

## ABSTRACT

*Today the very rapid development of technology. Including the increasing number of wireless devices such as mobile phone technology, Radio Frequency Identification (RFID) etc. The technique used to provide catuang tegaangan on these devices generally are using batteries, magnetic coupling or a solar cell. But from the rationing techniques still have limitations.*

*One technique that can be used as an alternative rationing was rectena. Rectena is a technology that consists of a rectifier and antenna, which serves to convert electromagnetic waves into DC current source. By using a rectena, radiation of electromagnetic waves emanating from the Access Point (AP) wi-fi or from Base Transcevier Station (BTS) mobile phones can be used to be a source of stress for other devices without using batteries.*

*The measurement results show the value of VSWR of 1.176 at a frequency of 2.4 GHz, gain value obtained by 4.16 dBi, the resulting impedance values approaching  $50 \Omega$  is equal to  $45.151 \Omega$ , return loss generated at -21.84 dB, the resulting power receive before using rectifier is -47,577 dBm, the resulting power receive after using rectifier is -43,681, and the value DC output of the power generated at 4.306 mV.*

*Keywords: Antenna, Rectifier, DC*