

2.35 w/o Enriched UO2 Rods in 2.032 cm Sq. Pitched Arrays

LCT001 - 1 0.99959(28)
- 2 0.99996(30)
- 3 0.99935(27)
- 4 0.99969(28)
- 5 0.99701(28)
- 6 0.99903(29)
- 7 0.99882(29)
- 8 0.99775(30)

Average 0.99890

4.31 w/o Enriched UO2 Rods in 2.54 cm Sq. Pitched Arrays

LCT002 - 1 0.99972(33)
2 1.00014(33)
3 0.99929(33)
4 0.99910(34)
5 0.99830(33)

Average 0.99931

2.60 w/o Enriched UO2 TCA Critical Experiments

LCT006 - 1 1.00079(23)
- 2 1.00115(23)
- 3 1.00054(23)
- 4 1.00008(22)
- 5 1.00029(24)
- 6 1.00115(24)
- 7 1.00104(23)
- 8 1.00059(24)
- 9 1.00067(23)
- 10 1.00000(23)
- 11 1.00027(23)
- 12 1.00040(24)
- 13 1.00022(23)
- 14 1.00031(21)
- 15 1.00091(22)
- 16 1.00041(23)
- 17 1.00015(23)
- 18 1.00009(23)

Average 1.00050

4.738 w/o Enriched UO2 Valduc Critical Experiments

LCT007 - 1 0.99946(26)
- 2 1.00026(24)
- 3 0.99953(22)
- 4 1.00023(20)

Average 0.99987

B & W Critical Experiments

LCT008 - 1 1.00178(20)
- 2 1.00164(20)
- 3 1.00261(21)
- 4 1.00171(21)
- 5 1.00081(20)
- 6 1.00157(21)
- 7 1.00049(20)
- 8 1.00036(21)
- 9 1.00099(21)
- 10 1.00121(20)
- 11 1.00195(21)
- 12 1.00196(19)
- 13 1.00174(21)
- 14 1.00141(21)
- 15 1.00197(22)
- 16 1.00131(20)
- 17 1.00053(22)

Average 1.00141

7.0 w/o Enriched Dimple Critical Experiment

LCT018 - 1 0.99964(26)

Average1 0.99964

5.0 w/o Enriched Hexagonal Arrays Critical Experiments

LCT020 - 1 0.99658(24)
- 2 1.00181(24)
- 3 1.00389(23)
- 4 1.00382(24)
- 5 1.00430(24)
- 6 1.00523(24)
- 7 1.00491(22)

Average 1.00293

4.738 w/o Enriched Valduc Series Critical Experiments

LCT039 - 1 0.99850(25)
- 2 0.99895(25)
- 3 0.99878(26)
- 4 0.99829(25)
- 5 0.99963(26)
- 6 1.00113(26)
- 7 0.99807(26)
- 8 0.99879(26)
- 9 0.99992(25)
- 10 1.00073(25)

Average 0.99928

3.0 w/o Enriched UO2 Critical Experiments

LCT048 - 1 1.00664(23)
- 2 1.00558(23)
- 3 1.00668(23)
- 4 1.00740(21)
- 5 1.00362(24)

Average 1.00598

4.31 w/o Enriched UO2 Tod Lattices with Rhodium Foils

LCT079 - 1 0.99904(24)
- 2 0.99955(25)
- 3 1.00010(25)
- 4 1.00003(26)
- 5 0.99970(24)
- 6 0.99905(24)
- 7 1.00002(23)
- 8 1.00015(35)
- 9 0.99987(23)

Average 0.99972

TRX and BAPL Critical Experiments

TRX-1 0.99785(19)
TRX-2 0.99818(18)

BAPL-1 1.00252(19)
BAPL-2 1.00318(18)
BAPL-3 1.00325(18)

MOX Critical Experiments (2 w/o PuO2 in Natural UO2)

MCT002 - 1 1.00119(23)
- 2 1.00226(24)
- 3 1.00329(24)
- 4 1.00722(25)
- 5 1.00397(23)
- 6 1.00612(22)

Average 1.00401

MOX Critical Experiments (6.6 w/o PuO2 in 5.72 w/o UO2)

MCT003 - 1 1.00196(25)
- 2 1.00264(27)
- 3 1.00207(26)
- 4 1.00144(25)
- 5 1.00140(26)

Average 1.00190

MOX Critical Experiments (3 w/o PuO2 in Natural UO2)

MCT004 - 1 0.99562(24)
- 2 0.99642(22)
- 3 0.99734(22)
- 4 0.99781(20)

Average 0.99680

MOX Critical Experiments (4 w/o PuO2 in Natural UO2 – 18 % Pu-240)

MCT005 - 1 1.00243(24)
- 2 1.00003(25)
- 3 1.00640(24)
- 4 1.00307(22)
- 5 1.00577(22)
- 6 1.00531(20)
- 7 1.00638(19)

Average 1.00420

MOX Critical Experiments (2 w/o PuO2 in Natural UO2 – 8 % Pu-240)

MCT006 - 1 0.99796(23)
- 2 1.00148(24)
- 3 0.99764(23)
- 4 1.00347(21)
- 5 1.00417(19)
- 6 1.00186(19)
- 7 0.99307(23)
- 8 0.99249(21)

Average 0.99902

MOX Critical Experiments (2 w/o PuO2 in Natural UO2 – 16 % Pu-240)

MCT007 - 1 1.00456(23)
- 2 0.99985(23)
- 3 1.00206(21)
- 4 1.00159(20)
- 5 0.99959(19)

Average 1.00153

MOX Critical Experiments (2 w/o PuO₂ in Natural UO₂ – 24 % Pu-240)

MCT008 - 1 0.99875(22)
- 2 0.99888(22)
- 3 0.99931(22)
- 4 1.00281(21)
- 5 1.00309(19)
- 6 1.00155(17)

Average 1.00073

MOX Critical Experiments (1.5 w/o PuO₂ in Depleted UO₂)

MCT009 - 1 1.00160(21)
- 2 0.99796(22)
- 3 0.99780(21)
- 4 0.99695(20)
- 5 0.99859(19)
- 6 1.00064(18)

Average 0.99892

MOX Critical Experiments (Rhapsodie – 25.8 w/o PUO₂ in 60 w/o UO₂)

MCT011 - 1 1.00412(28)
- 2 1.00394(29)
- 3 1.00476(28)
- 4 1.00510(25)
- 5 1.00270(26)
- 6 1.00277(26)

Average 1.00390