46.430 | -10 | 0.843 | 1.00 |
| 126 | 4.40 | 17 | 7.986 | 46.249 | 45.350 | 46.860 | -7 | 0.854 | 1.00 |
| 126 | 4.40 | 17 | 9.031 | 46.703 | 45.810 | 47.280 | -5 | 0.882 | 1.00 |
| 126 | 4.40 | 17 | 10.152 | 47.193 | 46.310 | 47.730 | -251 | 0.735 | 1.01 |
| 126 | 4.40 | 17 | 11.235 | 47.669 | 46.790 | 48.160 | 0 | 0.901 | 1.00 |
| 126 | 4.40 | 17 | 12.317 | 48.148 | 47.280 | 48.600 | -254 | 0.818 | 1.01 |
| 126 | 4.40 | 17 | 13.360 | 48.613 | 47.750 | 49.030 | 516 | 0.784 | 0.98 |
| 126 | 4.40 | 17 | 14.482 | 49.121 | 48.260 | 49.490 | -258 | 0.889 | 1.01 |
| 126 | 4.40 | 17 | 15.564 | 49.616 | 48.760 | 49.940 | -2 | 0.972 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 126 | 4.40 | 17 | 16.622 | 50.107 | 49.260 | 50.490 | 261 | 1.075 | 0.99 |
| 127 | 4.73 | 15 | 9.738 | 11.911 | 11.480 | 12.560 | 39 | 0.412 | 0.99 |
| 127 | 4.73 | 15 | 10.822 | 13.248 | 12.720 | 14.010 | 96 | 0.435 | 0.98 |
| 127 | 4.73 | 15 | 11.903 | 14.582 | 13.960 | 15.470 | -56 | 0.631 | 1.01 |
| 127 | 4.73 | 15 | 12.984 | 15.915 | 15.200 | 16.930 | -359 | 0.406 | 1.05 |
| 127 | 4.73 | 15 | 14.067 | 17.250 | 16.440 | 18.400 | 8 | 0.880 | 1.00 |
| 127 | 4.73 | 15 | 15.073 | 18.491 | 17.590 | 19.760 | 11 | 0.963 | 1.00 |
| 127 | 4.73 | 15 | 16.209 | 19.891 | 18.890 | 21.300 | -90 | 1.110 | 1.01 |
| 127 | 4.73 | 15 | 17.293 | 21.225 | 20.130 | 22.760 | -229 | 1.231 | 1.02 |
| 127 | 4.73 | 15 | 18.376 | 22.559 | 21.370 | 24.220 | 5 | 1.458 | 1.00 |
| 128 | 4.73 | 16 | 3.178 | 27.613 | 26.270 | 29.360 | 2 | 2.070 | 1.00 |
| 128 | 4.73 | 16 | 4.222 | 28.886 | 27.520 | 30.650 | -160 | 2.190 | 1.01 |
| 128 | 4.73 | 16 | 5.343 | 30.237 | 28.840 | 32.020 | -161 | 2.405 | 1.01 |
| 128 | 4.73 | 16 | 6.426 | 31.532 | 30.100 | 33.340 | -167 | 2.457 | 1.01 |
| 128 | 4.73 | 16 | 7.509 | 32.818 | 31.340 | 34.660 | 10 | 2.581 | 1.00 |
| 128 | 4.73 | 16 | 8.592 | 34.096 | 32.570 | 35.990 | 204 | 2.580 | 0.99 |
| 128 | 4.73 | 16 | 9.676 | 35.369 | 33.790 | 37.320 | 203 | 2.498 | 0.99 |
| 128 | 4.73 | 16 | 10.758 | 36.635 | 34.990 | 38.640 | 420 | 2.431 | 0.98 |
| 128 | 4.73 | 16 | 11.842 | 37.899 | 36.190 | 39.970 | 422 | 2.449 | 0.98 |
| 128 | 4.73 | 16 | 12.925 | 39.157 | 37.390 | 41.300 | 437 | 2.324 | 0.98 |
| 128 | 4.73 | 16 | 14.011 | 40.413 | 38.580 | 42.620 | 220 | 2.687 | 0.99 |
| 128 | 4.73 | 16 | 15.092 | 41.662 | 39.770 | 43.930 | 222 | 2.693 | 0.99 |
| 128 | 4.73 | 16 | 15.247 | 41.839 | 39.940 | 44.120 | 232 | 2.532 | 0.99 |
| 128 | 4.73 | 16 | 15.285 | 41.884 | 39.980 | 44.170 | 232 | 2.732 | 0.99 |
| 128 | 4.73 | 16 | 16.176 | 42.908 | 40.950 | 45.250 | 235 | 2.607 | 0.99 |
| 129 | 4.73 | 17 | 3.655 | 46.764 | 45.100 | 48.630 | -507 | 0.776 | 1.02 |
| 129 | 4.73 | 17 | 4.737 | 47.160 | 45.600 | 48.850 | -755 | 0.764 | 1.03 |
| 129 | 4.73 | 17 | 5.821 | 47.557 | 46.110 | 49.070 | -10 | 1.044 | 1.00 |
| 129 | 4.73 | 17 | 6.904 | 47.954 | 46.610 | 49.290 | -10 | 1.014 | 1.00 |
| 129 | 4.73 | 17 | 7.986 | 48.352 | 47.110 | 49.510 | -514 | 0.859 | 1.02 |
| 129 | 4.73 | 17 | 9.031 | 48.738 | 47.590 | 49.730 | -515 | 0.865 | 1.02 |
| 129 | 4.73 | 17 | 10.152 | 49.154 | 48.110 | 49.960 | -771 | 0.727 | 1.03 |
| 129 | 4.73 | 17 | 11.235 | 49.559 | 48.620 | 50.190 | -1029 | 0.741 | 1.04 |
| 129 | 4.73 | 17 | 12.317 | 49.967 | 49.120 | 50.490 | -523 | 0.897 | 1.02 |
| 129 | 4.73 | 17 | 13.360 | 50.365 | 49.620 | 50.960 | -785 | 0.792 | 1.03 |
| 129 | 4.73 | 17 | 14.482 | 50.799 | 50.160 | 51.460 | -267 | 1.097 | 1.01 |
| 129 | 4.73 | 17 | 15.564 | 51.224 | 50.690 | 51.960 | -1 | 1.250 | 1.00 |
| 129 | 4.73 | 17 | 16.622 | 51.646 | 51.210 | 52.450 | 538 | 1.264 | 0.98 |
| 130 | 4.38 | 16 | 8.592 | 10.393 | 9.080 | 11.090 | 9 | 0.311 | 1.01 |
| 130 | 4.38 | 16 | 15.285 | 18.931 | 15.730 | 20.010 | 163 | 0.333 | 0.98 |
| 130 | 4.38 | 16 | 16.176 | 20.072 | 16.620 | 21.220 | 276 | 0.392 | 0.97 |
| 131 | 4.38 | 17 | 3.655 | 27.485 | 23.590 | 28.790 | -150 | 8.137 | 1.01 |
| 131 | 4.38 | 17 | 4.737 | 28.787 | 24.940 | 30.060 | -161 | 8.273 | 1.01 |
| 131 | 4.38 | 17 | 5.821 | 30.071 | 26.270 | 31.300 | -163 | 8.158 | 1.01 |
| 131 | 4.38 | 17 | 6.904 | 31.338 | 27.600 | 32.520 | -163 | 8.202 | 1.01 |
| 131 | 4.38 | 17 | 7.986 | 32.592 | 28.910 | 33.770 | -169 | 8.236 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 131 | 4.38 | 17 | 9.031 | 33.791 | 30.170 | 35.030 | -170 | 8.084 | 1.01 |
| 131 | 4.38 | 17 | 10.152 | 35.069 | 31.520 | 36.380 | -179 | 8.184 | 1.01 |
| 131 | 4.38 | 17 | 11.235 | 36.296 | 32.810 | 37.680 | -186 | 8.142 | 1.01 |
| 131 | 4.38 | 17 | 12.317 | 37.515 | 34.100 | 38.990 | -191 | 8.188 | 1.01 |
| 131 | 4.38 | 17 | 13.360 | 38.685 | 35.340 | 40.250 | -191 | 8.306 | 1.01 |
| 131 | 4.38 | 17 | 14.482 | 39.940 | 36.660 | 41.600 | -201 | 8.428 | 1.01 |
| 131 | 4.38 | 17 | 15.564 | 41.145 | 37.930 | 42.900 | 13 | 8.988 | 1.00 |
| 131 | 4.38 | 17 | 16.622 | 42.321 | 39.170 | 44.160 | 18 | 9.326 | 1.00 |
| 132 | 4.90 | 16 | 8.592 | 10.361 | 10.170 | 10.470 | 51 | 0.434 | 0.99 |
| 132 | 4.90 | 16 | 9.676 | 11.685 | 11.410 | 11.850 | 133 | 0.567 | 0.97 |
| 132 | 4.90 | 16 | 10.758 | 13.004 | 12.650 | 13.230 | 281 | 0.540 | 0.95 |
| 132 | 4.90 | 16 | 11.842 | 14.320 | 13.890 | 14.620 | 142 | 1.111 | 0.98 |
| 132 | 4.90 | 16 | 12.925 | 15.632 | 15.120 | 16.000 | 378 | 1.068 | 0.95 |
| 132 | 4.90 | 16 | 14.011 | 16.945 | 16.360 | 17.380 | 172 | 1.786 | 0.98 |
| 132 | 4.90 | 16 | 15.092 | 18.253 | 17.600 | 18.760 | 101 | 2.199 | 0.99 |
| 132 | 4.90 | 16 | 15.247 | 18.440 | 17.770 | 18.950 | 205 | 2.026 | 0.98 |
| 132 | 4.90 | 16 | 15.285 | 18.487 | 17.820 | 19.000 | 117 | 2.282 | 0.99 |
| 132 | 4.90 | 16 | 16.176 | 19.563 | 18.830 | 20.130 | 132 | 2.584 | 0.99 |
| 133 | 4.90 | 17 | 3.655 | 26.822 | 25.790 | 27.670 | -159 | 2.527 | 1.01 |
| 133 | 4.90 | 17 | 4.737 | 28.163 | 27.080 | 29.050 | -166 | 2.517 | 1.01 |
| 133 | 4.90 | 17 | 5.821 | 29.501 | 28.370 | 30.410 | -174 | 2.772 | 1.01 |
| 133 | 4.90 | 17 | 6.904 | 30.834 | 29.660 | 31.760 | -9 | 2.986 | 1.00 |
| 133 | 4.90 | 17 | 7.986 | 32.162 | 30.930 | 33.100 | -11 | 3.086 | 1.00 |
| 133 | 4.90 | 17 | 9.031 | 33.441 | 32.170 | 34.370 | 175 | 3.304 | 0.99 |
| 133 | 4.90 | 17 | 10.152 | 34.810 | 33.480 | 35.730 | 178 | 3.269 | 0.99 |
| 133 | 4.90 | 17 | 11.235 | 36.128 | 34.750 | 37.100 | 184 | 3.375 | 0.99 |
| 133 | 4.90 | 17 | 12.317 | 37.442 | 36.020 | 38.480 | 190 | 3.384 | 0.99 |
| 133 | 4.90 | 17 | 13.360 | 38.705 | 37.240 | 39.810 | 407 | 3.388 | 0.98 |
| 133 | 4.90 | 17 | 14.482 | 40.058 | 38.550 | 41.240 | 202 | 3.428 | 0.99 |
| 133 | 4.90 | 17 | 15.564 | 41.359 | 39.810 | 42.600 | 224 | 3.267 | 0.99 |
| 133 | 4.90 | 17 | 16.622 | 42.626 | 41.040 | 43.930 | 232 | 3.525 | 0.99 |
| 134 | 4.20 | 17 | 4.737 | 5.783 | 5.480 | 6.100 | 7 | 0.423 | 1.01 |
| 134 | 4.20 | 17 | 5.821 | 7.119 | 6.770 | 7.460 | -5 | 0.514 | 0.99 |
| 134 | 4.20 | 17 | 6.904 | 8.454 | 8.050 | 8.860 | 5 | 0.406 | 1.00 |
| 134 | 4.20 | 17 | 7.986 | 9.785 | 9.330 | 10.280 | 72 | 0.347 | 0.95 |
| 134 | 4.20 | 17 | 9.031 | 11.066 | 10.570 | 11.650 | 109 | 0.338 | 0.96 |
| 134 | 4.20 | 17 | 10.152 | 12.348 | 11.810 | 12.890 | 209 | 0.424 | 0.98 |
| 134 | 4.20 | 17 | 11.235 | 13.630 | 12.940 | 14.140 | 466 | 0.349 | 0.96 |
| 135 | 4.82 | 17 | 9.031 | 10.297 | 9.590 | 11.080 | -17 | 0.515 | 1.00 |
| 135 | 4.82 | 17 | 10.152 | 11.589 | 10.750 | 12.490 | 125 | 0.568 | 0.97 |
| 135 | 4.82 | 17 | 11.235 | 12.833 | 11.870 | 13.840 | 101 | 0.798 | 0.98 |
| 135 | 4.82 | 17 | 12.317 | 14.075 | 12.990 | 15.190 | -12 | 1.299 | 1.00 |
| 135 | 4.82 | 17 | 13.360 | 15.272 | 14.070 | 16.480 | -165 | 1.287 | 1.02 |
| 135 | 4.82 | 17 | 14.482 | 16.559 | 15.230 | 17.870 | -100 | 1.791 | 1.01 |
| 135 | 4.82 | 17 | 15.564 | 17.800 | 16.350 | 19.200 | 91 | 2.016 | 0.99 |
| 135 | 4.82 | 17 | 16.622 | 19.015 | 17.450 | 20.500 | 1 | 2.571 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 136 | 4.20 | 17 | 16.622 | 21.104 | 21.030 | 21.160 | 426 | 0.422 | 0.95 |
| 137 | 3.40 | 11 | 4.672 | 5.872 | 5.740 | 6.000 | 80 | 0.353 | 0.96 |
| 137 | 3.40 | 11 | 5.072 | 6.379 | 6.240 | 6.510 | 114 | 0.340 | 0.95 |
| 137 | 3.40 | 11 | 5.607 | 7.059 | 6.910 | 7.200 | 124 | 0.339 | 0.95 |
| 137 | 3.40 | 11 | 6.690 | 8.437 | 8.280 | 8.600 | 64 | 0.610 | 0.98 |
| 137 | 3.40 | 11 | 7.773 | 9.817 | 9.650 | 10.000 | 293 | 0.454 | 0.93 |
| 137 | 3.40 | 11 | 8.859 | 11.204 | 11.010 | 11.410 | 154 | 0.846 | 0.97 |
| 137 | 3.40 | 11 | 9.942 | 12.586 | 12.330 | 12.810 | 126 | 1.138 | 0.98 |
| 137 | 3.40 | 11 | 10.671 | 13.516 | 13.220 | 13.750 | 210 | 1.070 | 0.97 |
| 137 | 3.40 | 11 | 11.482 | 14.550 | 14.210 | 14.790 | 161 | 1.365 | 0.98 |
| 137 | 3.40 | 11 | 12.565 | 15.927 | 15.530 | 16.180 | 87 | 1.811 | 0.99 |
| 137 | 3.40 | 11 | 13.601 | 17.240 | 16.790 | 17.510 | 214 | 1.714 | 0.98 |
| 138 | 3.40 | 12 | 3.606 | 21.115 | 19.270 | 22.300 | -136 | 1.359 | 1.01 |
| 138 | 3.40 | 12 | 4.544 | 21.981 | 19.720 | 23.430 | 8 | 1.443 | 1.00 |
| 138 | 3.40 | 12 | 5.630 | 22.980 | 20.250 | 24.730 | 322 | 1.451 | 0.98 |
| 138 | 3.40 | 12 | 7.836 | 25.002 | 21.320 | 27.360 | 512 | 1.278 | 0.97 |
| 138 | 3.40 | 12 | 8.899 | 25.972 | 21.850 | 28.610 | 524 | 1.275 | 0.97 |
| 138 | 3.40 | 12 | 10.070 | 27.042 | 22.430 | 29.990 | 180 | 1.553 | 0.99 |
| 138 | 3.40 | 12 | 10.931 | 27.828 | 22.860 | 31.000 | 554 | 1.249 | 0.97 |
| 138 | 3.40 | 12 | 11.989 | 28.795 | 23.410 | 32.240 | 569 | 1.153 | 0.97 |
| 138 | 3.40 | 12 | 12.997 | 29.717 | 23.930 | 33.420 | -3 | 1.343 | 1.00 |
| 139 | 3.40 | 13 | 3.513 | 28.577 | 26.220 | 34.110 | 537 | 0.550 | 0.97 |
| 139 | 3.40 | 13 | 4.670 | 29.227 | 26.800 | 35.240 | 745 | 0.418 | 0.96 |
| 139 | 3.40 | 13 | 5.677 | 29.795 | 27.310 | 36.240 | 952 | 0.334 | 0.95 |
| 139 | 3.40 | 13 | 6.757 | 30.407 | 27.850 | 37.330 | 968 | 0.361 | 0.95 |
| 139 | 3.40 | 13 | 7.919 | 31.068 | 28.430 | 38.510 | 787 | 0.356 | 0.96 |
| 139 | 3.40 | 13 | 10.002 | 32.260 | 29.480 | 40.660 | 810 | 0.355 | 0.96 |
| 139 | 3.40 | 13 | 12.244 | 33.559 | 30.610 | 43.000 | 840 | 0.308 | 0.96 |
| 139 | 3.40 | 13 | 15.493 | 35.484 | 32.300 | 46.420 | 874 | 0.301 | 0.96 |
| 139 | 3.40 | 13 | 16.573 | 36.138 | 32.870 | 47.560 | 881 | 0.335 | 0.96 |
| 140 | 3.55 | 11 | 7.773 | 9.010 | 8.700 | 9.350 | 275 | 0.310 | 0.96 |
| 140 | 3.55 | 11 | 8.859 | 10.268 | 9.920 | 10.650 | 238 | 0.460 | 0.97 |
| 140 | 3.55 | 11 | 9.942 | 11.518 | 11.120 | 11.940 | 16 | 0.521 | 1.00 |
| 140 | 3.55 | 11 | 10.671 | 12.359 | 11.940 | 12.810 | 111 | 0.634 | 0.99 |
| 140 | 3.55 | 11 | 11.482 | 13.293 | 12.840 | 13.770 | 214 | 0.687 | 0.98 |
| 140 | 3.55 | 11 | 12.565 | 14.538 | 14.050 | 15.060 | -90 | 0.712 | 1.01 |
| 140 | 3.55 | 11 | 13.601 | 15.729 | 15.210 | 16.280 | 134 | 0.864 | 0.99 |
| 141 | 3.55 | 12 | 3.606 | 20.171 | 19.330 | 21.160 | 146 | 2.096 | 0.99 |
| 141 | 3.55 | 12 | 4.544 | 21.184 | 20.260 | 22.280 | 151 | 2.046 | 0.99 |
| 141 | 3.55 | 12 | 5.630 | 22.347 | 21.340 | 23.570 | 162 | 2.061 | 0.99 |
| 141 | 3.55 | 12 | 7.836 | 24.689 | 23.500 | 26.170 | 174 | 2.017 | 0.99 |
| 141 | 3.55 | 12 | 8.899 | 25.808 | 24.530 | 27.420 | 9 | 1.886 | 1.00 |
| 141 | 3.55 | 12 | 10.070 | 27.037 | 25.670 | 28.780 | 4 | 1.943 | 1.00 |
| 141 | 3.55 | 12 | 10.931 | 27.939 | 26.510 | 29.780 | 9 | 1.943 | 1.00 |
| 141 | 3.55 | 12 | 11.989 | 29.047 | 27.540 | 31.010 | 9 | 2.022 | 1.00 |
| 141 | 3.55 | 12 | 12.997 | 30.101 | 28.520 | 32.170 | -3 | 1.862 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 142 | 3.67 | 12 | 12.997 | 16.375 | 14.380 | 17.210 | 95 | 0.372 | 0.99 |
| 143 | 3.67 | 13 | 19.610 | 21.468 | 19.610 | 22.720 | -286 | 1.045 | 1.02 |
| 143 | 3.67 | 13 | 4.670 | 22.738 | 20.950 | 24.130 | 158 | 1.178 | 0.99 |
| 143 | 3.67 | 13 | 5.677 | 23.840 | 21.590 | 25.360 | 322 | 1.208 | 0.98 |
| 143 | 3.67 | 13 | 6.757 | 25.019 | 22.210 | 26.670 | 334 | 1.195 | 0.98 |
| 143 | 3.67 | 13 | 7.919 | 26.282 | 22.880 | 28.090 | 347 | 1.237 | 0.98 |
| 143 | 3.67 | 13 | 8.999 | 27.453 | 23.500 | 29.400 | 530 | 1.208 | 0.97 |
| 143 | 3.67 | 13 | 10.002 | 28.537 | 24.070 | 30.620 | 369 | 1.287 | 0.98 |
| 143 | 3.67 | 13 | 11.160 | 29.785 | 24.730 | 32.020 | 564 | 1.267 | 0.97 |
| 143 | 3.67 | 13 | 12.244 | 30.951 | 25.350 | 33.330 | 588 | 1.179 | 0.97 |
| 143 | 3.67 | 13 | 13.247 | 32.026 | 25.920 | 34.540 | 596 | 1.268 | 0.97 |
| 143 | 3.67 | 13 | 14.408 | 33.268 | 26.600 | 35.940 | 614 | 1.220 | 0.97 |
| 143 | 3.67 | 13 | 15.493 | 34.424 | 27.240 | 37.240 | 635 | 1.089 | 0.97 |
| 143 | 3.67 | 13 | 16.573 | 35.574 | 27.880 | 38.520 | 653 | 1.053 | 0.97 |
| 144 | 3.67 | 14 | 3.006 | 32.411 | 29.670 | 35.150 | 408 | 0.421 | 0.98 |
| 144 | 3.67 | 14 | 4.086 | 32.820 | 30.230 | 35.410 | 416 | 0.455 | 0.98 |
| 144 | 3.67 | 14 | 5.169 | 33.230 | 30.790 | 35.670 | 846 | 0.506 | 0.96 |
| 144 | 3.67 | 14 | 6.248 | 33.638 | 31.350 | 35.930 | 433 | 0.499 | 0.98 |
| 144 | 3.67 | 14 | 7.365 | 34.061 | 31.930 | 36.190 | 870 | 0.497 | 0.96 |
| 144 | 3.67 | 14 | 8.324 | 34.424 | 32.420 | 36.430 | 880 | 0.430 | 0.96 |
| 144 | 3.67 | 14 | 9.406 | 34.834 | 32.980 | 36.690 | 1333 | 0.377 | 0.94 |
| 144 | 3.67 | 14 | 10.485 | 35.244 | 33.540 | 36.950 | 1121 | 0.374 | 0.95 |
| 144 | 3.67 | 14 | 11.564 | 35.656 | 34.090 | 37.220 | 676 | 0.408 | 0.97 |
| 144 | 3.67 | 14 | 12.646 | 36.072 | 34.660 | 37.490 | 680 | 0.399 | 0.97 |
| 144 | 3.67 | 14 | 13.729 | 36.493 | 35.220 | 37.760 | 681 | 0.383 | 0.97 |
| 144 | 3.67 | 14 | 14.807 | 36.917 | 35.790 | 38.040 | 691 | 0.350 | 0.97 |
| 144 | 3.67 | 14 | 16.431 | 37.570 | 36.660 | 38.480 | -480 | 0.359 | 1.02 |
| 145 | 3.92 | 14 | 3.006 | 18.553 | 15.880 | 19.920 | -921 | 0.377 | 1.07 |
| 145 | 3.92 | 14 | 4.086 | 19.671 | 17.130 | 20.980 | -546 | 0.759 | 1.04 |
| 145 | 3.92 | 14 | 5.169 | 20.780 | 18.370 | 22.020 | -274 | 1.092 | 1.02 |
| 145 | 3.92 | 14 | 6.248 | 21.877 | 19.600 | 23.060 | 19 | 1.422 | 1.00 |
| 145 | 3.92 | 14 | 7.365 | 23.003 | 20.860 | 24.120 | 178 | 1.573 | 0.99 |
| 145 | 3.92 | 14 | 8.324 | 23.962 | 21.930 | 25.020 | 513 | 1.606 | 0.97 |
| 145 | 3.92 | 14 | 9.406 | 25.036 | 23.130 | 26.030 | 362 | 1.912 | 0.98 |
| 145 | 3.92 | 14 | 10.485 | 26.101 | 24.320 | 27.030 | 371 | 1.829 | 0.98 |
| 145 | 3.92 | 14 | 11.564 | 27.159 | 25.500 | 28.030 | 375 | 1.721 | 0.98 |
| 145 | 3.92 | 14 | 12.646 | 28.218 | 26.670 | 29.040 | 383 | 1.781 | 0.98 |
| 145 | 3.92 | 14 | 13.729 | 29.275 | 27.840 | 30.040 | 192 | 1.775 | 0.99 |
| 145 | 3.92 | 14 | 14.807 | 30.328 | 29.000 | 31.040 | 206 | 1.784 | 0.99 |
| 145 | 3.92 | 14 | 15.619 | 31.121 | 29.870 | 31.790 | 205 | 1.720 | 0.99 |
