UPPSALA UNIVERSITET

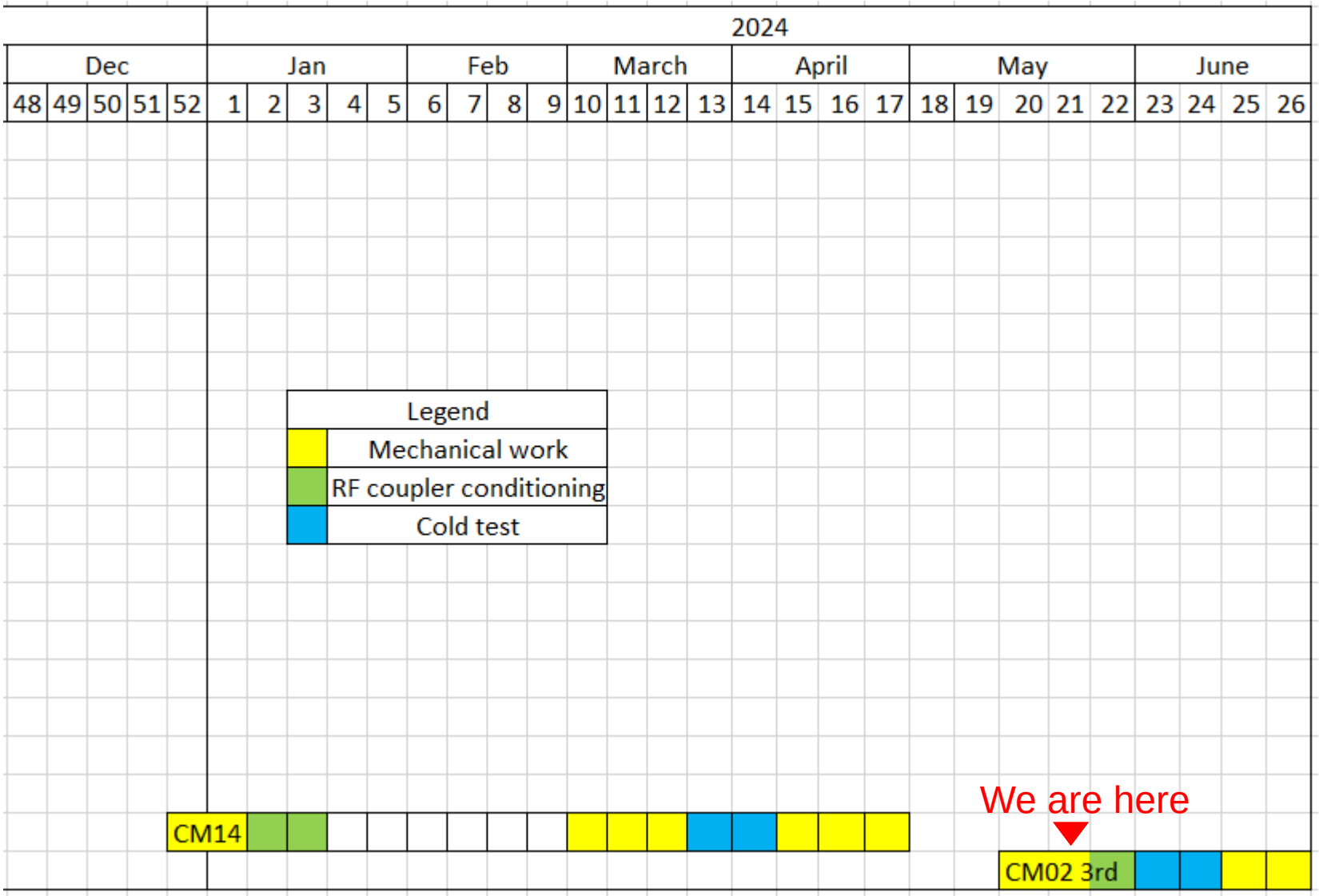
ESS weekly meeting (2024 W21)

