

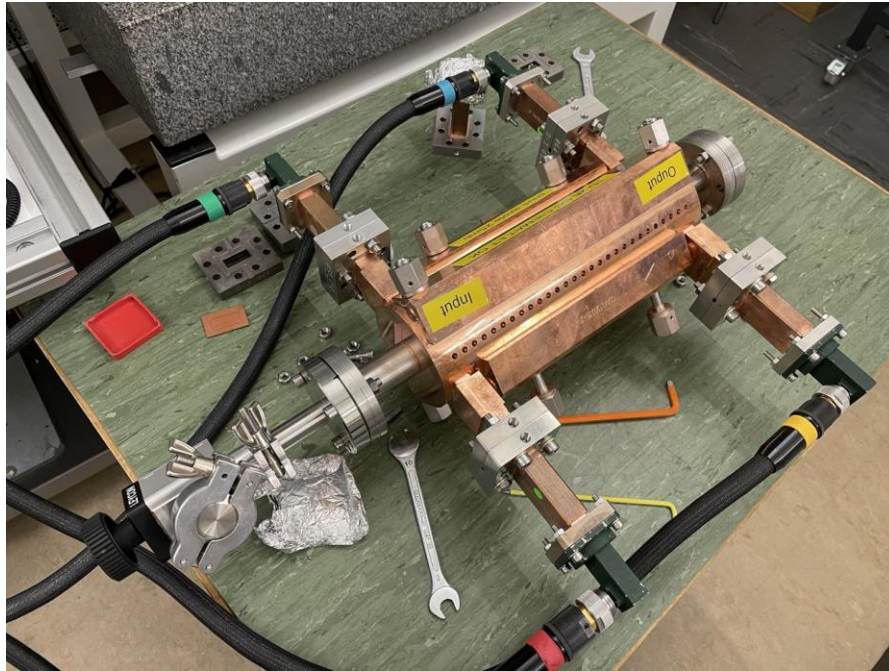


# TD26 R11 CC Ciemat RF measurements

17.02.2025

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Pablo

# TD26 R11 CC Ciemat

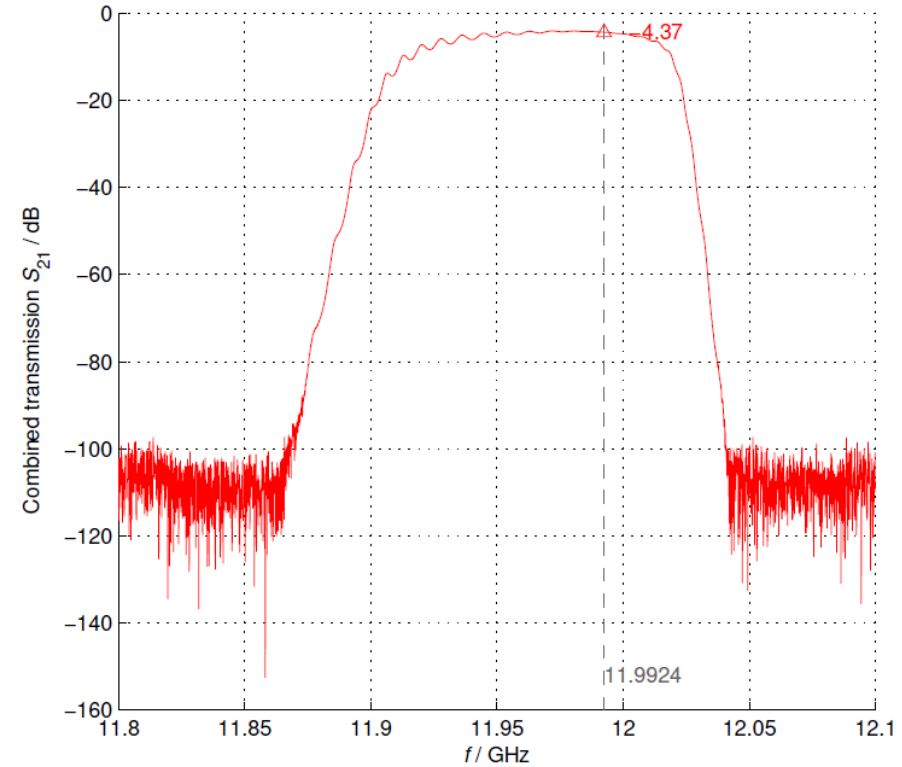
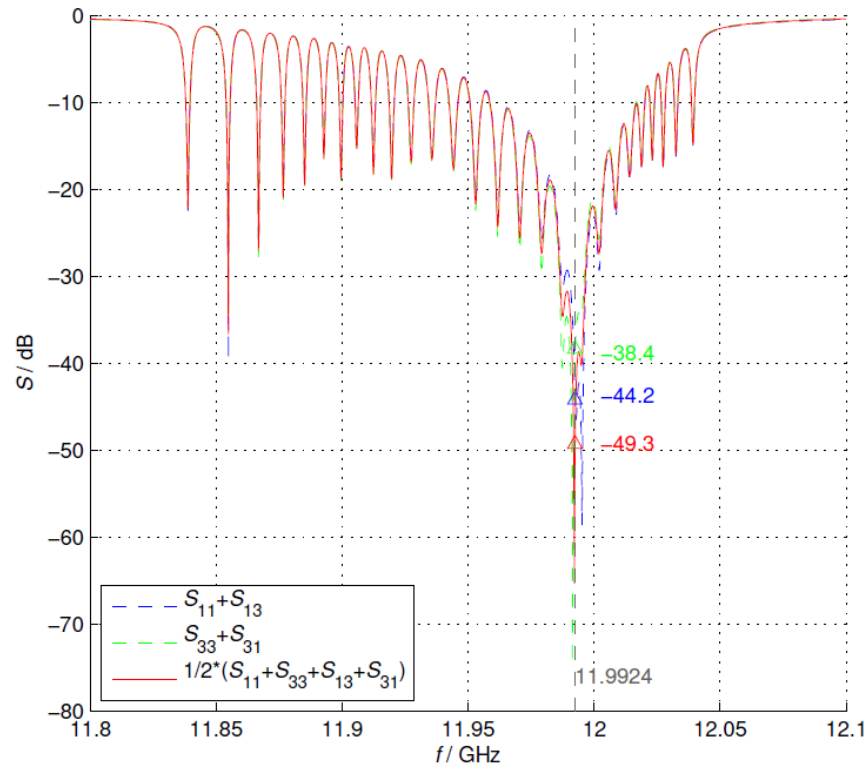


