

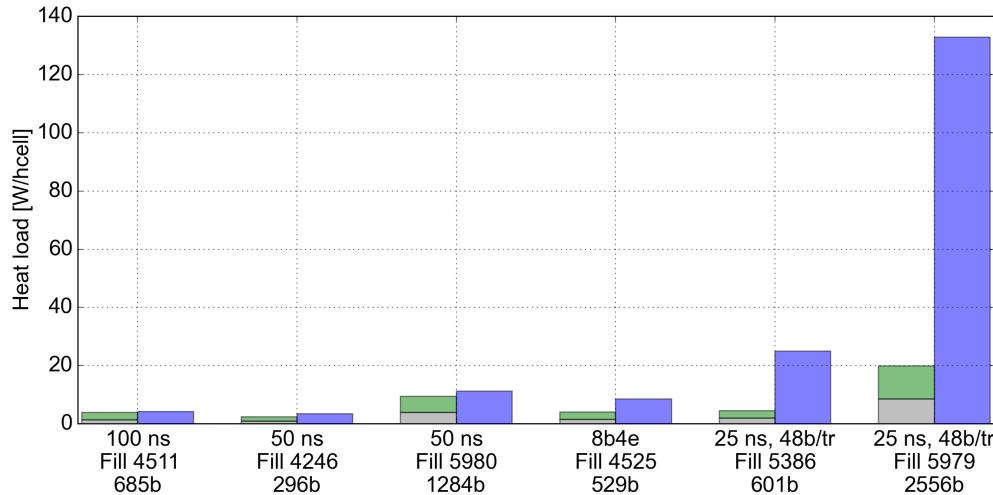
Heat Load in the LHC Arcs with Different Filling Patterns

Giovanni Iadarola
Philipp Dijkstal

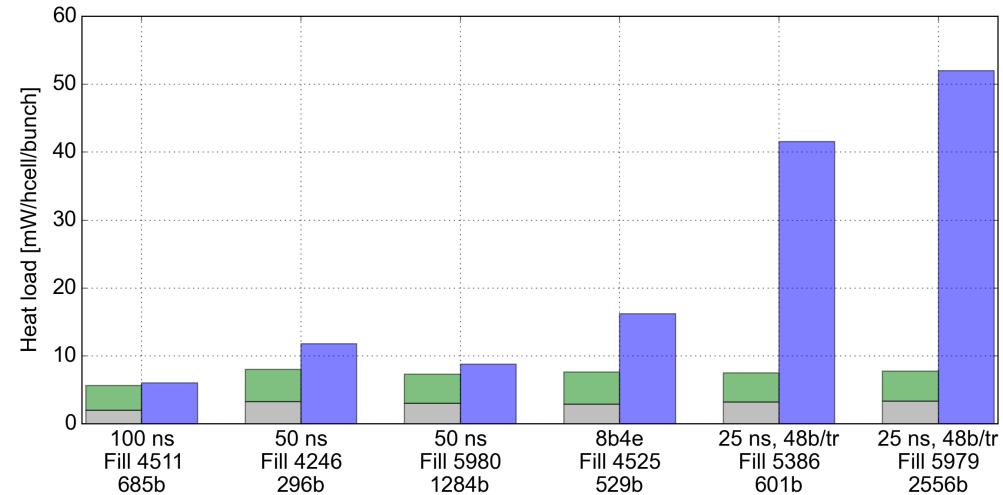
Main beam parameters (after 2h in Stable Beams)

Beam type	Fill n.	N. bunches	Avg. bun. intensity	Avg. bun. length
100 ns	4511	685	0.85e11 p/b	1.11 ns
50 ns	4246	296	1.11e11 p/b	1.14 ns
50 ns	5980	1284	1.01e11 p/b	1.06 ns
8b4e	4525	529	1.11e11 p/b	1.24 ns
25 ns, 48b/tr	5386	601	1.01e11 p/b	1.03 ns
25 ns, 48b/tr	5979	2556	1.04e11 p/b	1.04 ns

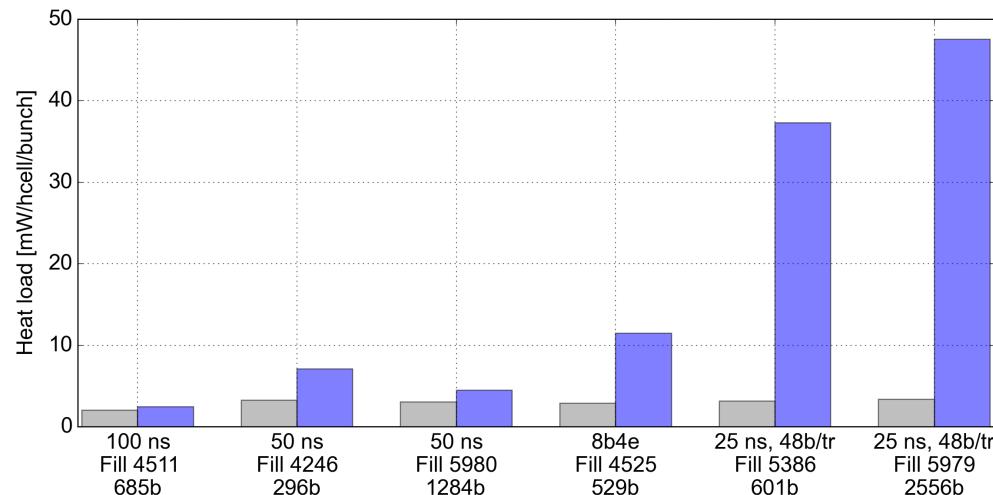
Average Arc 12



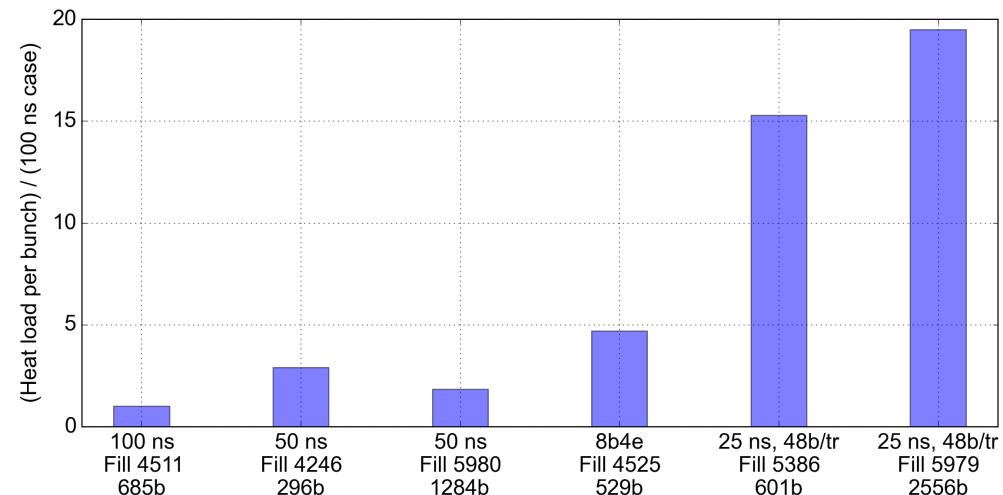
Average Arc 12



Average Arc 12
(synch. radiation is subtracted)



