



## Test of the first RF dipole cryomodule for HL-LHC

*Friday 26 September 2025 10:10 (20 minutes)*

The first RF Dipole crab cavity cryomodule under the HL-LHC project was jointly built between CERN and UK-STFC to carry out proton beams tests in the SPS machine. In 2024, the cryomodule was tested in the CERN horizontal test facility prior to its installation in the SPS. During the acceptance tests two critical non-conformities on the fundamental power couplers were detected. The mitigation of these non-conformities and the subsequent validation tests of the cryomodule tests leading to successful CW operation is presented. Some key aspects on RF, cryogenics stability, alignment and frequency tuning are addressed.

### I have read and accept the Privacy Policy Statement

Yes

### Footnotes

### Funding Agency

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