FREIA team

UPPSALA UNIVERSITET

Global planning

Global planning



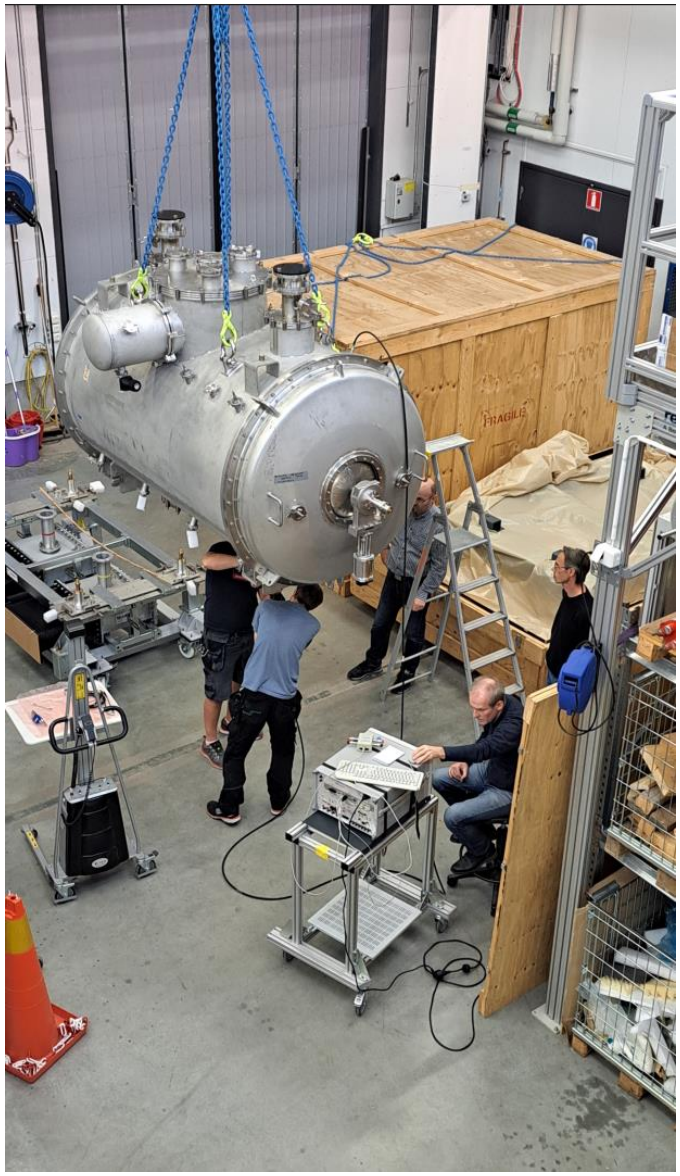
Local planning

week		W20											
date		MON		TUE		WED		THU		FRI		SAT	SUN
		13-May		14-May		15-May		16-May		17-May		18-May	19-May
		m	a	m	a	m	a	m	a	m	a		
CM	CM02					Arrival to FREIA		Thermalization		reception test			

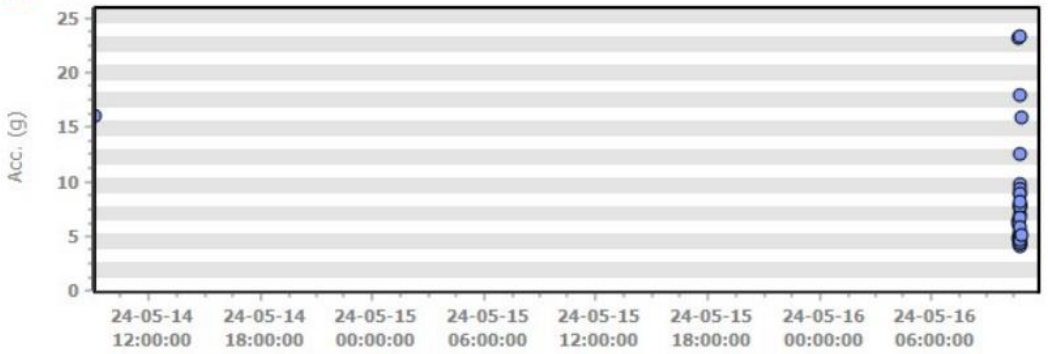
week		W21 We are here											
date		MON		TUE		WED		THU		FRI		SAT	SUN
		20-May		21-May		22-May		23-May		24-May		25-May	26-May
		m	a	m	a	m	a	m	a	m	a		
CM	CM02	Doornobs connection, move to the bunker		Cryo connection, leak check		Vacuum connection		Vacuum pumping		Start RF stations, RF cable calibration			