Average Arc 12
(synch. radiation is subtracted)

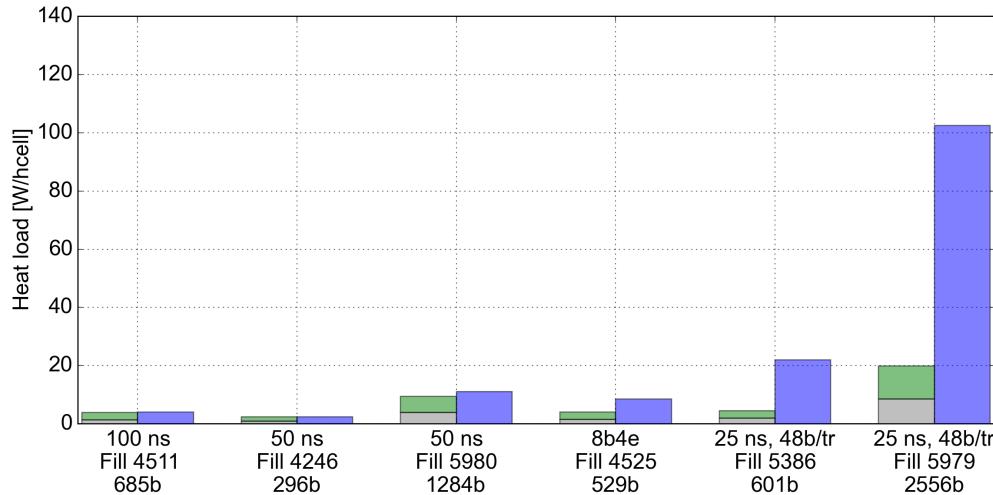


Synchrotron Radiation

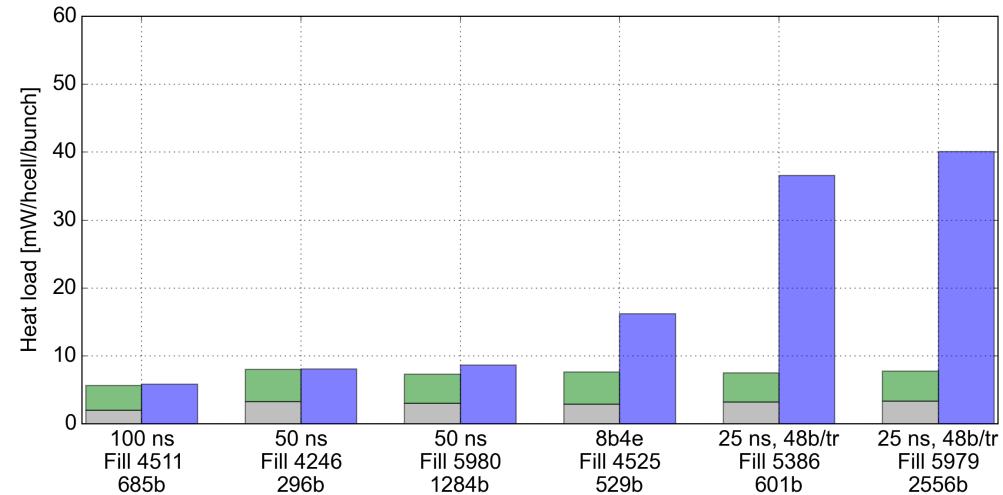
Impedance (R.W.)

Measured

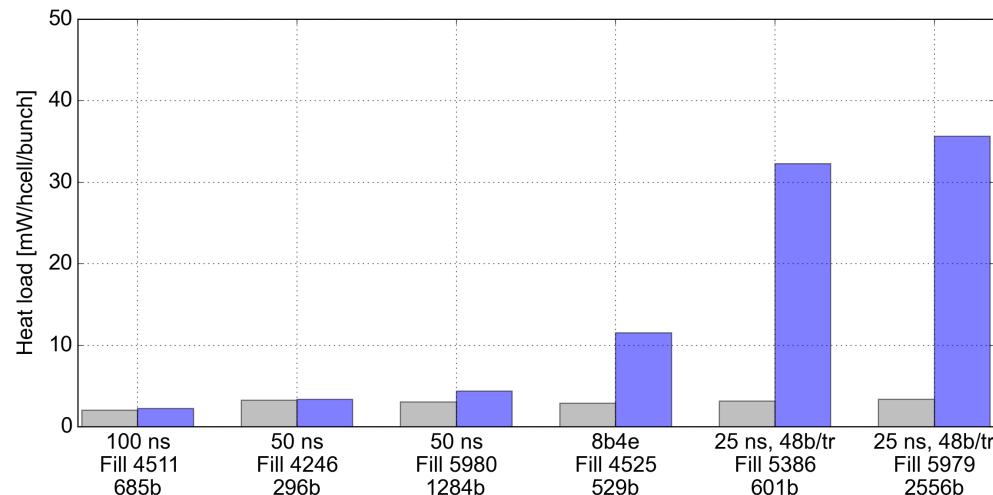
Average Arc 23



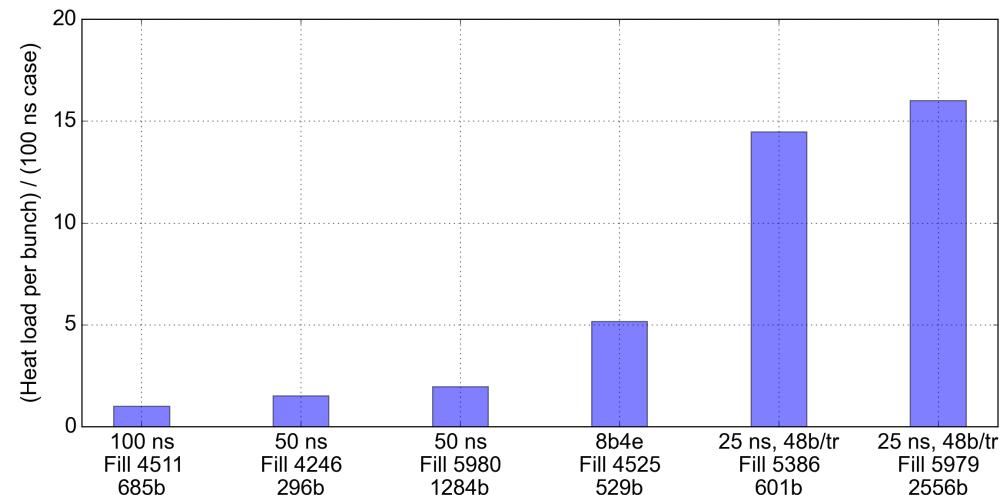
Average Arc 23



Average Arc 23
(synch. radiation is subtracted)



