

ABSTRACT

Due to increasing traffic for indoor coverage and to weak signal reception, the cellular network covering such areas has no longer able to serve required traffic. This is why we need an indoor coverage for the cellular network to deliver its service to the customer with a large traffic requirements and a good signal reception.

Nowadays, cellular network customers need not only voice services, but they also need high capacity data service. This makes operators try to give voice and high-speed data service over the same cellular network, especially at the indoor network coverage. Thus, it requires a system to overcome the problems. Here, we proposed to implement the WiFi technology over Picocell.

At this final task report, we will discuss the process of planning a WiFi over Picocell network, calculating power link budget, the configuration of WiFi over Picocell Network, and drive test after including an analysis of experimental throughput. The analysis is then used to overcome high-speed data and voice network demand. After the planning of the WiFi over Picocell Network, at drive test WiFi the Rx level expected to be ≥ -65 dBm and at drive test after GSM Rx Level expected to be ≥ -85 dBm.

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