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SEC Calibrations

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AGS Studies Report

Date <u>May 8, 19</u>	84	Time _	1400	
Experimenter(s)	J.W. Glenn			
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Reported by	J.W. Glenn			
Subject(s)	SEC "Calibrations"			
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Observations and Conclusion

An approximate calibration of the ABC and C3 SEC's was obtained using the internal beam monitor and loss monitors. Approximately 1×10^{12} and 4×10^{12} protons per pulse was delivered to each target station separately and the losses and SEC responses noted. The sum of loss monitors was generally less than 10% of the total beam accelerated and their calibration is known to better than 25%. Thus, the SEC calibrations should be better than 5%. The exception is the C3 SEC where loss monitor coverage is less complete and beam hitting the C target further complicates the calibration.

A similar test was made in January, 1984. The A and C3 SEC's show significant changes since then.

Beam	Present Response Normalized to January Response	New Calibration protons x 10 % count
A	42%	0.477
В	78%	1.208
С	98%	1.29
C†	200%	0.491

mvh