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Vertical Beam Size Measurement at J5

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Vertical Beam Size Measurements

A trial measurement of beam size using the targets at J-5 was made.

Conditions

- 1) Vertical targets at J-5
- 2) 260 ms after $t_0 \sim 30$ ms after transition.
- 3) Beam intensity $\sim 4 - 4.4 \times 10^{12}$ p/p
- 4) Vertical size ~ 1.4 cm
- 5) Vacuum good ($\sim 10^{-7}$ all over)

Conclusions

- 1) J5 is a vertical β min position. Therefore vertical beam is bigger than before conversion by about a ratio of 1.4. Very preliminary result. (measured at 2×10^{12} p/p)
- 2) It is very difficult to adjust the vertical positions of the targets. Actuating motor is apparently low in voltage.
- 3) Additional studies required.

Blumberg
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