

TD25_vg1.7_ccsd

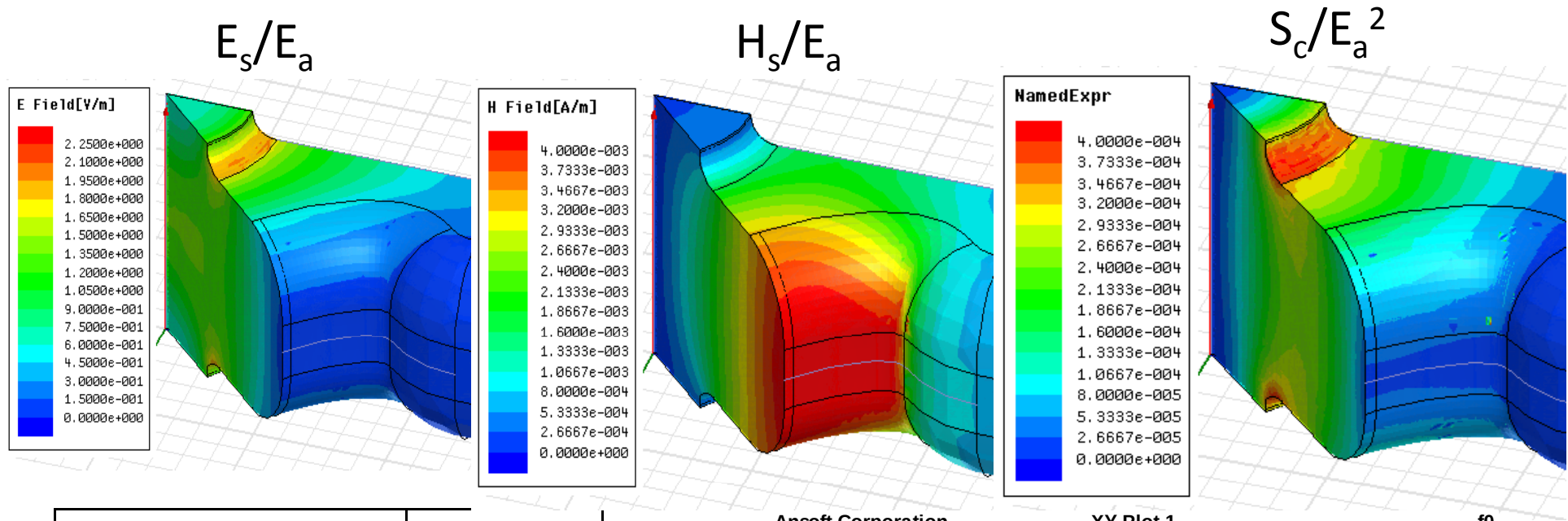
...