1. S-matrix measurements of TD26 with 4-port VNA
2. Mounting of manifolds (\*)
3. S-matrix measurements with 2-port VNA

(\*) Measured by M. Boronat; cleaning of waveguides: TBD



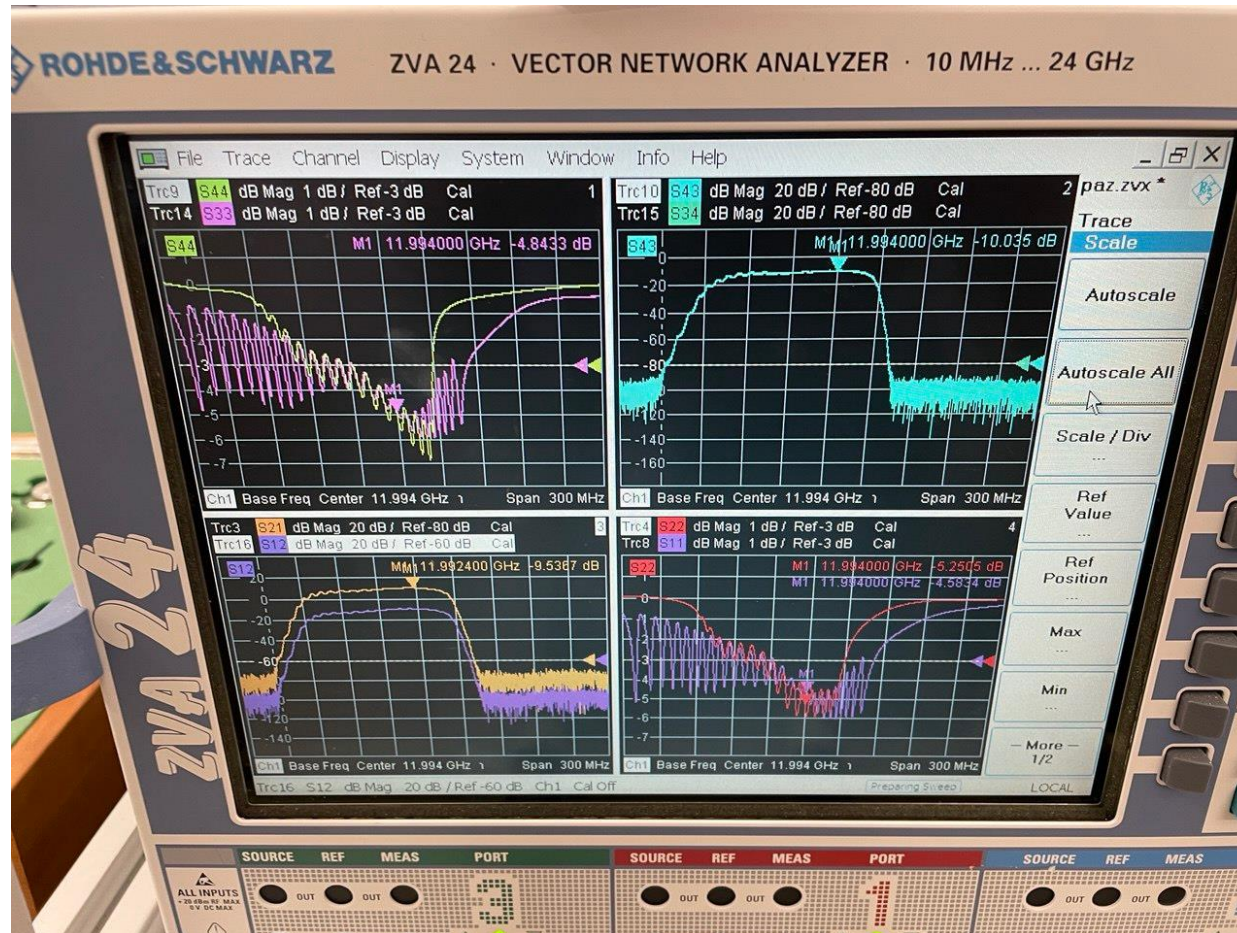