| 145 | 3.92 | 14 | 16.431 | 31.917 | 30.740 | 32.550 | 383 | 1.582 | 0.98 |
| 145 | 3.92 | 14 | 17.312 | 32.782 | 31.690 | 33.380 | 11 | 1.616 | 1.00 |
| 146 | 3.92 | 15 | 12.905 | 38.732 | 38.350 | 38.980 | 460 | 0.325 | 0.98 |
| 147 | 3.92 | 14 | 3.006 | 24.452 | 22.140 | 25.580 | -481 | 1.754 | 1.03 |
| 147 | 3.92 | 14 | 4.086 | 25.673 | 23.350 | 26.860 | -167 | 2.205 | 1.01 |
| 147 | 3.92 | 14 | 5.169 | 26.892 | 24.540 | 28.180 | 172 | 1.878 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 147 | 3.92 | 14 | 6.248 | 28.102 | 25.720 | 29.490 | 356 | 1.712 | 0.98 |
| 147 | 3.92 | 14 | 7.365 | 29.352 | 26.930 | 30.850 | 554 | 1.498 | 0.97 |
| 147 | 3.92 | 14 | 8.324 | 30.423 | 27.850 | 32.020 | 762 | 1.482 | 0.96 |
| 147 | 3.92 | 14 | 9.406 | 31.628 | 28.530 | 33.330 | 785 | 1.410 | 0.96 |
| 147 | 3.92 | 14 | 10.485 | 32.825 | 29.210 | 34.640 | 803 | 1.404 | 0.96 |
| 147 | 3.92 | 14 | 11.564 | 34.020 | 29.890 | 35.950 | 616 | 1.685 | 0.97 |
| 147 | 3.92 | 14 | 12.646 | 35.215 | 30.580 | 37.260 | 631 | 1.593 | 0.97 |
| 147 | 3.92 | 14 | 13.729 | 36.407 | 31.270 | 38.560 | 428 | 1.786 | 0.98 |
| 147 | 3.92 | 14 | 14.807 | 37.591 | 31.970 | 39.850 | 657 | 1.703 | 0.97 |
| 147 | 3.92 | 14 | 15.619 | 38.481 | 32.490 | 40.810 | 221 | 2.000 | 0.99 |
| 147 | 3.92 | 14 | 16.431 | 39.368 | 33.030 | 41.770 | -219 | 1.825 | 1.01 |
| 147 | 3.92 | 14 | 17.312 | 40.329 | 33.610 | 42.800 | 452 | 1.850 | 0.98 |
| 148 | 3.92 | 13 | 16.573 | 21.573 | 21.240 | 21.900 | -417 | 0.327 | 1.04 |
| 149 | 3.92 | 14 | 3.006 | 24.570 | 23.720 | 25.410 | 462 | 0.482 | 0.97 |
| 149 | 3.92 | 14 | 4.086 | 25.475 | 24.230 | 26.700 | 484 | 0.494 | 0.97 |
| 149 | 3.92 | 14 | 5.169 | 26.382 | 24.740 | 28.010 | 505 | 0.496 | 0.97 |
| 149 | 3.92 | 14 | 6.248 | 27.287 | 25.250 | 29.310 | 352 | 0.588 | 0.98 |
| 149 | 3.92 | 14 | 7.365 | 28.224 | 25.780 | 30.660 | 366 | 0.613 | 0.98 |
| 149 | 3.92 | 14 | 8.324 | 29.028 | 26.230 | 31.820 | 377 | 0.733 | 0.98 |
| 149 | 3.92 | 14 | 9.406 | 29.937 | 26.730 | 33.130 | 388 | 0.753 | 0.98 |
| 149 | 3.92 | 14 | 10.485 | 30.842 | 27.240 | 34.440 | 21 | 0.886 | 1.00 |
| 149 | 3.92 | 14 | 11.564 | 31.748 | 27.750 | 35.740 | -175 | 0.692 | 1.01 |
| 149 | 3.92 | 14 | 12.646 | 32.657 | 28.260 | 37.050 | -373 | 0.635 | 1.02 |
| 149 | 3.92 | 14 | 13.729 | 33.566 | 28.780 | 38.350 | -781 | 0.446 | 1.04 |
| 149 | 3.92 | 14 | 14.807 | 34.471 | 29.310 | 39.640 | -787 | 0.427 | 1.04 |
| 149 | 3.92 | 14 | 16.431 | 35.835 | 30.110 | 41.560 | -421 | 0.321 | 1.02 |
| 149 | 3.92 | 14 | 17.312 | 36.575 | 30.560 | 42.600 | -1039 | 0.335 | 1.05 |
| 150 | 4.50 | 15 | 4.553 | 21.341 | 19.740 | 22.140 | 1067 | 0.376 | 0.93 |
| 150 | 4.50 | 15 | 5.636 | 22.241 | 20.880 | 22.920 | 950 | 0.412 | 0.94 |
| 150 | 4.50 | 15 | 6.720 | 23.131 | 22.020 | 23.690 | 1140 | 0.377 | 0.93 |
| 150 | 4.50 | 15 | 7.795 | 24.007 | 23.140 | 24.440 | 1338 | 0.356 | 0.92 |
| 150 | 4.50 | 15 | 8.847 | 24.858 | 24.230 | 25.170 | 1196 | 0.400 | 0.93 |
| 150 | 4.50 | 15 | 10.008 | 25.791 | 25.440 | 25.970 | 1230 | 0.411 | 0.93 |
| 150 | 4.50 | 15 | 12.905 | 28.110 | 27.900 | 28.580 | 921 | 0.563 | 0.95 |
| 150 | 4.50 | 15 | 14.170 | 29.124 | 28.760 | 29.900 | 1164 | 0.481 | 0.94 |
| 150 | 4.50 | 15 | 15.254 | 29.997 | 29.500 | 31.030 | 797 | 0.634 | 0.96 |
| 150 | 4.50 | 15 | 16.337 | 30.874 | 30.250 | 32.170 | 380 | 0.825 | 0.98 |
| 150 | 4.50 | 15 | 17.412 | 31.752 | 31.000 | 33.310 | 643 | 0.736 | 0.97 |
| 151 | 4.50 | 16 | 4.433 | 35.356 | 34.410 | 37.330 | 659 | 0.366 | 0.97 |
| 151 | 4.50 | 16 | 5.517 | 35.790 | 34.850 | 37.750 | 1119 | 0.364 | 0.95 |
| 151 | 4.50 | 16 | 8.286 | 36.942 | 36.010 | 38.890 | 1149 | 0.451 | 0.95 |
| 151 | 4.50 | 16 | 8.739 | 37.137 | 36.200 | 39.090 | 1390 | 0.322 | 0.94 |
| 151 | 4.50 | 16 | 10.907 | 38.095 | 37.150 | 40.060 | 1663 | 0.307 | 0.93 |
| 151 | 4.50 | 16 | 11.991 | 38.589 | 37.650 | 40.570 | 949 | 0.440 | 0.96 |
| 151 | 4.50 | 16 | 14.147 | 39.602 | 38.650 | 41.600 | 1466 | 0.305 | 0.94 |
| 151 | 4.50 | 16 | 15.231 | 40.126 | 39.170 | 42.140 | 986 | 0.366 | 0.96 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 151 | 4.50 | 16 | 16.316 | 40.659 | 39.690 | 42.680 | 990 | 0.301 | 0.96 |
| 151 | 4.50 | 16 | 17.400 | 41.201 | 40.230 | 43.240 | 1000 | 0.399 | 0.96 |
| 151 | 4.50 | 16 | 8.746 | 37.157 | 36.200 | 39.090 | 1158 | 0.375 | 0.95 |
| 152 | 4.50 | 14 | 12.646 | 14.323 | 14.060 | 14.580 | 60 | 0.327 | 0.99 |
| 152 | 4.50 | 14 | 13.729 | 15.526 | 15.220 | 15.820 | -17 | 0.426 | 1.00 |
| 152 | 4.50 | 14 | 14.807 | 16.726 | 16.380 | 17.060 | 157 | 0.360 | 0.98 |
| 152 | 4.50 | 14 | 16.431 | 18.538 | 18.140 | 18.930 | 175 | 0.438 | 0.98 |
| 152 | 4.50 | 14 | 17.312 | 19.527 | 19.100 | 19.950 | -348 | 0.521 | 1.03 |
| 153 | 4.50 | 15 | 3.508 | 25.099 | 24.640 | 25.550 | 23 | 1.549 | 1.00 |
| 153 | 4.50 | 15 | 4.553 | 26.344 | 25.890 | 26.790 | 14 | 1.436 | 1.00 |
| 153 | 4.50 | 15 | 5.636 | 27.619 | 27.170 | 28.060 | 364 | 1.778 | 0.98 |
| 153 | 4.50 | 15 | 6.720 | 28.877 | 28.450 | 29.300 | 197 | 1.853 | 0.99 |
| 153 | 4.50 | 15 | 7.795 | 30.111 | 29.700 | 30.520 | 387 | 1.958 | 0.98 |
| 153 | 4.50 | 15 | 8.847 | 31.307 | 30.920 | 31.690 | -171 | 1.476 | 1.01 |
| 153 | 4.50 | 15 | 10.008 | 32.613 | 32.250 | 32.970 | 401 | 1.942 | 0.98 |
| 153 | 4.50 | 15 | 11.048 | 33.776 | 33.450 | 34.100 | 17 | 1.935 | 1.00 |
| 153 | 4.50 | 15 | 12.132 | 34.979 | 34.680 | 35.270 | 218 | 2.018 | 0.99 |
| 153 | 4.50 | 15 | 12.905 | 35.834 | 35.560 | 36.100 | 218 | 2.054 | 0.99 |
| 153 | 4.50 | 15 | 14.170 | 37.229 | 37.000 | 37.450 | -204 | 1.474 | 1.01 |
| 153 | 4.50 | 15 | 15.254 | 38.420 | 38.230 | 38.600 | 228 | 1.914 | 0.99 |
| 153 | 4.50 | 15 | 16.337 | 39.608 | 39.450 | 39.760 | -675 | 0.986 | 1.03 |
| 153 | 4.50 | 15 | 17.412 | 40.787 | 40.660 | 40.900 | -440 | 1.289 | 1.02 |
| 154 | 4.50 | 16 | 8.739 | 45.904 | 45.860 | 46.060 | 500 | 0.322 | 0.98 |
| 154 | 4.50 | 16 | 10.907 | 46.573 | 46.540 | 46.720 | 1030 | 0.305 | 0.96 |
| 154 | 4.50 | 16 | 11.991 | 46.917 | 46.880 | 47.070 | 509 | 0.343 | 0.98 |
| 154 | 4.50 | 16 | 14.147 | 47.620 | 47.590 | 47.770 | 511 | 0.385 | 0.98 |
| 154 | 4.50 | 16 | 15.231 | 47.984 | 47.950 | 48.130 | 520 | 0.343 | 0.98 |
| 154 | 4.50 | 16 | 16.316 | 48.356 | 48.320 | 48.500 | 517 | 0.301 | 0.98 |
| 154 | 4.50 | 16 | 17.400 | 48.736 | 48.690 | 48.880 | 1065 | 0.310 | 0.96 |
| 155 | 4.14 | 14 | 17.312 | 22.177 | 21.320 | 23.020 | -383 | 0.338 | 1.04 |
| 156 | 4.14 | 15 | 3.508 | 27.774 | 26.900 | 28.630 | -344 | 0.370 | 1.02 |
| 156 | 4.14 | 15 | 4.553 | 28.963 | 28.100 | 29.810 | 179 | 0.483 | 0.99 |
| 156 | 4.14 | 15 | 5.636 | 30.180 | 29.340 | 31.000 | -179 | 0.374 | 1.01 |
| 156 | 4.14 | 15 | 6.720 | 31.383 | 30.570 | 32.180 | 4 | 0.418 | 1.00 |
| 156 | 4.14 | 15 | 7.795 | 32.568 | 31.790 | 33.330 | -185 | 0.368 | 1.01 |
| 156 | 4.14 | 15 | 8.847 | 33.718 | 32.980 | 34.440 | -385 | 0.338 | 1.02 |
| 156 | 4.14 | 15 | 10.008 | 34.978 | 34.290 | 35.640 | -193 | 0.410 | 1.01 |
| 156 | 4.14 | 15 | 12.132 | 37.264 | 36.680 | 37.830 | -615 | 0.332 | 1.03 |
| 156 | 4.14 | 15 | 12.905 | 38.091 | 37.550 | 38.620 | -1043 | 0.324 | 1.05 |
| 156 | 4.14 | 15 | 16.337 | 41.732 | 41.350 | 42.100 | -215 | 0.474 | 1.01 |
| 157 | 4.14 | 14 | 17.312 | 22.129 | 21.510 | 22.560 | 96 | 0.409 | 0.99 |
| 158 | 4.14 | 15 | 3.508 | 27.719 | 27.100 | 28.180 | 843 | 2.667 | 0.95 |
| 158 | 4.14 | 15 | 4.553 | 28.918 | 28.320 | 29.340 | 705 | 3.123 | 0.96 |
| 158 | 4.14 | 15 | 5.636 | 30.153 | 29.600 | 30.540 | 722 | 3.363 | 0.96 |
| 158 | 4.14 | 15 | 6.720 | 31.385 | 30.870 | 31.720 | 555 | 3.776 | 0.97 |
| 158 | 4.14 | 15 | 7.795 | 32.605 | 32.140 | 32.880 | 768 | 3.452 | 0.96 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 158 | 4.14 | 15 | 8.847 | 33.796 | 33.390 | 34.040 | 585 | 3.758 | 0.97 |
| 158 | 4.14 | 15 | 10.008 | 35.108 | 34.770 | 35.320 | 615 | 3.880 | 0.97 |
| 158 | 4.14 | 15 | 11.048 | 36.281 | 36.000 | 36.470 | 614 | 3.793 | 0.97 |
| 158 | 4.14 | 15 | 12.132 | 37.499 | 37.280 | 37.700 | 645 | 3.951 | 0.97 |
| 158 | 4.14 | 15 | 12.905 | 38.366 | 38.170 | 38.600 | 441 | 4.095 | 0.98 |
| 158 | 4.14 | 15 | 14.170 | 39.779 | 39.610 | 40.070 | 443 | 4.042 | 0.98 |
| 158 | 4.14 | 15 | 15.254 | 40.983 | 40.740 | 41.330 | 679 | 4.031 | 0.97 |
| 158 | 4.14 | 15 | 16.337 | 42.181 | 41.860 | 42.580 | 243 | 4.317 | 0.99 |
| 158 | 4.14 | 15 | 17.412 | 43.365 | 42.970 | 43.810 | 926 | 3.520 | 0.96 |
| 159 | 4.40 | 15 | 16.337 | 17.753 | 16.680 | 20.290 | 169 | 0.409 | 0.98 |
| 160 | 4.40 | 16 | 3.374 | 25.622 | 24.310 | 28.710 | 443 | 1.148 | 0.97 |
| 160 | 4.40 | 16 | 4.433 | 26.869 | 25.550 | 29.950 | 310 | 1.210 | 0.98 |
| 160 | 4.40 | 16 | 5.517 | 28.124 | 26.800 | 31.200 | 167 | 1.520 | 0.99 |
| 160 | 4.40 | 16 | 6.605 | 29.366 | 28.040 | 32.450 | 335 | 1.471 | 0.98 |
| 160 | 4.40 | 16 | 7.662 | 30.560 | 29.230 | 33.660 | 347 | 1.527 | 0.98 |
| 160 | 4.40 | 16 | 8.286 | 31.258 | 29.930 | 34.360 | 181 | 1.635 | 0.99 |
| 160 | 4.40 | 16 | 8.739 | 31.764 | 30.430 | 34.870 | 364 | 1.629 | 0.98 |
| 160 | 4.40 | 16 | 9.823 | 32.968 | 31.640 | 36.080 | 2 | 1.838 | 1.00 |
| 160 | 4.40 | 16 | 10.907 | 34.165 | 32.840 | 37.290 | 204 | 1.880 | 0.99 |
| 160 | 4.40 | 16 | 11.991 | 35.356 | 34.030 | 38.480 | -181 | 1.646 | 1.01 |
| 160 | 4.40 | 16 | 13.063 | 36.530 | 35.210 | 39.660 | 15 | 1.824 | 1.00 |
| 160 | 4.40 | 16 | 14.147 | 37.712 | 36.400 | 40.840 | -391 | 1.104 | 1.02 |
| 160 | 4.40 | 16 | 15.231 | 38.891 | 37.580 | 42.020 | -399 | 1.091 | 1.02 |
| 160 | 4.40 | 16 | 16.316 | 40.068 | 38.770 | 43.200 | -835 | 0.775 | 1.04 |
| 160 | 4.40 | 16 | 17.400 | 41.242 | 39.950 | 44.370 | -851 | 0.848 | 1.04 |
| 160 | 4.40 | 16 | 18.484 | 42.415 | 41.140 | 45.530 | -879 | 0.863 | 1.04 |
| 160 | 4.40 | 16 | 8.746 | 31.767 | 30.430 | 34.870 | 360 | 1.619 | 0.98 |
| 161 | 4.40 | 17 | 4.337 | 44.180 | 44.100 | 44.260 | 473 | 0.457 | 0.98 |
| 161 | 4.40 | 17 | 5.421 | 44.551 | 44.440 | 44.700 | 476 | 0.514 | 0.98 |
| 161 | 4.40 | 17 | 6.504 | 44.927 | 44.780 | 45.140 | 482 | 0.549 | 0.98 |
| 161 | 4.40 | 17 | 7.711 | 45.350 | 45.170 | 45.640 | 736 | 0.500 | 0.97 |
| 161 | 4.40 | 17 | 8.748 | 45.718 | 45.500 | 46.080 | 994 | 0.432 | 0.96 |
| 161 | 4.40 | 17 | 9.909 | 46.137 | 45.880 | 46.580 | 493 | 0.553 | 0.98 |
| 161 | 4.40 | 17 | 10.950 | 46.517 | 46.220 | 47.040 | 494 | 0.558 | 0.98 |
| 161 | 4.40 | 17 | 12.033 | 46.918 | 46.580 | 47.520 | 1015 | 0.415 | 0.96 |
| 161 | 4.40 | 17 | 13.082 | 47.313 | 46.940 | 48.000 | 1024 | 0.383 | 0.96 |
| 161 | 4.40 | 17 | 14.196 | 47.739 | 47.320 | 48.510 | 1293 | 0.344 | 0.95 |
| 161 | 4.40 | 17 | 15.276 | 48.158 | 47.700 | 49.010 | 1302 | 0.348 | 0.95 |
| 161 | 4.40 | 17 | 17.419 | 49.009 | 48.470 | 50.030 | 1589 | 0.329 | 0.94 |
| 162 | 4.75 | 15 | 16.337 | 19.359 | 18.630 | 20.080 | 224 | 0.344 | 0.97 |
| 163 | 4.75 | 16 | 3.374 | 27.676 | 26.870 | 28.480 | 297 | 1.304 | 0.98 |
| 163 | 4.75 | 16 | 4.433 | 28.957 | 28.140 | 29.770 | 152 | 1.267 | 0.99 |
| 163 | 4.75 | 16 | 5.517 | 30.251 | 29.430 | 31.060 | -1 | 1.465 | 1.00 |
| 163 | 4.75 | 16 | 6.605 | 31.536 | 30.720 | 32.350 | -2 | 1.481 | 1.00 |
| 163 | 4.75 | 16 | 7.662 | 32.774 | 31.960 | 33.580 | -3 | 1.411 | 1.00 |
| 163 | 4.75 | 16 | 8.286 | 33.500 | 32.690 | 34.310 | -184 | 1.323 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 163 | 4.75 | 16 | 8.739 | 34.026 | 33.220 | 34.830 | 1 | 1.389 | 1.00 |
| 163 | 4.75 | 16 | 9.823 | 35.280 | 34.480 | 36.080 | 196 | 1.638 | 0.99 |
| 163 | 4.75 | 16 | 10.907 | 36.527 | 35.730 | 37.320 | 7 | 1.473 | 1.00 |
| 163 | 4.75 | 16 | 11.991 | 37.768 | 36.990 | 38.550 | 9 | 1.285 | 1.00 |
| 163 | 4.75 | 16 | 13.063 | 38.991 | 38.220 | 39.760 | 15 | 1.395 | 1.00 |
| 163 | 4.75 | 16 | 14.147 | 40.223 | 39.470 | 40.980 | 17 | 1.406 | 1.00 |
| 163 | 4.75 | 16 | 15.231 | 41.451 | 40.710 | 42.190 | 238 | 1.407 | 0.99 |
| 163 | 4.75 | 16 | 16.316 | 42.675 | 41.950 | 43.400 | 241 | 1.381 | 0.99 |
| 163 | 4.75 | 16 | 17.400 | 43.896 | 43.180 | 44.610 | 251 | 1.457 | 0.99 |
| 163 | 4.75 | 16 | 18.484 | 45.113 | 44.410 | 45.810 | 495 | 1.403 | 0.98 |
| 163 | 4.75 | 16 | 8.746 | 34.030 | 33.220 | 34.830 | -1 | 1.371 | 1.00 |
| 164 | 4.40 | 15 | 4.553 | 5.478 | 5.030 | 5.590 | -147 | 0.540 | 0.96 |
| 164 | 4.40 | 15 | 5.636 | 6.836 | 6.320 | 6.980 | 28 | 0.510 | 1.01 |
| 164 | 4.40 | 15 | 6.720 | 8.215 | 7.640 | 8.390 | 116 | 0.340 | 1.04 |
| 164 | 4.40 | 15 | 7.795 | 9.603 | 8.990 | 9.820 | 48 | 0.308 | 1.02 |
| 164 | 4.40 | 15 | 14.170 | 18.069 | 17.500 | 18.480 | -51 | 0.437 | 1.01 |
| 164 | 4.40 | 15 | 15.254 | 19.516 | 18.980 | 19.950 | -204 | 1.298 | 1.03 |
| 164 | 4.40 | 15 | 16.337 | 20.958 | 20.450 | 21.420 | -248 | 1.700 | 1.03 |
| 164 | 4.40 | 15 | 17.412 | 22.383 | 21.900 | 22.870 | -326 | 2.110 | 1.03 |
| 165 | 4.40 | 16 | 3.374 | 28.956 | 27.340 | 30.040 | -312 | 4.377 | 1.02 |
| 165 | 4.40 | 16 | 4.433 | 30.054 | 28.000 | 31.270 | -322 | 4.677 | 1.02 |
| 165 | 4.40 | 16 | 5.517 | 31.170 | 28.670 | 32.500 | -162 | 5.199 | 1.01 |
| 165 | 4.40 | 16 | 6.605 | 32.281 | 29.350 | 33.720 | -169 | 5.346 | 1.01 |
| 165 | 4.40 | 16 | 7.662 | 33.353 | 30.000 | 34.890 | -175 | 5.577 | 1.01 |
| 165 | 4.40 | 16 | 8.286 | 33.982 | 30.390 | 35.570 | -177 | 5.765 | 1.01 |
| 165 | 4.40 | 16 | 8.739 | 34.438 | 30.680 | 36.060 | -173 | 5.662 | 1.01 |
| 165 | 4.40 | 16 | 9.823 | 35.524 | 31.360 | 37.260 | 203 | 6.516 | 0.99 |
| 165 | 4.40 | 16 | 10.907 | 36.605 | 32.050 | 38.480 | 15 | 6.158 | 1.00 |
| 165 | 4.40 | 16 | 11.991 | 37.683 | 32.740 | 39.690 | 222 | 6.182 | 0.99 |
| 165 | 4.40 | 16 | 13.063 | 38.745 | 33.430 | 40.880 | 426 | 6.175 | 0.98 |
| 165 | 4.40 | 16 | 14.147 | 39.817 | 34.140 | 42.080 | 450 | 6.015 | 0.98 |
| 165 | 4.40 | 16 | 15.231 | 40.887 | 34.860 | 43.280 | 461 | 5.857 | 0.98 |
| 165 | 4.40 | 16 | 16.316 | 41.955 | 35.580 | 44.460 | 692 | 5.418 | 0.97 |
| 165 | 4.40 | 16 | 17.400 | 43.022 | 36.310 | 45.650 | 706 | 5.554 | 0.97 |
| 165 | 4.40 | 16 | 18.484 | 44.089 | 37.050 | 46.830 | 940 | 5.142 | 0.96 |
| 165 | 4.40 | 16 | 8.746 | 34.435 | 30.680 | 36.060 | -177 | 5.790 | 1.01 |
| 166 | 4.35 | 16 | 8.286 | 9.623 | 8.660 | 10.910 | -13 | 0.489 | 1.00 |
| 166 | 4.35 | 16 | 8.739 | 10.154 | 9.130 | 11.500 | -17 | 0.539 | 1.00 |
| 166 | 4.35 | 16 | 9.823 | 11.427 | 10.270 | 12.930 | -8 | 0.845 | 1.00 |
| 166 | 4.35 | 16 | 10.907 | 12.703 | 11.410 | 14.350 | 114 | 0.895 | 0.98 |
| 166 | 4.35 | 16 | 11.991 | 13.982 | 12.560 | 15.780 | 350 | 0.739 | 0.95 |
| 166 | 4.35 | 16 | 13.063 | 15.250 | 13.690 | 17.180 | 432 | 0.824 | 0.95 |
