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A result analysis of H-slot circular polarized micro strip patch antenna using CST

***¹Dr. Pritesh Tiwari, ²Preeti Kumari, ³Md.Gulab**

^{*1}Assistant Professor, Department of Electronics & Communication, Bhopal Institute of Technology and Science, Bhojpur Road Bhopal, 462045 M.P. India

^{2, 3}Student, Department of Electronics & Communication, Bhopal Institute of Technology and Science, Bhojpur Road Bhopal, 462045 M.P. India

**Corresponding Author: Dr.Pritesh Tiwari
 Email: Priteshtiwari.15@gmail.com*

Abstract:

The paper describes a novel differential-fed aperture reception apparatus designed for circularly polarized (CP) radiation. This apparatus is characterized by its simplicity in structure and is fabricated on a single layer overlay using standard printed-circuit-board (PCB) technology. Circular polarization is achieved through a dual loop-like strips design with peripatetic wave sharing serving as the transmitting part. The proposed antenna is positioned as a promising candidate for various consumer-level millimeter-wave (mmWave) band applications due to its advantages of wide bandwidth, high gain, simple structure, low cost, and ease of manufacture with differential circuits.

Keywords:

Aperture antenna, circular polarization (CP), Substrate Integrated Waveguide (SIW), 60 GHz.