

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

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Potential competing interests: No potential competing interests to declare.

Comments to the Authors

In this manuscript, the authors demonstrate the "Investigations of Input Impedance and Radiation Pattern of a UWB Antenna for Microwave Imaging". The proposed antenna is fabricated on an FR4-printed circuit board with a rectangular aperture. Major applications of UWB technology are presented.

The manuscript requires major revision as mentioned below to improve the quality of the publication:

1. The authors should show the novelty of the work properly.
2. Keywords should be in alphabetical order.
3. Authors should put a snapshot of the return loss measurement setup.
4. Need to modify the introduction, antenna design, conclusion, results, and analysis sections.
5. The Introduction section is too lengthy. Please try to reduce it.
6. Authors should rewrite the conclusion by removing the figures.
7. Include a comparison table of the proposed and reference antennas.
8. Please explain the significance of figures 23 and 24.
9. Figures (5 to 8) show only the measured radiation pattern. Please include simulated radiation patterns also.
10. Figures (20 to 22 and 27 to 30) show only the simulated realised gain. It would be better to please include measured realised gain also.
11. The references are very old, and for betterment, the authors should add recent quality papers in the revised manuscript and make a comparison table by adding recent and closely related papers.
12. Please explain how the reflector is designed and how the reflector increases the directivity. Also, include a comparison table that can show the increase of directivity.
13. The quality of the figures needs to be improved in the revised manuscript.

14. Some figures are not cited in the manuscript. (Ex. 4, 9, 22, 23)

15. More discussion is required in the results and analysis section.

16. The coordinate axes (Y) are missing in many figures. (Ex. 14, 15, 16, 23)

All the corrections should be done in the revised manuscript.