week		W22											
date		MON		TUE		WED		THU		FRI		SAT	SUN
		27-May		28-May		29-May		30-May		31-May		1-Jun	2-Jun
		m	a	m	a	m	a	m	a	m	a		
CM	CM02	Coupler conditioning ???											

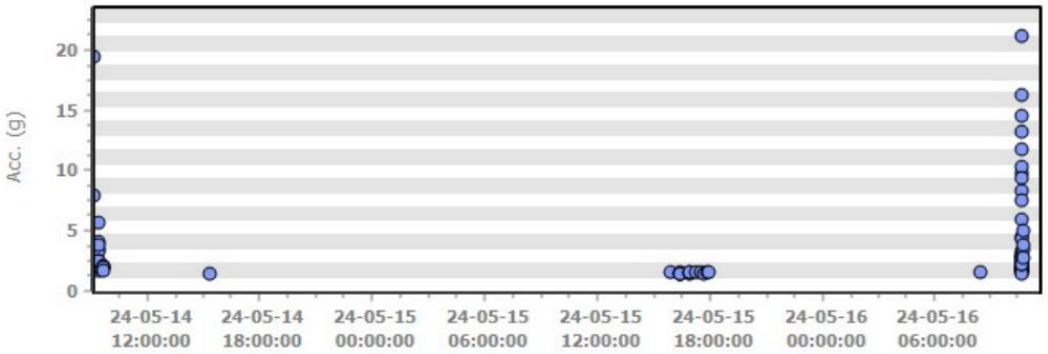
CM02 3rd arrived to FREIA



