## Method of measurement of electromagnetic radiation from printed circuit board in the near field by spectral-polarization method

Skvortsov I., Latypov R. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

## **Abstract**

© 2017 IEEE. in this paper we propose a technique for estimating the electromagnetic radiation from a printed circuit board in the near field on the basis of the simplest oscillators- Hertz dipoles, the equations for which are well known. This technique makes it possible, at early stages of printed circuit board design, to detect interference emitted from printed circuit board and to estimate their influence on printed circuit board.

http://dx.doi.org/10.1109/RSEMW.2017.8103692

## **Keywords**

Electromagnetic radiation, Hertz dipole, Near field, Printed circuit board

## References

- [1] V. Glotov, M. Romashchenko, "Methods of assessment of the near electromagnetic field by the method of equivalent models", Bulletin of Voronezh State Technical University, vol.12, No. 4, Voronezh, 2016, pp. 44-47.
- [2] A. Gorbunova, An algorithm for spatial localization of sources of stochastic electromagnetic radiation based on the results of two-point scanning in the near zone, "Information-measuring and control systems, 2014, vol.1, pp.25-32.
- [3] D.Rinas, P. Ahl, S. Frei, PCB current identification based on near-field measurements using preconditioning and regularization, Adv.Radio Sci., 14, 121-127, 2016, doi:10.5194/ars-14-121-2016.