CLIC_G damped symmetric disk with
compact damped magnetic couplers

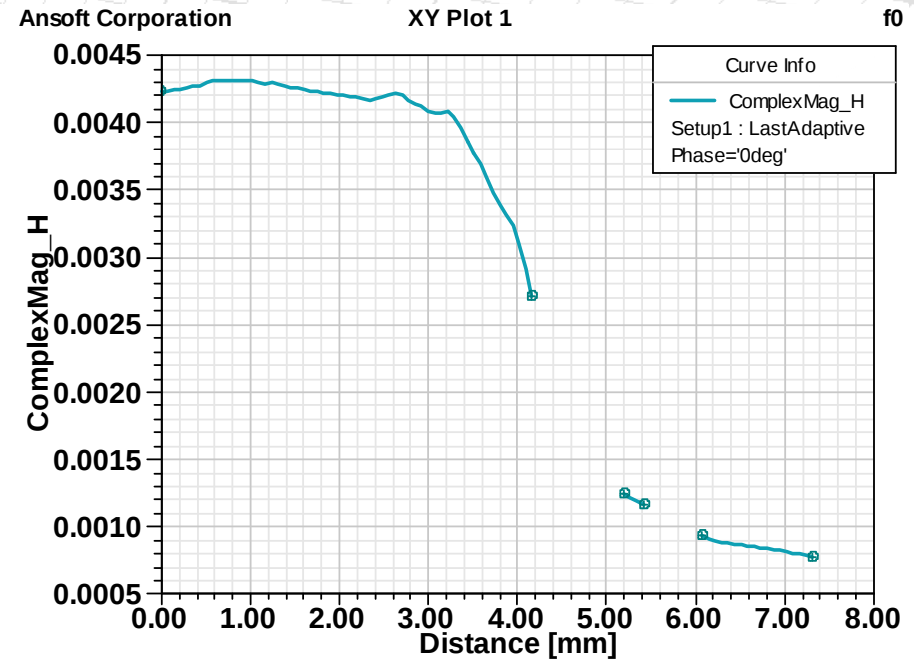
A.Grudiev

11/12/08

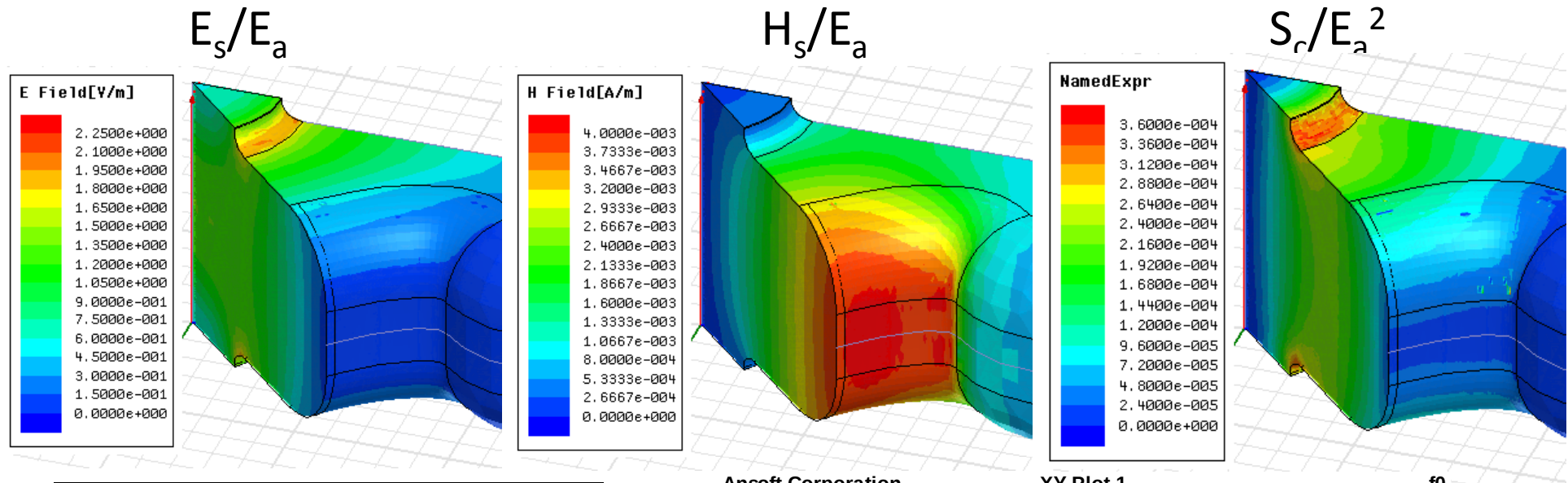
First cell



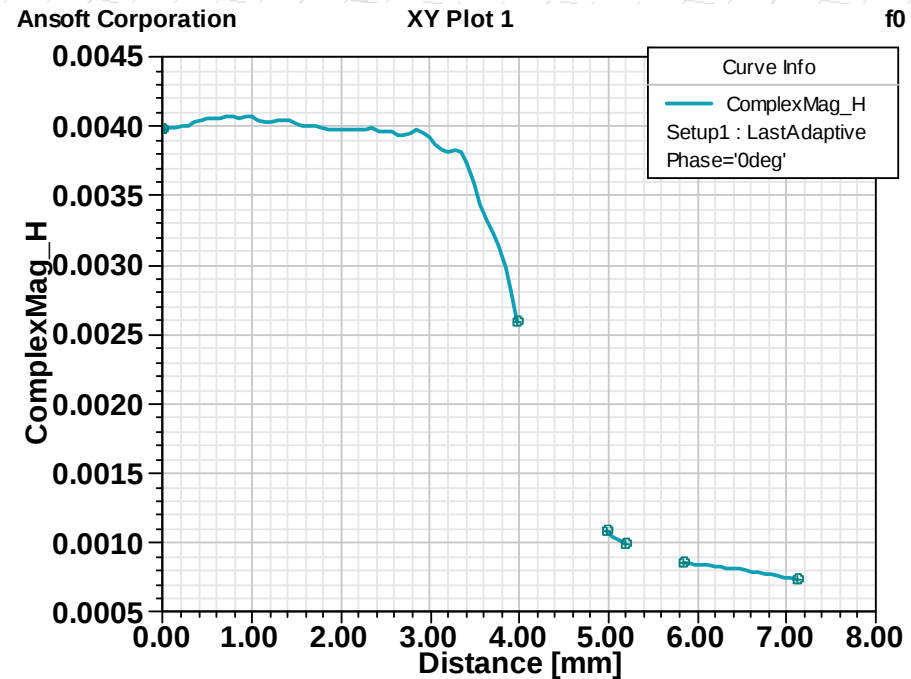
a [mm]	3.307
d [mm]	1.753
e	1.16
f [GHz]	11.424
Q(Cu)	6198
vg/c [%]	1.66
r'/Q [Linac Ω /m]	13832
