CIRCULARLY POLARIZED RECTANGULAR MICROSTRIP ANTENNA DESIGN WITH ARBITRARY INPUT IMPEDANCE

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In partnership with:

Microstrip antenna design with selectable input impedance

What is it about?

This work provides two algorithms, the first algorithm calculates the antenna dimensions and probe position for a user-defined input impedance. The second algorithm finds all the available input impedances that can be generated by a given dielectric substrate and frequency of operation.

Why is it important?

This work eliminates most if not all, the educated guesswork involved in the design of probe fed circularly polarized microstrip antennas. It also presents an algorithm whose final objective is to provide an easy to use graphic where the user can immediately identify if a certain impedance can be generated by the probe fed circularly polarized microstrip antenna.

Perspectives

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I hope this work facilitates (for newcomers and experts alike) the design of circularly polarized microstrip antennas, and at the same time, I hope it provides a deeper understanding on the issue of generating circular polarization in probe-fed microstrip antennas.

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