Average Arc 23
(synch. radiation is subtracted)

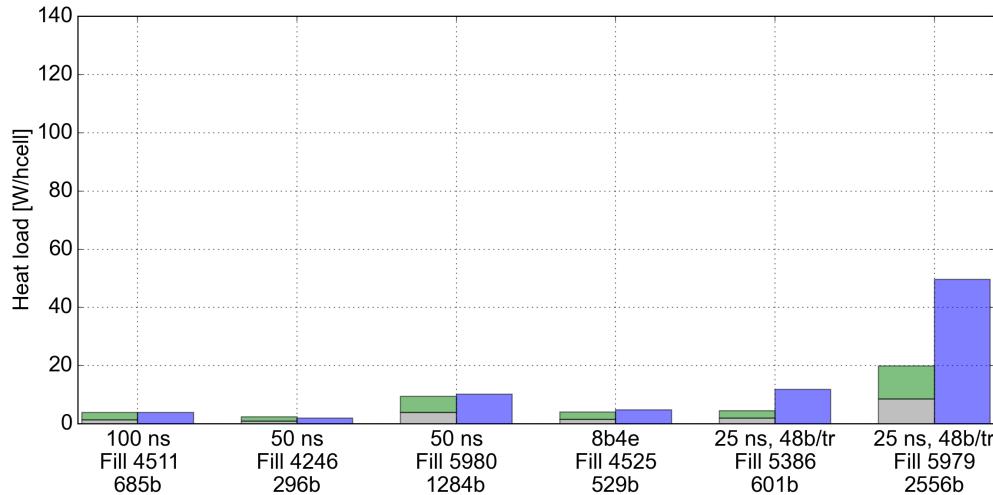


Synchrotron Radiation

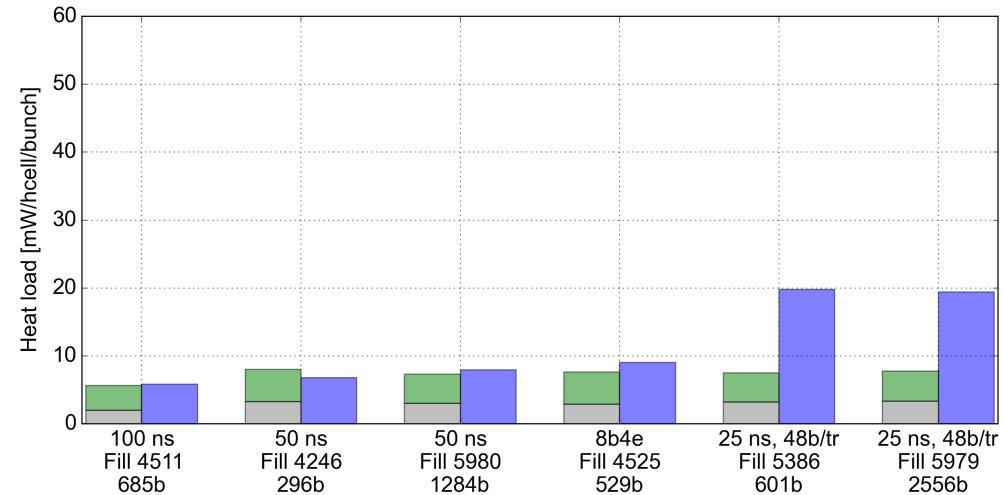
Impedance (R.W.)

Measured

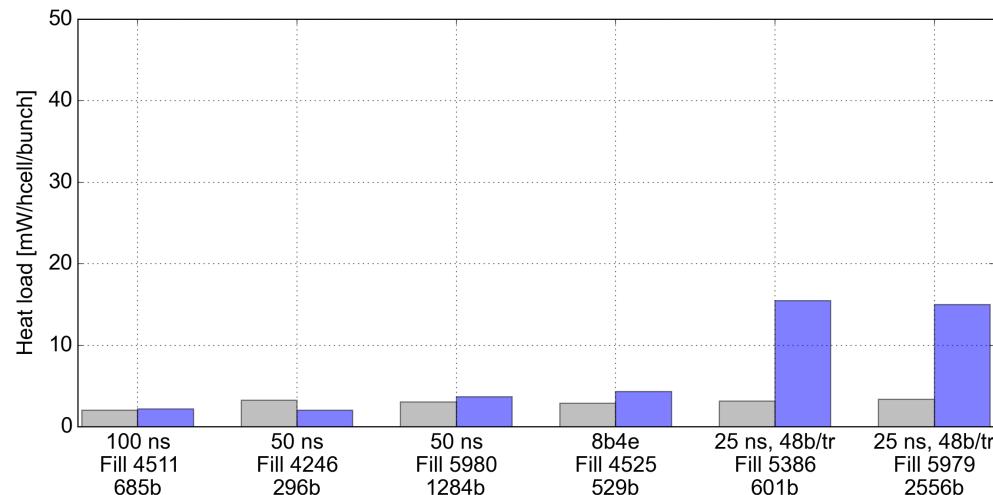
Average Arc 34



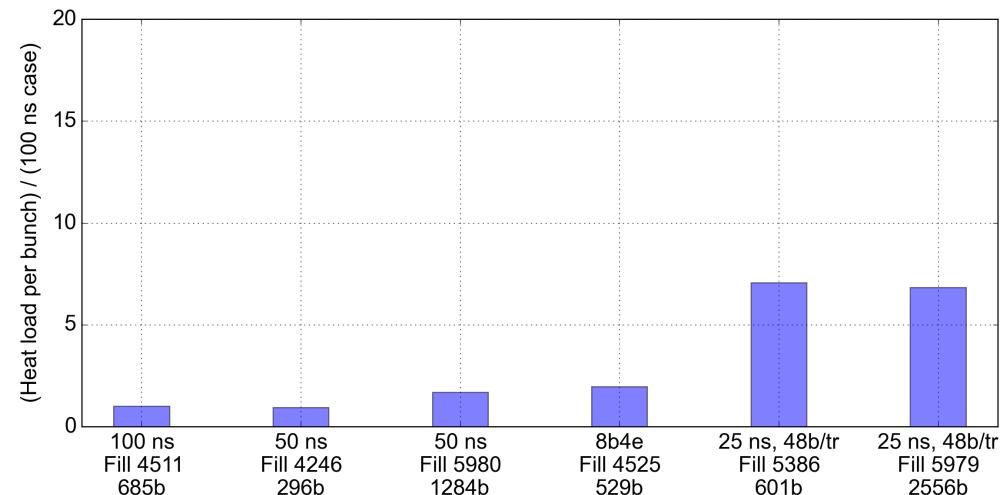
Average Arc 34



Average Arc 34
(synch. radiation is subtracted)