| 166 | 4.35 | 16 | 14.147 | 16.532 | 14.850 | 18.600 | 365 | 1.012 | 0.96 |
| 166 | 4.35 | 16 | 15.231 | 17.816 | 16.010 | 20.010 | 306 | 1.262 | 0.97 |
| 166 | 4.35 | 16 | 16.316 | 19.101 | 17.170 | 21.420 | 445 | 1.128 | 0.96 |
| 166 | 4.35 | 16 | 17.400 | 20.386 | 18.330 | 22.830 | 358 | 1.686 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 166 | 4.35 | 16 | 18.484 | 21.671 | 19.500 | 24.230 | 0 | 2.345 | 1.00 |
| 166 | 4.35 | 16 | 8.746 | 10.161 | 9.130 | 11.500 | -55 | 0.524 | 1.01 |
| 167 | 4.35 | 17 | 3.257 | 26.362 | 24.670 | 27.830 | -645 | 1.805 | 1.04 |
| 167 | 4.35 | 17 | 4.337 | 27.407 | 25.910 | 28.500 | -168 | 2.602 | 1.01 |
| 167 | 4.35 | 17 | 5.421 | 28.446 | 27.140 | 29.180 | -174 | 2.671 | 1.01 |
| 167 | 4.35 | 17 | 6.504 | 29.478 | 28.370 | 30.190 | 173 | 2.865 | 0.99 |
| 167 | 4.35 | 17 | 7.711 | 30.621 | 29.720 | 31.510 | -2 | 2.848 | 1.00 |
| 167 | 4.35 | 17 | 8.748 | 31.599 | 30.880 | 32.630 | 188 | 3.103 | 0.99 |
| 167 | 4.35 | 17 | 9.909 | 32.691 | 31.990 | 33.870 | 2 | 3.018 | 1.00 |
| 167 | 4.35 | 17 | 10.950 | 33.667 | 32.660 | 34.980 | 396 | 2.885 | 0.98 |
| 167 | 4.35 | 17 | 12.033 | 34.683 | 33.360 | 36.140 | 204 | 3.111 | 0.99 |
| 167 | 4.35 | 17 | 13.082 | 35.666 | 34.040 | 37.250 | 6 | 3.065 | 1.00 |
| 167 | 4.35 | 17 | 14.196 | 36.710 | 34.770 | 38.420 | 214 | 3.133 | 0.99 |
| 167 | 4.35 | 17 | 15.276 | 37.722 | 35.490 | 39.560 | 218 | 3.120 | 0.99 |
| 167 | 4.35 | 17 | 17.419 | 39.734 | 36.920 | 41.820 | 453 | 2.947 | 0.98 |
| 167 | 4.35 | 17 | 18.479 | 40.731 | 37.640 | 42.940 | 230 | 3.195 | 0.99 |
| 168 | 4.35 | 18 | 3.255 | 42.518 | 39.370 | 44.590 | 212 | 1.218 | 0.99 |
| 168 | 4.35 | 18 | 4.414 | 42.921 | 39.820 | 44.920 | 453 | 1.268 | 0.98 |
| 168 | 4.35 | 18 | 5.494 | 43.302 | 40.240 | 45.220 | 456 | 1.378 | 0.98 |
| 168 | 4.35 | 18 | 6.573 | 43.688 | 40.670 | 45.530 | 462 | 1.380 | 0.98 |
| 168 | 4.35 | 18 | 7.653 | 44.082 | 41.110 | 45.840 | 473 | 1.362 | 0.98 |
| 168 | 4.35 | 18 | 8.724 | 44.480 | 41.550 | 46.160 | 1222 | 0.956 | 0.95 |
| 168 | 4.35 | 18 | 9.846 | 44.906 | 42.010 | 46.500 | 1480 | 0.791 | 0.94 |
| 168 | 4.35 | 18 | 10.891 | 45.310 | 42.460 | 46.820 | 730 | 1.412 | 0.97 |
| 168 | 4.35 | 18 | 13.046 | 46.167 | 43.400 | 47.710 | 1267 | 1.084 | 0.95 |
| 168 | 4.35 | 18 | 14.133 | 46.613 | 43.890 | 48.200 | 758 | 1.430 | 0.97 |
| 168 | 4.35 | 18 | 15.181 | 47.050 | 44.370 | 48.680 | 1020 | 1.252 | 0.96 |
| 168 | 4.35 | 18 | 16.299 | 47.525 | 44.890 | 49.210 | 770 | 1.524 | 0.97 |
| 168 | 4.35 | 18 | 17.379 | 47.992 | 45.400 | 49.720 | 780 | 1.457 | 0.97 |
| 168 | 4.35 | 18 | 18.462 | 48.469 | 45.920 | 50.250 | 252 | 1.505 | 0.99 |
| 169 | 4.35 | 16 | 10.907 | 12.560 | 11.930 | 13.200 | -171 | 0.307 | 1.03 |
| 169 | 4.35 | 16 | 11.991 | 13.864 | 13.220 | 14.520 | 125 | 0.497 | 0.98 |
| 169 | 4.35 | 16 | 14.147 | 16.473 | 15.820 | 17.140 | 262 | 0.631 | 0.97 |
| 169 | 4.35 | 16 | 15.231 | 17.788 | 17.130 | 18.460 | 498 | 0.562 | 0.95 |
| 169 | 4.35 | 16 | 16.316 | 19.106 | 18.450 | 19.780 | 227 | 0.809 | 0.98 |
| 169 | 4.35 | 16 | 17.400 | 20.424 | 19.760 | 21.090 | 248 | 1.039 | 0.98 |
| 169 | 4.35 | 16 | 18.484 | 21.743 | 21.080 | 22.410 | 286 | 1.178 | 0.98 |
| 170 | 4.35 | 17 | 3.257 | 27.035 | 26.340 | 27.720 | -317 | 1.091 | 1.02 |
| 170 | 4.35 | 17 | 4.337 | 28.257 | 27.560 | 28.940 | -328 | 1.179 | 1.02 |
| 170 | 4.35 | 17 | 5.421 | 29.469 | 28.760 | 30.140 | -340 | 1.238 | 1.02 |
| 170 | 4.35 | 17 | 6.504 | 30.669 | 29.960 | 31.340 | -351 | 1.200 | 1.02 |
| 170 | 4.35 | 17 | 7.711 | 31.997 | 31.290 | 32.650 | 2 | 1.271 | 1.00 |
| 170 | 4.35 | 17 | 8.748 | 33.130 | 32.420 | 33.780 | 7 | 1.307 | 1.00 |
| 170 | 4.35 | 17 | 9.909 | 34.392 | 33.680 | 35.030 | 204 | 1.528 | 0.99 |
| 170 | 4.35 | 17 | 10.950 | 35.519 | 34.800 | 36.140 | 11 | 1.444 | 1.00 |
| 170 | 4.35 | 17 | 12.033 | 36.688 | 35.970 | 37.300 | 8 | 1.331 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 170 | 4.35 | 17 | 13.082 | 37.817 | 37.090 | 38.420 | 223 | 1.478 | 0.99 |
| 170 | 4.35 | 17 | 14.196 | 39.013 | 38.290 | 39.600 | -210 | 1.175 | 1.01 |
| 170 | 4.35 | 17 | 15.276 | 40.170 | 39.440 | 40.750 | 7 | 1.325 | 1.00 |
| 170 | 4.35 | 17 | 17.419 | 42.462 | 41.730 | 43.020 | 4 | 1.313 | 1.00 |
| 170 | 4.35 | 17 | 18.479 | 43.594 | 42.860 | 44.140 | -239 | 1.162 | 1.01 |
| 171 | 3.92 | 16 | 9.823 | 12.242 | 10.040 | 12.710 | -222 | 0.428 | 1.05 |
| 171 | 3.92 | 16 | 10.907 | 13.627 | 11.300 | 14.100 | 20 | 0.973 | 1.00 |
| 171 | 3.92 | 16 | 11.991 | 15.008 | 12.580 | 15.490 | 21 | 1.242 | 1.00 |
| 171 | 3.92 | 16 | 13.063 | 16.370 | 13.860 | 16.850 | 183 | 1.425 | 0.98 |
| 171 | 3.92 | 16 | 14.147 | 17.743 | 15.150 | 18.220 | -78 | 1.592 | 1.01 |
| 171 | 3.92 | 16 | 15.231 | 19.110 | 16.460 | 19.580 | 21 | 1.908 | 1.00 |
| 171 | 3.92 | 16 | 16.316 | 20.471 | 17.760 | 20.970 | -232 | 1.506 | 1.02 |
| 171 | 3.92 | 16 | 17.400 | 21.827 | 19.060 | 22.390 | -250 | 1.807 | 1.02 |
| 171 | 3.92 | 16 | 18.484 | 23.177 | 20.370 | 23.810 | -582 | 1.697 | 1.04 |
| 172 | 3.92 | 17 | 3.257 | 28.207 | 25.350 | 28.880 | -505 | 3.912 | 1.03 |
| 172 | 3.92 | 17 | 4.337 | 29.360 | 26.470 | 30.030 | -171 | 4.961 | 1.01 |
| 172 | 3.92 | 17 | 5.421 | 30.507 | 27.580 | 31.230 | -176 | 5.171 | 1.01 |
| 172 | 3.92 | 17 | 6.504 | 31.647 | 28.670 | 32.410 | 5 | 5.811 | 1.00 |
| 172 | 3.92 | 17 | 7.711 | 32.910 | 29.880 | 33.730 | 4 | 5.918 | 1.00 |
| 172 | 3.92 | 17 | 8.748 | 33.991 | 30.910 | 34.850 | 202 | 5.961 | 1.00 |
| 172 | 3.92 | 17 | 9.909 | 35.198 | 32.060 | 36.090 | 6 | 5.927 | 1.00 |
| 172 | 3.92 | 17 | 10.950 | 36.276 | 33.090 | 37.210 | 11 | 5.954 | 1.00 |
| 172 | 3.92 | 17 | 12.033 | 37.397 | 34.160 | 38.360 | 11 | 5.921 | 1.00 |
| 172 | 3.92 | 17 | 13.082 | 38.479 | 35.200 | 39.470 | 11 | 5.844 | 1.00 |
| 172 | 3.92 | 17 | 14.196 | 39.628 | 36.300 | 40.650 | 11 | 5.920 | 1.00 |
| 172 | 3.92 | 17 | 15.276 | 40.740 | 37.360 | 41.790 | 12 | 5.888 | 1.00 |
| 172 | 3.92 | 17 | 17.419 | 42.946 | 39.480 | 44.050 | 10 | 5.922 | 1.00 |
| 172 | 3.92 | 17 | 18.479 | 44.035 | 40.530 | 45.160 | -5 | 6.073 | 1.00 |
| 173 | 4.45 | 17 | 9.909 | 12.205 | 9.840 | 13.140 | 239 | 0.360 | 0.95 |
| 173 | 4.45 | 17 | 10.950 | 13.516 | 10.870 | 14.520 | 420 | 0.369 | 0.93 |
| 173 | 4.45 | 17 | 12.033 | 14.880 | 11.950 | 15.940 | 362 | 0.714 | 0.95 |
| 173 | 4.45 | 17 | 13.082 | 16.199 | 12.990 | 17.320 | 423 | 0.937 | 0.95 |
| 173 | 4.45 | 17 | 14.196 | 17.599 | 14.100 | 18.780 | 299 | 1.439 | 0.97 |
| 173 | 4.45 | 17 | 15.276 | 18.953 | 15.180 | 20.180 | 330 | 1.779 | 0.97 |
| 173 | 4.45 | 17 | 17.419 | 21.633 | 17.340 | 23.000 | 263 | 2.536 | 0.98 |
| 173 | 4.45 | 17 | 18.479 | 22.953 | 18.410 | 24.420 | -3 | 3.083 | 1.00 |
| 174 | 4.45 | 18 | 3.255 | 27.719 | 23.110 | 29.200 | -468 | 3.286 | 1.03 |
| 174 | 4.45 | 18 | 4.414 | 29.075 | 24.450 | 30.550 | -487 | 3.564 | 1.03 |
| 174 | 4.45 | 18 | 5.494 | 30.324 | 25.670 | 31.820 | -334 | 4.125 | 1.02 |
| 174 | 4.45 | 18 | 6.573 | 31.560 | 26.880 | 33.070 | -346 | 4.203 | 1.02 |
| 174 | 4.45 | 18 | 7.653 | 32.786 | 28.090 | 34.310 | -172 | 4.674 | 1.01 |
| 174 | 4.45 | 18 | 8.724 | 33.992 | 29.280 | 35.540 | 15 | 5.110 | 1.00 |
| 174 | 4.45 | 18 | 9.846 | 35.245 | 30.520 | 36.860 | -173 | 4.383 | 1.01 |
| 174 | 4.45 | 18 | 10.891 | 36.404 | 31.680 | 38.070 | -188 | 4.977 | 1.01 |
| 174 | 4.45 | 18 | 13.046 | 38.775 | 34.060 | 40.540 | 234 | 5.539 | 0.99 |
| 174 | 4.45 | 18 | 14.133 | 39.962 | 35.270 | 41.770 | 13 | 5.236 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 174 | 4.45 | 18 | 15.181 | 41.103 | 36.430 | 42.950 | 14 | 5.177 | 1.00 |
| 174 | 4.45 | 18 | 16.299 | 42.316 | 37.670 | 44.200 | 8 | 5.310 | 1.00 |
| 174 | 4.45 | 18 | 17.379 | 43.483 | 38.870 | 45.400 | 9 | 5.244 | 1.00 |
| 174 | 4.45 | 18 | 18.462 | 44.652 | 40.070 | 46.600 | 3 | 5.151 | 1.00 |
| 175 | 4.74 | 17 | 7.711 | 8.987 | 8.420 | 9.490 | -1 | 0.565 | 1.00 |
| 175 | 4.74 | 17 | 8.748 | 10.227 | 9.560 | 10.800 | 114 | 0.733 | 0.97 |
| 175 | 4.74 | 17 | 9.909 | 11.618 | 10.850 | 12.280 | 146 | 0.972 | 0.97 |
| 175 | 4.74 | 17 | 10.950 | 12.868 | 12.000 | 13.600 | 121 | 1.337 | 0.98 |
| 175 | 4.74 | 17 | 12.033 | 14.171 | 13.200 | 14.980 | 145 | 1.640 | 0.98 |
| 175 | 4.74 | 17 | 13.082 | 15.433 | 14.360 | 16.310 | 250 | 1.719 | 0.97 |
| 175 | 4.74 | 17 | 14.196 | 16.776 | 15.600 | 17.720 | 98 | 2.458 | 0.99 |
| 175 | 4.74 | 17 | 15.276 | 18.076 | 16.790 | 19.090 | 108 | 2.801 | 0.99 |
| 175 | 4.74 | 17 | 17.419 | 20.658 | 19.170 | 21.800 | -113 | 3.284 | 1.01 |
| 175 | 4.74 | 17 | 18.479 | 21.933 | 20.350 | 23.140 | -252 | 3.333 | 1.02 |
| 176 | 4.74 | 18 | 3.255 | 26.862 | 25.300 | 28.150 | -167 | 3.248 | 1.01 |
| 176 | 4.74 | 18 | 4.414 | 28.260 | 26.700 | 29.560 | -168 | 3.521 | 1.01 |
| 176 | 4.74 | 18 | 5.494 | 29.545 | 27.970 | 30.850 | -174 | 3.712 | 1.01 |
| 176 | 4.74 | 18 | 6.573 | 30.817 | 29.220 | 32.120 | -177 | 3.842 | 1.01 |
| 176 | 4.74 | 18 | 7.653 | 32.079 | 30.460 | 33.380 | -2 | 4.076 | 1.00 |
| 176 | 4.74 | 18 | 8.724 | 33.324 | 31.680 | 34.620 | 195 | 4.229 | 0.99 |
| 176 | 4.74 | 18 | 9.846 | 34.621 | 32.950 | 35.900 | 203 | 4.159 | 0.99 |
| 176 | 4.74 | 18 | 10.891 | 35.823 | 34.130 | 37.090 | -184 | 4.018 | 1.01 |
| 176 | 4.74 | 18 | 13.046 | 38.289 | 36.540 | 39.530 | 234 | 4.207 | 0.99 |
| 176 | 4.74 | 18 | 14.133 | 39.527 | 37.760 | 40.750 | 16 | 4.228 | 1.00 |
| 176 | 4.74 | 18 | 15.181 | 40.718 | 38.930 | 41.930 | 16 | 3.997 | 1.00 |
| 176 | 4.74 | 18 | 16.299 | 41.985 | 40.170 | 43.170 | 13 | 4.063 | 1.00 |
| 176 | 4.74 | 18 | 17.379 | 43.205 | 41.370 | 44.380 | 19 | 3.982 | 1.00 |
| 176 | 4.74 | 18 | 18.462 | 44.426 | 42.580 | 45.580 | -220 | 3.623 | 1.01 |
| 177 | 4.74 | 19 | 3.410 | 46.342 | 45.070 | 47.410 | -751 | 0.426 | 1.03 |
| 177 | 4.74 | 19 | 4.493 | 46.685 | 45.530 | 47.650 | -255 | 0.670 | 1.01 |
| 177 | 4.74 | 19 | 5.573 | 47.029 | 46.000 | 47.900 | -4 | 0.832 | 1.00 |
| 177 | 4.74 | 19 | 6.617 | 47.367 | 46.450 | 48.130 | 250 | 1.049 | 0.99 |
| 177 | 4.74 | 19 | 7.740 | 47.735 | 46.950 | 48.390 | 1555 | 0.593 | 0.94 |
| 177 | 4.74 | 19 | 8.858 | 48.108 | 47.460 | 48.650 | 2101 | 0.383 | 0.92 |
| 177 | 4.74 | 19 | 9.907 | 48.465 | 47.930 | 48.910 | 1040 | 0.762 | 0.96 |
| 177 | 4.74 | 19 | 10.983 | 48.837 | 48.430 | 49.170 | 794 | 0.900 | 0.97 |
| 177 | 4.74 | 19 | 12.066 | 49.219 | 48.940 | 49.450 | 260 | 1.203 | 0.99 |
| 177 | 4.74 | 19 | 13.150 | 49.608 | 49.460 | 49.730 | 266 | 1.186 | 0.99 |
| 177 | 4.74 | 19 | 14.229 | 50.003 | 49.910 | 50.130 | 1071 | 0.772 | 0.96 |
| 177 | 4.74 | 19 | 15.468 | 50.466 | 50.250 | 50.740 | 1653 | 0.564 | 0.94 |
| 177 | 4.74 | 19 | 16.242 | 50.761 | 50.470 | 51.120 | 271 | 1.121 | 0.99 |
| 177 | 4.74 | 19 | 17.321 | 51.179 | 50.780 | 51.670 | 822 | 0.955 | 0.97 |
| 178 | 4.45 | 17 | 12.033 | 15.908 | 15.800 | 15.980 | 379 | 0.321 | 0.95 |
| 178 | 4.45 | 17 | 13.082 | 17.288 | 17.170 | 17.380 | 362 | 0.385 | 0.96 |
| 178 | 4.45 | 17 | 14.196 | 18.750 | 18.630 | 18.860 | 513 | 0.474 | 0.95 |
| 178 | 4.45 | 17 | 15.276 | 20.161 | 20.030 | 20.280 | 351 | 0.673 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 178 | 4.45 | 17 | 17.419 | 22.948 | 22.810 | 23.100 | 145 | 1.070 | 0.99 |
| 178 | 4.45 | 17 | 18.479 | 24.319 | 24.180 | 24.480 | 143 | 1.237 | 0.99 |
| 179 | 4.45 | 18 | 3.255 | 28.151 | 27.150 | 29.120 | -328 | 1.766 | 1.02 |
| 179 | 4.45 | 18 | 4.414 | 29.178 | 27.800 | 30.480 | -1 | 2.253 | 1.00 |
| 179 | 4.45 | 18 | 5.494 | 30.129 | 28.410 | 31.730 | -175 | 2.272 | 1.01 |
| 179 | 4.45 | 18 | 6.573 | 31.076 | 29.030 | 33.020 | -1 | 2.454 | 1.00 |
| 179 | 4.45 | 18 | 7.653 | 32.020 | 29.650 | 34.290 | 4 | 2.571 | 1.00 |
| 179 | 4.45 | 18 | 8.724 | 32.956 | 30.270 | 35.540 | 203 | 2.489 | 0.99 |
| 179 | 4.45 | 18 | 9.846 | 33.935 | 30.940 | 36.840 | 212 | 2.438 | 0.99 |
| 179 | 4.45 | 18 | 10.891 | 34.846 | 31.570 | 38.040 | 201 | 2.759 | 0.99 |
| 179 | 4.45 | 18 | 13.046 | 36.729 | 32.890 | 40.490 | 641 | 2.310 | 0.97 |
| 179 | 4.45 | 18 | 14.133 | 37.682 | 33.570 | 41.710 | 221 | 2.758 | 0.99 |
| 179 | 4.45 | 18 | 15.181 | 38.602 | 34.240 | 42.880 | 226 | 2.616 | 0.99 |
| 179 | 4.45 | 18 | 16.299 | 39.586 | 34.960 | 44.120 | 227 | 2.680 | 0.99 |
| 179 | 4.45 | 18 | 17.379 | 40.539 | 35.670 | 45.310 | 457 | 2.476 | 0.98 |
| 179 | 4.45 | 18 | 18.462 | 41.498 | 36.390 | 46.510 | 225 | 2.623 | 0.99 |
| 180 | 4.45 | 19 | 3.410 | 39.062 | 38.430 | 40.230 | -6 | 0.496 | 1.00 |
| 180 | 4.45 | 19 | 4.493 | 39.558 | 38.880 | 40.820 | -5 | 0.548 | 1.00 |
| 180 | 4.45 | 19 | 5.573 | 40.055 | 39.340 | 41.410 | -5 | 0.611 | 1.00 |
| 180 | 4.45 | 19 | 6.617 | 40.541 | 39.780 | 41.970 | -6 | 0.719 | 1.00 |
| 180 | 4.45 | 19 | 7.740 | 41.069 | 40.270 | 42.590 | 469 | 0.726 | 0.98 |
| 180 | 4.45 | 19 | 8.858 | 41.603 | 40.760 | 43.210 | 475 | 0.672 | 0.98 |
| 180 | 4.45 | 19 | 9.907 | 42.111 | 41.230 | 43.790 | 968 | 0.563 | 0.96 |
| 180 | 4.45 | 19 | 10.983 | 42.640 | 41.720 | 44.410 | 248 | 0.796 | 0.99 |
| 180 | 4.45 | 19 | 12.066 | 43.182 | 42.220 | 45.030 | 744 | 0.700 | 0.97 |
| 180 | 4.45 | 19 | 13.150 | 43.733 | 42.730 | 45.670 | 756 | 0.641 | 0.97 |
| 180 | 4.45 | 19 | 14.229 | 44.290 | 43.240 | 46.310 | 1009 | 0.579 | 0.96 |
| 180 | 4.45 | 19 | 15.468 | 44.941 | 43.840 | 47.060 | -499 | 0.836 | 1.02 |
| 180 | 4.45 | 19 | 16.242 | 45.354 | 44.220 | 47.540 | 778 | 0.660 | 0.97 |
| 180 | 4.45 | 19 | 17.321 | 45.938 | 44.760 | 48.210 | 259 | 0.917 | 0.99 |
| 181 | 4.64 | 18 | 9.846 | 10.812 | 10.190 | 11.440 | 92 | 0.391 | 0.98 |
| 181 | 4.64 | 18 | 10.891 | 11.994 | 11.310 | 12.690 | 283 | 0.363 | 0.95 |
| 181 | 4.64 | 18 | 13.046 | 14.452 | 13.640 | 15.270 | 165 | 0.868 | 0.98 |
| 181 | 4.64 | 18 | 14.133 | 15.700 | 14.830 | 16.580 | 179 | 0.981 | 0.98 |
| 181 | 4.64 | 18 | 15.181 | 16.908 | 15.970 | 17.850 | -2 | 1.235 | 1.00 |
| 181 | 4.64 | 18 | 16.299 | 18.200 | 17.210 | 19.200 | 0 | 1.409 | 1.00 |
| 181 | 4.64 | 18 | 17.379 | 19.450 | 18.400 | 20.500 | 5 | 1.530 | 1.00 |
| 181 | 4.64 | 18 | 18.462 | 20.707 | 19.600 | 21.810 | 121 | 1.621 | 0.99 |
| 182 | 4.64 | 19 | 3.410 | 26.039 | 24.880 | 27.260 | -618 | 1.061 | 1.04 |
| 182 | 4.64 | 19 | 4.493 | 27.345 | 26.180 | 28.600 | -162 | 1.482 | 1.01 |
| 182 | 4.64 | 19 | 5.573 | 28.634 | 27.460 | 29.930 | -333 | 1.498 | 1.02 |
| 182 | 4.64 | 19 | 6.617 | 29.871 | 28.700 | 31.200 | -172 | 1.574 | 1.01 |
| 182 | 4.64 | 19 | 7.740 | 31.190 | 30.020 | 32.550 | 189 | 1.769 | 0.99 |
| 182 | 4.64 | 19 | 8.858 | 32.496 | 31.330 | 33.890 | 13 | 1.598 | 1.00 |
| 182 | 4.64 | 19 | 9.907 | 33.713 | 32.550 | 35.140 | 206 | 1.854 | 0.99 |
