

Table 1: Beam Energies/Momenta

Design p (MeV/c)	Design K.E (MeV)	2D line dipole setting (G cm)	5D line dipole setting (G cm)	Measured p \pm RMS (MeV/c)	Measured K.E. (MeV)
5.24	4.75	-8957.675	7338.900	5.299 \pm 0.006	4.813 \pm
5.34	4.85	-9135.993	7490.000	5.406 \pm 0.006	4.919 \pm
5.44	4.95	-9320.700	7646.800	5.517 \pm 0.006	5.030 \pm
5.54	5.05	-9468.500	7771.400	5.605 \pm 0.006	5.117 \pm
5.64	5.15	-9632.300	7909.200	5.703 \pm 0.006	5.215 \pm
5.74	5.25	-9865.500	8099.000	5.840 \pm 0.007	5.351 \pm
5.84	5.35	-9937.637	8168.800	5.887 \pm 0.006	5.398 \pm

Table 2: Horizontal beam size at wire scanner and extrapolated beam size at the radiator

Measured p (MeV/c)	Wire Scanner RMS size (mm)	RMS size (mm)	Note
5.299	1.312	1.698	05142018 22:35:00 measurement prior to data taking is different from 05162018 13:21:51 re-measurement after data taking (latter reported)
5.406	0.7528	0.7844	05132018 22:39:02
5.517	0.4907	0.3093	05162018 19:01:44
5.517	1.11	1.51	05172018 11:28:02 (larger spot size)
5.605	0.1532	0.4092	05122018 16:11:48
5.703	0.6809	0.6575	05152018 23:29:41 poor beam position on radiator
5.703	0.9079	1.023	05162018 09:45:50 centered on radiator
5.840	0.7493	0.7416	05112018 22:04:10
5.840	0.5721	0.5100	05132018 15:34:03
5.887	1.342	1.623	05172018 23:59:19

Table 3: Vertical beam size at wire scanner and extrapolated beam size at the radiator

Measured p (MeV/c)	Wire Scanner		Note
	RMS size (mm)	RMS size (mm)	
5.299	0.6964	0.5736	05142018 22:35:00 measurement prior to data taking is different from 05162018 13:21:51 re-measurement after data taking (latter reported)
5.406	0.9905	1.223	05132018 22:39:02
5.517	1.001	1.220	05162018 19:01:44
5.517	2.296	2.793	05172018 11:28:02 (larger spot size)
5.605	1.013	1.261	05122018 16:11:48
5.703	0.9945	1.190	05152018 23:29:41 poor beam position on radiator
5.703	1.137	1.180	05162018 09:45:50 centered on radiator
5.840	0.5956	0.7936	05112018 22:04:10
5.840	0.4482	0.5249	05132018 15:34:03
5.887	0.405	0.4781	05172018 23:59:19