Average Arc 34
(synch. radiation is subtracted)

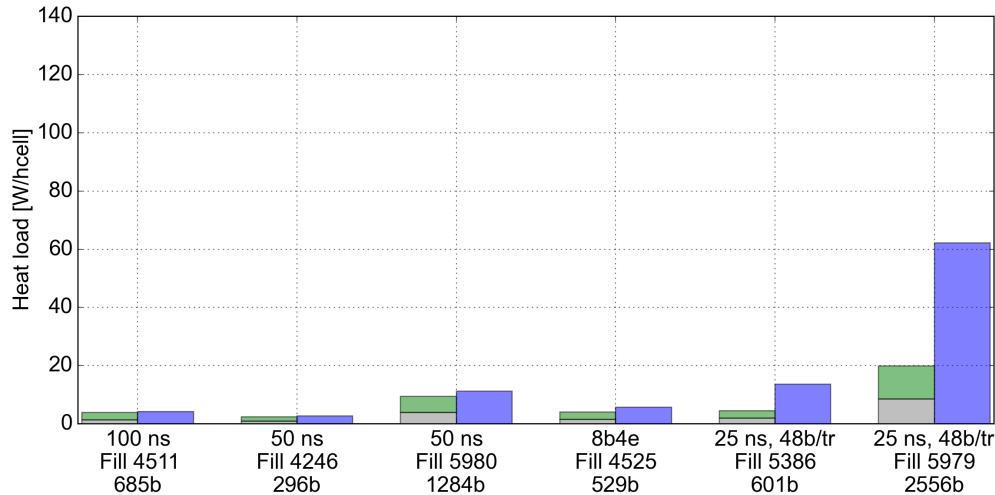


Synchrotron Radiation

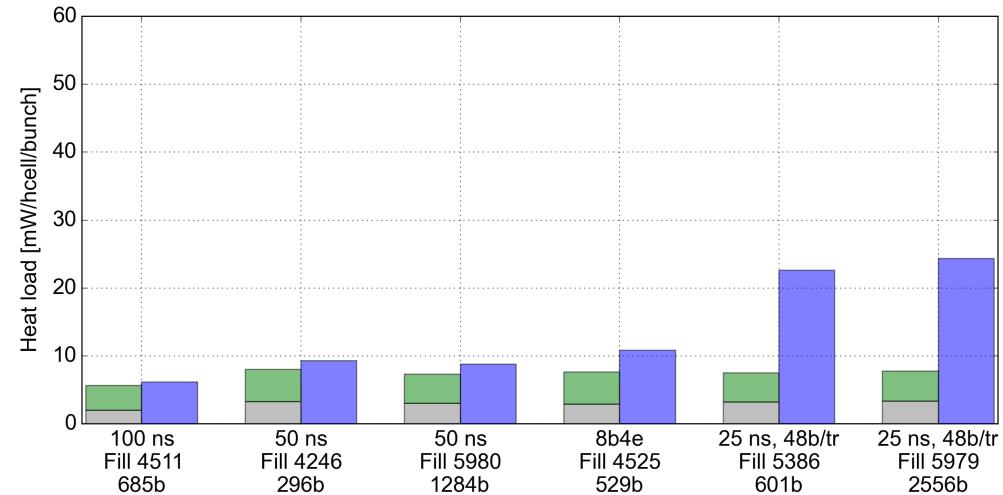
Impedance (R.W.)

Measured

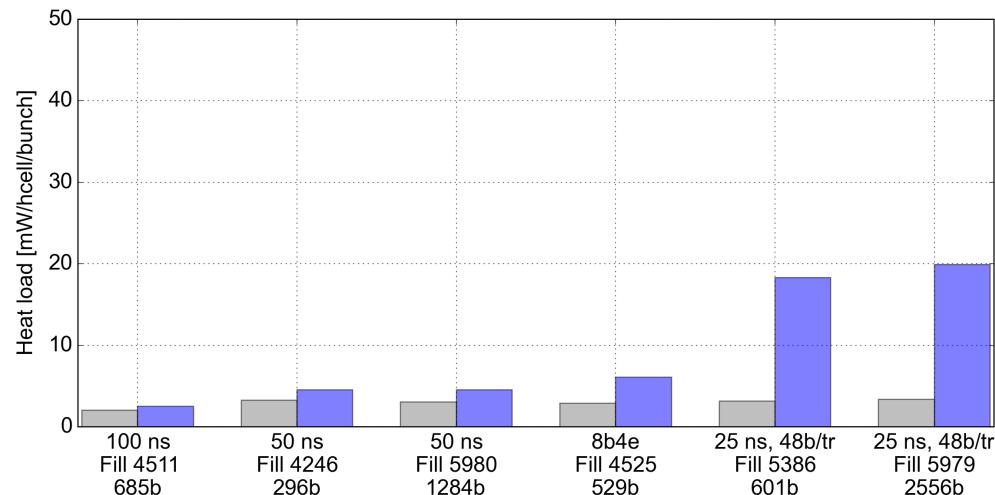
Average Arc 45



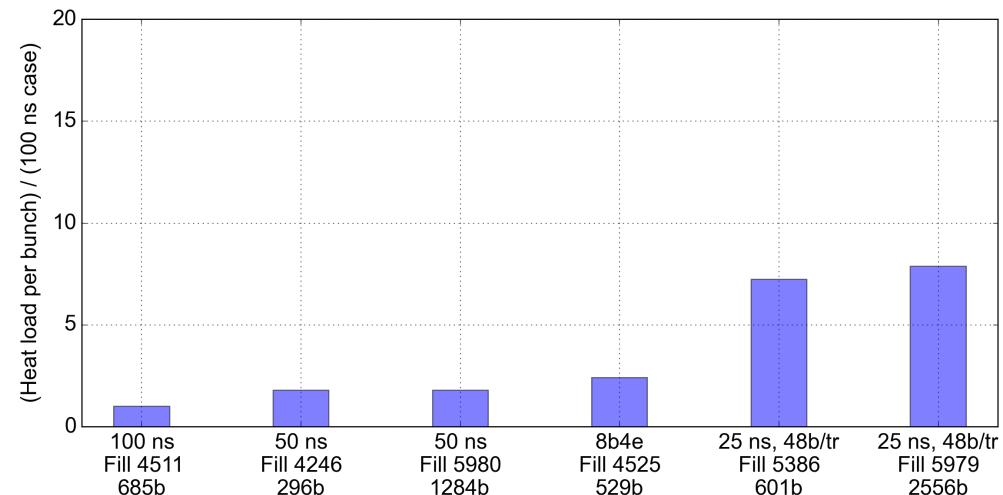
Average Arc 45



Average Arc 45
(synch. radiation is subtracted)



