ABSTRACT

Wireless Technology development especially Wireless LAN (WLAN) 802.11b has encourage many people to use it in order to support their activities. Not only for public internet users like café, restaurant, hotel, airport, but also many users in enterprise area use this technology.

Basically, in conducting scheme of telecommunications network is to get best performance. Otherwise be created good performance, earn to generate trouble at system. Kinds of trouble which often we hear are trouble of interference caused by same channel assignment and increasing in RSL value caused by indoor propagation path loss. To get more explanation about those troubles, measurement was taken to get some data.

From the measurements and analyzing, RSL value degradation that causing its value below the value of minimum receive sensitivity (-85 dBm) occurred in 4^{th} floor. Beside that, much interference occurred in 8^{th} floor. From the measurements data, some solution was found to cover those troubles.

These solutions are repeating the assignment of access point coverage in 4^{th} floor and 8^{th} floor, using the equipments based on the standard (maximum EIRP limitation by 20 dBm) to get maximum radius of access point, and channel management to avoid interference.

Key words : Wireless LAN, Interference, performance, SNR, indoor propagation.