

Experiments performed on DeLight setup

	Power distribution	Fuel time constant (s)	Reactivity feedback constant	Pressure (MPa)	Kin core	Kout core	Ktop riser	Nature of the data
1	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	Open	Open	Open	Full plane scan
2	HPLWR distribution	4	$3.5625 \cdot 10^{-5}$	5.7	Open	Open	Open	Full plane scan
3	HPLWR distribution	2	$3.5625 \cdot 10^{-5}$	5.7	Open	Open	Open	Full plane scan
4	Uniform distribution	6	$3.5625 \cdot 10^{-5}$	5.7	Open	Open	Open	Full plane scan
5	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	27	Open	Open	Full plane scan
6	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	Open	29	Open	Full plane scan
7	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	Open	Open	X	Full plane scan
8	HPLWR distribution	6	$5 \cdot 10^{-5}$	5.7	Open	Open	Open	Full plane scan
9	HPLWR distribution	6	110^{-4}	5.7	Open	Open	Open	Full plane scan
10	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.48	Open	Open	Open	Full plane scan
11	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.6	Open	Open	Open	Line scan at Tin = -17°C
12	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.8	Open	Open	Open	Line scan at Tin = -17°C
13	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	62	Open	Open	Line scan at Tin = -6°C
14	HPLWR distribution	6	$3.5625 \cdot 10^{-5}$	5.7	Open	10	Open	Line scan at Tin = -30°C