| 182 | 4.64 | 19 | 10.983 | 34.956 | 33.810 | 36.400 | 8 | 1.794 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 182 | 4.64 | 19 | 12.066 | 36.202 | 35.060 | 37.670 | 13 | 1.876 | 1.00 |
| 182 | 4.64 | 19 | 13.150 | 37.443 | 36.320 | 38.930 | 224 | 1.929 | 0.99 |
| 182 | 4.64 | 19 | 14.229 | 38.675 | 37.570 | 40.180 | 444 | 1.679 | 0.98 |
| 182 | 4.64 | 19 | 15.468 | 40.083 | 38.990 | 41.600 | 685 | 1.814 | 0.97 |
| 182 | 4.64 | 19 | 16.242 | 40.960 | 39.890 | 42.480 | 461 | 1.869 | 0.98 |
| 182 | 4.64 | 19 | 17.321 | 42.181 | 41.130 | 43.710 | 242 | 1.927 | 0.99 |
| 183 | 4.64 | 20 | 3.370 | 44.104 | 43.600 | 45.070 | 464 | 0.736 | 0.98 |
| 183 | 4.64 | 20 | 4.485 | 44.556 | 44.070 | 45.500 | 471 | 0.800 | 0.98 |
| 183 | 4.64 | 20 | 5.530 | 44.982 | 44.500 | 45.900 | 229 | 0.815 | 0.99 |
| 183 | 4.64 | 20 | 6.611 | 45.424 | 44.960 | 46.320 | -11 | 0.793 | 1.00 |
| 183 | 4.64 | 20 | 7.738 | 45.890 | 45.440 | 46.760 | 743 | 0.653 | 0.97 |
| 183 | 4.64 | 20 | 8.818 | 46.342 | 45.900 | 47.190 | -255 | 0.654 | 1.01 |
| 183 | 4.64 | 20 | 9.864 | 46.783 | 46.360 | 47.610 | -2 | 0.780 | 1.00 |
| 183 | 4.64 | 20 | 10.987 | 47.263 | 46.850 | 48.060 | 5 | 0.836 | 1.00 |
| 183 | 4.64 | 20 | 12.068 | 47.732 | 47.330 | 48.500 | -245 | 0.838 | 1.01 |
| 183 | 4.64 | 20 | 13.152 | 48.210 | 47.820 | 48.960 | 2 | 0.882 | 1.00 |
| 183 | 4.64 | 20 | 14.237 | 48.695 | 48.320 | 49.420 | 9 | 0.947 | 1.00 |
| 183 | 4.64 | 20 | 15.317 | 49.186 | 48.820 | 49.880 | 265 | 1.034 | 0.99 |
| 183 | 4.64 | 20 | 16.405 | 49.689 | 49.340 | 50.360 | 266 | 1.042 | 0.99 |
| 183 | 4.64 | 20 | 17.474 | 50.193 | 49.850 | 50.840 | 267 | 1.027 | 0.99 |
| 184 | 4.64 | 18 | 10.891 | 12.504 | 12.390 | 12.600 | 153 | 0.325 | 0.97 |
| 184 | 4.64 | 18 | 13.046 | 15.106 | 14.950 | 15.250 | 448 | 0.353 | 0.94 |
| 184 | 4.64 | 18 | 14.133 | 16.428 | 16.250 | 16.590 | 347 | 0.625 | 0.96 |
| 184 | 4.64 | 18 | 15.181 | 17.707 | 17.510 | 17.890 | 293 | 0.842 | 0.97 |
| 184 | 4.64 | 18 | 16.299 | 19.075 | 18.860 | 19.270 | 114 | 1.266 | 0.99 |
| 184 | 4.64 | 18 | 17.379 | 20.397 | 20.170 | 20.600 | 243 | 1.249 | 0.98 |
| 184 | 4.64 | 18 | 18.462 | 21.724 | 21.480 | 21.940 | 125 | 1.472 | 0.99 |
| 185 | 4.64 | 19 | 3.410 | 27.121 | 26.720 | 27.370 | -317 | 2.527 | 1.02 |
| 185 | 4.64 | 19 | 4.493 | 28.392 | 27.940 | 28.650 | -163 | 2.842 | 1.01 |
| 185 | 4.64 | 19 | 5.573 | 29.639 | 29.140 | 29.900 | -167 | 2.898 | 1.01 |
| 185 | 4.64 | 19 | 6.617 | 30.830 | 30.290 | 31.090 | -168 | 3.050 | 1.01 |
| 185 | 4.64 | 19 | 7.740 | 32.097 | 31.510 | 32.370 | 24 | 3.305 | 1.00 |
| 185 | 4.64 | 19 | 8.858 | 33.351 | 32.730 | 33.620 | 34 | 3.424 | 1.00 |
| 185 | 4.64 | 19 | 9.907 | 34.520 | 33.860 | 34.790 | 31 | 3.514 | 1.00 |
| 185 | 4.64 | 19 | 10.983 | 35.713 | 35.020 | 35.990 | 26 | 3.586 | 1.00 |
| 185 | 4.64 | 19 | 12.066 | 36.912 | 36.190 | 37.190 | -171 | 3.262 | 1.01 |
| 185 | 4.64 | 19 | 13.150 | 38.108 | 37.360 | 38.390 | -169 | 3.204 | 1.01 |
| 185 | 4.64 | 19 | 14.229 | 39.297 | 38.520 | 39.580 | -180 | 3.174 | 1.01 |
| 185 | 4.64 | 19 | 15.468 | 40.659 | 39.860 | 40.950 | 52 | 3.567 | 1.00 |
| 185 | 4.64 | 19 | 16.242 | 41.510 | 40.700 | 41.800 | -177 | 3.229 | 1.01 |
| 185 | 4.64 | 19 | 17.321 | 42.696 | 41.870 | 42.990 | -191 | 3.220 | 1.01 |
| 186 | 4.64 | 20 | 3.370 | 45.080 | 43.920 | 45.690 | -12 | 0.805 | 1.00 |
| 186 | 4.64 | 20 | 4.485 | 45.535 | 44.270 | 46.260 | 240 | 1.011 | 0.99 |
| 186 | 4.64 | 20 | 5.530 | 45.968 | 44.600 | 46.800 | 741 | 0.891 | 0.97 |
| 186 | 4.64 | 20 | 6.611 | 46.422 | 44.950 | 47.370 | 497 | 0.946 | 0.98 |
| 186 | 4.64 | 20 | 7.738 | 46.900 | 45.320 | 47.980 | 1276 | 0.652 | 0.95 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 186 | 4.64 | 20 | 8.818 | 47.365 | 45.670 | 48.560 | 1021 | 0.832 | 0.96 |
| 186 | 4.64 | 20 | 9.864 | 47.821 | 46.020 | 49.140 | 772 | 0.925 | 0.97 |
| 186 | 4.64 | 20 | 10.987 | 48.317 | 46.410 | 49.760 | -249 | 0.969 | 1.01 |
| 186 | 4.64 | 20 | 12.068 | 48.801 | 46.780 | 50.370 | 525 | 1.114 | 0.98 |
| 186 | 4.64 | 20 | 13.152 | 49.295 | 47.160 | 51.000 | 261 | 1.236 | 0.99 |
| 186 | 4.64 | 20 | 14.237 | 49.795 | 47.540 | 51.630 | 1071 | 0.918 | 0.96 |
| 186 | 4.64 | 20 | 15.317 | 50.302 | 47.930 | 52.260 | 807 | 1.067 | 0.97 |
| 186 | 4.64 | 20 | 16.405 | 50.821 | 48.340 | 52.920 | 811 | 1.192 | 0.97 |
| 186 | 4.64 | 20 | 17.474 | 51.339 | 48.740 | 53.570 | 543 | 1.380 | 0.98 |
| 187 | 4.01 | 18 | 8.724 | 11.348 | 10.910 | 11.510 | 151 | 0.377 | 0.96 |
| 187 | 4.01 | 18 | 9.846 | 12.824 | 12.350 | 12.980 | 397 | 0.302 | 0.92 |
| 187 | 4.01 | 18 | 10.891 | 14.193 | 13.680 | 14.350 | 269 | 0.897 | 0.96 |
| 187 | 4.01 | 18 | 13.046 | 16.998 | 16.450 | 17.220 | 204 | 1.701 | 0.98 |
| 187 | 4.01 | 18 | 14.133 | 18.403 | 17.840 | 18.680 | 326 | 1.981 | 0.97 |
| 187 | 4.01 | 18 | 15.181 | 19.752 | 19.190 | 20.080 | 248 | 2.265 | 0.98 |
| 187 | 4.01 | 18 | 16.299 | 21.182 | 20.620 | 21.570 | 138 | 2.898 | 0.99 |
| 187 | 4.01 | 18 | 17.379 | 22.557 | 22.000 | 23.000 | 150 | 3.082 | 0.99 |
| 187 | 4.01 | 18 | 18.462 | 23.931 | 23.380 | 24.420 | 4 | 3.544 | 1.00 |
| 188 | 4.01 | 19 | 3.410 | 28.622 | 27.010 | 29.590 | -176 | 2.827 | 1.01 |
| 188 | 4.01 | 19 | 4.493 | 29.712 | 27.600 | 30.830 | -179 | 3.062 | 1.01 |
| 188 | 4.01 | 19 | 5.573 | 30.793 | 28.190 | 32.060 | 3 | 3.295 | 1.00 |
| 188 | 4.01 | 19 | 6.617 | 31.835 | 28.760 | 33.250 | 0 | 3.452 | 1.00 |
| 188 | 4.01 | 19 | 7.740 | 32.948 | 29.380 | 34.510 | 391 | 3.161 | 0.98 |
| 188 | 4.01 | 19 | 8.858 | 34.055 | 30.000 | 35.770 | 599 | 3.115 | 0.97 |
| 188 | 4.01 | 19 | 9.907 | 35.089 | 30.600 | 36.940 | 414 | 3.354 | 0.98 |
| 188 | 4.01 | 19 | 10.983 | 36.147 | 31.210 | 38.130 | 416 | 3.406 | 0.98 |
| 188 | 4.01 | 19 | 12.066 | 37.212 | 31.840 | 39.330 | 430 | 3.414 | 0.98 |
| 188 | 4.01 | 19 | 13.150 | 38.274 | 32.480 | 40.520 | 657 | 3.122 | 0.97 |
| 188 | 4.01 | 19 | 14.229 | 39.331 | 33.120 | 41.700 | 228 | 3.642 | 0.99 |
| 188 | 4.01 | 19 | 15.468 | 40.543 | 33.870 | 43.040 | 689 | 3.180 | 0.97 |
| 188 | 4.01 | 19 | 16.242 | 41.299 | 34.350 | 43.880 | 694 | 3.091 | 0.97 |
| 188 | 4.01 | 19 | 17.321 | 42.354 | 35.020 | 45.050 | 470 | 3.448 | 0.98 |
| 189 | 4.00 | 19 | 8.858 | 11.653 | 11.530 | 11.720 | 160 | 0.301 | 0.96 |
| 189 | 4.00 | 19 | 9.907 | 13.062 | 12.950 | 13.120 | 259 | 0.468 | 0.95 |
| 189 | 4.00 | 19 | 10.983 | 14.503 | 14.400 | 14.560 | 397 | 0.484 | 0.94 |
| 189 | 4.00 | 19 | 12.066 | 15.946 | 15.860 | 16.000 | 406 | 0.693 | 0.95 |
| 189 | 4.00 | 19 | 13.150 | 17.382 | 17.310 | 17.420 | 296 | 1.006 | 0.97 |
| 189 | 4.00 | 19 | 14.229 | 18.805 | 18.750 | 18.840 | 229 | 1.114 | 0.98 |
| 189 | 4.00 | 19 | 15.468 | 20.427 | 20.370 | 20.460 | 504 | 1.264 | 0.96 |
| 189 | 4.00 | 19 | 16.242 | 21.435 | 21.370 | 21.480 | 143 | 1.632 | 0.99 |
| 189 | 4.00 | 19 | 17.321 | 22.834 | 22.750 | 22.910 | 149 | 1.826 | 0.99 |
| 190 | 4.00 | 20 | 3.370 | 27.674 | 27.240 | 27.910 | 8 | 2.149 | 1.00 |
| 190 | 4.00 | 20 | 4.485 | 28.847 | 28.280 | 29.150 | 11 | 2.432 | 1.00 |
| 190 | 4.00 | 20 | 5.530 | 29.941 | 29.240 | 30.310 | 188 | 2.607 | 0.99 |
| 190 | 4.00 | 20 | 6.611 | 31.069 | 30.230 | 31.510 | 191 | 2.707 | 0.99 |
| 190 | 4.00 | 20 | 7.738 | 32.242 | 31.260 | 32.750 | 394 | 2.405 | 0.98 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 190 | 4.00 | 20 | 8.818 | 33.365 | 32.250 | 33.950 | 600 | 2.401 | 0.97 |
| 190 | 4.00 | 20 | 9.864 | 34.451 | 33.200 | 35.100 | 213 | 2.838 | 0.99 |
| 190 | 4.00 | 20 | 10.987 | 35.616 | 34.220 | 36.340 | 214 | 2.845 | 0.99 |
| 190 | 4.00 | 20 | 12.068 | 36.737 | 35.210 | 37.530 | 224 | 2.998 | 0.99 |
| 190 | 4.00 | 20 | 13.152 | 37.861 | 36.200 | 38.720 | 9 | 2.780 | 1.00 |
| 190 | 4.00 | 20 | 14.237 | 38.985 | 37.190 | 39.910 | 229 | 2.951 | 0.99 |
| 190 | 4.00 | 20 | 15.317 | 40.103 | 38.190 | 41.090 | 227 | 2.923 | 0.99 |
| 190 | 4.00 | 20 | 16.405 | 41.230 | 39.190 | 42.280 | 234 | 3.035 | 0.99 |
| 190 | 4.00 | 20 | 17.474 | 42.336 | 40.180 | 43.440 | 3 | 2.907 | 1.00 |
| 191 | 4.68 | 19 | 9.907 | 11.101 | 10.550 | 11.660 | 190 | 0.324 | 0.96 |
| 191 | 4.68 | 19 | 12.066 | 13.614 | 12.930 | 14.300 | 341 | 0.450 | 0.95 |
| 191 | 4.68 | 19 | 13.150 | 14.883 | 14.130 | 15.630 | 402 | 0.539 | 0.95 |
| 191 | 4.68 | 19 | 14.229 | 16.152 | 15.330 | 16.970 | -84 | 1.047 | 1.01 |
| 191 | 4.68 | 19 | 15.468 | 17.611 | 16.720 | 18.500 | 425 | 0.718 | 0.96 |
| 191 | 4.68 | 19 | 16.242 | 18.525 | 17.590 | 19.450 | 439 | 0.851 | 0.96 |
| 191 | 4.68 | 19 | 17.321 | 19.801 | 18.800 | 20.790 | 127 | 1.480 | 0.99 |
| 192 | 4.68 | 20 | 3.370 | 25.335 | 24.350 | 26.300 | 149 | 0.988 | 0.99 |
| 192 | 4.68 | 20 | 4.485 | 26.735 | 25.760 | 27.700 | 466 | 1.044 | 0.97 |
| 192 | 4.68 | 20 | 5.530 | 28.030 | 27.050 | 28.990 | 490 | 1.052 | 0.97 |
| 192 | 4.68 | 20 | 6.611 | 29.353 | 28.380 | 30.310 | 508 | 1.225 | 0.97 |
| 192 | 4.68 | 20 | 7.738 | 30.719 | 29.740 | 31.670 | 537 | 1.248 | 0.97 |
| 192 | 4.68 | 20 | 8.818 | 32.019 | 31.050 | 32.970 | 561 | 1.221 | 0.97 |
| 192 | 4.68 | 20 | 9.864 | 33.269 | 32.300 | 34.220 | 578 | 1.360 | 0.97 |
| 192 | 4.68 | 20 | 10.987 | 34.604 | 33.640 | 35.550 | 199 | 1.572 | 0.99 |
| 192 | 4.68 | 20 | 12.068 | 35.882 | 34.920 | 36.830 | 214 | 1.664 | 0.99 |
| 192 | 4.68 | 20 | 13.152 | 37.158 | 36.200 | 38.100 | 217 | 1.660 | 0.99 |
| 192 | 4.68 | 20 | 14.237 | 38.429 | 37.470 | 39.370 | 441 | 1.578 | 0.98 |
| 192 | 4.68 | 20 | 15.317 | 39.691 | 38.740 | 40.630 | 453 | 1.548 | 0.98 |
| 192 | 4.68 | 20 | 16.405 | 40.957 | 40.010 | 41.890 | 464 | 1.653 | 0.98 |
| 192 | 4.68 | 20 | 17.474 | 42.196 | 41.250 | 43.130 | 236 | 1.836 | 0.99 |
| 193 | 4.68 | 19 | 9.907 | 11.712 | 11.370 | 12.070 | 220 | 0.312 | 0.96 |
| 193 | 4.68 | 19 | 12.066 | 14.321 | 13.890 | 14.770 | 528 | 0.327 | 0.93 |
| 193 | 4.68 | 19 | 13.150 | 15.636 | 15.160 | 16.130 | 698 | 0.341 | 0.92 |
| 193 | 4.68 | 19 | 14.229 | 16.949 | 16.430 | 17.480 | 396 | 0.735 | 0.96 |
| 193 | 4.68 | 19 | 15.468 | 18.458 | 17.900 | 19.040 | 893 | 0.349 | 0.92 |
| 193 | 4.68 | 19 | 16.242 | 19.402 | 18.820 | 20.010 | 597 | 0.753 | 0.95 |
| 193 | 4.68 | 19 | 17.321 | 20.720 | 20.100 | 21.360 | 516 | 1.016 | 0.96 |
| 194 | 4.68 | 20 | 3.370 | 26.129 | 25.230 | 26.860 | 151 | 1.954 | 0.99 |
| 194 | 4.68 | 20 | 4.485 | 27.492 | 26.510 | 28.270 | 159 | 2.264 | 0.99 |
| 194 | 4.68 | 20 | 5.530 | 28.761 | 27.720 | 29.580 | 169 | 2.261 | 0.99 |
| 194 | 4.68 | 20 | 6.611 | 30.061 | 28.960 | 30.930 | 174 | 2.339 | 0.99 |
| 194 | 4.68 | 20 | 7.738 | 31.407 | 30.240 | 32.320 | 547 | 2.015 | 0.97 |
| 194 | 4.68 | 20 | 8.818 | 32.689 | 31.470 | 33.650 | 380 | 2.253 | 0.98 |
| 194 | 4.68 | 20 | 9.864 | 33.922 | 32.650 | 34.930 | 7 | 2.361 | 1.00 |
| 194 | 4.68 | 20 | 10.987 | 35.240 | 33.920 | 36.300 | 204 | 2.581 | 0.99 |
| 194 | 4.68 | 20 | 12.068 | 36.503 | 35.130 | 37.610 | 212 | 2.650 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 194 | 4.68 | 20 | 13.152 | 37.765 | 36.350 | 38.910 | 4 | 2.612 | 1.00 |
| 194 | 4.68 | 20 | 14.237 | 39.022 | 37.570 | 40.210 | 228 | 2.614 | 0.99 |
| 194 | 4.68 | 20 | 15.317 | 40.271 | 38.770 | 41.500 | 11 | 2.714 | 1.00 |
| 194 | 4.68 | 20 | 16.405 | 41.525 | 39.990 | 42.800 | 9 | 2.598 | 1.00 |
| 194 | 4.68 | 20 | 17.474 | 42.754 | 41.180 | 44.060 | 6 | 2.558 | 1.00 |
| 195 | 4.15 | 19 | 10.983 | 14.392 | 14.160 | 14.640 | 143 | 0.315 | 0.98 |
| 195 | 4.15 | 19 | 12.066 | 15.817 | 15.580 | 16.070 | 325 | 0.373 | 0.96 |
| 195 | 4.15 | 19 | 13.150 | 17.237 | 17.000 | 17.500 | 385 | 0.473 | 0.96 |
| 195 | 4.15 | 19 | 14.229 | 18.648 | 18.410 | 18.910 | 338 | 0.570 | 0.97 |
| 195 | 4.15 | 19 | 15.468 | 20.260 | 20.020 | 20.530 | 502 | 0.710 | 0.96 |
| 195 | 4.15 | 19 | 16.242 | 21.264 | 21.030 | 21.530 | 279 | 0.961 | 0.98 |
| 195 | 4.15 | 19 | 17.321 | 22.660 | 22.430 | 22.930 | 295 | 1.061 | 0.98 |
| 196 | 4.15 | 20 | 3.370 | 27.858 | 27.740 | 28.120 | -481 | 1.740 | 1.03 |
| 196 | 4.15 | 20 | 4.485 | 29.128 | 28.970 | 29.370 | -331 | 2.104 | 1.02 |
| 196 | 4.15 | 20 | 5.530 | 30.307 | 30.110 | 30.520 | -343 | 2.137 | 1.02 |
| 196 | 4.15 | 20 | 6.611 | 31.517 | 31.290 | 31.690 | -358 | 2.194 | 1.02 |
| 196 | 4.15 | 20 | 7.738 | 32.772 | 32.520 | 32.910 | 203 | 2.676 | 0.99 |
| 196 | 4.15 | 20 | 8.818 | 33.969 | 33.700 | 34.060 | 18 | 2.782 | 1.00 |
| 196 | 4.15 | 20 | 9.864 | 35.123 | 34.850 | 35.210 | 415 | 2.737 | 0.98 |
| 196 | 4.15 | 20 | 10.987 | 36.358 | 36.090 | 36.470 | 421 | 2.788 | 0.98 |
| 196 | 4.15 | 20 | 12.068 | 37.543 | 37.280 | 37.670 | 434 | 2.885 | 0.98 |
| 196 | 4.15 | 20 | 13.152 | 38.730 | 38.470 | 38.870 | 10 | 3.067 | 1.00 |
| 196 | 4.15 | 20 | 14.237 | 39.913 | 39.660 | 40.070 | 12 | 3.010 | 1.00 |
| 196 | 4.15 | 20 | 15.317 | 41.090 | 40.840 | 41.260 | 11 | 3.077 | 1.00 |
| 196 | 4.15 | 20 | 16.405 | 42.273 | 42.040 | 42.460 | 240 | 3.369 | 0.99 |
| 196 | 4.15 | 20 | 17.474 | 43.432 | 43.180 | 43.630 | 5 | 3.299 | 1.00 |
| 197 | 4.00 | 20 | 12.068 | 15.891 | 15.840 | 15.920 | 181 | 0.386 | 0.98 |
| 197 | 4.00 | 20 | 13.152 | 17.339 | 17.300 | 17.370 | 399 | 0.351 | 0.96 |
| 197 | 4.00 | 20 | 14.237 | 18.781 | 18.750 | 18.800 | 570 | 0.353 | 0.95 |
| 197 | 4.00 | 20 | 15.317 | 20.211 | 20.180 | 20.230 | 627 | 0.447 | 0.95 |
| 197 | 4.00 | 20 | 16.405 | 21.645 | 21.610 | 21.660 | 418 | 0.605 | 0.97 |
| 197 | 4.00 | 20 | 17.474 | 23.047 | 23.000 | 23.070 | 299 | 0.715 | 0.98 |
| 198 | 4.28 | 20 | 10.987 | 14.499 | 13.860 | 14.810 | 199 | 0.340 | 0.96 |
| 198 | 4.28 | 20 | 12.068 | 15.948 | 15.290 | 16.250 | 311 | 0.376 | 0.95 |
| 198 | 4.28 | 20 | 13.152 | 17.401 | 16.730 | 17.690 | 314 | 0.632 | 0.96 |
| 198 | 4.28 | 20 | 14.237 | 18.850 | 18.160 | 19.120 | 464 | 0.766 | 0.95 |
| 198 | 4.28 | 20 | 15.317 | 20.290 | 19.590 | 20.540 | 220 | 1.354 | 0.98 |
| 198 | 4.28 | 20 | 16.405 | 21.735 | 21.030 | 21.970 | 13 | 1.826 | 1.00 |
| 198 | 4.28 | 20 | 17.474 | 23.149 | 22.430 | 23.360 | 138 | 1.881 | 0.99 |
| 199 | 4.85 | 20 | 8.818 | 10.345 | 9.820 | 10.790 | 263 | 0.380 | 0.93 |
| 199 | 4.85 | 20 | 9.864 | 11.607 | 11.010 | 12.070 | 336 | 0.433 | 0.93 |
| 199 | 4.85 | 20 | 10.987 | 12.963 | 12.290 | 13.480 | 425 | 0.670 | 0.93 |
| 199 | 4.85 | 20 | 12.068 | 14.270 | 13.520 | 14.850 | 427 | 0.897 | 0.94 |
| 199 | 4.85 | 20 | 13.152 | 15.582 | 14.760 | 16.230 | 243 | 1.731 | 0.97 |
| 199 | 4.85 | 20 | 14.237 | 16.896 | 16.000 | 17.600 | 196 | 2.161 | 0.98 |
| 199 | 4.85 | 20 | 15.317 | 18.207 | 17.230 | 18.970 | 110 | 2.726 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 199 | 4.85 | 20 | 16.405 | 19.527 | 18.470 | 20.350 | 120 | 3.108 | 0.99 |