Average Arc 45
(synch. radiation is subtracted)

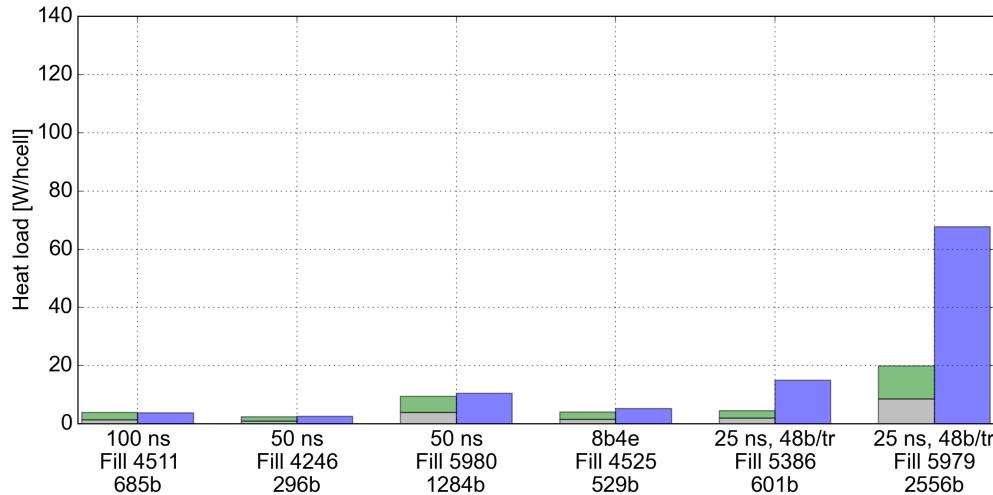


Synchrotron Radiation

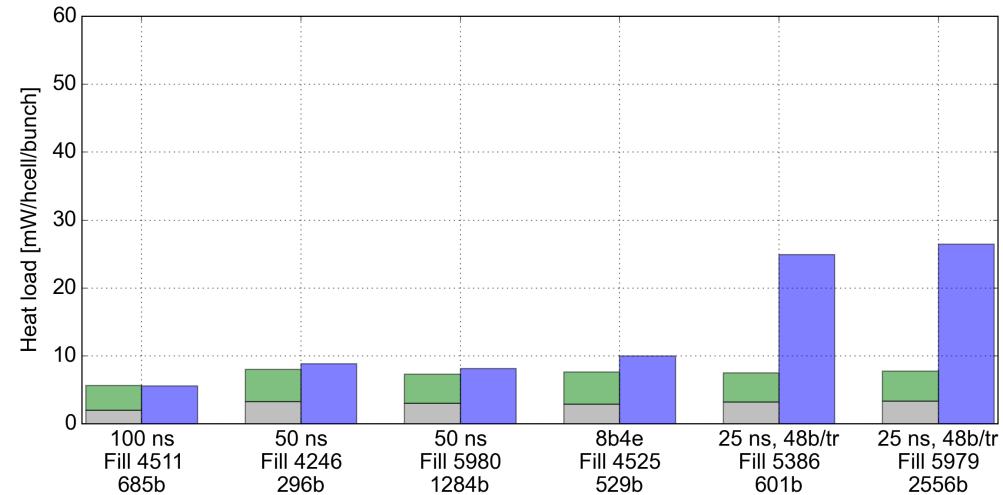
Impedance (R.W.)

Measured

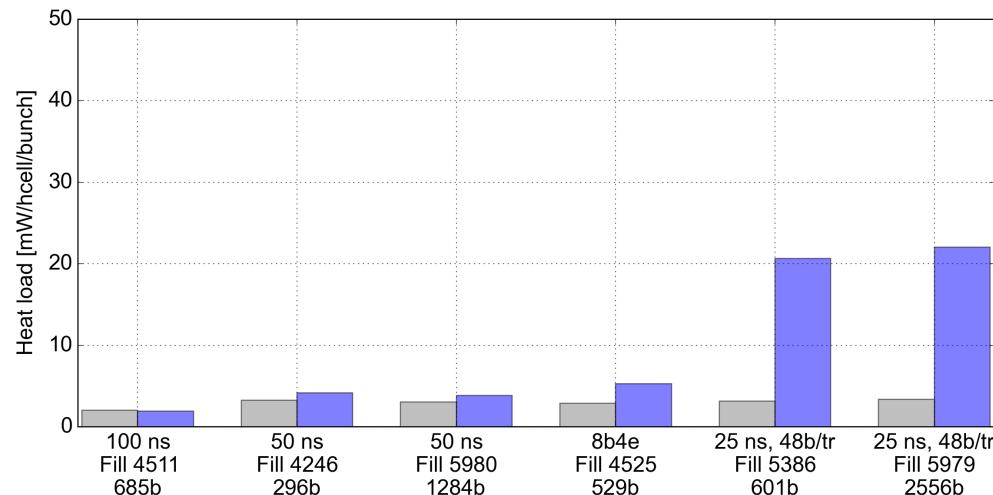
Average Arc 56



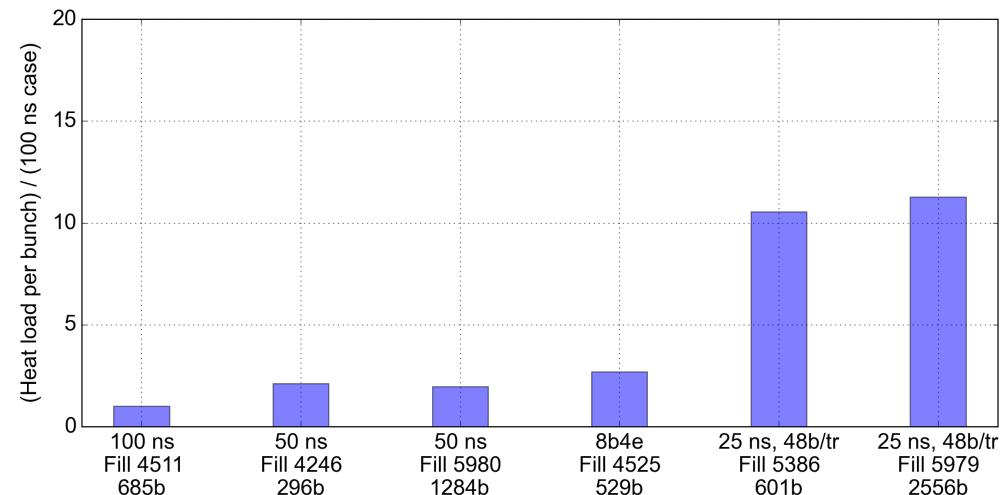
Average Arc 56



Average Arc 56
(synch. radiation is subtracted)



