

Verification REPORT

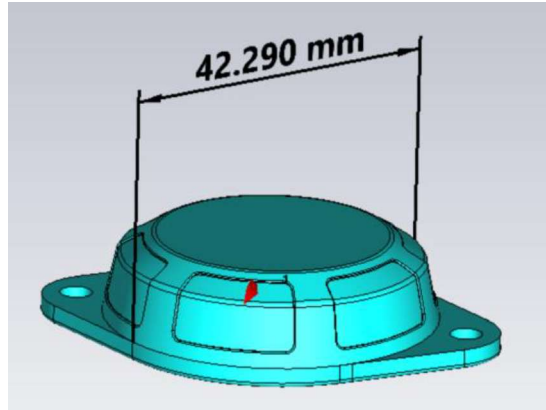
Project number: P4034 Digital Matter Connected Devices
Project name: BLE Antenna asset tracker

Date: 9.6.2025

Author / PM: Jari van Wonterghem



Statement of work



Updated device DOT-TAG (*modified* outline as per the x_t file).
Continuation work based on P4034 (DOT-SENSOR)

Updated board outline with enhanced space for antenna
Additional ground implemented for the battery holder

Focus is now on optimized antenna performance. F-antenna
design was implemented on enlarged antenna area

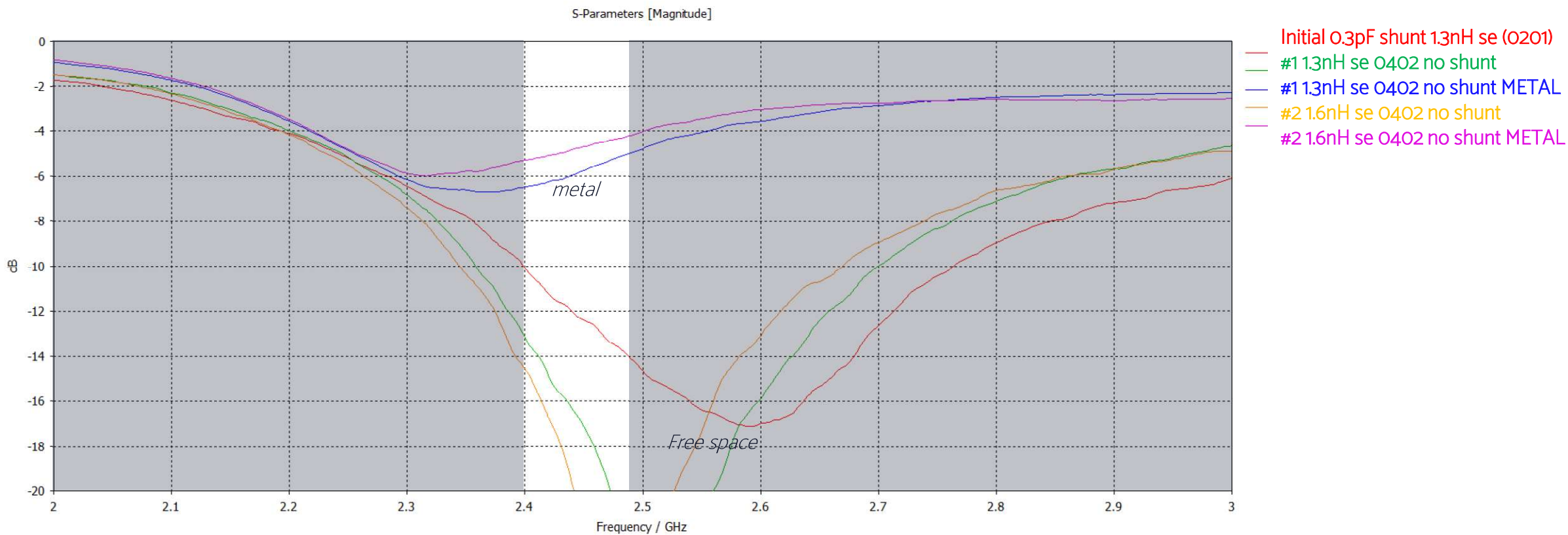


*DUT with the
implemented
F-antenna
and cabling
setup*

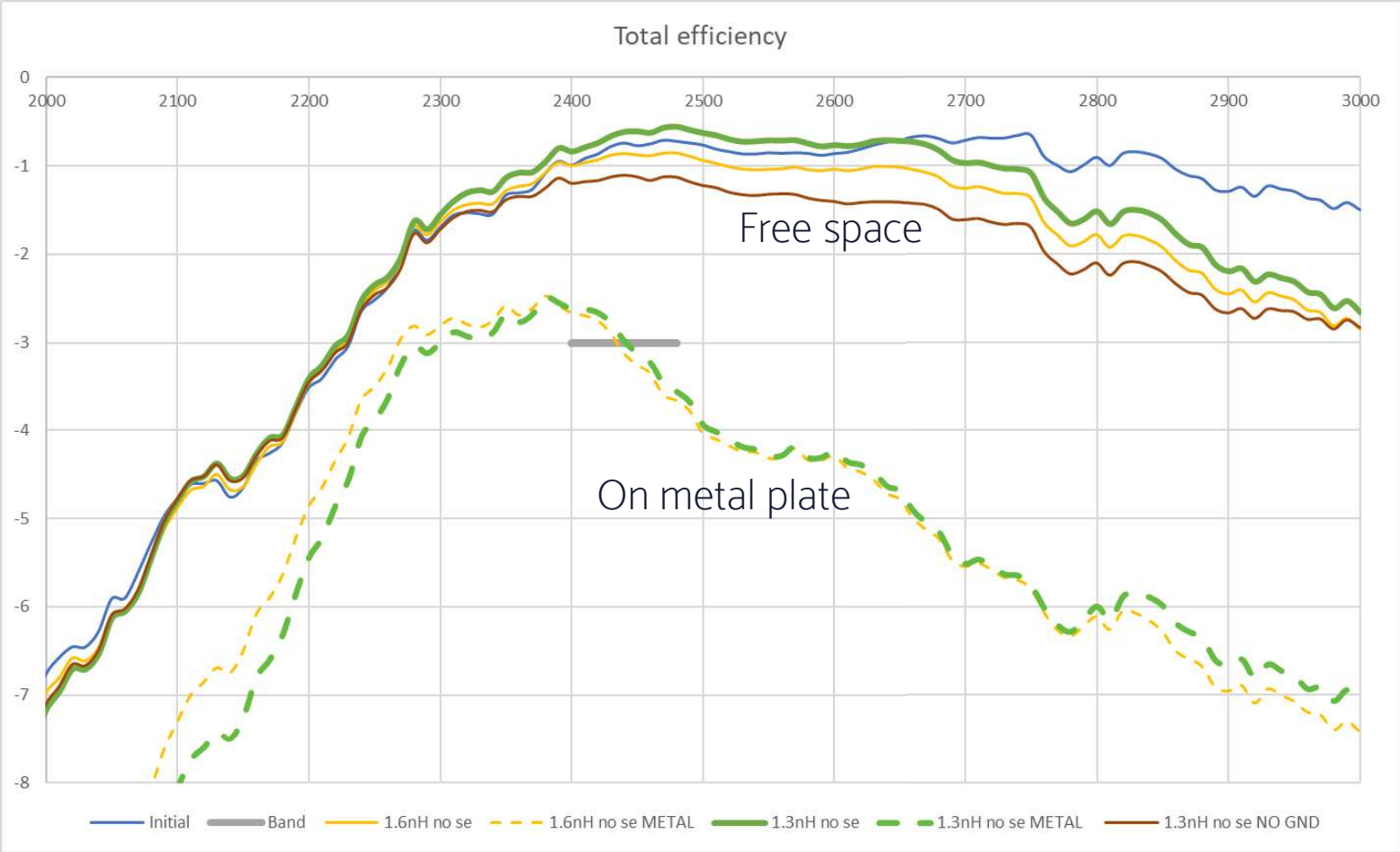


Batt holder ground foam

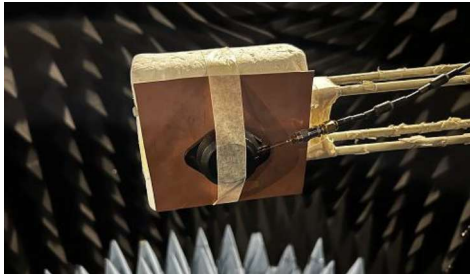
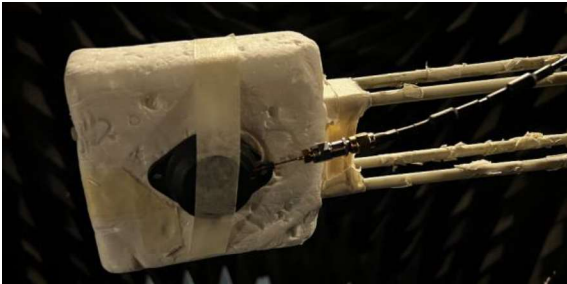