| 199 | 4.85 | 20 | 17.474 | 20.825 | 19.700 | 21.700 | 5 | 3.740 | 1.00 |
| 200 | 3.85 | 10 | 9.344 | 11.859 | 10.673 | 13.045 | 16 | 0.334 | 0.99 |
| 200 | 3.85 | 10 | 10.425 | 13.284 | 11.956 | 14.612 | 18 | 0.565 | 0.99 |
| 200 | 3.85 | 10 | 11.507 | 14.713 | 13.242 | 16.184 | 81 | 0.746 | 0.98 |
| 200 | 3.85 | 10 | 12.551 | 16.092 | 14.483 | 17.701 | 224 | 0.916 | 0.96 |
| 200 | 3.85 | 10 | 13.313 | 17.099 | 15.389 | 18.809 | 121 | 1.388 | 0.98 |
| 200 | 3.85 | 10 | 14.394 | 18.520 | 16.668 | 20.372 | 87 | 2.023 | 0.99 |
| 200 | 3.85 | 10 | 15.471 | 19.930 | 17.937 | 21.923 | 93 | 2.388 | 0.99 |
| 201 | 3.85 | 11 | 3.397 | 23.824 | 22.740 | 25.390 | -126 | 2.642 | 1.01 |
| 201 | 3.85 | 11 | 3.668 | 24.012 | 22.830 | 25.700 | -128 | 2.608 | 1.01 |
| 201 | 3.85 | 11 | 4.481 | 24.577 | 23.110 | 26.610 | -287 | 2.366 | 1.02 |
| 201 | 3.85 | 11 | 5.083 | 24.994 | 23.310 | 27.290 | 28 | 2.874 | 1.00 |
| 201 | 3.85 | 11 | 6.166 | 25.750 | 23.690 | 28.510 | -141 | 2.648 | 1.01 |
| 201 | 3.85 | 11 | 7.248 | 26.505 | 24.070 | 29.730 | -146 | 2.794 | 1.01 |
| 201 | 3.85 | 11 | 8.327 | 27.257 | 24.460 | 30.940 | 17 | 2.862 | 1.00 |
| 201 | 3.85 | 11 | 9.409 | 28.014 | 24.850 | 32.140 | 6 | 3.113 | 1.00 |
| 201 | 3.85 | 11 | 10.274 | 28.622 | 25.170 | 33.100 | 380 | 3.256 | 0.98 |
| 201 | 3.85 | 11 | 11.315 | 29.356 | 25.570 | 34.250 | 569 | 3.065 | 0.97 |
| 201 | 3.85 | 11 | 12.400 | 30.127 | 25.990 | 35.450 | 197 | 3.476 | 0.99 |
| 201 | 3.85 | 11 | 13.092 | 30.620 | 26.260 | 36.210 | 199 | 3.352 | 0.99 |
| 201 | 3.85 | 11 | 14.568 | 31.678 | 26.850 | 37.820 | -200 | 2.880 | 1.01 |
| 201 | 3.85 | 11 | 15.518 | 32.364 | 27.240 | 38.860 | 3 | 3.180 | 1.00 |
| 202 | 3.85 | 12 | 3.166 | 30.178 | 29.410 | 30.990 | 5 | 1.013 | 1.00 |
| 202 | 3.85 | 12 | 4.326 | 31.063 | 29.910 | 32.270 | 200 | 0.994 | 0.99 |
| 202 | 3.85 | 12 | 5.368 | 31.861 | 30.350 | 33.420 | 203 | 0.994 | 0.99 |
| 202 | 3.85 | 12 | 6.452 | 32.692 | 30.820 | 34.620 | 206 | 0.933 | 0.99 |
| 202 | 3.85 | 12 | 7.536 | 33.526 | 31.290 | 35.820 | 619 | 0.787 | 0.97 |
| 202 | 3.85 | 12 | 8.349 | 34.153 | 31.640 | 36.720 | 211 | 0.862 | 0.99 |
| 202 | 3.85 | 12 | 9.432 | 34.990 | 32.110 | 37.920 | 635 | 0.744 | 0.97 |
| 202 | 3.85 | 12 | 10.512 | 35.827 | 32.590 | 39.120 | 647 | 0.688 | 0.97 |
| 202 | 3.85 | 12 | 11.596 | 36.670 | 33.080 | 40.310 | 438 | 0.766 | 0.98 |
| 202 | 3.85 | 12 | 12.681 | 37.516 | 33.580 | 41.510 | 439 | 0.868 | 0.98 |
| 202 | 3.85 | 12 | 13.803 | 38.393 | 34.110 | 42.740 | 228 | 1.012 | 0.99 |
| 202 | 3.85 | 12 | 14.847 | 39.213 | 34.610 | 43.880 | 460 | 0.825 | 0.98 |
| 202 | 3.85 | 12 | 15.925 | 40.063 | 35.140 | 45.050 | 697 | 0.754 | 0.97 |
| 203 | 3.95 | 10 | 11.507 | 12.853 | 11.568 | 14.138 | 22 | 0.356 | 1.00 |
| 203 | 3.95 | 10 | 12.551 | 14.004 | 12.604 | 15.404 | 174 | 0.394 | 0.98 |
| 203 | 3.95 | 10 | 13.313 | 14.844 | 13.360 | 16.328 | -137 | 0.444 | 1.02 |
| 203 | 3.95 | 10 | 14.394 | 16.040 | 14.436 | 17.644 | 295 | 0.408 | 0.97 |
| 203 | 3.95 | 10 | 15.471 | 17.236 | 15.512 | 18.960 | -78 | 0.576 | 1.01 |
| 204 | 3.95 | 11 | 3.397 | 20.634 | 20.520 | 20.720 | 313 | 0.398 | 0.98 |
| 204 | 3.95 | 11 | 3.668 | 20.800 | 20.700 | 20.870 | 748 | 0.319 | 0.95 |
| 204 | 3.95 | 11 | 4.481 | 21.298 | 21.220 | 21.350 | 319 | 0.434 | 0.98 |
| 204 | 3.95 | 11 | 5.083 | 21.666 | 21.610 | 21.710 | 476 | 0.503 | 0.97 |
| 204 | 3.95 | 11 | 6.166 | 22.331 | 22.300 | 22.420 | 794 | 0.303 | 0.95 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 204 | 3.95 | 11 | 7.248 | 22.998 | 22.930 | 23.130 | 334 | 0.431 | 0.98 |
| 204 | 3.95 | 11 | 8.327 | 23.666 | 23.560 | 23.830 | 346 | 0.462 | 0.98 |
| 204 | 3.95 | 11 | 9.409 | 24.342 | 24.200 | 24.550 | -486 | 0.542 | 1.03 |
| 204 | 3.95 | 11 | 10.274 | 24.887 | 24.720 | 25.120 | -146 | 0.597 | 1.01 |
| 204 | 3.95 | 11 | 11.315 | 25.549 | 25.350 | 25.820 | -158 | 0.613 | 1.01 |
| 204 | 3.95 | 11 | 12.400 | 26.247 | 26.000 | 26.560 | 15 | 0.585 | 1.00 |
| 204 | 3.95 | 11 | 13.092 | 26.696 | 26.430 | 27.040 | -345 | 0.550 | 1.02 |
| 204 | 3.95 | 11 | 14.568 | 27.668 | 27.350 | 28.060 | 574 | 0.527 | 0.97 |
| 204 | 3.95 | 11 | 15.518 | 28.302 | 27.950 | 28.730 | 594 | 0.538 | 0.97 |
| 205 | 3.95 | 12 | 3.166 | 30.291 | 29.250 | 32.380 | 195 | 1.521 | 0.99 |
| 205 | 3.95 | 12 | 4.326 | 30.936 | 29.640 | 33.660 | 795 | 1.140 | 0.96 |
| 205 | 3.95 | 12 | 5.368 | 31.520 | 29.990 | 34.820 | 608 | 1.187 | 0.97 |
| 205 | 3.95 | 12 | 6.452 | 32.129 | 30.360 | 36.030 | 820 | 1.101 | 0.96 |
| 205 | 3.95 | 12 | 7.536 | 32.742 | 30.730 | 37.260 | 1046 | 1.018 | 0.95 |
| 205 | 3.95 | 12 | 8.349 | 33.203 | 31.010 | 38.170 | 420 | 1.330 | 0.98 |
| 205 | 3.95 | 12 | 9.432 | 33.822 | 31.380 | 39.400 | 643 | 1.229 | 0.97 |
| 205 | 3.95 | 12 | 10.512 | 34.442 | 31.760 | 40.620 | 440 | 1.262 | 0.98 |
| 205 | 3.95 | 12 | 11.596 | 35.069 | 32.150 | 41.840 | 224 | 1.389 | 0.99 |
| 205 | 3.95 | 12 | 12.681 | 35.702 | 32.540 | 43.050 | 220 | 1.298 | 0.99 |
| 205 | 3.95 | 12 | 13.803 | 36.362 | 32.960 | 44.310 | 905 | 1.256 | 0.96 |
| 205 | 3.95 | 12 | 14.847 | 36.982 | 33.360 | 45.470 | 1385 | 0.714 | 0.94 |
| 205 | 3.95 | 12 | 15.925 | 37.629 | 33.780 | 46.660 | 2116 | 0.397 | 0.91 |
| 206 | 3.85 | 10 | 12.551 | 16.102 | 14.492 | 17.712 | 281 | 0.303 | 0.96 |
| 206 | 3.85 | 10 | 14.394 | 18.461 | 16.615 | 20.307 | 550 | 0.325 | 0.94 |
| 206 | 3.85 | 10 | 15.471 | 19.832 | 17.849 | 21.815 | 629 | 0.305 | 0.94 |
| 207 | 3.85 | 11 | 3.397 | 24.214 | 22.780 | 25.670 | 326 | 1.289 | 0.98 |
| 207 | 3.85 | 11 | 3.668 | 24.442 | 22.920 | 25.980 | 329 | 1.382 | 0.98 |
| 207 | 3.85 | 11 | 4.481 | 25.127 | 23.340 | 26.930 | 170 | 1.397 | 0.99 |
| 207 | 3.85 | 11 | 5.083 | 25.631 | 23.650 | 27.630 | 669 | 1.062 | 0.96 |
| 207 | 3.85 | 11 | 6.166 | 26.537 | 24.210 | 28.890 | 346 | 1.246 | 0.98 |
| 207 | 3.85 | 11 | 7.248 | 27.440 | 24.770 | 30.140 | 350 | 1.345 | 0.98 |
| 207 | 3.85 | 11 | 8.327 | 28.341 | 25.330 | 31.380 | 191 | 1.407 | 0.99 |
| 207 | 3.85 | 11 | 9.409 | 29.245 | 25.900 | 32.620 | -172 | 1.255 | 1.01 |
| 207 | 3.85 | 11 | 10.274 | 29.968 | 26.360 | 33.610 | 761 | 1.031 | 0.96 |
| 207 | 3.85 | 11 | 11.315 | 30.839 | 26.920 | 34.790 | 1159 | 0.794 | 0.94 |
| 207 | 3.85 | 11 | 12.400 | 31.746 | 27.510 | 36.020 | 398 | 1.429 | 0.98 |
| 207 | 3.85 | 11 | 13.092 | 32.327 | 27.890 | 36.800 | 208 | 1.382 | 0.99 |
| 207 | 3.85 | 11 | 14.568 | 33.571 | 28.710 | 38.470 | -597 | 0.877 | 1.03 |
| 207 | 3.85 | 11 | 15.518 | 34.373 | 29.250 | 39.540 | -194 | 1.163 | 1.01 |
| 208 | 3.90 | 11 | 6.166 | 7.904 | 7.610 | 8.060 | 1 | 0.369 | 0.99 |
| 208 | 3.90 | 11 | 7.248 | 9.292 | 8.950 | 9.480 | -24 | 0.512 | 1.00 |
| 208 | 3.90 | 11 | 8.327 | 10.674 | 10.270 | 10.900 | -117 | 0.585 | 1.02 |
| 208 | 3.90 | 11 | 9.409 | 12.056 | 11.590 | 12.310 | -75 | 0.874 | 1.01 |
| 208 | 3.90 | 11 | 10.274 | 13.156 | 12.650 | 13.440 | 0 | 1.201 | 1.00 |
| 208 | 3.90 | 11 | 11.315 | 14.476 | 13.910 | 14.790 | 181 | 1.274 | 0.98 |
| 208 | 3.90 | 11 | 12.400 | 15.844 | 15.230 | 16.190 | -59 | 1.635 | 1.01 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 208 | 3.90 | 11 | 13.092 | 16.714 | 16.070 | 17.080 | 15 | 2.094 | 1.00 |
| 208 | 3.90 | 11 | 14.568 | 18.560 | 17.850 | 18.970 | -76 | 2.366 | 1.01 |
| 208 | 3.90 | 11 | 15.518 | 19.740 | 18.990 | 20.170 | 166 | 2.474 | 0.99 |
| 209 | 3.90 | 12 | 3.166 | 23.460 | 23.240 | 23.750 | -600 | 0.622 | 1.04 |
| 209 | 3.90 | 12 | 4.326 | 24.640 | 24.430 | 24.840 | -464 | 0.661 | 1.03 |
| 209 | 3.90 | 12 | 5.368 | 25.696 | 25.410 | 25.980 | -478 | 0.625 | 1.03 |
| 209 | 3.90 | 12 | 6.452 | 26.789 | 26.420 | 27.320 | -329 | 0.655 | 1.02 |
| 209 | 3.90 | 12 | 7.536 | 27.878 | 27.430 | 28.670 | -509 | 0.649 | 1.03 |
| 209 | 3.90 | 12 | 8.349 | 28.693 | 28.180 | 29.680 | -353 | 0.676 | 1.02 |
| 209 | 3.90 | 12 | 9.432 | 29.778 | 29.190 | 31.020 | -360 | 0.694 | 1.02 |
| 209 | 3.90 | 12 | 10.512 | 30.859 | 30.190 | 32.360 | -370 | 0.719 | 1.02 |
| 209 | 3.90 | 12 | 11.596 | 31.943 | 31.190 | 33.690 | -383 | 0.728 | 1.02 |
| 209 | 3.90 | 12 | 12.681 | 33.029 | 32.200 | 35.020 | -200 | 0.821 | 1.01 |
| 209 | 3.90 | 12 | 13.803 | 34.154 | 33.250 | 36.380 | -202 | 0.708 | 1.01 |
| 209 | 3.90 | 12 | 14.847 | 35.202 | 34.230 | 37.640 | -200 | 0.757 | 1.01 |
| 209 | 3.90 | 12 | 15.925 | 36.287 | 35.250 | 38.940 | -202 | 0.813 | 1.01 |
| 210 | 4.15 | 11 | 9.409 | 10.558 | 9.790 | 11.780 | 205 | 0.344 | 0.96 |
| 210 | 4.15 | 11 | 11.315 | 12.718 | 11.760 | 14.220 | 330 | 0.438 | 0.95 |
| 210 | 4.15 | 11 | 12.400 | 13.952 | 12.890 | 15.610 | 453 | 0.484 | 0.94 |
| 210 | 4.15 | 11 | 13.092 | 14.741 | 13.610 | 16.500 | 492 | 0.576 | 0.94 |
| 210 | 4.15 | 11 | 14.568 | 16.429 | 15.150 | 18.380 | 292 | 0.949 | 0.97 |
| 210 | 4.15 | 11 | 15.518 | 17.518 | 16.150 | 19.590 | 327 | 1.099 | 0.97 |
| 211 | 4.15 | 12 | 3.166 | 21.989 | 20.560 | 23.960 | -15 | 2.521 | 1.00 |
| 211 | 4.15 | 12 | 4.326 | 23.452 | 22.000 | 25.390 | 293 | 2.443 | 0.98 |
| 211 | 4.15 | 12 | 5.368 | 24.758 | 23.290 | 26.650 | 306 | 2.535 | 0.98 |
| 211 | 4.15 | 12 | 6.452 | 26.106 | 24.620 | 27.970 | 323 | 2.494 | 0.98 |
| 211 | 4.15 | 12 | 7.536 | 27.448 | 25.940 | 29.280 | 507 | 2.303 | 0.97 |
| 211 | 4.15 | 12 | 8.349 | 28.449 | 26.920 | 30.260 | 164 | 2.872 | 0.99 |
| 211 | 4.15 | 12 | 9.432 | 29.778 | 28.230 | 31.560 | 357 | 2.613 | 0.98 |
| 211 | 4.15 | 12 | 10.512 | 31.097 | 29.520 | 32.850 | 364 | 2.677 | 0.98 |
| 211 | 4.15 | 12 | 11.596 | 32.414 | 30.820 | 34.140 | 180 | 2.887 | 0.99 |
| 211 | 4.15 | 12 | 12.681 | 33.727 | 32.110 | 35.420 | -6 | 2.932 | 1.00 |
| 211 | 4.15 | 12 | 13.803 | 35.078 | 33.440 | 36.740 | 192 | 3.270 | 0.99 |
| 211 | 4.15 | 12 | 14.847 | 36.332 | 34.670 | 37.970 | 419 | 2.750 | 0.98 |
| 211 | 4.15 | 12 | 15.925 | 37.622 | 35.940 | 39.240 | 427 | 2.620 | 0.98 |
| 212 | 3.90 | 11 | 12.400 | 16.111 | 15.730 | 16.290 | 158 | 0.309 | 0.98 |
| 212 | 3.90 | 11 | 13.092 | 17.006 | 16.610 | 17.190 | 176 | 0.361 | 0.98 |
| 212 | 3.90 | 11 | 14.568 | 18.905 | 18.470 | 19.100 | 623 | 0.493 | 0.94 |
| 212 | 3.90 | 11 | 15.518 | 20.118 | 19.660 | 20.320 | 809 | 0.435 | 0.93 |
| 213 | 3.90 | 12 | 3.166 | 23.323 | 22.270 | 24.490 | -598 | 1.392 | 1.04 |
| 213 | 3.90 | 12 | 4.326 | 24.317 | 22.850 | 25.840 | -458 | 1.436 | 1.03 |
| 213 | 3.90 | 12 | 5.368 | 25.208 | 23.370 | 27.050 | -314 | 1.533 | 1.02 |
| 213 | 3.90 | 12 | 6.452 | 26.131 | 23.910 | 28.300 | -322 | 1.469 | 1.02 |
| 213 | 3.90 | 12 | 7.536 | 27.053 | 24.450 | 29.540 | -497 | 1.404 | 1.03 |
| 213 | 3.90 | 12 | 8.349 | 27.743 | 24.860 | 30.470 | -513 | 1.443 | 1.03 |
| 213 | 3.90 | 12 | 9.432 | 28.663 | 25.410 | 31.700 | -525 | 1.356 | 1.03 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 213 | 3.90 | 12 | 10.512 | 29.580 | 25.960 | 32.930 | -538 | 1.393 | 1.03 |
| 213 | 3.90 | 12 | 11.596 | 30.502 | 26.520 | 34.150 | -555 | 1.350 | 1.03 |
| 213 | 3.90 | 12 | 12.681 | 31.426 | 27.100 | 35.370 | -572 | 1.359 | 1.03 |
| 213 | 3.90 | 12 | 13.803 | 32.384 | 27.700 | 36.670 | -382 | 1.533 | 1.02 |
| 213 | 3.90 | 12 | 14.847 | 33.280 | 28.270 | 37.890 | 17 | 1.771 | 1.00 |
| 213 | 3.90 | 12 | 15.925 | 34.207 | 28.870 | 39.130 | 28 | 1.941 | 1.00 |
| 214 | 3.90 | 13 | 3.862 | 33.136 | 33.060 | 33.840 | 803 | 0.828 | 0.96 |
| 214 | 3.90 | 13 | 4.945 | 33.960 | 33.530 | 35.030 | 819 | 0.810 | 0.96 |
| 214 | 3.90 | 13 | 7.109 | 35.607 | 34.490 | 37.440 | 1279 | 0.580 | 0.94 |
| 214 | 3.90 | 13 | 8.193 | 36.430 | 34.970 | 38.650 | 862 | 0.788 | 0.96 |
| 214 | 3.90 | 13 | 9.059 | 37.079 | 35.350 | 39.620 | 1098 | 0.716 | 0.95 |
| 214 | 3.90 | 13 | 9.922 | 37.728 | 35.730 | 40.600 | 1108 | 0.714 | 0.95 |
| 214 | 3.90 | 13 | 10.502 | 38.169 | 35.990 | 41.250 | 668 | 0.818 | 0.97 |
| 214 | 3.90 | 13 | 11.368 | 38.822 | 36.380 | 42.220 | 1137 | 0.590 | 0.95 |
| 214 | 3.90 | 13 | 12.102 | 39.383 | 36.710 | 43.050 | 1147 | 0.598 | 0.95 |
| 214 | 3.90 | 13 | 13.221 | 40.238 | 37.230 | 44.300 | 926 | 0.701 | 0.96 |
| 214 | 3.90 | 13 | 14.304 | 41.067 | 37.730 | 45.510 | 707 | 0.762 | 0.97 |
| 214 | 3.90 | 13 | 15.116 | 41.691 | 38.110 | 46.410 | 477 | 0.808 | 0.98 |
| 214 | 3.90 | 13 | 16.197 | 42.524 | 38.630 | 47.610 | 482 | 0.801 | 0.98 |
| 214 | 3.90 | 13 | 17.276 | 43.359 | 39.160 | 48.790 | 1213 | 0.583 | 0.95 |
| 214 | 3.90 | 13 | 11.367 | 39.137 | 36.380 | 42.220 | 913 | 0.730 | 0.96 |
| 215 | 3.78 | 12 | 14.847 | 17.982 | 16.300 | 19.280 | -550 | 0.399 | 1.05 |
| 215 | 3.78 | 12 | 15.925 | 19.282 | 17.470 | 20.670 | -851 | 0.310 | 1.07 |
| 216 | 3.78 | 13 | 3.862 | 23.899 | 23.250 | 26.580 | 6 | 1.299 | 1.00 |
| 216 | 3.78 | 13 | 4.945 | 24.984 | 24.020 | 27.850 | 170 | 1.428 | 0.99 |
| 216 | 3.78 | 13 | 7.109 | 27.141 | 24.980 | 30.370 | 533 | 1.284 | 0.97 |
| 216 | 3.78 | 13 | 8.193 | 28.214 | 25.470 | 31.630 | 366 | 1.427 | 0.98 |
| 216 | 3.78 | 13 | 9.059 | 29.070 | 25.850 | 32.650 | 564 | 1.167 | 0.97 |
| 216 | 3.78 | 13 | 9.922 | 29.921 | 26.230 | 33.650 | 573 | 1.317 | 0.97 |
| 216 | 3.78 | 13 | 10.502 | 30.491 | 26.490 | 34.320 | 386 | 1.418 | 0.98 |
| 216 | 3.78 | 13 | 11.368 | 31.342 | 26.880 | 35.330 | 792 | 1.102 | 0.96 |
| 216 | 3.78 | 13 | 12.102 | 32.062 | 27.210 | 36.180 | 805 | 1.085 | 0.96 |
| 216 | 3.78 | 13 | 13.221 | 33.158 | 27.730 | 37.480 | 614 | 1.199 | 0.97 |
| 216 | 3.78 | 13 | 14.304 | 34.216 | 28.230 | 38.730 | 840 | 1.041 | 0.96 |
| 216 | 3.78 | 13 | 15.116 | 35.010 | 28.610 | 39.660 | 851 | 1.049 | 0.96 |
| 216 | 3.78 | 13 | 16.197 | 36.067 | 29.130 | 40.900 | 869 | 0.981 | 0.96 |
| 216 | 3.78 | 13 | 17.276 | 37.121 | 29.660 | 42.130 | 881 | 1.050 | 0.96 |
| 216 | 3.78 | 13 | 11.367 | 31.909 | 26.880 | 35.330 | 604 | 1.161 | 0.97 |
| 217 | 3.78 | 12 | 13.803 | 17.754 | 17.400 | 18.010 | 153 | 0.361 | 0.98 |
| 217 | 3.78 | 12 | 15.925 | 20.499 | 20.080 | 20.790 | 661 | 0.356 | 0.94 |
| 218 | 3.78 | 13 | 3.862 | 25.676 | 25.130 | 26.730 | 5 | 2.703 | 1.00 |
| 218 | 3.78 | 13 | 4.945 | 26.919 | 26.150 | 28.010 | 7 | 2.834 | 1.00 |
| 218 | 3.78 | 13 | 7.109 | 29.406 | 28.150 | 30.580 | 17 | 2.861 | 1.00 |
| 218 | 3.78 | 13 | 8.193 | 30.652 | 29.140 | 31.880 | 14 | 2.891 | 1.00 |
| 218 | 3.78 | 13 | 9.059 | 31.654 | 29.940 | 32.920 | 205 | 2.972 | 0.99 |
| 218 | 3.78 | 13 | 9.922 | 32.648 | 30.720 | 33.960 | 22 | 2.787 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 218 | 3.78 | 13 | 10.502 | 33.313 | 31.250 | 34.650 | 17 | 2.697 | 1.00 |
| 218 | 3.78 | 13 | 11.368 | 34.307 | 32.030 | 35.690 | 229 | 2.767 | 0.99 |
