**Cycle 2**

Initial Conditions:

Inner Radius (Th­232) = 1.5863 mm

Outer Radius (U235) = 1.5863 – 4.09575 mm

Output Conditions:

MNDBR­ ­uniform­ = 1.4641

MNDBR non-uniform = 1.3711

Maximum Temperature of the Fuel: 3259.319 K @ 14.35 (burnup could be mistaken because MCNP uses MT uranium)

Which occurs 2.432304 m above the bottom of the core

Pressure Drop along the subchannel: 76 kPa (negligible compared to total pressure)

Max Coolant Temperature = 609.003380397 K

Max Cladding Temperature = 707.3994 K

FQ = 2.29629810652

FZ = 1.52404640455

FR =

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6.16907 | 6.00325 | 5.64544 | 6.7617 | 5.91837 | 5.01455 | 7.76525 | 4.74727 | 7.286 | 3.65497 |
| 3.64575 | 2.71815 | 2.65376 | 3.24487 | 2.35846 | 2.7947 | 2.46147 | 2.53898 | 3.39885 | 2.49154 |

FNΔH= 1.50671140962