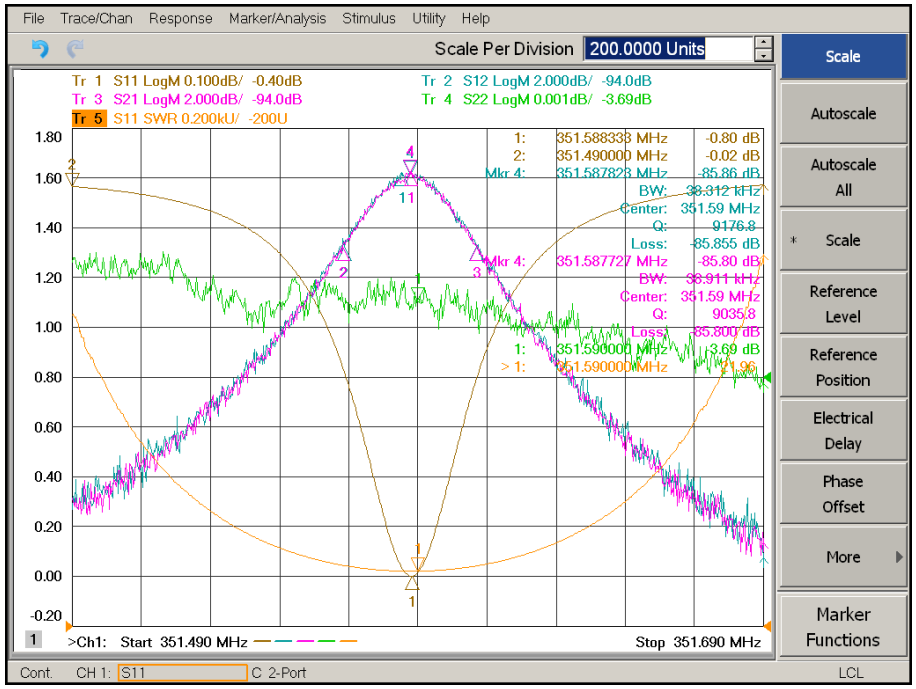
CavIN 4g limit



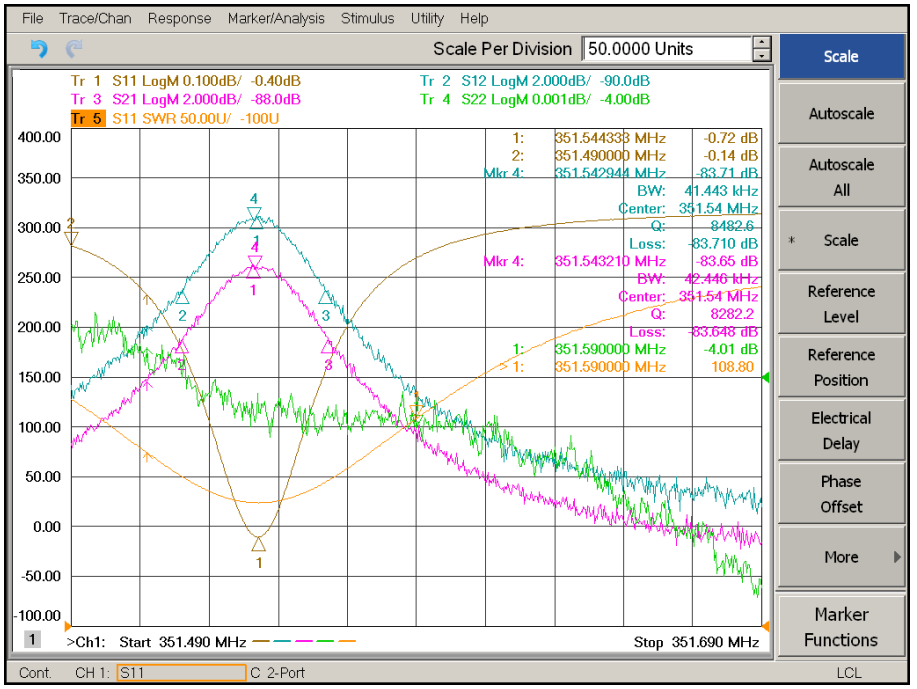
CavOUT 1.5g limit



CM02 3rd: VNA reception



CavIN



CavOUT

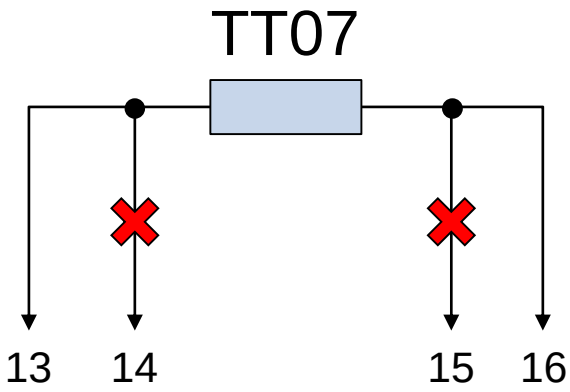
	CM02-2 out	CM02-03 rec
S11	351.592MHz -0.82dB	351.588MHz -0.80dB