E_s/E_a	1.95
H_s/E_a [mA/V]	4.3
S_c/E_a^2 [mA/V]	0.37



Middle cell

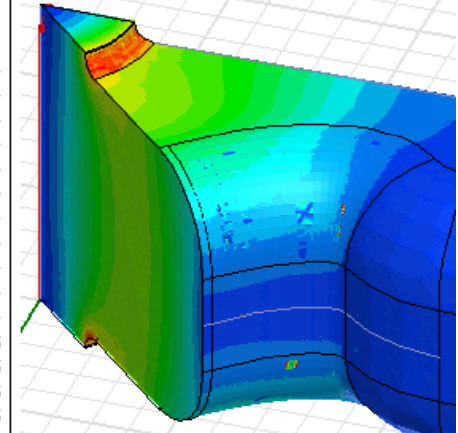
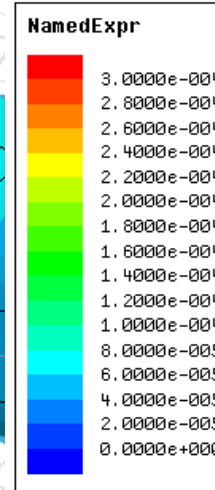
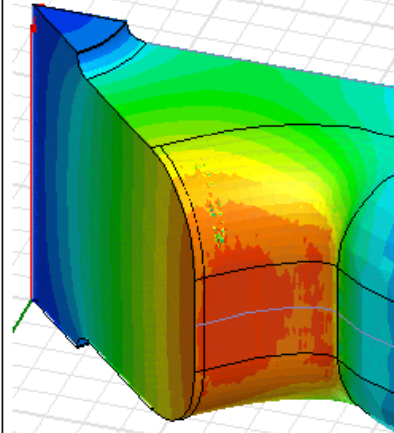
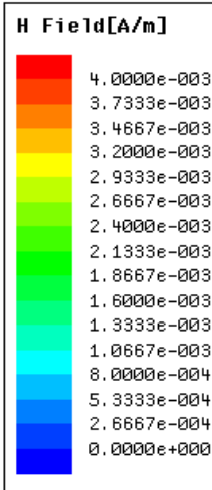
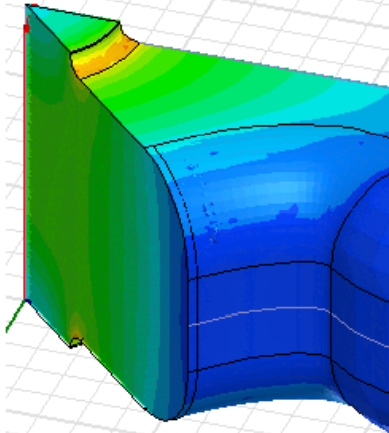
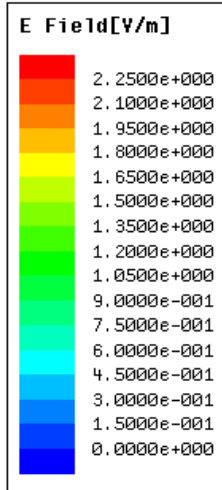


