Realistic conditions

Beam Conditions	Z_{max} (cm)	T_{max} (^{O}C)	T_{cold} (^{O}C)	P_{max} (KW/cm^3)
Nominal beam + radiator	33	188	95	4.2
Beam σ = 510 μm	37	244	109	8.7
Beam σ = 1.7 mm	5	192	91	3.1
Δx = +1 mm	5	192	90	3.7
Δy = +1 mm	54	210	97	6
Δy = -1 mm	7	219	99	3.8
θ_x = +0.5 μrad	5	200	92	4.2
θ_y = +0.5 μrad	55	215	98	6
θ_y = -0.5 μrad	7	225	101	5.4
B-field +3%	25	195	97	5
B-field -3%	53	190	91	5.4

Extreme conditions

Beam Conditions	Z_{max} (cm)	T_{max} (^{O}C)	T_{cold} (^{O}C)	P_{max} (KW/cm^3)
Nominal beam, no radiator	39	253	115	8
Beam σ = 255 μm	37	262	110	10.5
Δx =+2 mm	3	249	102	6
Δy =+2 mm	59	260	110	6.8
Δy =-2 mm	6	252	108	6
θ_x = +1 mrad	3	282	113	6.7
θ_y = +1 mrad	59	252	109	6.7
θ_y = -1 mrad	6	266	110	5.2
B-field +5%	7	209	97	3.4
B-field -5%	54	206	96	5.8
B-field -10%	58	242	110	7
B-field -20%	70	348	130	8

- The realistic conditions do not produce temperature above T_{max}=250 ^{O}C.
- The highest the temperature is expected to be about 245 ^{O}C.

- Shifts in X and Y beam positions as well as in the beam directions are accommodated better now than with KLCPS69 model.
- When the beam hits the vertical surface at z=64 cm T_{max} can reach 350 ^{O}C.