



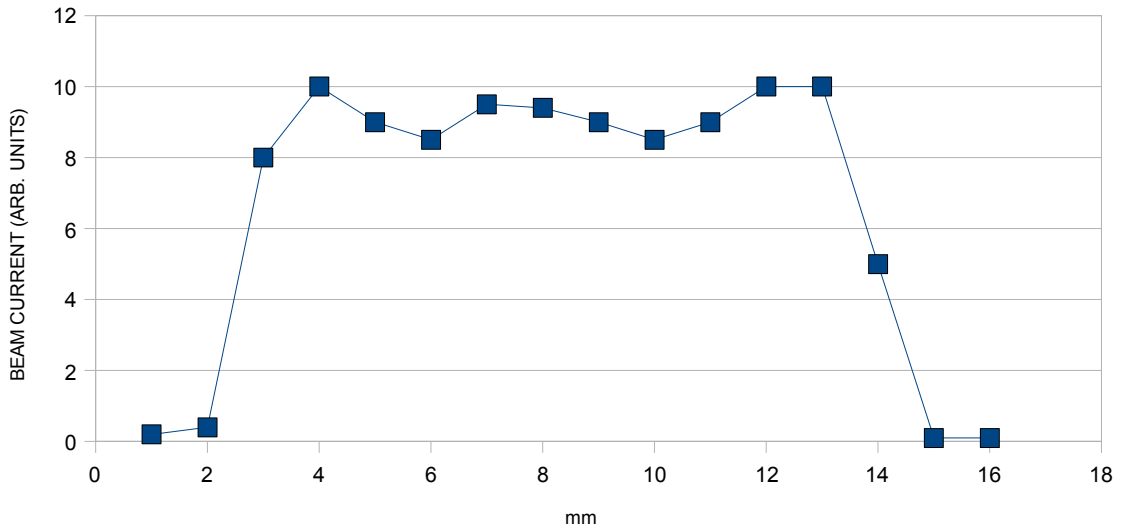
RBD Instruments, Inc.

3 kV Large Area Ion Source

Measurements taken at 100mm working distance (tip of source to sample)
All focus settings optimised for maximum beam current.
Vacuum $\sim 5 \times 10^{-6}$ mbar. Argon ions.

BEAM PROFILE @ 500V BEAM ENERGY

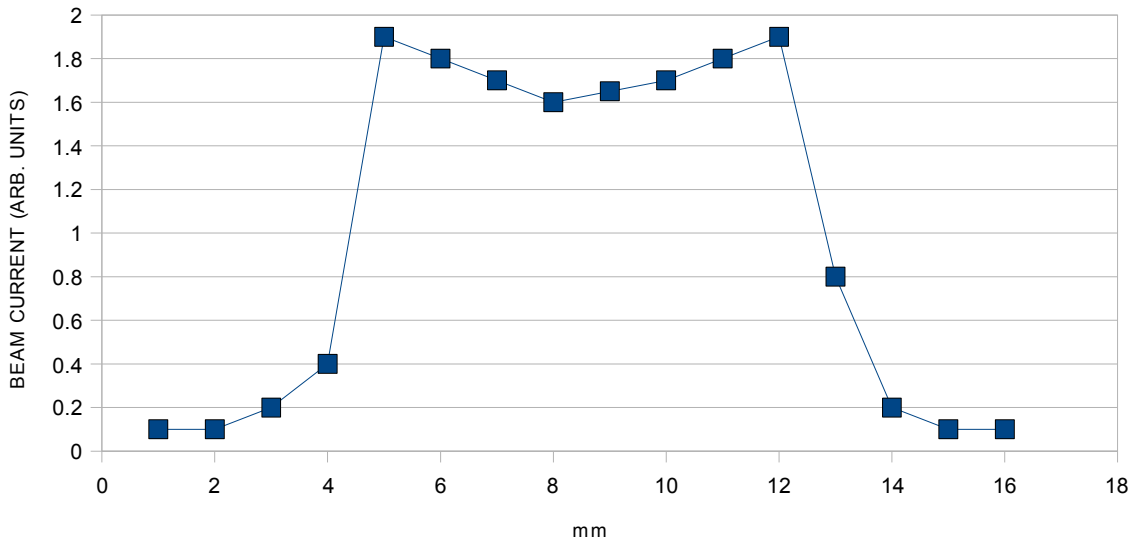
ANODE 65%, FOCUS 0%, 40mA DISCHARGE , BEAM CURRENT 12.7 μ A



Current Density ~ 11 microamps/cm²
Spot Size ~ 12 mm dia.

BEAM PROFILE @ 1000V BEAM ENERGY

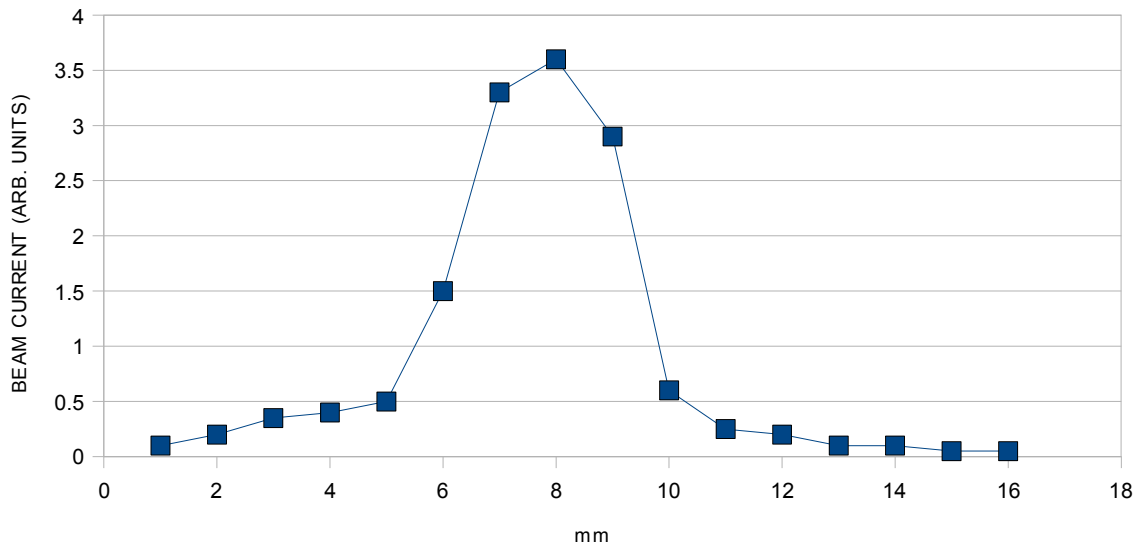
ANODE 65%, FOCUS 25%, 40mA DISCHARGE , BEAM CURRENT 19 μ A



Beam density ~ 30 microamps / cm²
Spot Size ~ 9 mm dia.

BEAM PROFILE @ 2000V BEAM ENERGY

ANODE 65%, FOCUS 60%, 40mA DISCHARGE , BEAM CURRENT 18 μ A



Beam current density ~ 140 microamps/cm²
Spot size ~ 4mm dia.

Anode and Focus pot. vs Beam Voltage

