ABSTRACT

The increasing population growth causes the need for cellular data access to also increase. The use of microwaves in exchanging data requires good planning so that people can use cellular data properly. The design of the microwave transmission network at the Kepil site and the Wonosobo site located in Wonosobo Regency uses pathloss 5.0 using a frequency of 23,000 MHz and has a distance of 2.16 km as a comparison with Huawei's design. Microwave radio communication is used as transmission between Base Transciever Station (BTS) to Base System Control (BSC). The results of the Pathloss 5.0 design with an RSL value of -61.13 dBm, Fading Margin 5.78 dB and Availability 99.87917%, while the results from the Huawei design with an RSL value of -33.40 dBm, Fading Margin 33.60 dB and Availability 99.99362 %. The value of the Huawei design has a better value than the value of the Pathloss 5.0 design

Keywords: microwave, pathloss 5.0, RSL, fading margin, availability