Measured Tuning



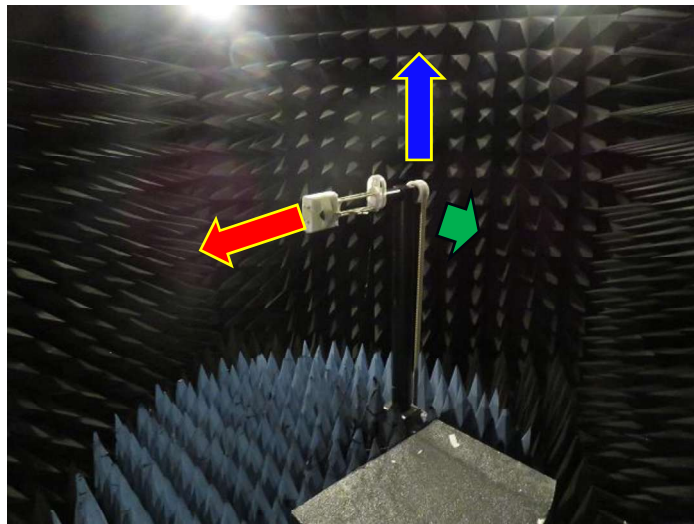
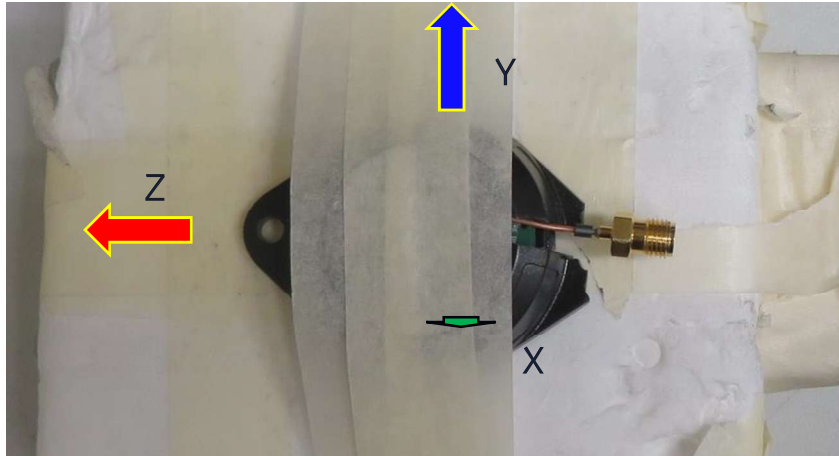
Measured Total efficiency



- Initial 0.3pF shunt 1.3nH se (O201)
- #1 1.3nH se O402 no shunt
- #1 1.3nH se O402 no shunt METAL
- #2 1.6nH se O402 no shunt
- #2 1.6nH se O402 no shunt METAL
- #3 1.3nH no batt holder GROUND



Pictures, radiation pattern alignment



Radiation patterns

