



## Horizontal cryostat testing of the ORNL Spallation Neutron Source (SNS) Proton Power Upgrade (PPU) cryomodules at Jefferson Lab

*Thursday 25 September 2025 14:30 (3 hours)*

Oak Ridge National Laboratory (ORNL) is in the process of upgrading its Spallation Neutron Source (SNS) Linear Accelerator in order to double the total machine power from 1.4 to 2.8 MW. This Proton Power Upgrade (PPU) makes use of an added 7 4-cavity cryomodules to its SRF Linac to raise the machine energy to a total 1.3 GeV (with one additional module produced as a ready spare). Jefferson Lab was contacted to produce these modules with vertical testing, manufacturing, and limited horizontal testing of the cryomodules executed at Jefferson Lab and final high-power testing occurring locally at ORNL. This paper will detail ensemble tuner testing results, passbands, and loaded Q results obtained for the 8 modules which have been manufactured.

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

Yes

### Footnotes

### Funding Agency

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