a [mm]	2.887
d [mm]	1.402
e	1.15
f [GHz]	11.425
Q(Cu)	6305
vg/c [%]	1.19
r'/Q [Linac Ω /m]	15430
E_s/E_a	1.925
H_s/E_a [mA/V]	4.05
S_c/E_a^2 [mA/V]	0.34



Last cell

$$E_s/E_a$$

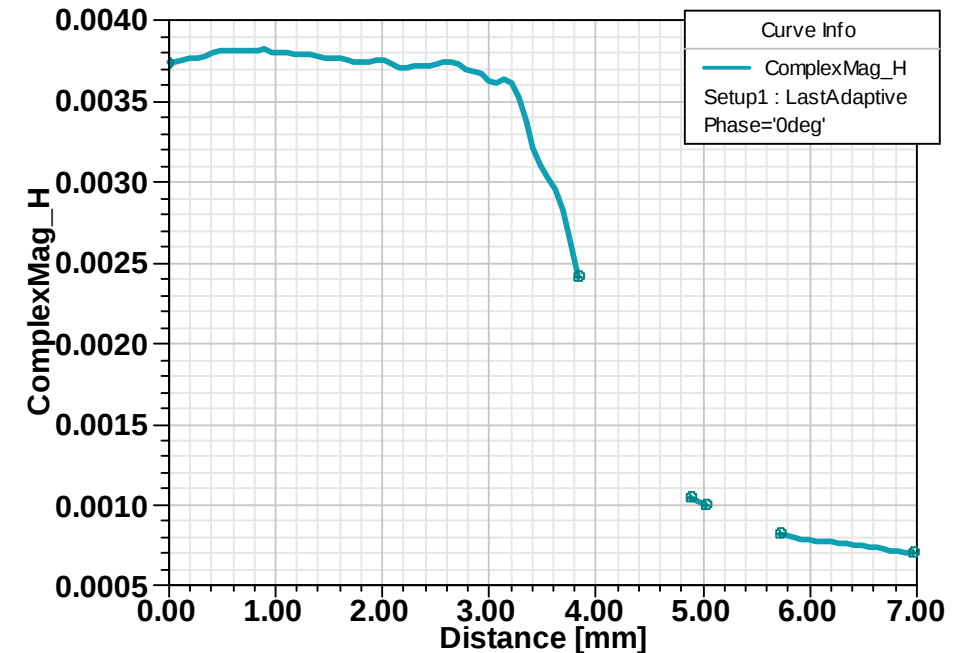


a [mm]	2.467
d [mm]	1.05
e	1.13
f [GHz]	11.421
Q(Cu)	6407
vg/c [%]	0.83
r'/Q [LinacΩ/m]	17003
Es/Ea	1.9
Hs/Ea [mA/V]	3.8
Sc/Ea ² [mA/V]	0.28