| 218 | 3.78 | 13 | 12.102 | 35.145 | 32.700 | 36.560 | 233 | 2.847 | 0.99 |
| 218 | 3.78 | 13 | 13.221 | 36.418 | 33.710 | 37.890 | 29 | 2.643 | 1.00 |
| 218 | 3.78 | 13 | 14.304 | 37.644 | 34.690 | 39.170 | 33 | 2.603 | 1.00 |
| 218 | 3.78 | 13 | 15.116 | 38.560 | 35.430 | 40.130 | -182 | 2.382 | 1.01 |
| 218 | 3.78 | 13 | 16.197 | 39.775 | 36.410 | 41.390 | -189 | 2.210 | 1.01 |
| 218 | 3.78 | 13 | 17.276 | 40.980 | 37.400 | 42.640 | -415 | 2.046 | 1.02 |
| 218 | 3.78 | 13 | 11.367 | 34.898 | 32.030 | 35.690 | 432 | 2.533 | 0.98 |
| 219 | 4.09 | 13 | 14.304 | 18.066 | 13.860 | 19.020 | 276 | 0.334 | 0.97 |
| 219 | 4.09 | 13 | 15.116 | 19.102 | 14.620 | 20.130 | 395 | 0.362 | 0.96 |
| 219 | 4.09 | 13 | 16.197 | 20.476 | 15.630 | 21.600 | 346 | 0.690 | 0.97 |
| 219 | 4.09 | 13 | 17.276 | 21.840 | 16.640 | 23.040 | -220 | 1.120 | 1.02 |
| 220 | 4.09 | 14 | 3.291 | 26.674 | 21.890 | 28.420 | -505 | 1.556 | 1.03 |
| 220 | 4.09 | 14 | 4.366 | 27.723 | 23.190 | 29.650 | -344 | 1.901 | 1.02 |
| 220 | 4.09 | 14 | 6.530 | 29.826 | 25.780 | 32.120 | 5 | 2.424 | 1.00 |
| 220 | 4.09 | 14 | 7.613 | 30.875 | 27.060 | 33.360 | 6 | 2.378 | 1.00 |
| 220 | 4.09 | 14 | 8.696 | 31.921 | 28.320 | 34.600 | 200 | 2.454 | 0.99 |
| 220 | 4.09 | 14 | 9.779 | 32.967 | 29.420 | 35.830 | 409 | 2.334 | 0.98 |
| 220 | 4.09 | 14 | 10.754 | 33.906 | 29.900 | 36.940 | 414 | 2.373 | 0.98 |
| 220 | 4.09 | 14 | 12.921 | 35.992 | 30.990 | 39.380 | -404 | 1.608 | 1.02 |
| 220 | 4.09 | 14 | 14.003 | 37.034 | 31.550 | 40.600 | 20 | 1.641 | 1.00 |
| 220 | 4.09 | 14 | 15.088 | 38.076 | 32.120 | 41.800 | 20 | 1.578 | 1.00 |
| 220 | 4.09 | 14 | 16.171 | 39.116 | 32.700 | 42.990 | 252 | 2.043 | 0.99 |
| 220 | 4.09 | 14 | 17.236 | 40.139 | 33.280 | 44.160 | 25 | 1.845 | 1.00 |
| 220 | 4.09 | 14 | 18.319 | 41.178 | 33.880 | 45.340 | 21 | 1.857 | 1.00 |
| 220 | 4.09 | 14 | 5.460 | 28.855 | 24.510 | 30.900 | -175 | 1.987 | 1.01 |
| 221 | 4.39 | 13 | 8.193 | 9.483 | 8.660 | 10.220 | 40 | 0.423 | 0.99 |
| 221 | 4.39 | 13 | 9.059 | 10.460 | 9.520 | 11.310 | 96 | 0.344 | 0.98 |
| 221 | 4.39 | 13 | 9.922 | 11.429 | 10.370 | 12.410 | 97 | 0.481 | 0.98 |
| 221 | 4.39 | 13 | 10.502 | 12.082 | 10.940 | 13.140 | 102 | 0.498 | 0.98 |
| 221 | 4.39 | 13 | 11.368 | 13.053 | 11.790 | 14.250 | 238 | 0.441 | 0.96 |
| 221 | 4.39 | 13 | 12.102 | 13.878 | 12.510 | 15.180 | 257 | 0.450 | 0.96 |
| 221 | 4.39 | 13 | 13.221 | 15.136 | 13.600 | 16.610 | 214 | 0.649 | 0.97 |
| 221 | 4.39 | 13 | 14.304 | 16.354 | 14.660 | 18.000 | 325 | 0.638 | 0.96 |
| 221 | 4.39 | 13 | 15.116 | 17.270 | 15.460 | 19.040 | 262 | 0.894 | 0.97 |
| 221 | 4.39 | 13 | 16.197 | 18.492 | 16.530 | 20.430 | 193 | 1.078 | 0.98 |
| 221 | 4.39 | 13 | 17.276 | 19.716 | 17.600 | 21.820 | -249 | 1.441 | 1.02 |
| 221 | 4.39 | 13 | 11.367 | 13.098 | 11.790 | 14.250 | 416 | 0.305 | 0.93 |
| 222 | 4.39 | 14 | 3.291 | 25.143 | 22.860 | 27.420 | -324 | 1.538 | 1.02 |
| 222 | 4.39 | 14 | 4.366 | 26.416 | 24.120 | 28.710 | -169 | 1.717 | 1.01 |
| 222 | 4.39 | 14 | 6.530 | 28.938 | 26.600 | 31.310 | 177 | 2.086 | 0.99 |
| 222 | 4.39 | 14 | 7.613 | 30.186 | 27.820 | 32.610 | 183 | 2.127 | 0.99 |
| 222 | 4.39 | 14 | 8.696 | 31.425 | 29.010 | 33.910 | 379 | 2.035 | 0.98 |
| 222 | 4.39 | 14 | 9.779 | 32.657 | 30.200 | 35.210 | 780 | 1.729 | 0.96 |
| 222 | 4.39 | 14 | 10.754 | 33.762 | 31.260 | 36.380 | 602 | 1.765 | 0.97 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 222 | 4.39 | 14 | 12.921 | 36.201 | 33.600 | 38.970 | 205 | 1.905 | 0.99 |
| 222 | 4.39 | 14 | 14.003 | 37.413 | 34.760 | 40.260 | 647 | 1.730 | 0.97 |
| 222 | 4.39 | 14 | 15.088 | 38.622 | 35.930 | 41.530 | 878 | 1.710 | 0.96 |
| 222 | 4.39 | 14 | 16.171 | 39.827 | 37.090 | 42.800 | 691 | 1.642 | 0.97 |
| 222 | 4.39 | 14 | 17.236 | 41.010 | 38.230 | 44.040 | 699 | 1.503 | 0.97 |
| 222 | 4.39 | 14 | 18.319 | 42.208 | 39.400 | 45.290 | 702 | 1.626 | 0.97 |
| 222 | 4.39 | 14 | 5.460 | 27.759 | 25.380 | 30.020 | -1 | 1.879 | 1.00 |
| 223 | 4.09 | 14 | 3.291 | 26.917 | 25.720 | 28.170 | -11 | 0.940 | 1.00 |
| 223 | 4.09 | 14 | 4.366 | 27.813 | 26.270 | 29.430 | 164 | 1.100 | 0.99 |
| 223 | 4.09 | 14 | 6.530 | 29.619 | 27.380 | 31.950 | 361 | 1.183 | 0.98 |
| 223 | 4.09 | 14 | 7.613 | 30.525 | 27.930 | 33.210 | 554 | 1.138 | 0.97 |
| 223 | 4.09 | 14 | 8.696 | 31.433 | 28.500 | 34.470 | 570 | 1.070 | 0.97 |
| 223 | 4.09 | 14 | 9.779 | 32.342 | 29.060 | 35.720 | 786 | 1.014 | 0.96 |
| 223 | 4.09 | 14 | 10.754 | 33.162 | 29.580 | 36.850 | 797 | 0.953 | 0.96 |
| 223 | 4.09 | 14 | 12.921 | 34.988 | 30.740 | 39.330 | 409 | 1.085 | 0.98 |
| 223 | 4.09 | 14 | 14.003 | 35.903 | 31.340 | 40.560 | 848 | 0.922 | 0.96 |
| 223 | 4.09 | 14 | 15.088 | 36.820 | 31.940 | 41.790 | 651 | 0.936 | 0.97 |
| 223 | 4.09 | 14 | 16.171 | 37.738 | 32.560 | 43.010 | 1547 | 0.413 | 0.93 |
| 223 | 4.09 | 14 | 17.236 | 38.643 | 33.170 | 44.210 | 1114 | 0.599 | 0.95 |
| 223 | 4.09 | 14 | 18.319 | 39.564 | 33.810 | 45.420 | 1130 | 0.561 | 0.95 |
| 223 | 4.09 | 14 | 5.460 | 28.739 | 26.830 | 30.700 | 348 | 1.133 | 0.98 |
| 224 | 3.77 | 14 | 17.236 | 21.193 | 19.740 | 21.830 | 521 | 0.332 | 0.96 |
| 224 | 3.77 | 14 | 18.319 | 22.523 | 21.010 | 23.170 | 140 | 0.450 | 0.99 |
| 225 | 3.77 | 15 | 3.694 | 27.427 | 25.990 | 28.040 | 163 | 3.980 | 0.99 |
| 225 | 3.77 | 15 | 4.778 | 28.635 | 27.220 | 29.240 | -3 | 4.147 | 1.00 |
| 225 | 3.77 | 15 | 5.741 | 29.708 | 28.310 | 30.300 | 173 | 4.395 | 0.99 |
| 225 | 3.77 | 15 | 6.865 | 30.959 | 29.580 | 31.540 | -10 | 4.364 | 1.00 |
| 225 | 3.77 | 15 | 7.910 | 32.121 | 30.760 | 32.690 | -4 | 4.534 | 1.00 |
| 225 | 3.77 | 15 | 9.034 | 33.367 | 32.020 | 33.920 | 1 | 4.682 | 1.00 |
| 225 | 3.77 | 15 | 10.207 | 34.662 | 33.330 | 35.200 | 1 | 4.706 | 1.00 |
| 225 | 3.77 | 15 | 11.175 | 35.727 | 34.400 | 36.250 | 6 | 4.676 | 1.00 |
| 225 | 3.77 | 15 | 12.225 | 36.877 | 35.570 | 37.390 | 8 | 4.649 | 1.00 |
| 225 | 3.77 | 15 | 13.294 | 38.041 | 36.740 | 38.550 | 12 | 4.694 | 1.00 |
| 225 | 3.77 | 15 | 14.375 | 39.212 | 37.920 | 39.730 | 8 | 4.534 | 1.00 |
| 225 | 3.77 | 15 | 15.460 | 40.379 | 39.100 | 40.900 | 9 | 4.520 | 1.00 |
| 225 | 3.77 | 15 | 15.801 | 40.745 | 39.470 | 41.260 | 11 | 4.380 | 1.00 |
| 225 | 3.77 | 15 | 16.512 | 41.507 | 40.230 | 42.030 | 6 | 4.388 | 1.00 |
| 225 | 3.77 | 15 | 17.597 | 42.660 | 41.390 | 43.190 | 6 | 4.414 | 1.00 |
| 225 | 3.77 | 15 | 18.643 | 43.767 | 42.510 | 44.300 | 6 | 4.386 | 1.00 |
| 225 | 3.77 | 15 | 19.765 | 44.950 | 43.700 | 45.480 | 229 | 4.674 | 0.99 |
| 226 | 4.33 | 14 | 12.921 | 13.721 | 12.640 | 14.850 | 80 | 0.545 | 0.99 |
| 226 | 4.33 | 14 | 14.003 | 14.865 | 13.650 | 16.140 | 194 | 0.388 | 0.98 |
| 226 | 4.33 | 14 | 16.171 | 17.172 | 15.670 | 18.720 | 650 | 0.325 | 0.94 |
| 226 | 4.33 | 14 | 17.236 | 18.314 | 16.670 | 20.000 | 593 | 0.497 | 0.95 |
| 226 | 4.33 | 14 | 18.319 | 19.482 | 17.700 | 21.310 | 19 | 1.156 | 1.00 |
| 227 | 4.33 | 15 | 3.694 | 24.621 | 22.850 | 26.630 | 300 | 0.435 | 0.98 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 227 | 4.33 | 15 | 4.778 | 25.893 | 24.150 | 27.950 | 155 | 0.495 | 0.99 |
| 227 | 4.33 | 15 | 5.741 | 27.016 | 25.280 | 29.120 | 651 | 0.495 | 0.96 |
| 227 | 4.33 | 15 | 6.865 | 28.317 | 26.590 | 30.490 | -2 | 0.578 | 1.00 |
| 227 | 4.33 | 15 | 7.910 | 29.521 | 27.810 | 31.750 | 0 | 0.650 | 1.00 |
| 227 | 4.33 | 15 | 9.034 | 30.808 | 29.100 | 33.110 | 182 | 0.685 | 0.99 |
| 227 | 4.33 | 15 | 10.207 | 32.144 | 30.430 | 34.510 | 190 | 0.739 | 0.99 |
| 227 | 4.33 | 15 | 11.175 | 33.242 | 31.530 | 35.670 | 195 | 0.724 | 0.99 |
| 227 | 4.33 | 15 | 12.225 | 34.427 | 32.710 | 36.910 | 398 | 0.741 | 0.98 |
| 227 | 4.33 | 15 | 13.294 | 35.629 | 33.900 | 38.170 | 412 | 0.696 | 0.98 |
| 227 | 4.33 | 15 | 14.375 | 36.841 | 35.120 | 39.430 | 423 | 0.725 | 0.98 |
| 227 | 4.33 | 15 | 15.460 | 38.053 | 36.330 | 40.680 | 430 | 0.711 | 0.98 |
| 227 | 4.33 | 15 | 15.801 | 38.433 | 36.690 | 41.070 | 651 | 0.680 | 0.97 |
| 227 | 4.33 | 15 | 16.512 | 39.223 | 37.460 | 41.890 | 666 | 0.673 | 0.97 |
| 227 | 4.33 | 15 | 17.597 | 40.428 | 38.620 | 43.120 | 677 | 0.711 | 0.97 |
| 227 | 4.33 | 15 | 18.643 | 41.586 | 39.740 | 44.300 | 692 | 0.667 | 0.97 |
| 227 | 4.33 | 15 | 19.765 | 42.826 | 40.940 | 45.560 | 239 | 0.641 | 0.99 |
| 228 | 4.33 | 17 | 4.527 | 43.099 | 42.920 | 43.190 | 464 | 0.463 | 0.98 |
| 228 | 4.33 | 17 | 5.609 | 43.494 | 43.240 | 43.620 | 710 | 0.398 | 0.97 |
| 228 | 4.33 | 17 | 6.691 | 43.891 | 43.570 | 44.060 | 466 | 0.531 | 0.98 |
| 228 | 4.33 | 17 | 7.745 | 44.279 | 43.890 | 44.480 | 717 | 0.435 | 0.97 |
| 228 | 4.33 | 17 | 8.829 | 44.680 | 44.220 | 44.920 | 723 | 0.419 | 0.97 |
| 228 | 4.33 | 17 | 9.912 | 45.084 | 44.550 | 45.360 | 983 | 0.341 | 0.96 |
| 228 | 4.33 | 17 | 10.994 | 45.491 | 44.880 | 45.810 | -499 | 0.365 | 1.02 |
| 228 | 4.33 | 17 | 12.077 | 45.902 | 45.220 | 46.260 | 494 | 0.409 | 0.98 |
| 228 | 4.33 | 17 | 14.241 | 46.738 | 45.910 | 47.170 | 508 | 0.423 | 0.98 |
| 228 | 4.33 | 17 | 15.323 | 47.165 | 46.260 | 47.630 | 760 | 0.417 | 0.97 |
| 228 | 4.33 | 17 | 15.666 | 47.301 | 46.370 | 47.780 | 512 | 0.433 | 0.98 |
| 228 | 4.33 | 17 | 16.400 | 47.597 | 46.620 | 48.100 | 511 | 0.441 | 0.98 |
| 228 | 4.33 | 17 | 17.483 | 48.038 | 46.980 | 48.580 | 776 | 0.413 | 0.97 |
| 228 | 4.33 | 17 | 18.566 | 48.489 | 47.360 | 49.070 | 1048 | 0.301 | 0.96 |
| 229 | 4.33 | 14 | 12.921 | 15.186 | 14.710 | 15.610 | 463 | 0.380 | 0.94 |
| 229 | 4.33 | 14 | 14.003 | 16.439 | 15.960 | 16.870 | 373 | 0.371 | 0.96 |
| 229 | 4.33 | 14 | 15.088 | 17.696 | 17.200 | 18.140 | 226 | 0.389 | 0.98 |
| 229 | 4.33 | 14 | 16.171 | 18.955 | 18.460 | 19.410 | 795 | 0.322 | 0.93 |
| 229 | 4.33 | 14 | 17.236 | 20.196 | 19.690 | 20.650 | 138 | 0.891 | 0.99 |
| 229 | 4.33 | 14 | 18.319 | 21.461 | 20.960 | 21.920 | -123 | 1.148 | 1.01 |
| 230 | 4.33 | 15 | 3.694 | 26.465 | 26.090 | 26.820 | 316 | 1.505 | 0.98 |
| 230 | 4.33 | 15 | 4.778 | 27.673 | 27.350 | 27.980 | -1 | 1.558 | 1.00 |
| 230 | 4.33 | 15 | 5.741 | 28.738 | 28.470 | 29.000 | 173 | 1.719 | 0.99 |
| 230 | 4.33 | 15 | 6.865 | 29.972 | 29.760 | 30.170 | -174 | 1.778 | 1.01 |
| 230 | 4.33 | 15 | 7.910 | 31.113 | 30.960 | 31.250 | -179 | 1.697 | 1.01 |
| 230 | 4.33 | 15 | 9.034 | 32.334 | 32.250 | 32.410 | -187 | 1.719 | 1.01 |
| 230 | 4.33 | 15 | 10.207 | 33.604 | 33.540 | 33.650 | -383 | 1.636 | 1.02 |
| 230 | 4.33 | 15 | 11.175 | 34.650 | 34.520 | 34.760 | -197 | 1.807 | 1.01 |
| 230 | 4.33 | 15 | 12.225 | 35.782 | 35.590 | 35.950 | -405 | 1.614 | 1.02 |
| 230 | 4.33 | 15 | 13.294 | 36.933 | 36.680 | 37.170 | -619 | 1.407 | 1.03 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 230 | 4.33 | 15 | 14.375 | 38.096 | 37.780 | 38.400 | -634 | 1.481 | 1.03 |
| 230 | 4.33 | 15 | 15.460 | 39.262 | 38.890 | 39.620 | -435 | 1.536 | 1.02 |
| 230 | 4.33 | 15 | 15.801 | 39.628 | 39.240 | 40.010 | -437 | 1.456 | 1.02 |
| 230 | 4.33 | 15 | 16.512 | 40.393 | 39.960 | 40.810 | -878 | 1.275 | 1.04 |
| 230 | 4.33 | 15 | 17.597 | 41.557 | 41.080 | 42.030 | -674 | 1.288 | 1.03 |
| 230 | 4.33 | 15 | 18.643 | 42.679 | 42.160 | 43.200 | -688 | 1.193 | 1.03 |
| 230 | 4.33 | 15 | 19.765 | 43.883 | 43.310 | 44.450 | -463 | 1.342 | 1.02 |
| 231 | 3.77 | 14 | 12.921 | 16.022 | 15.660 | 16.300 | 332 | 0.435 | 0.94 |
| 231 | 3.77 | 14 | 14.003 | 17.418 | 17.040 | 17.710 | 224 | 1.219 | 0.97 |
| 231 | 3.77 | 14 | 15.088 | 18.812 | 18.420 | 19.120 | 178 | 1.586 | 0.98 |
| 231 | 3.77 | 14 | 16.171 | 20.197 | 19.800 | 20.520 | 433 | 1.329 | 0.96 |
| 231 | 3.77 | 14 | 17.236 | 21.552 | 21.150 | 21.880 | 139 | 2.203 | 0.99 |
| 231 | 3.77 | 14 | 18.319 | 22.921 | 22.520 | 23.260 | -260 | 2.372 | 1.02 |
| 232 | 3.77 | 15 | 3.694 | 26.394 | 25.520 | 27.680 | -153 | 1.293 | 1.01 |
| 232 | 3.77 | 15 | 4.778 | 27.163 | 26.010 | 28.850 | -162 | 1.330 | 1.01 |
| 232 | 3.77 | 15 | 5.741 | 27.845 | 26.450 | 29.890 | 11 | 1.569 | 1.00 |
| 232 | 3.77 | 15 | 6.865 | 28.640 | 26.960 | 31.090 | -171 | 1.598 | 1.01 |
| 232 | 3.77 | 15 | 7.910 | 29.380 | 27.440 | 32.200 | 0 | 1.665 | 1.00 |
| 232 | 3.77 | 15 | 9.034 | 30.177 | 27.960 | 33.420 | 2 | 1.790 | 1.00 |
| 232 | 3.77 | 15 | 10.207 | 31.012 | 28.500 | 34.690 | 2 | 1.852 | 1.00 |
| 232 | 3.77 | 15 | 11.175 | 31.703 | 28.960 | 35.740 | 2 | 1.892 | 1.00 |
| 232 | 3.77 | 15 | 12.225 | 32.456 | 29.470 | 36.880 | 191 | 1.997 | 0.99 |
| 232 | 3.77 | 15 | 13.294 | 33.226 | 29.990 | 38.020 | 195 | 1.997 | 0.99 |
| 232 | 3.77 | 15 | 14.375 | 34.009 | 30.530 | 39.180 | 198 | 2.008 | 0.99 |
| 232 | 3.77 | 15 | 15.460 | 34.798 | 31.080 | 40.330 | 201 | 2.000 | 0.99 |
| 232 | 3.77 | 15 | 15.801 | 35.048 | 31.250 | 40.700 | 207 | 1.878 | 0.99 |
| 232 | 3.77 | 15 | 16.512 | 35.570 | 31.620 | 41.450 | 210 | 1.948 | 0.99 |
| 232 | 3.77 | 15 | 17.597 | 36.369 | 32.190 | 42.600 | 211 | 1.964 | 0.99 |
| 232 | 3.77 | 15 | 18.643 | 37.144 | 32.750 | 43.700 | 216 | 1.950 | 0.99 |
| 232 | 3.77 | 15 | 19.765 | 37.981 | 33.360 | 44.890 | 216 | 1.931 | 0.99 |
| 233 | 3.77 | 16 | 3.216 | 35.424 | 34.920 | 36.030 | -426 | 0.497 | 1.02 |
| 233 | 3.77 | 16 | 4.299 | 35.869 | 35.370 | 36.460 | -634 | 0.453 | 1.03 |
| 233 | 3.77 | 16 | 5.497 | 36.365 | 35.880 | 36.940 | -9 | 0.713 | 1.00 |
| 233 | 3.77 | 16 | 6.465 | 36.768 | 36.300 | 37.330 | -219 | 0.676 | 1.01 |
| 233 | 3.77 | 16 | 7.547 | 37.223 | 36.770 | 37.770 | -222 | 0.645 | 1.01 |
| 233 | 3.77 | 16 | 8.629 | 37.682 | 37.250 | 38.210 | -436 | 0.613 | 1.02 |
| 233 | 3.77 | 16 | 9.674 | 38.132 | 37.720 | 38.640 | -440 | 0.586 | 1.02 |
| 233 | 3.77 | 16 | 10.796 | 38.621 | 38.230 | 39.110 | -217 | 0.790 | 1.01 |
| 233 | 3.77 | 16 | 11.880 | 39.099 | 38.730 | 39.570 | -219 | 0.788 | 1.01 |
| 233 | 3.77 | 16 | 12.962 | 39.583 | 39.230 | 40.030 | -443 | 0.691 | 1.02 |
| 233 | 3.77 | 16 | 14.046 | 40.076 | 39.740 | 40.500 | -668 | 0.598 | 1.03 |
| 233 | 3.77 | 16 | 16.215 | 41.084 | 40.790 | 41.470 | -457 | 0.707 | 1.02 |
| 233 | 3.77 | 16 | 17.297 | 41.600 | 41.330 | 41.960 | -460 | 0.729 | 1.02 |
| 233 | 3.77 | 16 | 18.458 | 42.162 | 41.920 | 42.500 | -465 | 0.757 | 1.02 |
| 234 | 4.16 | 15 | 10.207 | 13.159 | 12.440 | 13.410 | 48 | 0.546 | 0.99 |
| 234 | 4.16 | 15 | 11.175 | 14.435 | 13.640 | 14.710 | 65 | 0.859 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 234 | 4.16 | 15 | 12.225 | 15.815 | 14.940 | 16.110 | -67 | 1.543 | 1.01 |
| 234 | 4.16 | 15 | 13.294 | 17.214 | 16.270 | 17.520 | 13 | 1.723 | 1.00 |
| 234 | 4.16 | 15 | 14.375 | 18.623 | 17.610 | 18.950 | 10 | 2.337 | 1.00 |
| 234 | 4.16 | 15 | 15.460 | 20.028 | 18.950 | 20.360 | -104 | 2.757 | 1.01 |