# TD26 R11 CC Ciemat



*Meas. reported by Rolf, Hikmet after tuning [25 Oct, 2021]*

- Structure in N2
- Temperature 20.4°C

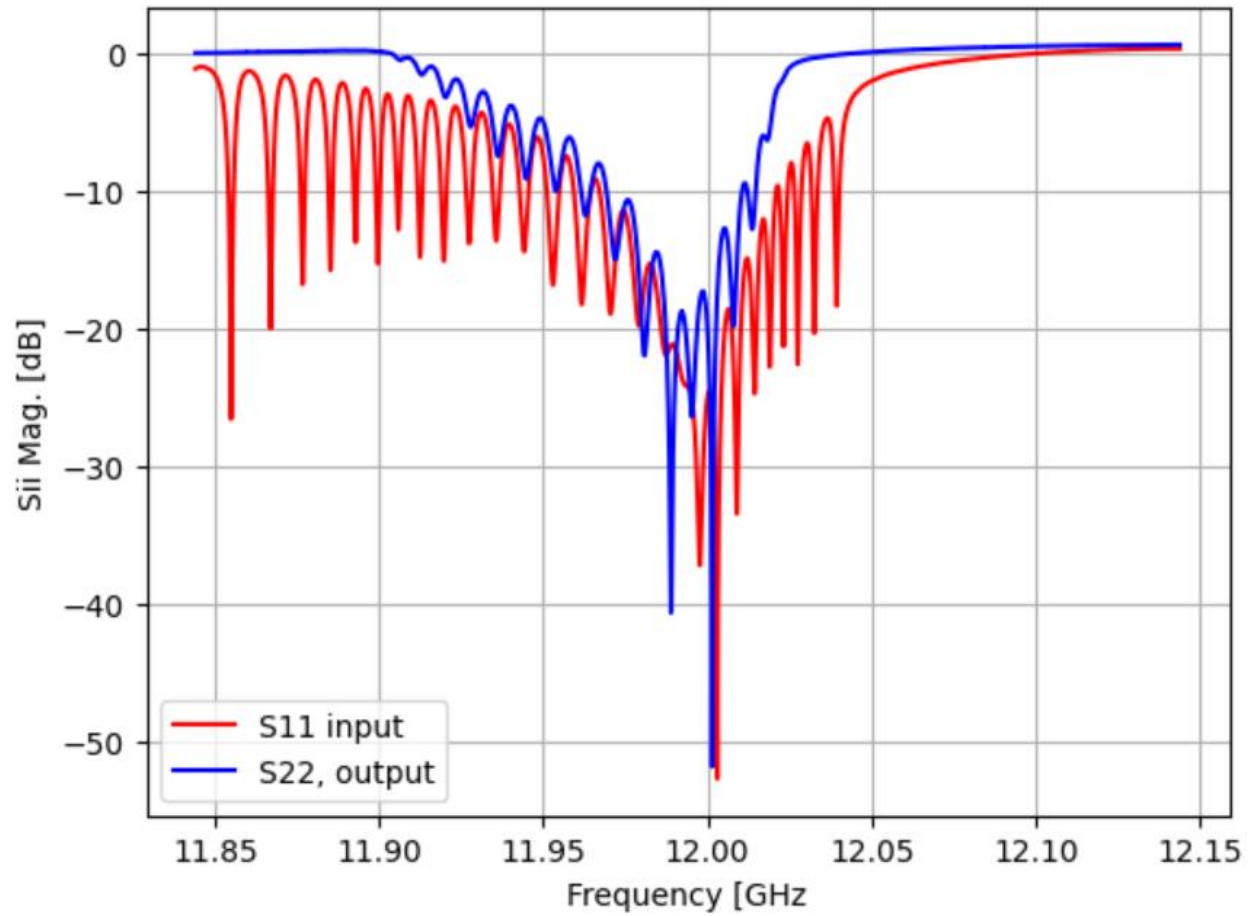
# Measurement Setup – VNA calibration



For both VNAs:

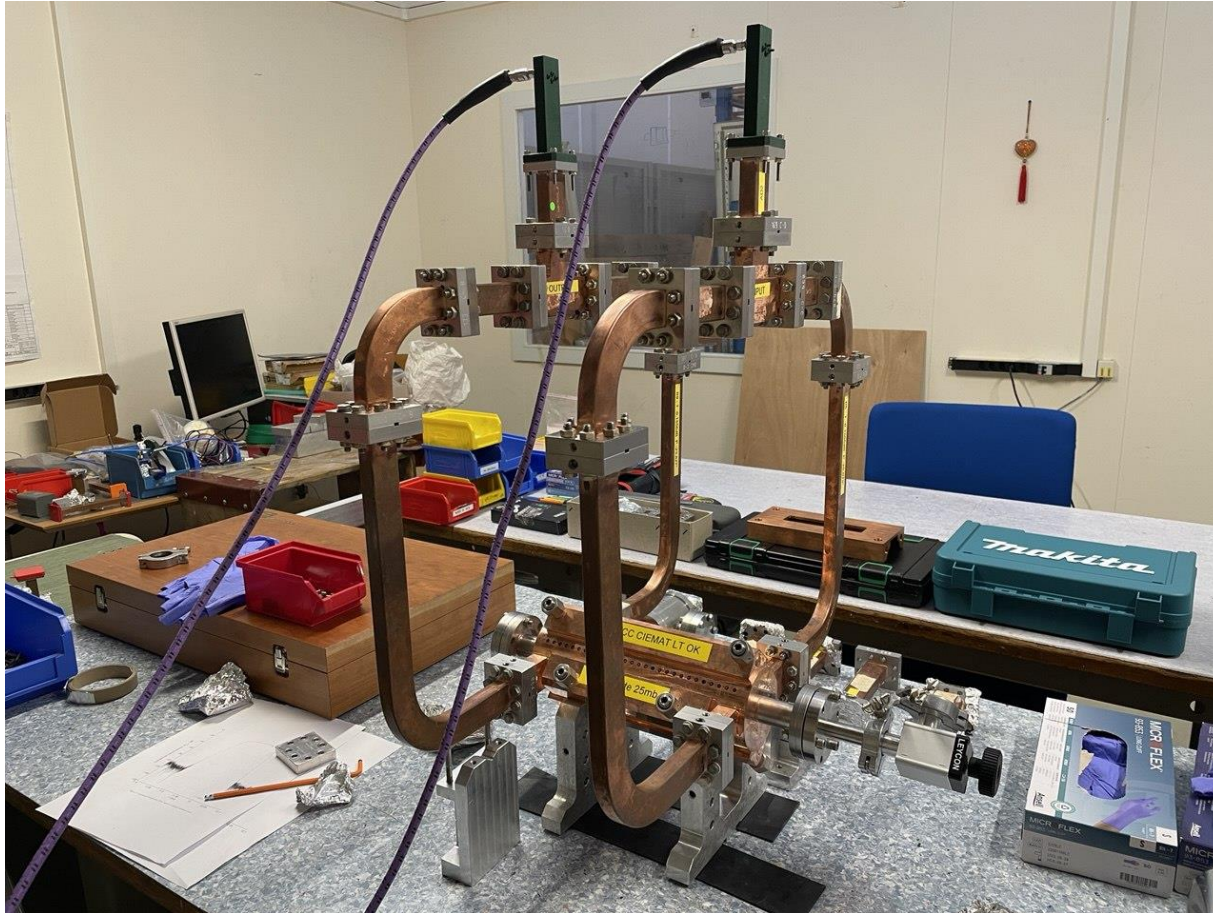
- Central freq: 11.994 GHz
  - Span 300 MHz
  - No. of points: 20001
  - IF Bandwidth: 1 kHz
- 
- Full 4-ports/2-ports calibration
  - Configuration of 2xbalanced ports (logical ports) in ZVA24