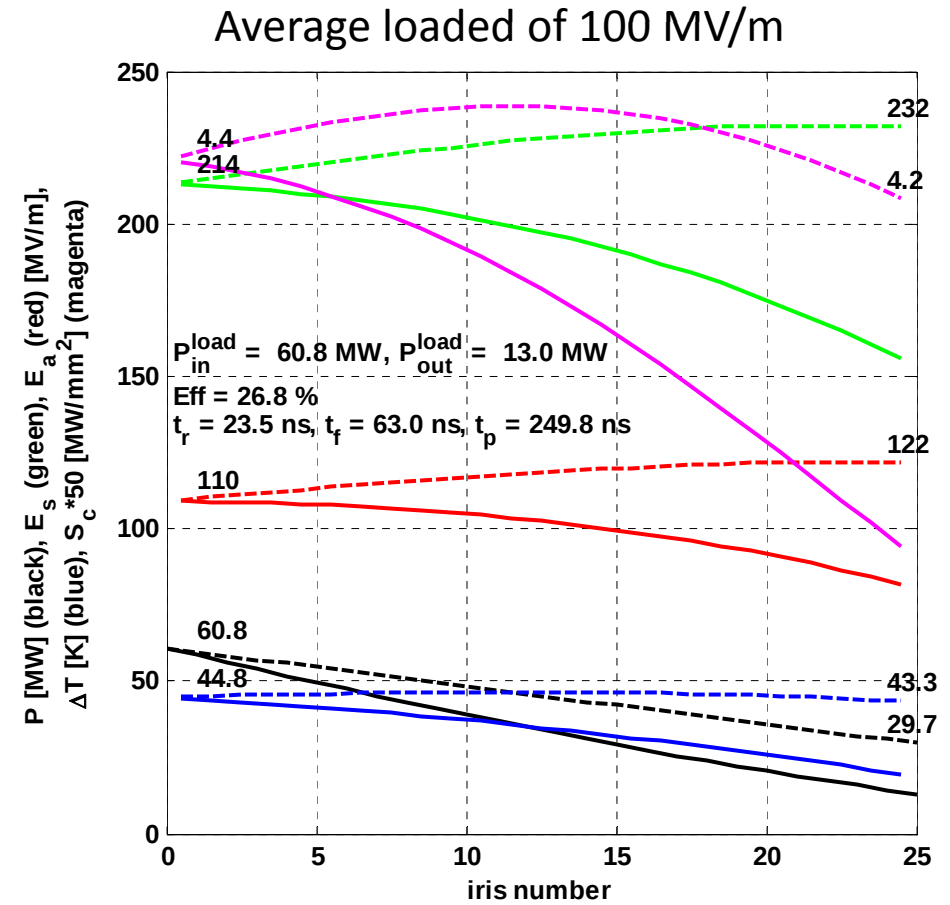
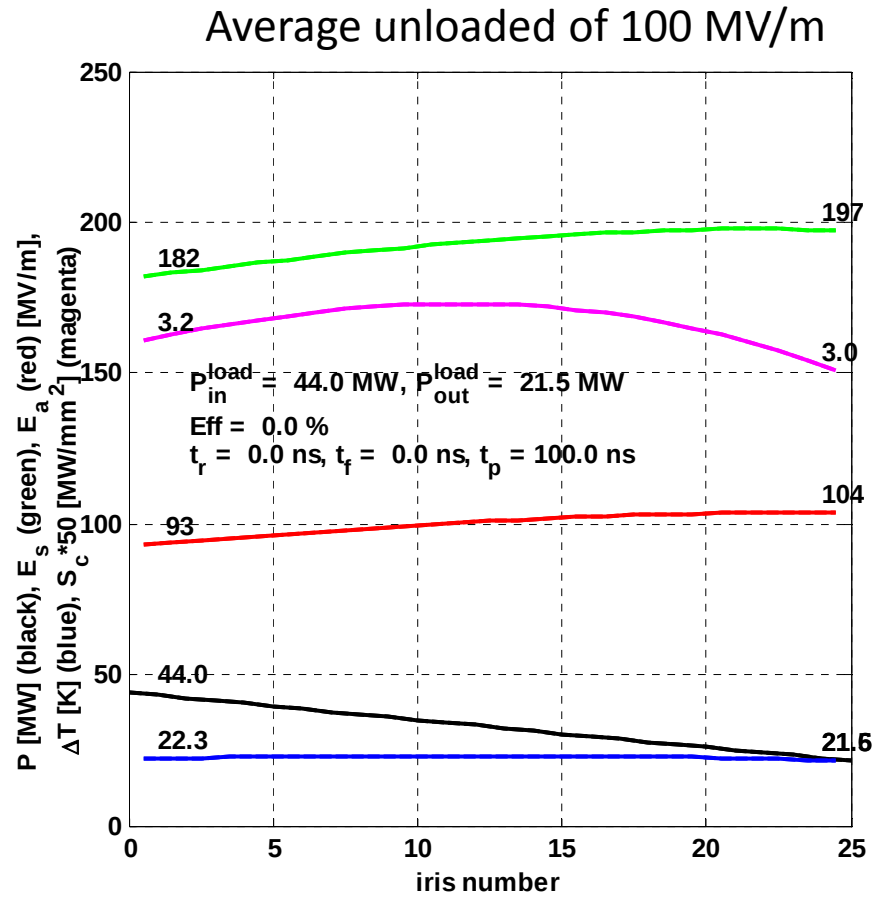
Ansoft Corporation

