STUDY OF VIVALDI ANTENNA

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ABSTRACT

This thesis is about a study of the effect of a different size of opening width and length of the slot flare Vivaldi antenna on the VSWR and S_{11}. The design, simulation and construction of the Vivaldi antenna implemented by using FR4 which have dielectric constant of 4.70 and dielectric thickness of 0.80 mm. In this project, the CST Microwave Studio has been used extensively to perform antenna simulations. The six different sizes of opening width and length are used to choose the best result that fulfills the specification of Vivaldi antenna. The required value of VSWR and S_{11} are 2.0 and -10 dB respectively which are measured at 8.5 GHz. After completing the measurement, the best size of opening width and length will be selected to fabricate. The Vivaldi antenna produced should be able to operate at the frequency between 8 to 9 GHz.

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