| 234 | 4.16 | 15 | 15.801 | 20.469 | 19.370 | 20.810 | 9 | 2.813 | 1.00 |
| 234 | 4.16 | 15 | 16.512 | 21.385 | 20.260 | 21.730 | 136 | 2.995 | 0.99 |
| 234 | 4.16 | 15 | 17.597 | 22.774 | 21.590 | 23.130 | 8 | 3.623 | 1.00 |
| 234 | 4.16 | 15 | 18.643 | 24.105 | 22.880 | 24.500 | 8 | 3.898 | 1.00 |
| 234 | 4.16 | 15 | 19.765 | 25.525 | 24.250 | 25.960 | -152 | 3.899 | 1.01 |
| 235 | 4.16 | 16 | 3.216 | 29.132 | 27.980 | 30.030 | -336 | 5.621 | 1.02 |
| 235 | 4.16 | 16 | 4.299 | 30.159 | 28.510 | 31.260 | -347 | 5.786 | 1.02 |
| 235 | 4.16 | 16 | 5.497 | 31.284 | 29.090 | 32.590 | -176 | 6.304 | 1.01 |
| 235 | 4.16 | 16 | 6.465 | 32.191 | 29.570 | 33.680 | -183 | 6.537 | 1.01 |
| 235 | 4.16 | 16 | 7.547 | 33.202 | 30.110 | 34.900 | -188 | 6.613 | 1.01 |
| 235 | 4.16 | 16 | 8.629 | 34.211 | 30.650 | 36.110 | -192 | 6.790 | 1.01 |
| 235 | 4.16 | 16 | 9.674 | 35.184 | 31.190 | 37.280 | -196 | 6.835 | 1.01 |
| 235 | 4.16 | 16 | 10.796 | 36.227 | 31.770 | 38.530 | 8 | 7.538 | 1.00 |
| 235 | 4.16 | 16 | 11.880 | 37.235 | 32.340 | 39.730 | 8 | 7.605 | 1.00 |
| 235 | 4.16 | 16 | 12.962 | 38.240 | 32.920 | 40.930 | 8 | 7.635 | 1.00 |
| 235 | 4.16 | 16 | 14.046 | 39.246 | 33.510 | 42.120 | 9 | 7.662 | 1.00 |
| 235 | 4.16 | 16 | 16.215 | 41.262 | 34.710 | 44.490 | 4 | 7.589 | 1.00 |
| 235 | 4.16 | 16 | 17.297 | 42.268 | 35.320 | 45.670 | 3 | 7.574 | 1.00 |
| 235 | 4.16 | 16 | 18.458 | 43.349 | 35.980 | 46.920 | 4 | 7.565 | 1.00 |
| 236 | 4.16 | 17 | 3.444 | 39.467 | 38.480 | 40.010 | -2 | 0.518 | 1.00 |
| 236 | 4.16 | 17 | 4.527 | 39.968 | 39.040 | 40.480 | -688 | 0.469 | 1.03 |
| 236 | 4.16 | 17 | 5.609 | 40.469 | 39.590 | 40.950 | -920 | 0.394 | 1.04 |
| 236 | 4.16 | 17 | 6.691 | 40.974 | 40.150 | 41.430 | -473 | 0.524 | 1.02 |
| 236 | 4.16 | 17 | 7.745 | 41.467 | 40.700 | 41.900 | -475 | 0.516 | 1.02 |
| 236 | 4.16 | 17 | 8.829 | 41.976 | 41.260 | 42.380 | -942 | 0.375 | 1.04 |
| 236 | 4.16 | 17 | 9.912 | 42.488 | 41.820 | 42.870 | -1174 | 0.349 | 1.05 |
| 236 | 4.16 | 17 | 10.994 | 43.002 | 42.380 | 43.360 | -1185 | 0.351 | 1.05 |
| 236 | 4.16 | 17 | 12.077 | 43.520 | 42.950 | 43.850 | -956 | 0.424 | 1.04 |
| 236 | 4.16 | 17 | 14.241 | 44.570 | 44.090 | 44.860 | -1205 | 0.440 | 1.05 |
| 236 | 4.16 | 17 | 15.323 | 45.105 | 44.670 | 45.370 | -742 | 0.556 | 1.03 |
| 236 | 4.16 | 17 | 15.666 | 45.275 | 44.860 | 45.530 | -243 | 0.763 | 1.01 |
| 236 | 4.16 | 17 | 16.400 | 45.643 | 45.260 | 45.890 | -247 | 0.773 | 1.01 |
| 236 | 4.16 | 17 | 17.483 | 46.193 | 45.850 | 46.410 | 2 | 0.815 | 1.00 |
| 236 | 4.16 | 17 | 18.566 | 46.751 | 46.450 | 46.950 | 259 | 0.778 | 0.99 |
| 237 | 4.56 | 15 | 7.910 | 8.690 | 7.590 | 9.180 | 32 | 0.492 | 0.99 |
| 237 | 4.56 | 15 | 9.034 | 9.915 | 8.620 | 10.520 | 80 | 0.764 | 0.98 |
| 237 | 4.56 | 15 | 10.207 | 11.196 | 9.700 | 11.930 | 196 | 0.739 | 0.96 |
| 237 | 4.56 | 15 | 11.175 | 12.257 | 10.590 | 13.090 | 175 | 0.997 | 0.97 |
| 237 | 4.56 | 15 | 12.225 | 13.412 | 11.560 | 14.370 | 131 | 1.366 | 0.98 |
| 237 | 4.56 | 15 | 13.294 | 14.592 | 12.560 | 15.670 | 305 | 1.403 | 0.96 |
| 237 | 4.56 | 15 | 14.375 | 15.792 | 13.570 | 16.990 | 259 | 1.705 | 0.97 |
| 237 | 4.56 | 15 | 15.460 | 17.002 | 14.590 | 18.320 | 92 | 2.408 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 237 | 4.56 | 15 | 15.801 | 17.384 | 14.920 | 18.740 | 202 | 2.159 | 0.98 |
| 237 | 4.56 | 15 | 16.512 | 18.181 | 15.590 | 19.610 | 430 | 1.914 | 0.96 |
| 237 | 4.56 | 15 | 17.597 | 19.402 | 16.640 | 20.940 | 236 | 2.707 | 0.98 |
| 237 | 4.56 | 15 | 18.643 | 20.584 | 17.650 | 22.220 | 254 | 2.970 | 0.98 |
| 237 | 4.56 | 15 | 19.765 | 21.858 | 18.750 | 23.600 | 134 | 3.519 | 0.99 |
| 238 | 4.56 | 16 | 3.216 | 26.207 | 23.100 | 27.910 | -16 | 3.525 | 1.00 |
| 238 | 4.56 | 16 | 4.299 | 27.484 | 24.400 | 29.170 | -16 | 3.691 | 1.00 |
| 238 | 4.56 | 16 | 5.497 | 28.884 | 25.860 | 30.540 | -8 | 3.719 | 1.00 |
| 238 | 4.56 | 16 | 6.465 | 30.004 | 27.020 | 31.640 | -9 | 4.011 | 1.00 |
| 238 | 4.56 | 16 | 7.547 | 31.249 | 28.330 | 32.860 | -10 | 4.136 | 1.00 |
| 238 | 4.56 | 16 | 8.629 | 32.489 | 29.640 | 34.070 | -10 | 4.085 | 1.00 |
| 238 | 4.56 | 16 | 9.674 | 33.681 | 30.910 | 35.240 | -10 | 4.054 | 1.00 |
| 238 | 4.56 | 16 | 10.796 | 34.957 | 32.280 | 36.490 | 193 | 4.400 | 0.99 |
| 238 | 4.56 | 16 | 11.880 | 36.185 | 33.600 | 37.690 | 199 | 4.466 | 0.99 |
| 238 | 4.56 | 16 | 12.962 | 37.408 | 34.920 | 38.890 | 206 | 4.442 | 0.99 |
| 238 | 4.56 | 16 | 14.046 | 38.629 | 36.240 | 40.080 | 214 | 4.478 | 0.99 |
| 238 | 4.56 | 16 | 16.215 | 41.064 | 38.860 | 42.460 | 5 | 4.217 | 1.00 |
| 238 | 4.56 | 16 | 17.297 | 42.274 | 40.160 | 43.640 | 5 | 4.190 | 1.00 |
| 238 | 4.56 | 16 | 18.458 | 43.569 | 41.550 | 44.910 | 5 | 4.126 | 1.00 |
| 239 | 4.37 | 16 | 11.880 | 14.801 | 13.730 | 15.810 | 4 | 0.353 | 1.00 |
| 239 | 4.37 | 16 | 12.962 | 16.174 | 15.050 | 17.250 | 159 | 0.525 | 0.98 |
| 239 | 4.37 | 16 | 14.046 | 17.546 | 16.320 | 18.690 | 273 | 0.619 | 0.97 |
| 239 | 4.37 | 16 | 16.215 | 20.285 | 18.840 | 21.550 | 345 | 0.936 | 0.97 |
| 239 | 4.37 | 16 | 17.297 | 21.646 | 20.100 | 22.970 | 257 | 1.094 | 0.98 |
| 239 | 4.37 | 16 | 18.458 | 23.102 | 21.450 | 24.480 | 282 | 1.200 | 0.98 |
| 240 | 4.37 | 17 | 3.444 | 28.735 | 27.020 | 30.110 | -4 | 5.459 | 1.00 |
| 240 | 4.37 | 17 | 4.527 | 29.968 | 28.290 | 31.310 | -180 | 5.369 | 1.01 |
| 240 | 4.37 | 17 | 5.609 | 31.190 | 29.520 | 32.500 | -184 | 5.541 | 1.01 |
| 240 | 4.37 | 17 | 6.691 | 32.406 | 30.610 | 33.700 | -189 | 5.852 | 1.01 |
| 240 | 4.37 | 17 | 7.745 | 33.585 | 31.670 | 34.910 | -193 | 5.860 | 1.01 |
| 240 | 4.37 | 17 | 8.829 | 34.796 | 32.780 | 36.160 | -196 | 5.930 | 1.01 |
| 240 | 4.37 | 17 | 9.912 | 36.004 | 33.890 | 37.400 | 2 | 6.563 | 1.00 |
| 240 | 4.37 | 17 | 10.994 | 37.208 | 35.010 | 38.630 | 1 | 6.571 | 1.00 |
| 240 | 4.37 | 17 | 12.077 | 38.413 | 36.140 | 39.870 | 221 | 6.475 | 0.99 |
| 240 | 4.37 | 17 | 14.241 | 40.812 | 38.410 | 42.330 | 225 | 6.323 | 0.99 |
| 240 | 4.37 | 17 | 15.323 | 42.009 | 39.560 | 43.550 | 10 | 7.132 | 1.00 |
| 240 | 4.37 | 17 | 15.666 | 42.387 | 39.920 | 43.940 | 235 | 6.489 | 0.99 |
| 240 | 4.37 | 17 | 16.400 | 43.197 | 40.690 | 44.760 | 4 | 6.971 | 1.00 |
| 240 | 4.37 | 17 | 17.483 | 44.388 | 41.840 | 45.970 | 8 | 6.991 | 1.00 |
| 240 | 4.37 | 17 | 18.566 | 45.576 | 42.990 | 47.180 | 11 | 6.836 | 1.00 |
| 241 | 4.37 | 18 | 3.310 | 47.393 | 46.500 | 49.260 | -760 | 0.440 | 1.03 |
| 241 | 4.37 | 18 | 4.393 | 47.735 | 46.920 | 49.500 | -267 | 0.580 | 1.01 |
| 241 | 4.37 | 18 | 5.403 | 48.057 | 47.320 | 49.720 | -268 | 0.631 | 1.01 |
| 241 | 4.37 | 18 | 6.487 | 48.406 | 47.760 | 49.970 | -764 | 0.563 | 1.03 |
| 241 | 4.37 | 18 | 7.569 | 48.759 | 48.180 | 50.210 | -768 | 0.524 | 1.03 |
| 241 | 4.37 | 18 | 8.652 | 49.116 | 48.590 | 50.460 | -12 | 0.825 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 241 | 4.37 | 18 | 9.735 | 49.477 | 49.020 | 50.710 | -521 | 0.685 | 1.02 |
| 241 | 4.37 | 18 | 11.901 | 50.221 | 49.870 | 51.230 | -264 | 0.789 | 1.01 |
| 241 | 4.37 | 18 | 12.945 | 50.583 | 50.240 | 51.480 | -2 | 0.909 | 1.00 |
| 241 | 4.37 | 18 | 14.067 | 50.978 | 50.520 | 51.760 | -1 | 0.938 | 1.00 |
| 241 | 4.37 | 18 | 15.149 | 51.366 | 50.800 | 52.030 | 257 | 1.003 | 0.99 |
| 241 | 4.37 | 18 | 16.232 | 51.761 | 51.090 | 52.320 | 531 | 0.921 | 0.98 |
| 241 | 4.37 | 18 | 17.313 | 52.164 | 51.390 | 52.600 | 532 | 0.972 | 0.98 |
| 242 | 4.67 | 16 | 7.547 | 8.671 | 7.710 | 9.550 | -103 | 0.318 | 1.03 |
| 242 | 4.67 | 16 | 8.629 | 9.909 | 8.800 | 10.910 | -12 | 0.532 | 1.00 |
| 242 | 4.67 | 16 | 9.674 | 11.102 | 9.850 | 12.230 | -14 | 0.733 | 1.00 |
| 242 | 4.67 | 16 | 10.796 | 12.379 | 10.980 | 13.640 | 117 | 0.832 | 0.98 |
| 242 | 4.67 | 16 | 11.880 | 13.610 | 12.070 | 14.990 | 135 | 1.133 | 0.98 |
| 242 | 4.67 | 16 | 12.962 | 14.835 | 13.150 | 16.340 | 160 | 1.248 | 0.98 |
| 242 | 4.67 | 16 | 14.046 | 16.063 | 14.240 | 17.680 | 265 | 1.408 | 0.97 |
| 242 | 4.67 | 16 | 16.215 | 18.523 | 16.430 | 20.380 | 218 | 1.896 | 0.98 |
| 242 | 4.67 | 16 | 17.297 | 19.752 | 17.530 | 21.710 | 227 | 2.092 | 0.98 |
| 242 | 4.67 | 16 | 18.458 | 21.072 | 18.720 | 23.150 | 247 | 2.293 | 0.98 |
| 243 | 4.67 | 17 | 3.444 | 26.378 | 22.600 | 28.860 | -625 | 0.467 | 1.04 |
| 243 | 4.67 | 17 | 4.527 | 27.554 | 23.410 | 30.120 | -974 | 0.450 | 1.06 |
| 243 | 4.67 | 17 | 5.609 | 28.715 | 24.210 | 31.360 | -674 | 0.553 | 1.04 |
| 243 | 4.67 | 17 | 6.691 | 29.866 | 25.020 | 32.590 | -870 | 0.540 | 1.05 |
| 243 | 4.67 | 17 | 7.745 | 30.976 | 25.800 | 33.770 | -540 | 0.683 | 1.03 |
| 243 | 4.67 | 17 | 8.829 | 32.113 | 26.600 | 34.970 | -374 | 0.656 | 1.02 |
| 243 | 4.67 | 17 | 9.912 | 33.243 | 27.400 | 36.170 | -190 | 0.745 | 1.01 |
| 243 | 4.67 | 17 | 10.994 | 34.367 | 28.200 | 37.350 | -591 | 0.552 | 1.03 |
| 243 | 4.67 | 17 | 12.077 | 35.488 | 29.000 | 38.530 | -199 | 0.823 | 1.01 |
| 243 | 4.67 | 17 | 14.241 | 37.719 | 30.620 | 40.870 | -206 | 0.747 | 1.01 |
| 243 | 4.67 | 17 | 15.323 | 38.832 | 31.430 | 42.040 | 9 | 0.889 | 1.00 |
| 243 | 4.67 | 17 | 15.666 | 39.184 | 31.690 | 42.410 | -425 | 0.758 | 1.02 |
| 243 | 4.67 | 17 | 16.400 | 39.938 | 32.250 | 43.200 | -432 | 0.815 | 1.02 |
| 243 | 4.67 | 17 | 17.483 | 41.050 | 33.080 | 44.360 | -216 | 0.838 | 1.01 |
| 243 | 4.67 | 17 | 18.566 | 42.163 | 33.920 | 45.520 | 14 | 0.931 | 1.00 |
| 244 | 4.67 | 18 | 3.310 | 44.663 | 36.640 | 47.790 | 716 | 0.678 | 0.97 |
| 244 | 4.67 | 18 | 4.393 | 45.080 | 37.220 | 48.110 | -24 | 0.880 | 1.00 |
| 244 | 4.67 | 18 | 5.403 | 45.470 | 37.760 | 48.400 | -24 | 0.931 | 1.00 |
| 244 | 4.67 | 18 | 6.487 | 45.893 | 38.340 | 48.720 | 482 | 0.943 | 0.98 |
| 244 | 4.67 | 18 | 7.569 | 46.318 | 38.930 | 49.030 | 485 | 1.042 | 0.98 |
| 244 | 4.67 | 18 | 8.652 | 46.748 | 39.510 | 49.360 | -16 | 1.038 | 1.00 |
| 244 | 4.67 | 18 | 9.735 | 47.180 | 40.100 | 49.680 | 498 | 0.995 | 0.98 |
| 244 | 4.67 | 18 | 11.901 | 48.038 | 41.280 | 50.330 | 515 | 1.062 | 0.98 |
| 244 | 4.67 | 18 | 12.945 | 48.468 | 41.850 | 50.650 | 520 | 0.976 | 0.98 |
| 244 | 4.67 | 18 | 14.067 | 48.935 | 42.470 | 51.000 | 792 | 0.865 | 0.97 |
| 244 | 4.67 | 18 | 15.149 | 49.393 | 43.080 | 51.340 | 527 | 1.090 | 0.98 |
| 244 | 4.67 | 18 | 16.232 | 49.857 | 43.690 | 51.690 | 532 | 1.110 | 0.98 |
| 244 | 4.67 | 18 | 17.313 | 50.328 | 44.310 | 52.050 | 1086 | 0.919 | 0.96 |
| 245 | 4.35 | 17 | 14.241 | 18.219 | 18.000 | 18.370 | 72 | 0.322 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 245 | 4.35 | 17 | 15.323 | 19.645 | 19.420 | 19.800 | 355 | 0.421 | 0.96 |
| 245 | 4.35 | 17 | 15.666 | 20.095 | 19.870 | 20.250 | 446 | 0.412 | 0.95 |
| 245 | 4.35 | 17 | 16.400 | 21.060 | 20.840 | 21.220 | 584 | 0.407 | 0.94 |
| 245 | 4.35 | 17 | 17.483 | 22.477 | 22.250 | 22.640 | 571 | 0.575 | 0.95 |
| 245 | 4.35 | 17 | 18.566 | 23.889 | 23.670 | 24.050 | 524 | 0.774 | 0.96 |
| 246 | 4.35 | 18 | 3.310 | 28.779 | 27.410 | 29.530 | -501 | 0.607 | 1.03 |
| 246 | 4.35 | 18 | 4.393 | 29.839 | 28.120 | 30.770 | -687 | 0.619 | 1.04 |
| 246 | 4.35 | 18 | 5.403 | 30.822 | 28.770 | 31.920 | -532 | 0.667 | 1.03 |
| 246 | 4.35 | 18 | 6.487 | 31.876 | 29.480 | 33.140 | -545 | 0.747 | 1.03 |
| 246 | 4.35 | 18 | 7.569 | 32.928 | 30.190 | 34.370 | -559 | 0.827 | 1.03 |
| 246 | 4.35 | 18 | 8.652 | 33.983 | 30.910 | 35.590 | -384 | 0.939 | 1.02 |
| 246 | 4.35 | 18 | 9.735 | 35.039 | 31.620 | 36.820 | -195 | 1.089 | 1.01 |
| 246 | 4.35 | 18 | 11.901 | 37.172 | 33.060 | 39.280 | 6 | 1.286 | 1.00 |
| 246 | 4.35 | 18 | 12.945 | 38.197 | 33.760 | 40.470 | -194 | 1.084 | 1.01 |
| 246 | 4.35 | 18 | 14.067 | 39.300 | 34.520 | 41.750 | -197 | 1.160 | 1.01 |
| 246 | 4.35 | 18 | 15.149 | 40.366 | 35.250 | 42.980 | 445 | 1.388 | 0.98 |
| 246 | 4.35 | 18 | 16.232 | 41.433 | 36.000 | 44.210 | 234 | 1.443 | 0.99 |
| 246 | 4.35 | 18 | 17.313 | 42.500 | 36.750 | 45.430 | 472 | 1.367 | 0.98 |
| 247 | 4.75 | 17 | 7.745 | 9.105 | 8.400 | 9.710 | -23 | 0.304 | 1.02 |
| 247 | 4.75 | 17 | 8.829 | 10.415 | 9.570 | 11.130 | -23 | 0.304 | 1.01 |
| 247 | 4.75 | 17 | 9.912 | 11.730 | 10.740 | 12.550 | 21 | 0.423 | 0.99 |
| 247 | 4.75 | 17 | 10.994 | 13.049 | 11.910 | 13.990 | 92 | 0.359 | 0.97 |
| 247 | 4.75 | 17 | 12.077 | 14.373 | 13.070 | 15.430 | 132 | 0.418 | 0.97 |
| 247 | 4.75 | 17 | 15.323 | 18.359 | 16.540 | 19.790 | 553 | 0.309 | 0.93 |
| 248 | 4.75 | 18 | 3.310 | 27.989 | 25.530 | 29.840 | -482 | 1.554 | 1.03 |
| 248 | 4.75 | 18 | 4.393 | 29.317 | 26.870 | 31.170 | -505 | 1.602 | 1.03 |
| 248 | 4.75 | 18 | 5.403 | 30.549 | 28.120 | 32.400 | -521 | 1.630 | 1.03 |
| 248 | 4.75 | 18 | 6.487 | 31.860 | 29.440 | 33.720 | -361 | 1.931 | 1.02 |
| 248 | 4.75 | 18 | 7.569 | 33.162 | 30.750 | 35.030 | -373 | 1.971 | 1.02 |
| 248 | 4.75 | 18 | 8.652 | 34.459 | 32.050 | 36.340 | -193 | 2.185 | 1.01 |
| 248 | 4.75 | 18 | 9.735 | 35.748 | 33.340 | 37.640 | -199 | 2.166 | 1.01 |
| 248 | 4.75 | 18 | 11.901 | 38.309 | 35.900 | 40.240 | 8 | 2.429 | 1.00 |
| 248 | 4.75 | 18 | 12.945 | 39.538 | 37.130 | 41.480 | 223 | 2.633 | 0.99 |
| 248 | 4.75 | 18 | 14.067 | 40.853 | 38.440 | 42.810 | 232 | 2.618 | 0.99 |
| 248 | 4.75 | 18 | 15.149 | 42.117 | 39.700 | 44.090 | 12 | 2.425 | 1.00 |
| 248 | 4.75 | 18 | 16.232 | 43.376 | 40.950 | 45.360 | 18 | 2.551 | 1.00 |
| 248 | 4.75 | 18 | 17.313 | 44.630 | 42.200 | 46.630 | 256 | 2.728 | 0.99 |
| 249 | 4.75 | 19 | 3.126 | 46.715 | 44.510 | 48.380 | -21 | 0.738 | 1.00 |
| 249 | 4.75 | 19 | 4.210 | 47.070 | 44.910 | 48.620 | 731 | 0.799 | 0.97 |
| 249 | 4.75 | 19 | 5.294 | 47.427 | 45.310 | 48.850 | 486 | 0.974 | 0.98 |
| 249 | 4.75 | 19 | 6.378 | 47.787 | 45.710 | 49.090 | 748 | 0.906 | 0.97 |
| 249 | 4.75 | 19 | 7.462 | 48.148 | 46.110 | 49.330 | 496 | 0.953 | 0.98 |
| 249 | 4.75 | 19 | 8.507 | 48.497 | 46.490 | 49.570 | 1284 | 0.745 | 0.95 |
| 249 | 4.75 | 19 | 9.552 | 48.848 | 46.880 | 49.810 | 773 | 0.939 | 0.97 |
| 249 | 4.75 | 19 | 10.714 | 49.242 | 47.320 | 50.070 | 780 | 0.945 | 0.97 |
| 249 | 4.75 | 19 | 11.797 | 49.613 | 47.730 | 50.330 | 264 | 1.009 | 0.99 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 249 | 4.75 | 19 | 12.879 | 49.988 | 48.150 | 50.590 | 534 | 1.006 | 0.98 |
| 249 | 4.75 | 19 | 13.962 | 50.368 | 48.580 | 51.030 | -509 | 0.904 | 1.02 |
| 249 | 4.75 | 19 | 15.046 | 50.756 | 49.010 | 51.660 | -513 | 0.804 | 1.02 |
| 249 | 4.75 | 19 | 16.129 | 51.150 | 49.460 | 52.290 | 11 | 0.971 | 1.00 |
| 249 | 4.75 | 19 | 17.213 | 51.554 | 49.910 | 52.930 | 564 | 1.003 | 0.98 |
| 249 | 4.75 | 19 | 18.297 | 51.966 | 50.370 | 53.580 | 566 | 1.171 | 0.98 |
