Thesis	CHARACTERISTICS OF RIGHT ANGLE MICROSTRIP SLOT ANTENNA FOR WIRELESS COMMUNICATION SYSTEM
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ABSTRACT

This thesis presents the analytical characteristics of right angle microstrip slot antenna for wireless communication system by using FR4 substrate (dielectric constant = 4.5) with thickness of 1.6 mm. The antenna is analyzed by using Finite Difference Time Domain (FDTD) method. Herein, the propose antenna consists of microstrip fed right-angle slot antenna, microstrip fed dual right angle slot array antenna and microstrip fed four right angle slot array antenna. From the simulation results of radiation patterns it shown that microstrip fed four right angle slot array antenna is very clear for omnidirectional patterns more than others. Furthermore, the measurement of microstrip fed four right angle slot array antenna can operate dual band at frequency 2.45 GHz for IEEE802.11b/g and 5.07 GHz for IEEE 802.11j and public safety band. Finally, these antennas are developed in order to use for wireless LAN system. The measurement results verify the simulated results.