

Modular Cavity Update

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MAP Weekly Meeting

26 February 2016

Current Status

We have completed the following modular cavity runs:

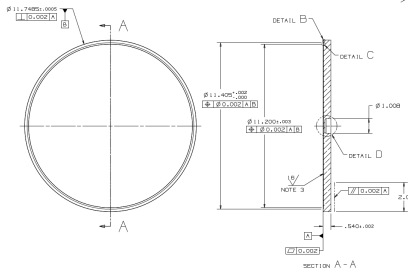
Material	<i>B</i>-field (T)	Max. Gradient (MV/m)
Cu	0	40
Cu	3	12
Cu	0	20

These

values are preliminary.

- ▶ Inspection after most recent run is complete. Results will be discussed at next MTA-centric MAP meeting.
- ▶ We're ready for Cu / $B = 3$ T run immediately after MICE run is finished.
- ▶ Be plates will arrive in early March.
- ▶ We should be able to run until mid-July.

Beryllium plate status



- ▶ Be plates fabricated by General Dynamics (Alabama).
- ▶ Shipped to FNAL between March 7 and 11.
- ▶ TiN coating to be done by LBNL or FNAL.
 - ▶ Both labs capable of doing this.
 - ▶ I'm trying to assess schedule reliability.
 - ▶ Recent HPRF experience cautions against non-lab shops.

Run plan, March-July 2016

- ▶ **Essential Runs.** Establish maximum achievable gradient in the following configurations:
 - ▶ Be plates, $B = 0$
 - ▶ Be plates, $B = 3$ T
- ▶ **Optional Runs**
 - ▶ Second run with Be plates, $B = 0$ to assess scope of B -field-induced damage, if any.
 - ▶ $0 \leq B \leq 3$ T runs to study field emission.
 - ▶ Beam test?