XY Plot 1

f0

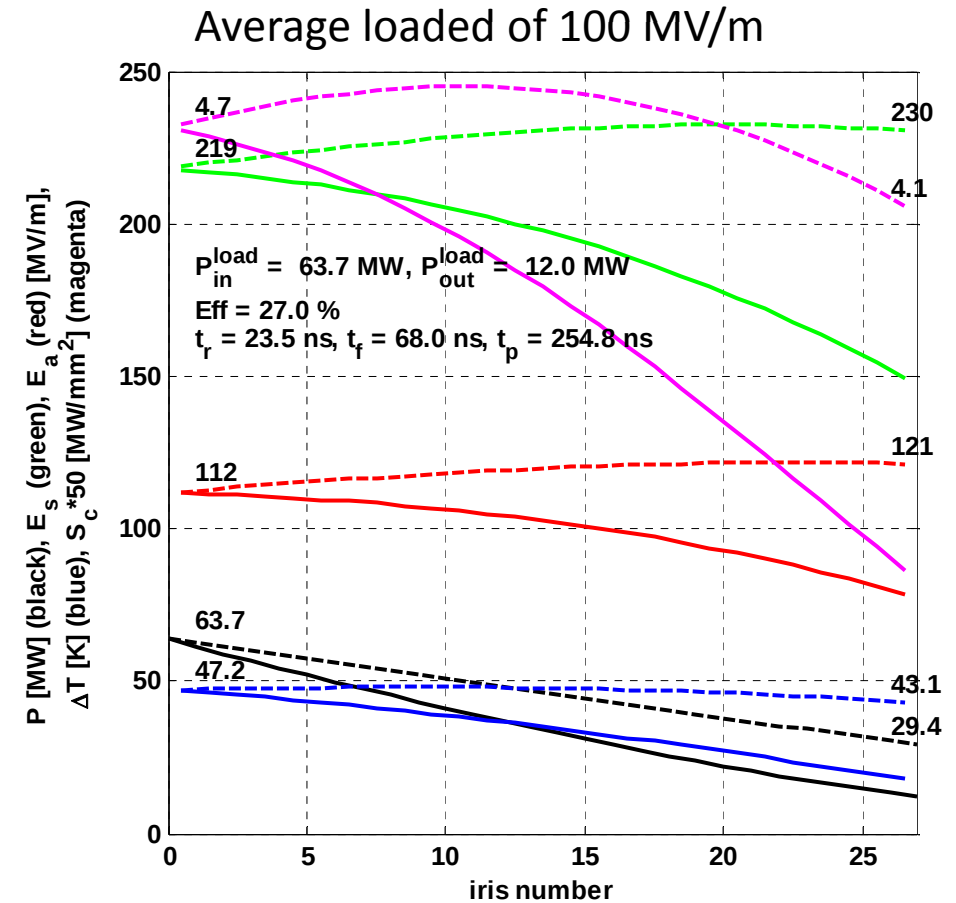
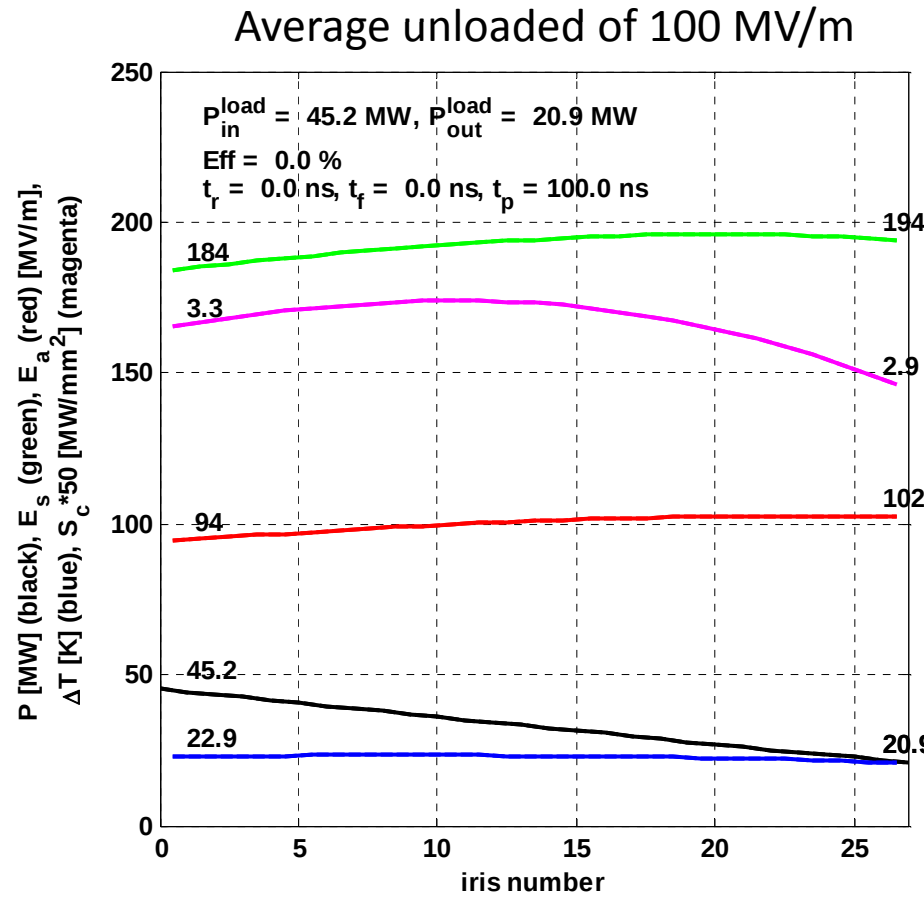


Gradient in 25 regular cells



Number of regular cells: Nc	25
Bunch population: N	3.72×10^9
Number of bunches: Nb	312
Bunch separation: Ncycl	6 rf cycles

Gradient in 25 regular + 2 matching cells



Matching cells are magnetically coupled to two input waveguides each and have two damping waveguide in addition.

Number of cells: N_c	25+2
Bunch population: N	3.72×10^9
Number of bunches: N_b	312
Bunch separation: N_{cycl}	6 rf cycles

Mechanical Design (Jouni)

