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The cavity combiner development for TPS SSPA tower at NSRRC

Wednesday 4 June 2025 16:00 (2 hours)

NSRRC builds four home-made solid state power amplifier towers to provide 300 kW for one superconducting RF cavity at TPS. The power combining tree of one tower is two-stages structure with a complex wire connection. In order to simplify the wire connection and increase the power combining efficiency, we devote resources to develop the cavity combiner. In this study, a 21-ports cavity combiner is designed and manufactured. The RF properties, S11 and S21, of output port were simulated and measured to evaluate the combining efficiency.

Footnotes

Paper preparation format

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Region represented

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