200 kV

400 A gun solenoid

Xoff=0

Yoff=0

5000 particles

50 ps (gauss rms)

0.56 mm mrad /mm emittance

1 nC

Space charge grid: Nrad=13, Nlong\_in=28

|  |  |  |
| --- | --- | --- |
| Laser size rms (mm) | # of Active particles | # of lost particles |
| 0.2 | 1196 | 3804 |
| 0.3 | 1753 | 3247 |
| 0.4 | 2284 | 2716 |
| 0.5 | 2762 | 2238 |
| 0.6 | 3208 | 1792 |
| 0.7 | 3566 | 1434 |
| 0.8 | 3931 | 1069 |
| 0.9 | 4173 | 827 |
| 1 | 4458 | 542 |
| 1.1 | 4684 | 316 |
| 1.2 | 4805 | 195 |
| 1.3 | 4919 | 81 |
| 1.4 | 4482 | 18 |
| 1.5 | 5000 | 0 |
| 1.6 | 5000 | 0 |

1.7 mm rms

10000 particles in distribution

-1000.00 pC total charge

Position 1.47

2.10356e-01 MeV, beta\*gamma 1.0, beta 0.7058

1.01778e+01 keV sig energy spread

43.98161 ps, sig time at cathode

sigx = 11.5342 mm, sigy = 11.5545 mm

sigxp = 48.6253 mrad, sigyp = 48.9506 mrad

sigz = 35.3822 mmnEnz = 84.0193 keV mm = 396.7909 keV ps

Enxps = 383.4320 um, Enyps = 385.0069 um

Enxtr = 384.8430 um, Enytr = 386.6228 um

Exge = 384.8252 um, Eyge = 386.4059 um