Average Arc 56
(synch. radiation is subtracted)

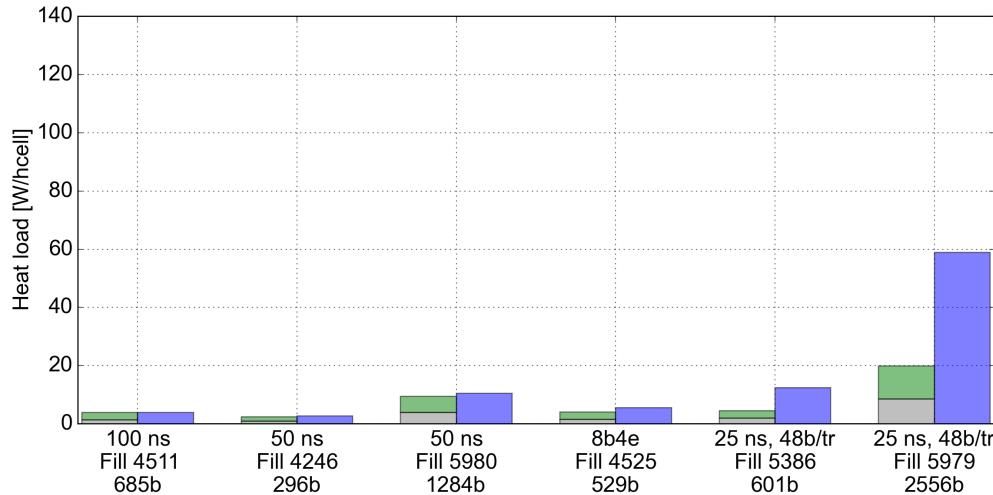


Synchrotron Radiation

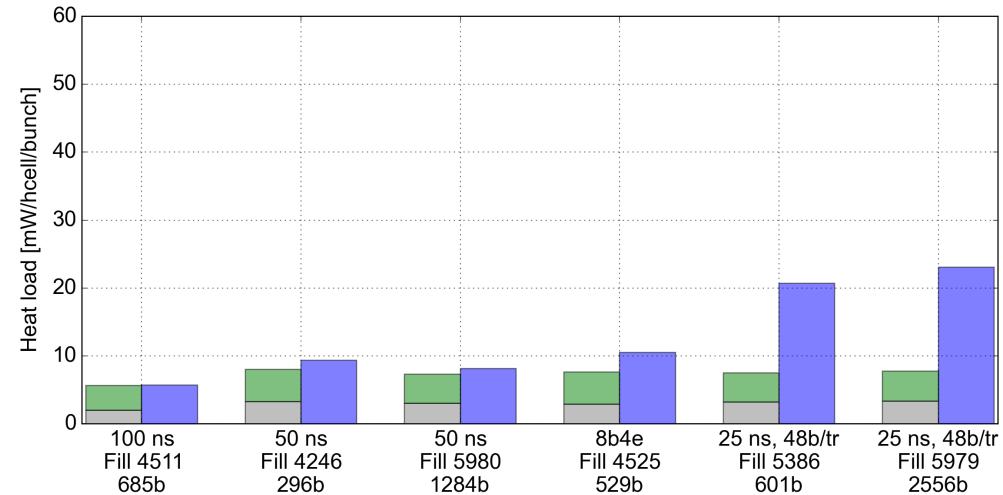
Impedance (R.W.)

Measured

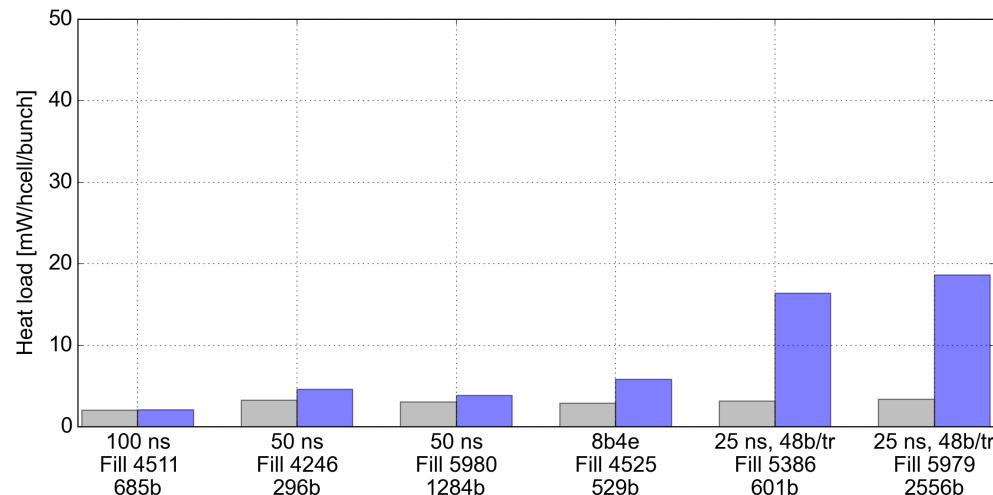
Average Arc 67



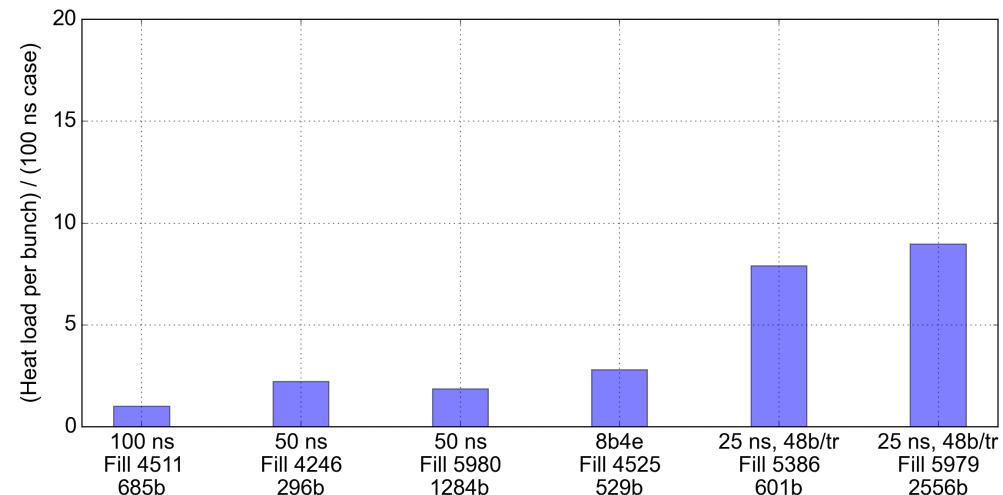
Average Arc 67



Average Arc 67
(synch. radiation is subtracted)



