Higher emittance settings using the diffusers

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Diffusers definition

Table 1: Material thicknesses of the brass-tungsten diffuser

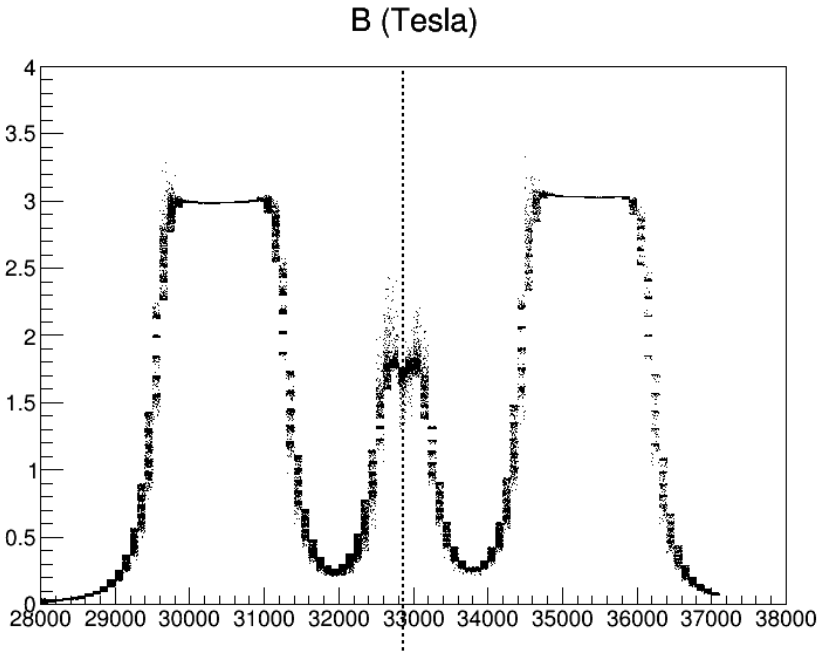
Iris Number	Material	Thickness (mm)	Fractional X_0	ΔE (MeV)
1	Brass	2.97	0.207	4.4
2	Brass	5.9	0.4108	8.7
3	Tungsten	2.8	0.799	6.7
	Brass (backing)	2.0	0.139	2.9
4	Tungsten	5.6	1.598	13.4
	Brass (backing)	2.0	0.139	2.9

Victoria's note draft

Cooling channel settings

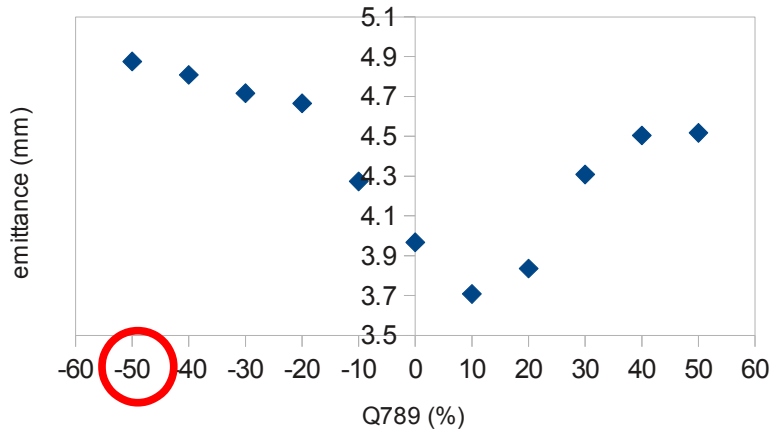
- 3T in SSU and SSD
- Focus Coil on
- No matching coils

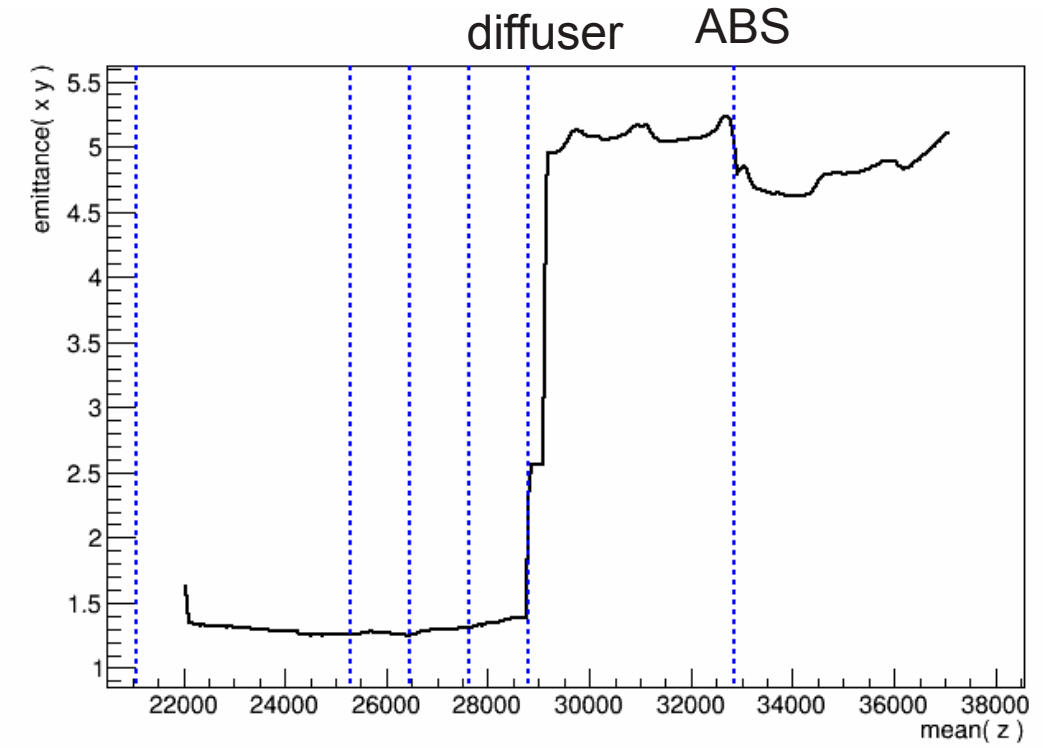
	E2	C	E1	M1	M2	FC1	FC2	M1	M2	C	E1	E2
(A)	189	208	210	0	0	63	63	0	0	210	208	189



200MeV/c with Iris1+Iris2

- Energy loss for muons ~ 13 MeV (9mm of brass)
- With transmission cuts: **ε ~ 5mm** with Q7/8/9 50% lower
- 75% of scraping





- Without keeping the transmission constant: ε~10mm

200MeV/c w/ Iris1+Iris2+Iris3+Iris4

- Energy loss for muons ~ 39 MeV
- **ε ~ 6.6mm** with Q7/8/9 20% lower
- 25% of scraping