

THE EFFECT OF CONDUCTOR LINE TO MEANDER LINE ANTENNA DESIGN

Abstract

In this paper, the meander line antenna (MLA) have been designed to operate at 2.4-GHz for WLAN application. Two different designs of meander line antenna are investigated, without conductor line and with conductor line. Microwave Office software is used for simulation designed process. The antenna is fabricated on a double-sided FR-4 printed circuit board using an etching technique. Then the design has been tested with the Advantest Network Analyzer. The comparison between simulation and measurement results for the return loss and radiation patterns were presented. A bandwidth of 152 MHz and return loss of -37.7 dB were obtained at frequency 2.4 GHz. The gain is comparable to microstrip yagi antenna.