Average Arc 67
(synch. radiation is subtracted)

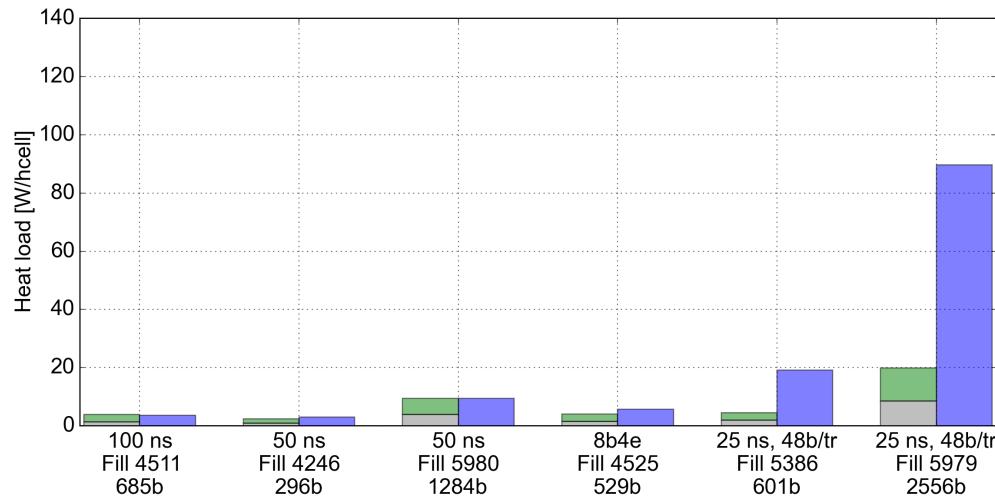


Synchrotron Radiation

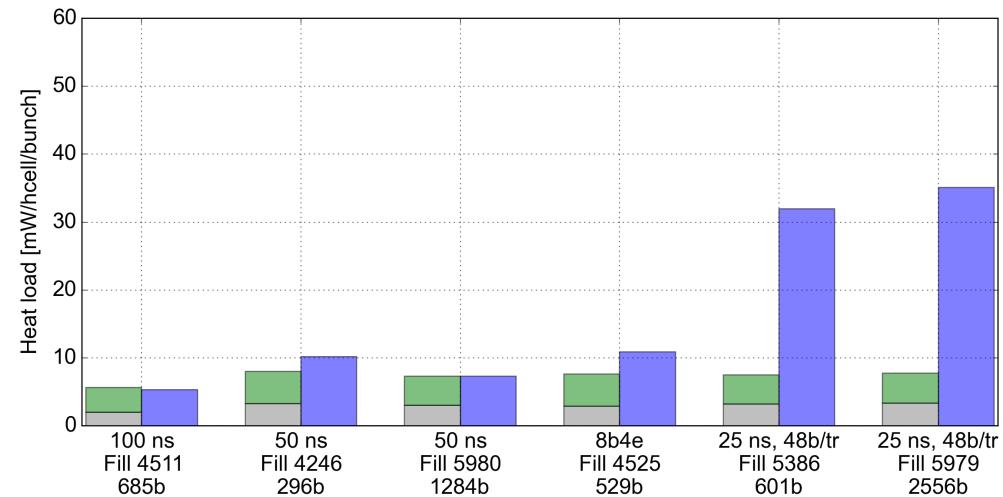
Impedance (R.W.)

Measured

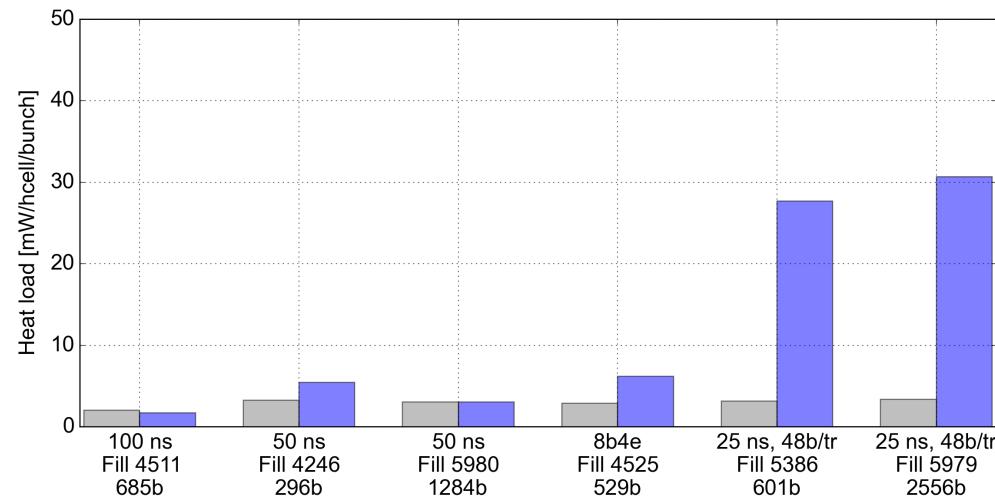
Average Arc 78



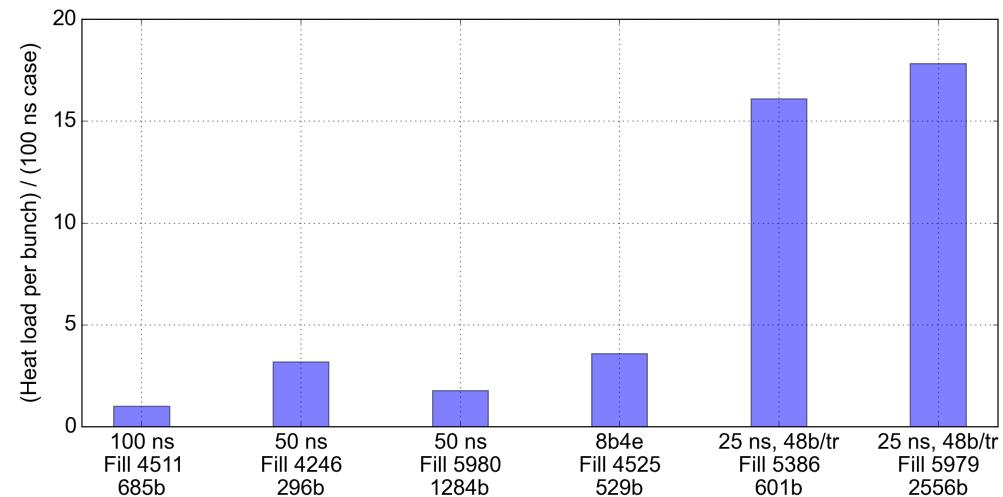
Average Arc 78



Average Arc 78
(synch. radiation is subtracted)



Average Arc 78
(synch. radiation is subtracted)

