

Outage Performance of Maximal Ratio Combining Technique Working over the Environments of Fading Channel

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ABSTRACT

The Nakagami fading distribution is assumed in this thesis for investigating the outage performance of digital communication with MRC (maximal ratio combining) diversity technique. Besides, the phenomena of CCI (co-channel interference), frequency selective channel, and the random communication branch are also considered in here. In this thesis some new formulae of outage performance are proposed. The numerical results obviously show that not only the characteristics parameters of the channel model, but the number of branch also affect the performance of wireless radio systems over CCI environments.

Keywords : Outage、Nakagami fading、Co-channel interference、MRC (maximum ratio combining)

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