ABSTRACT

A crest factor (CF) reducing scheme using preselective subcarrier groups that has lower crest factor is proposed for the OFDM systems, and simulation is performed to evaluate its performance according to the CCDF (Complementary Cumulative Distribution Function) of the crest factor. For a CCDF of 10^{-3}, a 4-subcarrier system, without preselective has a CCDF of 7.78dB. By preselecting 3 and 2 lower CF groups from the 4 subcarrier groups, a CF reduction of 1.85 and 3.17dB, respectively, can be obtained. In general, the proposed scheme is able to reduce the CF effectively.

Keywords: Crest Factor, CCDF