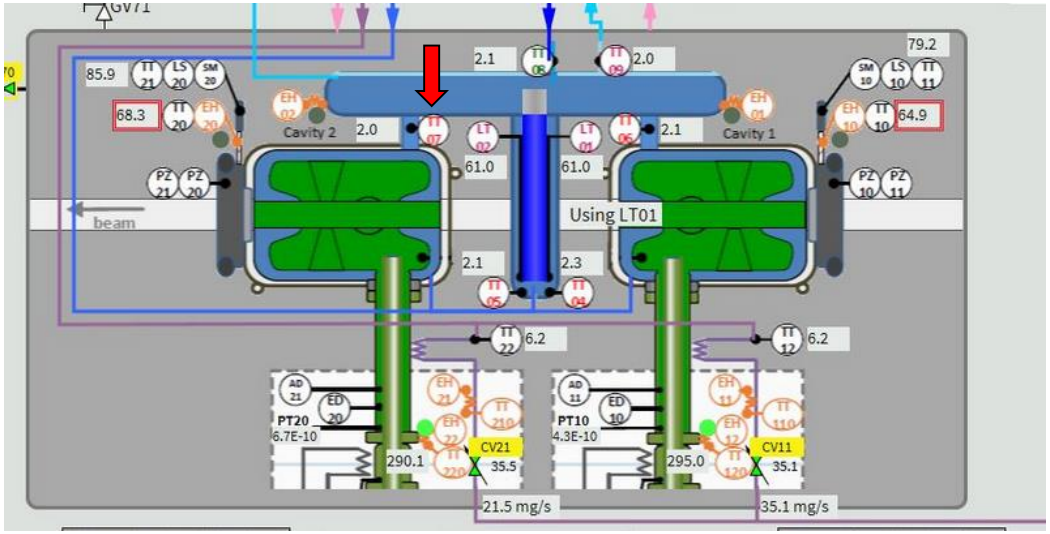
	CM02-2 out	CM02-03 rec
S11	351.549MHz -0.72dB	351.544MHz -0.72dB

CM02 3rd: "LEMO" reception

Problem with continuity of T077 sensor on LC01.

Same behavior if we measure resistance directly on LEMO plug on top of CM.



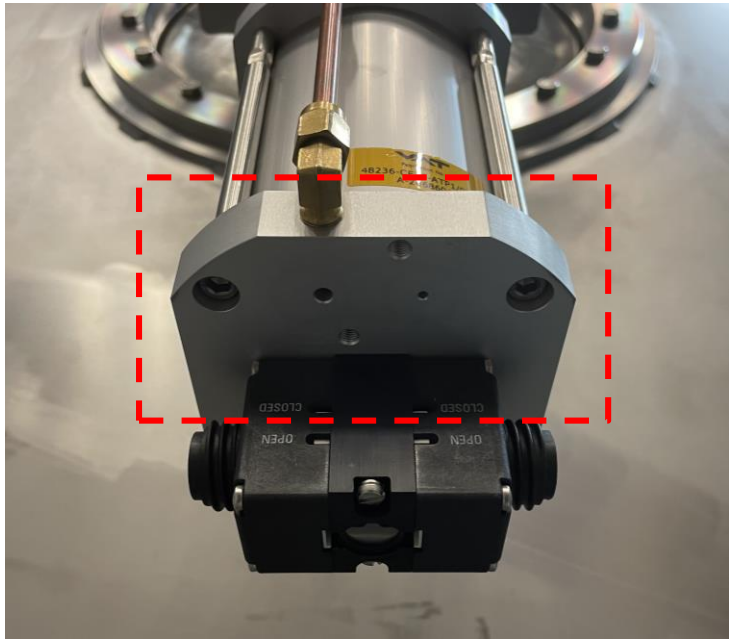


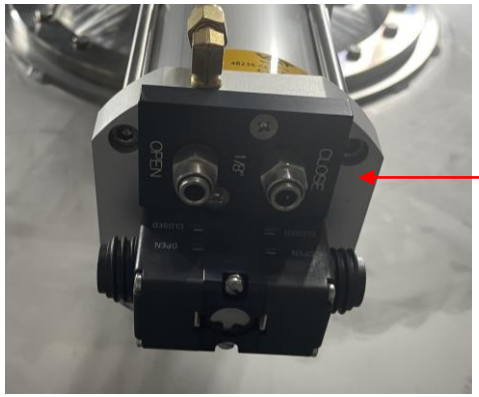
Pins	R [Ohm]
13 - 14	OL
13 - 15	OL
14 - 16	OL
15 – 16	OL

13 - 16	260.3

CM02 3rd: connectors

Missing metal plate on CavIN gate valve.





