

**a) Kritz Critical Experiments (1.35 w/o Enr)**

Case	Lattice	Boron (PPM)	Temp. (C)	Eigenvalue ENDF/B-VII.0
1	39X39	0.8	41.2	0.99986(19)
2	39X39	0.8	90.0	0.99968(19)
3	39X39	0.8	216.6	0.99744(18)
4	39X39	0.8	225.6	0.99592(18)
5	46X46	46.3	90.4	0.99933(19)
6	46X46	46.3	206.0	0.99838(20)
7	46X46	46.3	227.3	0.99716(19)
8	46X46	46.3	245.8	0.99725(18)
9	46X46	175.0	22.4	0.99926(19)
10	46X46	175.0	89.4	0.99961(19)
11	46X46	175.0	201.3	0.99958(18)
12	46X46	175.0	205.3	0.99891(17)
Average				0.99853

**b) LCT026 – 4.92 w/o Enr. – Hexagonally pitched Lattices – With different temperatures**

Case - 1	1.00348(24)
- 2	1.00329(26)
- 3	1.00504(25)
- 4	1.00288(24)
- 5	1.00437(25)
- 6	1.00353(24)
Average	1.00377

**c) LCT032 – 10.0 w/o Enr. – Hexagonally pitched Lattices – With Different temperatures**

Case - 1	1.00217(26)
- 2	1.00411(24)
- 3	1.00344(24)
- 4	1.00391(23)
- 5	1.00096(23)
- 6	1.00051(24)
- 7	1.00605(20)
- 8	1.00743(20)
- 9	1.00663(22)
Average	1.00391

***d) LCT062 – 2.60 w/o Enr. Rods in in Light Water with Borated SS plates***

Case - 1	1.00413(24)
- 2	1.00564(22)
- 3	1.00385(24)
- 4	1.00386(24)
- 5	1.00414(24)
- 6	1.00533(24)
- 7	1.00458(23)
- 8	1.00465(23)
- 9	1.00438(22)
-10	1.00512(23)
-11	1.00398(23)
-12	1.00407(23)
-13	1.00445(23)
-14	1.00605(23)
-15	1.00262(23)

Average 1.00446

***e) LCT062 – 2.60 w/o Enr. Rods in in Light Water with Borated SS plates – Coupled Arrays***

Case - 1	1.00390(22)
- 2	1.00386(23)
- 3	1.00306(23)
- 4	1.00308(22)
- 5	1.00439(22)
- 6	1.00402(23)
- 7	1.00376(23)
- 8	1.00432(23)
- 9	1.00379(22)
-10	1.00310(23)
-11	1.00334(23)
-12	1.00272(23)
-13	1.00251(22)
-14	1.00438(23)
-15	1.00286(23)
-16	1.00387(23)
-17	1.00325(23)

Average 1.00354