| 250 | 4.75 | 17 | 8.829 | 10.539 | 10.420 | 10.660 | 56 | 0.345 | 0.98 |
| 250 | 4.75 | 17 | 9.912 | 11.847 | 11.720 | 11.990 | 171 | 0.433 | 0.96 |
| 250 | 4.75 | 17 | 10.994 | 13.149 | 13.010 | 13.300 | 377 | 0.364 | 0.93 |
| 250 | 4.75 | 17 | 12.077 | 14.450 | 14.300 | 14.620 | 456 | 0.418 | 0.93 |
| 250 | 4.75 | 17 | 14.241 | 17.042 | 16.860 | 17.240 | 364 | 1.108 | 0.96 |
| 250 | 4.75 | 17 | 15.323 | 18.337 | 18.150 | 18.550 | 196 | 1.675 | 0.98 |
| 250 | 4.75 | 17 | 15.666 | 18.746 | 18.550 | 18.960 | 628 | 1.017 | 0.94 |
| 250 | 4.75 | 17 | 16.400 | 19.624 | 19.420 | 19.850 | 340 | 1.575 | 0.97 |
| 250 | 4.75 | 17 | 17.483 | 20.920 | 20.710 | 21.160 | 368 | 1.743 | 0.97 |
| 250 | 4.75 | 17 | 18.566 | 22.215 | 21.990 | 22.470 | 268 | 2.192 | 0.98 |
| 251 | 4.75 | 18 | 3.310 | 27.808 | 27.530 | 28.170 | -319 | 1.692 | 1.02 |
| 251 | 4.75 | 18 | 4.393 | 29.112 | 28.810 | 29.470 | -334 | 1.804 | 1.02 |
| 251 | 4.75 | 18 | 5.403 | 30.310 | 29.980 | 30.650 | -347 | 1.839 | 1.02 |
| 251 | 4.75 | 18 | 6.487 | 31.585 | 31.250 | 31.900 | -178 | 2.098 | 1.01 |
| 251 | 4.75 | 18 | 7.569 | 32.848 | 32.500 | 33.130 | -185 | 2.185 | 1.01 |
| 251 | 4.75 | 18 | 8.652 | 34.104 | 33.750 | 34.360 | 2 | 2.466 | 1.00 |
| 251 | 4.75 | 18 | 9.735 | 35.352 | 34.990 | 35.570 | -195 | 2.241 | 1.01 |
| 251 | 4.75 | 18 | 11.901 | 37.825 | 37.460 | 38.020 | 216 | 2.614 | 0.99 |
| 251 | 4.75 | 18 | 12.945 | 39.015 | 38.630 | 39.260 | 226 | 2.573 | 0.99 |
| 251 | 4.75 | 18 | 14.067 | 40.289 | 39.890 | 40.590 | 454 | 2.472 | 0.98 |
| 251 | 4.75 | 18 | 15.149 | 41.516 | 41.100 | 41.860 | 11 | 2.521 | 1.00 |
| 251 | 4.75 | 18 | 16.232 | 42.739 | 42.310 | 43.130 | 242 | 2.692 | 0.99 |
| 251 | 4.75 | 18 | 17.313 | 43.959 | 43.510 | 44.400 | 254 | 2.765 | 0.99 |
| 252 | 4.75 | 19 | 3.126 | 46.357 | 46.030 | 46.780 | -522 | 0.955 | 1.02 |
| 252 | 4.75 | 19 | 4.210 | 46.828 | 46.560 | 47.230 | -24 | 1.288 | 1.00 |
| 252 | 4.75 | 19 | 5.294 | 47.302 | 47.080 | 47.680 | -21 | 1.368 | 1.00 |
| 252 | 4.75 | 19 | 6.378 | 47.776 | 47.520 | 48.130 | -17 | 1.434 | 1.00 |
| 252 | 4.75 | 19 | 7.462 | 48.252 | 47.950 | 48.580 | -16 | 1.407 | 1.00 |
| 252 | 4.75 | 19 | 8.507 | 48.710 | 48.380 | 49.020 | -271 | 1.417 | 1.01 |
| 252 | 4.75 | 19 | 9.552 | 49.171 | 48.800 | 49.460 | 255 | 1.645 | 0.99 |
| 252 | 4.75 | 19 | 10.714 | 49.685 | 49.270 | 49.970 | -4 | 1.630 | 1.00 |
| 252 | 4.75 | 19 | 11.797 | 50.168 | 49.720 | 50.510 | 266 | 1.612 | 0.99 |
| 252 | 4.75 | 19 | 12.879 | 50.654 | 50.170 | 51.050 | 274 | 1.689 | 0.99 |
| 252 | 4.75 | 19 | 13.962 | 51.146 | 50.630 | 51.600 | 827 | 1.346 | 0.97 |
| 252 | 4.75 | 19 | 15.046 | 51.645 | 51.100 | 52.160 | 560 | 1.436 | 0.98 |
| 252 | 4.75 | 19 | 16.129 | 52.151 | 51.570 | 52.730 | 562 | 1.430 | 0.98 |
| 252 | 4.75 | 19 | 17.213 | 52.666 | 52.050 | 53.300 | 24 | 1.583 | 1.00 |
| 252 | 4.75 | 19 | 18.297 | 53.190 | 52.540 | 53.880 | 576 | 1.707 | 0.98 |
| 253 | 4.35 | 17 | 15.666 | 20.919 | 20.790 | 21.090 | 485 | 0.350 | 0.96 |
| 253 | 4.35 | 17 | 16.400 | 21.885 | 21.750 | 22.080 | 514 | 0.318 | 0.96 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 253 | 4.35 | 17 | 17.483 | 23.303 | 23.150 | 23.540 | 698 | 0.345 | 0.95 |
| 253 | 4.35 | 17 | 18.566 | 24.714 | 24.550 | 24.990 | 903 | 0.314 | 0.94 |
| 254 | 4.35 | 18 | 3.310 | 30.236 | 30.010 | 30.690 | -338 | 3.214 | 1.02 |
| 254 | 4.35 | 18 | 4.393 | 31.473 | 31.260 | 31.950 | -355 | 3.357 | 1.02 |
| 254 | 4.35 | 18 | 5.403 | 32.610 | 32.420 | 33.090 | -363 | 3.395 | 1.02 |
| 254 | 4.35 | 18 | 6.487 | 33.817 | 33.650 | 34.290 | -371 | 3.578 | 1.02 |
| 254 | 4.35 | 18 | 7.569 | 35.012 | 34.790 | 35.470 | -382 | 3.646 | 1.02 |
| 254 | 4.35 | 18 | 8.652 | 36.200 | 35.910 | 36.640 | -390 | 3.680 | 1.02 |
| 254 | 4.35 | 18 | 9.735 | 37.383 | 37.030 | 37.790 | -197 | 3.866 | 1.01 |
| 254 | 4.35 | 18 | 11.901 | 39.744 | 39.260 | 40.060 | -200 | 3.910 | 1.01 |
| 254 | 4.35 | 18 | 12.945 | 40.876 | 40.320 | 41.150 | 17 | 4.138 | 1.00 |
| 254 | 4.35 | 18 | 14.067 | 42.090 | 41.470 | 42.330 | 18 | 4.095 | 1.00 |
| 254 | 4.35 | 18 | 15.149 | 43.260 | 42.570 | 43.560 | 16 | 4.269 | 1.00 |
| 254 | 4.35 | 18 | 16.232 | 44.427 | 43.680 | 44.780 | 15 | 4.180 | 1.00 |
| 254 | 4.35 | 18 | 17.313 | 45.591 | 44.780 | 46.000 | 257 | 4.552 | 0.99 |
| 255 | 4.05 | 18 | 12.945 | 14.526 | 13.340 | 16.810 | 176 | 0.301 | 0.98 |
| 255 | 4.05 | 18 | 14.067 | 15.780 | 14.470 | 18.300 | 300 | 0.305 | 0.97 |
| 255 | 4.05 | 18 | 15.149 | 16.988 | 15.560 | 19.740 | -1 | 0.556 | 1.00 |
| 255 | 4.05 | 18 | 16.232 | 18.195 | 16.650 | 21.170 | 242 | 0.544 | 0.98 |
| 255 | 4.05 | 18 | 17.313 | 19.400 | 17.750 | 22.600 | 137 | 0.689 | 0.99 |
| 256 | 4.05 | 19 | 3.126 | 24.346 | 22.650 | 27.600 | 293 | 0.337 | 0.98 |
| 256 | 4.05 | 19 | 5.294 | 26.961 | 25.330 | 30.060 | 492 | 0.379 | 0.97 |
| 256 | 4.05 | 19 | 6.378 | 28.250 | 26.660 | 31.270 | 682 | 0.366 | 0.96 |
| 256 | 4.05 | 19 | 7.462 | 29.531 | 27.980 | 32.480 | 704 | 0.368 | 0.96 |
| 256 | 4.05 | 19 | 8.507 | 30.757 | 29.240 | 33.650 | 731 | 0.418 | 0.96 |
| 256 | 4.05 | 19 | 9.552 | 31.977 | 30.480 | 34.810 | 760 | 0.435 | 0.96 |
| 256 | 4.05 | 19 | 10.714 | 33.324 | 31.860 | 36.100 | 779 | 0.450 | 0.96 |
| 256 | 4.05 | 19 | 11.797 | 34.574 | 33.130 | 37.300 | 800 | 0.414 | 0.96 |
| 256 | 4.05 | 19 | 12.879 | 35.817 | 34.400 | 38.500 | 826 | 0.420 | 0.96 |
| 256 | 4.05 | 19 | 13.962 | 37.056 | 35.660 | 39.700 | 1271 | 0.348 | 0.94 |
| 256 | 4.05 | 19 | 15.046 | 38.290 | 36.910 | 40.900 | 437 | 0.309 | 0.98 |
| 256 | 4.05 | 19 | 17.213 | 40.748 | 39.410 | 43.280 | 904 | 0.320 | 0.96 |
| 256 | 4.05 | 19 | 18.297 | 41.970 | 40.650 | 44.470 | 1157 | 0.334 | 0.95 |
| 257 | 4.70 | 18 | 8.652 | 10.459 | 10.130 | 10.770 | -2 | 0.404 | 1.00 |
| 257 | 4.70 | 18 | 9.735 | 11.844 | 11.470 | 12.180 | 1 | 0.549 | 0.99 |
| 257 | 4.70 | 18 | 11.901 | 14.641 | 14.140 | 15.060 | 61 | 0.839 | 0.98 |
| 257 | 4.70 | 18 | 12.945 | 16.000 | 15.420 | 16.470 | 17 | 0.908 | 1.00 |
| 257 | 4.70 | 18 | 14.067 | 17.467 | 16.810 | 17.980 | 73 | 0.965 | 0.99 |
| 257 | 4.70 | 18 | 15.149 | 18.882 | 18.140 | 19.450 | 152 | 1.078 | 0.98 |
| 257 | 4.70 | 18 | 16.232 | 20.298 | 19.470 | 20.950 | 189 | 1.150 | 0.98 |
| 257 | 4.70 | 18 | 17.313 | 21.712 | 20.800 | 22.440 | 121 | 1.411 | 0.99 |
| 258 | 4.70 | 19 | 3.126 | 26.966 | 26.050 | 27.770 | -750 | 0.897 | 1.05 |
| 258 | 4.70 | 19 | 4.210 | 28.313 | 27.360 | 29.140 | -306 | 1.090 | 1.02 |
| 258 | 4.70 | 19 | 5.294 | 29.647 | 28.660 | 30.480 | -486 | 1.253 | 1.03 |
| 258 | 4.70 | 19 | 6.378 | 30.970 | 29.940 | 31.820 | -334 | 1.403 | 1.02 |
| 258 | 4.70 | 19 | 7.462 | 32.286 | 31.220 | 33.170 | -349 | 1.358 | 1.02 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 258 | 4.70 | 19 | 8.507 | 33.548 | 32.440 | 34.480 | -361 | 1.528 | 1.02 |
| 258 | 4.70 | 19 | 9.552 | 34.806 | 33.670 | 35.780 | 15 | 1.920 | 1.00 |
| 258 | 4.70 | 19 | 10.714 | 36.199 | 35.030 | 37.230 | -188 | 1.642 | 1.01 |
| 258 | 4.70 | 19 | 11.797 | 37.494 | 36.300 | 38.580 | 7 | 1.702 | 1.00 |
| 258 | 4.70 | 19 | 12.879 | 38.782 | 37.560 | 39.930 | 221 | 1.908 | 0.99 |
| 258 | 4.70 | 19 | 13.962 | 40.067 | 38.820 | 41.270 | 447 | 1.703 | 0.98 |
| 258 | 4.70 | 19 | 15.046 | 41.349 | 40.080 | 42.610 | 678 | 1.702 | 0.97 |
| 258 | 4.70 | 19 | 16.129 | 42.625 | 41.340 | 43.950 | 694 | 1.692 | 0.97 |
| 258 | 4.70 | 19 | 17.213 | 43.897 | 42.590 | 45.270 | 239 | 2.027 | 0.99 |
| 258 | 4.70 | 19 | 18.297 | 45.164 | 43.840 | 46.590 | 250 | 2.104 | 0.99 |
| 259 | 4.70 | 20 | 7.643 | 49.014 | 48.310 | 49.610 | -1515 | 0.409 | 1.06 |
| 259 | 4.70 | 20 | 8.724 | 49.366 | 48.630 | 49.920 | -509 | 0.906 | 1.02 |
| 259 | 4.70 | 20 | 9.800 | 49.718 | 48.950 | 50.230 | -510 | 0.928 | 1.02 |
| 260 | 4.70 | 18 | 11.901 | 13.988 | 13.870 | 14.110 | 177 | 0.481 | 0.97 |
| 260 | 4.70 | 18 | 12.945 | 15.233 | 15.110 | 15.370 | 286 | 0.486 | 0.96 |
| 260 | 4.70 | 18 | 14.067 | 16.569 | 16.430 | 16.720 | 168 | 0.784 | 0.98 |
| 260 | 4.70 | 18 | 15.149 | 17.857 | 17.710 | 18.010 | 192 | 0.958 | 0.98 |
| 260 | 4.70 | 18 | 16.232 | 19.146 | 18.990 | 19.310 | 108 | 1.192 | 0.99 |
| 260 | 4.70 | 18 | 17.313 | 20.433 | 20.270 | 20.600 | 244 | 1.261 | 0.98 |
| 261 | 4.70 | 19 | 3.126 | 25.670 | 25.440 | 25.890 | -277 | 2.081 | 1.02 |
| 261 | 4.70 | 19 | 4.210 | 27.027 | 26.770 | 27.270 | -288 | 2.202 | 1.02 |
| 261 | 4.70 | 19 | 5.294 | 28.369 | 28.080 | 28.640 | -139 | 2.651 | 1.01 |
| 261 | 4.70 | 19 | 6.378 | 29.700 | 29.380 | 30.010 | -148 | 2.792 | 1.01 |
| 261 | 4.70 | 19 | 7.462 | 31.026 | 30.680 | 31.360 | -157 | 2.792 | 1.01 |
| 261 | 4.70 | 19 | 8.507 | 32.304 | 31.930 | 32.670 | 202 | 3.031 | 0.99 |
| 261 | 4.70 | 19 | 9.552 | 33.577 | 33.180 | 33.960 | 210 | 3.269 | 0.99 |
| 261 | 4.70 | 19 | 10.714 | 34.990 | 34.570 | 35.400 | 12 | 3.219 | 1.00 |
| 261 | 4.70 | 19 | 11.797 | 36.307 | 35.870 | 36.740 | 211 | 3.239 | 0.99 |
| 261 | 4.70 | 19 | 12.879 | 37.619 | 37.160 | 38.070 | 217 | 3.368 | 0.99 |
| 261 | 4.70 | 19 | 13.962 | 38.929 | 38.450 | 39.400 | 225 | 3.267 | 0.99 |
| 261 | 4.70 | 19 | 15.046 | 40.234 | 39.740 | 40.720 | 449 | 3.044 | 0.98 |
| 261 | 4.70 | 19 | 16.129 | 41.535 | 41.030 | 42.040 | 457 | 3.060 | 0.98 |
| 261 | 4.70 | 19 | 17.213 | 42.830 | 42.310 | 43.350 | 690 | 2.835 | 0.97 |
| 261 | 4.70 | 19 | 18.297 | 44.119 | 43.590 | 44.650 | 475 | 3.268 | 0.98 |
| 262 | 4.70 | 20 | 5.475 | 47.663 | 47.400 | 47.920 | 264 | 0.410 | 0.99 |
| 262 | 4.70 | 20 | 6.559 | 48.088 | 47.880 | 48.290 | 1039 | 0.543 | 0.96 |
| 262 | 4.70 | 20 | 7.643 | 48.515 | 48.360 | 48.660 | -504 | 0.386 | 1.02 |
| 262 | 4.70 | 20 | 8.724 | 48.942 | 48.840 | 49.040 | 272 | 0.733 | 0.99 |
| 262 | 4.70 | 20 | 9.800 | 49.370 | 49.320 | 49.420 | -251 | 0.579 | 1.01 |
| 263 | 4.05 | 18 | 11.901 | 15.639 | 15.470 | 16.020 | 311 | 0.315 | 0.96 |
| 263 | 4.05 | 18 | 12.945 | 16.995 | 16.820 | 17.430 | 366 | 0.386 | 0.96 |
| 263 | 4.05 | 18 | 14.067 | 18.444 | 18.210 | 18.920 | 320 | 0.566 | 0.97 |
| 263 | 4.05 | 18 | 15.149 | 19.836 | 19.550 | 20.360 | 362 | 0.575 | 0.97 |
| 263 | 4.05 | 18 | 16.232 | 21.221 | 20.880 | 21.790 | 524 | 0.671 | 0.96 |
| 263 | 4.05 | 18 | 17.313 | 22.599 | 22.200 | 23.210 | 434 | 0.831 | 0.97 |
| 264 | 4.05 | 19 | 3.126 | 27.435 | 26.940 | 28.160 | -318 | 2.014 | 1.02 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 264 | 4.05 | 19 | 4.210 | 28.660 | 28.070 | 29.380 | -323 | 1.980 | 1.02 |
| 264 | 4.05 | 19 | 5.294 | 29.876 | 29.180 | 30.600 | -162 | 2.371 | 1.01 |
| 264 | 4.05 | 19 | 6.378 | 31.086 | 30.280 | 31.800 | -165 | 2.452 | 1.01 |
| 264 | 4.05 | 19 | 7.462 | 32.294 | 31.380 | 33.000 | -172 | 2.449 | 1.01 |
| 264 | 4.05 | 19 | 8.507 | 33.455 | 32.430 | 34.150 | -175 | 2.587 | 1.01 |
| 264 | 4.05 | 19 | 9.552 | 34.617 | 33.500 | 35.310 | 214 | 3.118 | 0.99 |
| 264 | 4.05 | 19 | 10.714 | 35.906 | 34.680 | 36.590 | 210 | 2.964 | 0.99 |
| 264 | 4.05 | 19 | 11.797 | 37.110 | 35.790 | 37.790 | 12 | 2.844 | 1.00 |
| 264 | 4.05 | 19 | 12.879 | 38.309 | 36.910 | 38.990 | 224 | 3.112 | 0.99 |
| 264 | 4.05 | 19 | 13.962 | 39.508 | 38.020 | 40.180 | 450 | 2.854 | 0.98 |
| 264 | 4.05 | 19 | 15.046 | 40.707 | 39.140 | 41.380 | 235 | 2.952 | 0.99 |
| 264 | 4.05 | 19 | 16.129 | 41.903 | 40.270 | 42.570 | 237 | 2.960 | 0.99 |
| 264 | 4.05 | 19 | 17.213 | 43.096 | 41.390 | 43.760 | 237 | 3.166 | 0.99 |
| 264 | 4.05 | 19 | 18.297 | 44.287 | 42.520 | 44.940 | 248 | 3.219 | 0.99 |
| 265 | 4.50 | 19 | 3.126 | 3.709 | 3.310 | 3.880 | -27 | 0.337 | 0.99 |
| 265 | 4.50 | 19 | 4.210 | 5.024 | 4.500 | 5.260 | 77 | 0.397 | 1.03 |
| 265 | 4.50 | 19 | 5.294 | 6.355 | 5.700 | 6.660 | 5 | 0.643 | 1.00 |
| 265 | 4.50 | 19 | 6.378 | 7.699 | 6.890 | 8.080 | 26 | 0.662 | 1.01 |
| 265 | 4.50 | 19 | 7.462 | 9.058 | 8.070 | 9.520 | 19 | 0.574 | 1.01 |
| 265 | 4.50 | 19 | 8.507 | 10.380 | 9.210 | 10.920 | 0 | 0.589 | 0.99 |
| 265 | 4.50 | 19 | 9.552 | 11.712 | 10.340 | 12.340 | 22 | 0.376 | 0.94 |
| 265 | 4.50 | 19 | 10.714 | 13.202 | 11.590 | 13.930 | 53 | 0.392 | 0.96 |
| 265 | 4.50 | 19 | 12.113 | 15.167 | 13.490 | 16.290 | 210 | 0.370 | 0.98 |
| 265 | 4.50 | 19 | 13.297 | 17.015 | 15.650 | 18.420 | 474 | 0.372 | 0.96 |
| 266 | 4.50 | 20 | 3.317 | 28.737 | 25.140 | 30.220 | 317 | 1.650 | 0.98 |
| 266 | 4.50 | 20 | 4.390 | 30.065 | 26.480 | 31.530 | 162 | 2.057 | 0.99 |
| 266 | 4.50 | 20 | 5.475 | 31.398 | 27.820 | 32.860 | -21 | 2.732 | 1.00 |
| 266 | 4.50 | 20 | 6.559 | 32.723 | 29.150 | 34.170 | -197 | 3.334 | 1.01 |
| 266 | 4.50 | 20 | 7.643 | 34.042 | 30.490 | 35.470 | -404 | 2.808 | 1.02 |
| 266 | 4.50 | 20 | 8.724 | 35.353 | 31.820 | 36.770 | 186 | 3.373 | 0.99 |
| 266 | 4.50 | 20 | 9.800 | 36.654 | 33.160 | 38.050 | 194 | 3.398 | 0.99 |
| 267 | 4.80 | 19 | 9.552 | 11.351 | 10.910 | 11.770 | -49 | 0.385 | 1.01 |
| 267 | 4.80 | 19 | 10.714 | 12.745 | 12.270 | 13.190 | -223 | 0.394 | 1.04 |
| 267 | 4.80 | 19 | 11.797 | 14.042 | 13.540 | 14.520 | 66 | 0.500 | 0.99 |
| 267 | 4.80 | 19 | 12.879 | 15.332 | 14.800 | 15.830 | 160 | 0.620 | 0.98 |
| 267 | 4.80 | 19 | 13.962 | 16.621 | 16.060 | 17.150 | 444 | 0.489 | 0.95 |
| 267 | 4.80 | 19 | 15.046 | 17.911 | 17.330 | 18.460 | 785 | 0.334 | 0.92 |
| 267 | 4.80 | 19 | 16.129 | 19.201 | 18.590 | 19.770 | 558 | 0.596 | 0.95 |
| 267 | 4.80 | 19 | 17.213 | 20.491 | 19.860 | 21.080 | 505 | 0.933 | 0.96 |
| 267 | 4.80 | 19 | 18.297 | 21.783 | 21.130 | 22.390 | 290 | 1.341 | 0.98 |
| 268 | 4.80 | 20 | 3.317 | 27.426 | 26.840 | 27.990 | -789 | 0.338 | 1.05 |
| 268 | 4.80 | 20 | 5.475 | 30.069 | 29.490 | 30.590 | -1210 | 0.306 | 1.07 |
| 268 | 4.80 | 20 | 6.559 | 31.376 | 30.800 | 31.880 | -1255 | 0.350 | 1.07 |
| 268 | 4.80 | 20 | 7.643 | 32.673 | 32.110 | 33.160 | -570 | 0.634 | 1.03 |
| 268 | 4.80 | 20 | 8.724 | 33.954 | 33.420 | 34.420 | -191 | 0.996 | 1.01 |
| 268 | 4.80 | 20 | 9.800 | 35.224 | 34.720 | 35.670 | -4 | 1.057 | 1.00 |

| # of sub-batch/cycle | enrichment | cycle # | cycle burnup | sub-batch burnup | Min. sub-batch burnup | Max. sub-batch burnup | Decrement bias (pcm) | Sensitivity (%) | Exposure Multiplier from r.m.s. Minimization |
|----------------------|------------|---------|--------------|------------------|-----------------------|-----------------------|----------------------|-----------------|--|
| 269 | 4.55 | 20 | 7.643 | 9.182 | 7.800 | 9.910 | 12 | 0.358 | 1.04 |
| 269 | 4.55 | 20 | 8.724 | 10.530 | 8.860 | 11.370 | -1 | 0.685 | 1.00 |
| 269 | 4.55 | 20 | 9.800 | 11.882 | 9.900 | 12.840 | 21 | 0.816 | 0.98 |
| 270 | 4.90 | 20 | 9.800 | 12.204 | 12.040 | 12.420 | 50 | 0.415 | 0.99 |