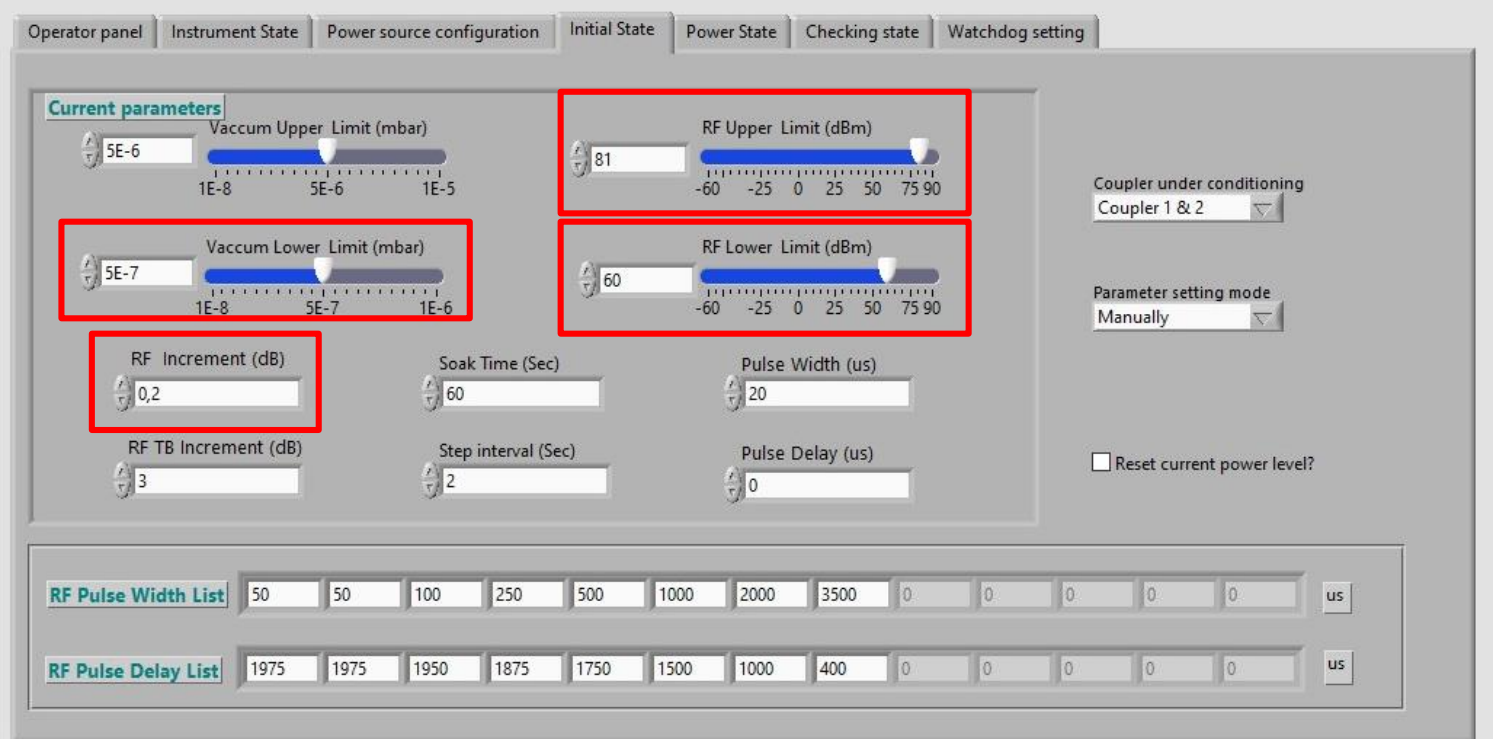
CavOUT side is OK!

Connectors for TT120/200 and EH12/22:

We didn't have a appropriate plugs

Should we "cut" them or ESS will send us a dedicated connectors?

Warm conditioning strategy



- Start RF power level: 60dBm → 50dBm (1kW → 100W)
- RF step increment 0.2dBm → 0.1 or 0.05dBm(if we have enough resolution)
- Vacuum low. Limit 5E-7mbar → 2E-7mbar (depend from beam vacuum).
- Limit upper RF power to 100kW