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Status of the 650 MHz high power couplers in IMP

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The 650 MHz high power coupler has been designed and developed by IMP for medium-high beta elliptical superconducting cavities in the Chinese Initiative for Accelerator Driven Subcritical Systems (CiADS) project, delivering an average power of 130 kW. The coupler incorporates a door knob conversion structure, 75 ohm coaxial structure and dual warm window structure to achieve long term stable operation at high power. The electromagnetic design, multi-physical field analysis and mechanical design of the coupler have been completed, and prototype production of the coupler has been completed. The traveling and standing wave conditioning results of the coupler are discussed in this paper.

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Yes

Footnotes

Funding Agency

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