

Measures for radiation immunity test by small loop antenna

◇EMS simple measurement

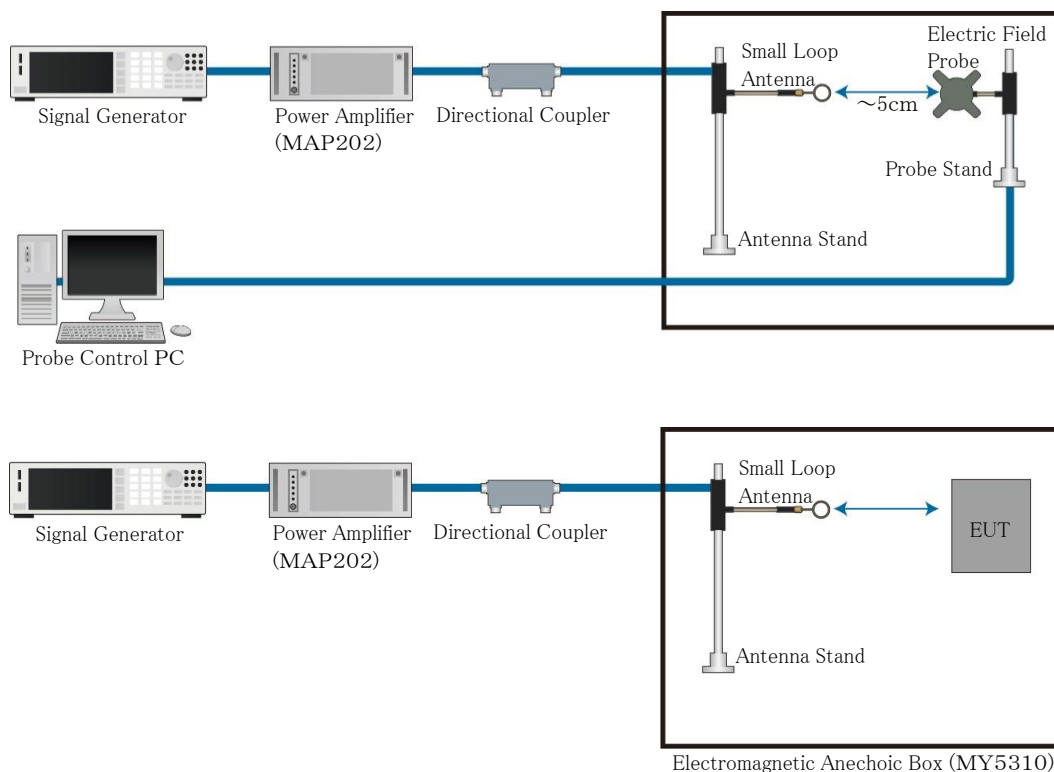
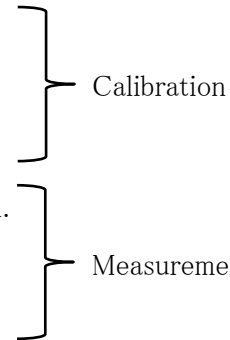
[~*Application*~]

Simple radiation immunity test of 80 MHz to 500 MHz, 30 V/m can be performed for preliminary evaluation before bringing the EUT to the EMC test site and for confirming the effect of the countermeasure. In order to perform a strong electric field radiation immunity test of 30 V/m at a low frequency of 80 MHz to 500 MHz in the Electromagnetic Anechoic Box which is a very narrow space compared to a normal Anechoic Chamber, a small loop antenna is installed close to EUT (5 cm).

[~*Solution*~]

<Procedure of measurement >

- Install an electric field probe for calibration at an EUT installation position.
- Adjust the level of a signal generator to achieve a desired field strength.
- Determine a level of the signal generator.
- Install the EUT and set the level of the signal generator determined by calibration.
- Check whether the EUT malfunctions.
- Repeat the measurement while moving the antenna up, down, left and right.



As an option, it is also possible to control the signal generator and EUT monitoring camera MEC235 by PC software.

[~*System constitution*~]

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|---|-----|
| • Electromagnetic Anechoic Box (MY5310) | × 1 |
| • Power Amplifier (MAP202) | × 1 |
| • Signal Generator, Directional Coupler, Small Loop Antenna, Antenna Stand, Electric Field Probe, Probe Stand | × 1 |

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