

Review of: "Investigations on Input Impedance and Radiation Pattern of a UWB Antenna for Microwave Imaging"

Kalyan Sundar Kola

Potential competing interests: No potential competing interests to declare.

The author has been proposed a UWB antenna for microwave imaging. They also investigate the impedance performance and the radiation patterns of the antenna. The reviewer has some queries, and those are as follows:

1. How is the distance between the antenna and the reflector finalized?
2. How will the results be affected if the DGS structure is imposed in the FSS part?
3. As per the measurement of S11, it is not a UWB antenna. Why has this much S11 difference been achieved? Justify.
4. The main beam's direction is positioned at different angles for different frequencies. What is the rationale behind this?
5. The back-lobe radiation performance could be better in every case. How will it be improved?
6. The co- and cross-polarization discrimination characteristics are missing. Please provide and analyze the same.
7. What about the radiation efficiency of the proposed antenna?
8. What is the significance of Eq. (1)? Please elaborate.
9. Comparative performance needs to be included. Please compare the proposed work with some relevant recent literature.

Decision: Major revision.