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## EMI measurement for SXFEL klystron-modulator system

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The purpose of this paper is to estimate the conducted and radiated Electromagnetic Interference (EMI) for subsystems in the SXFEL LINAC. A spectrum analyzer system with a wide frequency range of 9 kHz to 3 GHz was conducted to measure the EMI spectrum of pulse modulator and klystron system. The radiated EMI was tested by electric and magnetic field probe. A stray current was tested by wide frequency current transformer in order to measure the conducted current for kicker and septum systems. According to the experiment results, the stray current could flow through the other subsystems, and it might be affected the stability of other subsystems. Therefore reducing and eliminating the interference of EM waves will be a very important issue. At the end, measures to improve EMI performance are given.

### Footnotes

### Funding Agency

### Paper preparation format

Word

### Region represented

Asia

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