**ABSTRACT** 

In the implementation of cellular networks or fixed wireless, operators

often face the problem. Received signal quality degradation in the mobile station

happens especially metropolitan area. Received signal quality degradation is very

annoying, especially the customer service side as users. There are two common

causes of decrease in received signal quality, The first is an object that is able to

reduce signal (buildings, hills, tunnels). and the second is from the antenna. The

antenna is an intermediary device between the transmission line and the air. the

antenna must have the nature of the appropriate (matched) with the feeding line. If

the channel is not matching the signal quality is not perfect as expected.

In this final project, designed a model form of parabolic reflector antenna

bereksitasi linear helical. Designing a model with a form of parabolic reflector

antenna for transmitting the assumption reflector radio waves well. So we get a

good receive signal quality at receiver eksaiter form helical antenna.

From the design of parabolic reflector antenna after the measurements

taken by the gain obtained ≥ 15 dBi with the working frequency of 1250 MHz -

2500 MHz. And return loss obtained is very small, so the antenna can be designed

and implemented

Kaywords: Wi-Fi, parabolic antenna reflectors, linear helical

iν