

SCHOOL OF ENGINEERING

FINAL REPORT

STUDY ON PERFORMANCE OF SPACE AND POLARIZATION
DIVERSITY FOR WLAN APPLICATION

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ABSTRACT

The purpose of the project is to study on performance of space and polarization diversity for WLAN application. This project use wireless LAN technology to study on the diversity of polarization and space.

The experimentally derived diversity gains will be compared with theory, simulations and other experimental results. Next, study the polarization and space diversity and compared with their diversity gain.

The antenna design in the space and polarization diversity. Beside that, this project must understand the connection of the network and easy to simulate and fabricate of the result.

Wireless local area network (WLAN), research and development efforts are aiming at smaller size and better performance. In order to effectively receiver receive the communication signal, a polarization-diversity antenna for wireless communication may become an important requirement.