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# Experiments on a BSM test bench for CSNS-II linac upgrade

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A test bench for commissioning the 324 MHz RF deflectors used in BSMs has been in use for the upgrade project CSNS-II linac. The pulsed 10keV electron beam produced by a Kimball focusable electron gun has been captured by a YAG:Ce screen and imaged by an industrial camera installed vertically right above the view port of the screen after passing through the body of the RF deflector undertest. This paper introduces the verificating experiments of static electric lens, RF deflections and bending magnet, also with the postprocessing of the beam spot images. Results of theoretical analysis and the tests were compared and agreed very well. The experiments verified the feasibility of the BSM test bench, playing a critical role in shortening the future commissioning time of BSM equipment in the tunnel.

## Footnotes

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## I have read and accept the Conference Policies

Yes

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