

Performance of OCDMA system using and subtraction technique based on EDW code

In this paper we will present a full theoretical analysis for detection scheme proposed for spectral amplitude coding-optical code multiple access (SAC-OCDMA) system that using enhanced double weight (EDW) code, the detection scheme design based on the subtraction theory with new approach called AND subtraction technique. The theoretical analysis shows that EDW code can more effectively suppress the phase-induced intensity noise (PIIN) and provides a significantly better performance compared with Hadamard and Modified Frequency-Hopping (MFH) codes.