$f_T = 40.06 \frac{MHz}{T} \approx 40.06 \cdot (\alpha \cdot 3.21 A) \frac{MHz}{A} = 16.8905 MHz$

$f_A \; 42.58 \frac{MHz}{T} = 42.58 \cdot \alpha \cdot I$

$= 42.58 \cdot \alpha \cdot I = 16.8905 MHz$

$\rightsquigarrow$ 0.397 mT

$\rightsquigarrow$ 2.97 mA

Scanning 3.10 – A → 2.70

Lock in

Frequency: We used the Oszilloscope to obtain the resonance frequency

16.8520 MHz

$\Rightarrow f = 3.33 \pm 0.03$ (units on rotational regulator)

Amplitude: ~ $\frac{1}{4}$ of (2.) = ~~1.98~~ Lock 19 Ch 1
Lock 20 Ch 2

I = ~~2.94~~ 3.01 A 2.98 A
~~3.00 A~~

Amplitude = 1.068 VSS

(3.) Calibration:

Lock 21,22 CH2 CH1 CH2

- Sinus, unmodulated
- Rectified

[ΔT, Mode, T_0] = [2.5ms, Norm, ~~Inv~~] ~~Lock 23,24~~ : pos half waves:

~~[ΔT, Mode, T_0] = [" 25 ms", "Inv", "Norm"]~~

Time Const = 0

Delay Delay: 0.00 ± 0.03 (regulator)

Files: Lock 28 29 CH1 CH2

$\Rightarrow$ For $\Delta T = 0 \Rightarrow \phi \neq 0$!