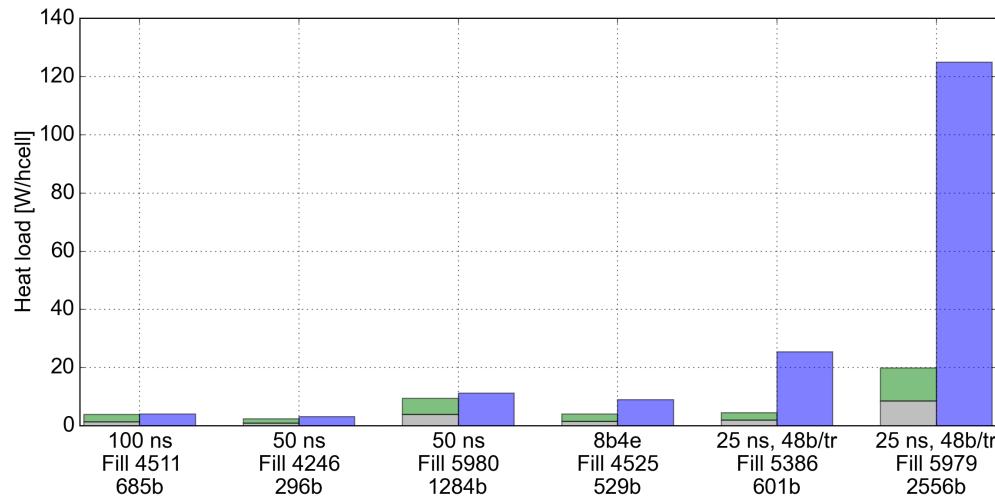


Synchrotron Radiation

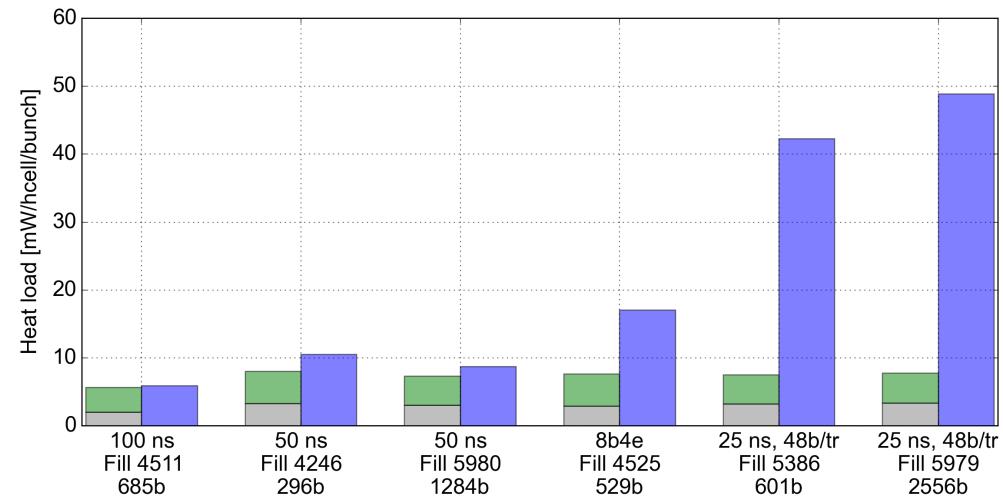
Impedance (R.W.)

Measured

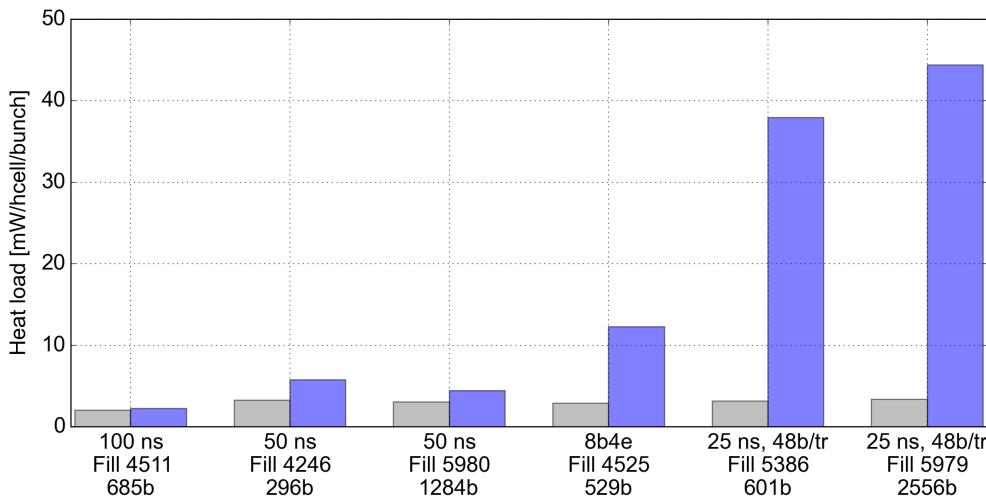
Average Arc 81



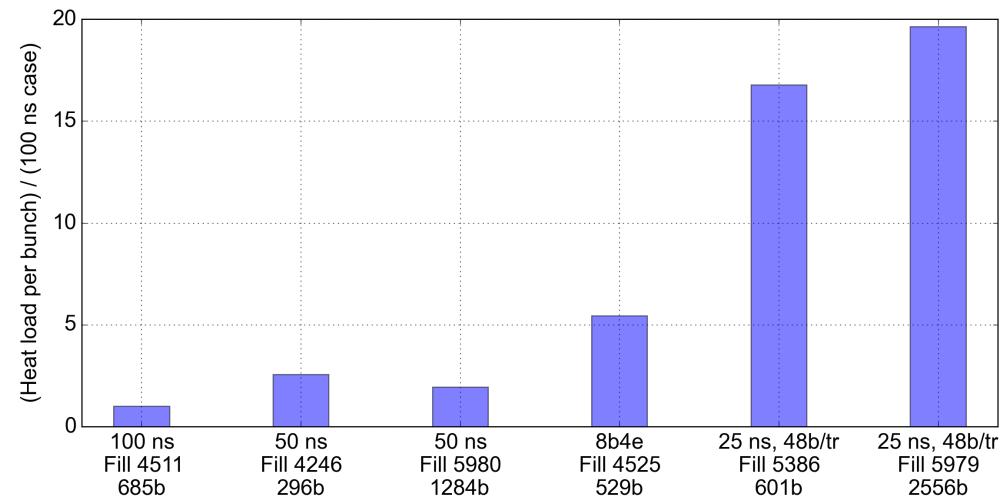
Average Arc 81



Average Arc 81
(synch. radiation is subtracted)



Average Arc 81
(synch. radiation is subtracted)



Synchrotron Radiation

Impedance (R.W.)

Measured