

STUDY ON VTVALDI ANTENNA DESIGN

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ABSTRACT

This paper summarizes a detailed computational study of behavior of Vivaldi antenna. The design, construction and characterization of the Vivaldi antenna implemented by using two (2) different substrates which is RT/Duroid 5880 and FR4. Generally, Vivaldi antenna is usually constructed on copper films on low permittivity low loss substrates such as RT/Duroid. [1] There were some modifications towards the antenna was carried out to improve its performance. At the end of project, a tapered slot Vivaldi antenna that operates from 2 to 10.6 GHz is produced which is fulfilling the UWB frequency range. The simulation has been conducted to study the effect of the different substrate towards its performance and also find the most optimized substrate and characteristic of the antenna. Simulation reveals that the antenna has satisfactory operating frequency band which acceptable amplitude of S-Parameter. The simulated results are presented.

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