# S-matrix TD26

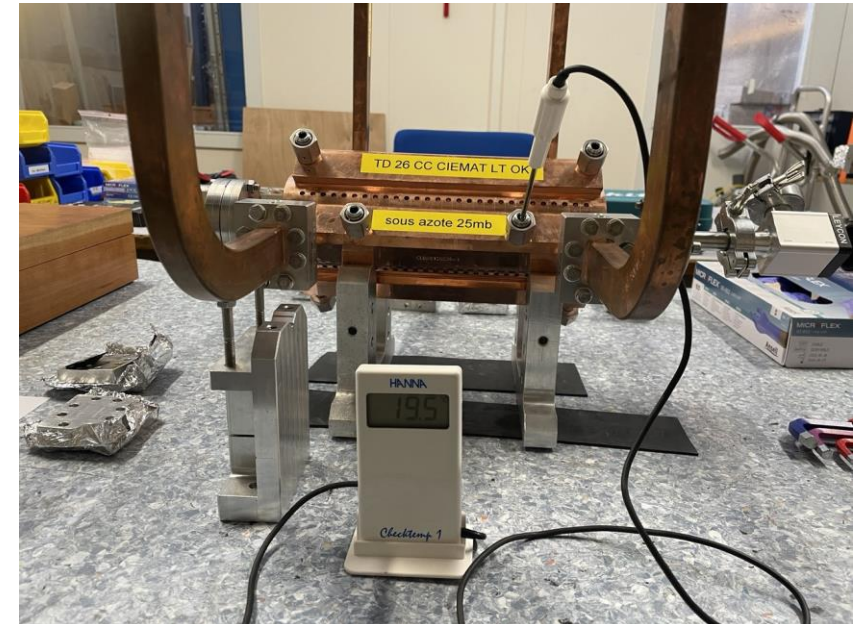


Meas.	F0 [GHz]	IL [dB]
Air, 18.3°C	12.0	4.60
Report	11.9924	4.36

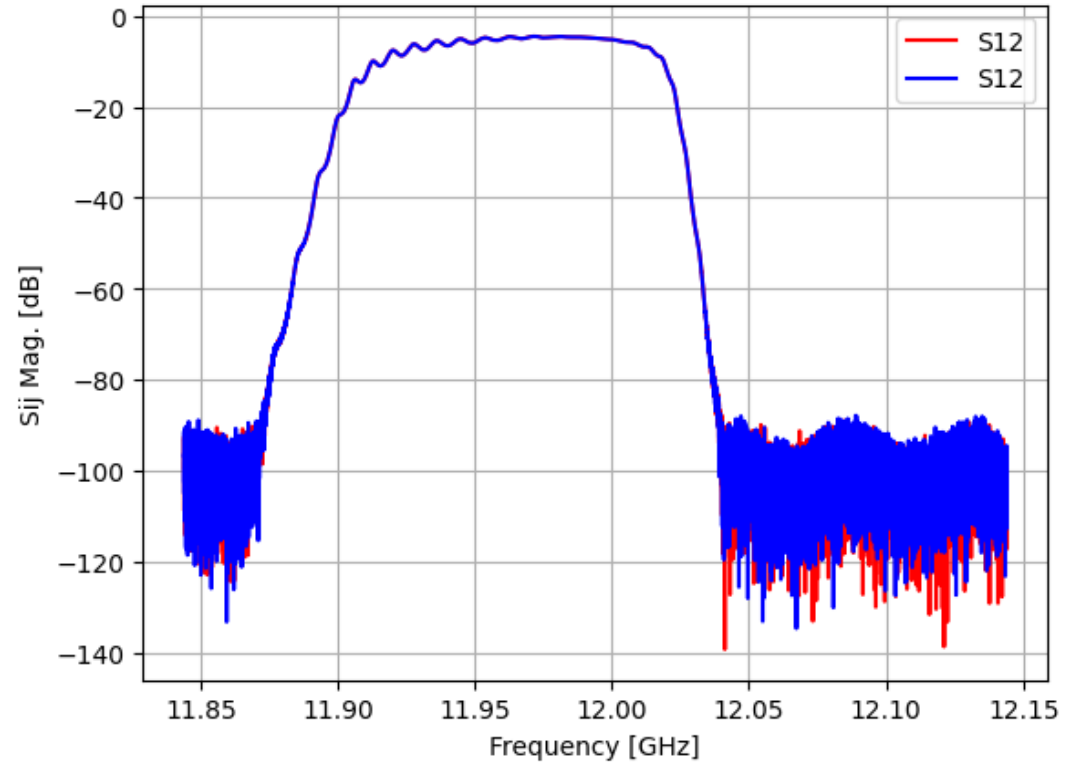
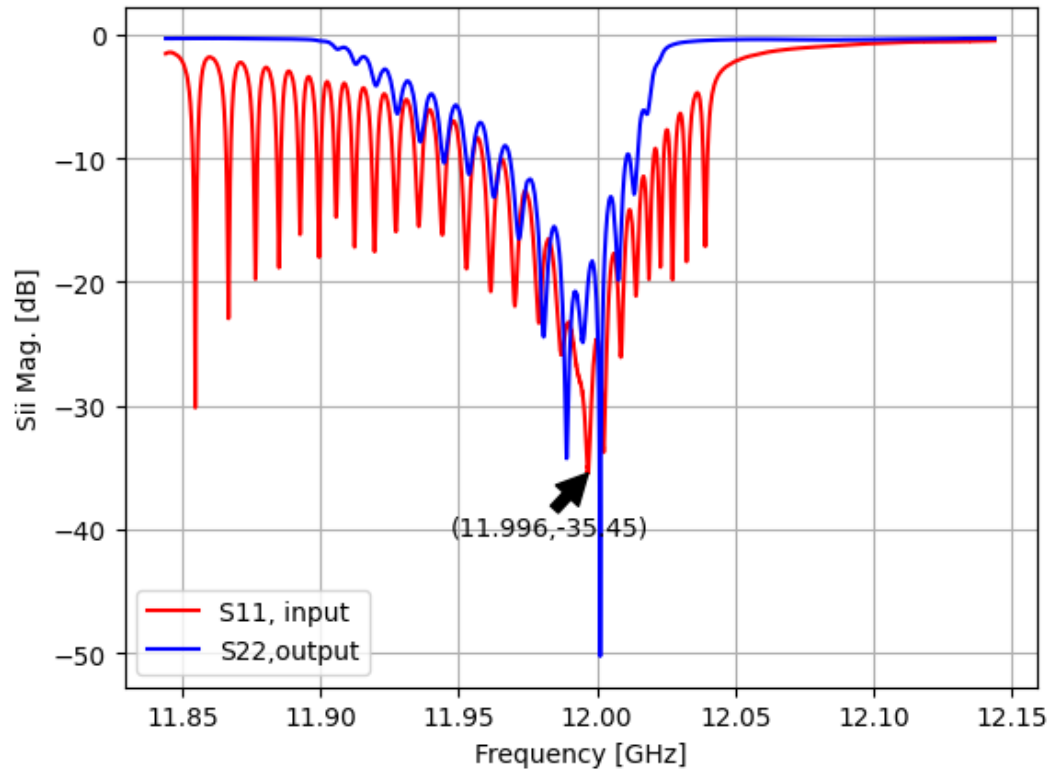
# S-matrix TD26+manifolds



Temperature 19.5 °C



# S-matrix TD26+manifolds



Air/vacuum correction  $f \approx 11.9933$  GHz  
Insertion Loss@ $f_0 = -5.03$  dB

# S-matrix TD26+manifolds

