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A test bench for 324MHz RF deflectors used in bunch shape monitors for the upgrade of CSNS-II linac

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The Feschenko-type bunch shape monitors based on the transverse modulation of low energy secondary emission electrons, will be used in the measurement of longitudinal beam density distribution in the upgrade of CSNS-II linac. A test bench for commissioning the 324MHz RF deflectors used in BSM has been built in the laboratory, which consists of a Kimball E-gun, an RF stimulator, a 324MHz RF power source and a set of MCP+Screen. This paper gives the design consideration, test results of the test bench and the continuing CST design of a λ/2 RF deflector.

Footnotes

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