

## **ABSTRACT**

Omnidirectional Dipole Elektrik Collinier Biconik-wire Antenna is the antenna that consists of 3 lines connected parallel, so it has an omnidirectional radiation pattern. This antenna designed at the frequency range 2400 MHz – 2484 MHz with two level binomial matching.

To deeply know the performance of this antenna it really needs a measuring mechanism. The measuring involving measure the VSWR, frequency bandwidth, antenna gain, radiation pattern, and polarization. From the measuring result that had been done, obtained bandwidth with the limit of  $VSWR \leq 1,6$  is 3,4% from center frequency or obtained about 84 MHz, gain obtained about 6,599 dBi, the radiation pattern is omnidirectional, and the polarization approach to linier. The result obtained has fulfilled the required specification, except the polarization which less suit enough.

The antenna that made used as a receiver. Precisely the antenna frequency range around 2400 MHz to 2840 MHz and has omnidirectional pattern, this antenna could be used for wireless-LAN. With a greater bandwidth, the antenna could accommodate a lot of information.