

ABSTRACT

MSAN (Multi Service Access Node) is a concept of integrated access network that can provide the kind of voice services, data and video in one single platform. MSAN technology to replace copper wires in the primary network. This device connects customers to the core network so that the customer is possible to obtain a regular phone service, ISDN or DSL broadband facility such as using only a single platform.

In this research conducted at the STO Klender Jakarta Jatinegara to perform data retrieval, data processing is to calculate the dispersion and BER and making conclusions to be proposed to the general and STO PT. Telkom Klender Jatinegara Jakarta in particular.

The results of calculation of dispersion analysis can be seen where the dispersion power penalty that is the closest distance MRAQ 2.89298×10^{-15} at a wavelength of 1310 nm and 1.09393×10^{-10} at a wavelength of 1550 nm, while the dispersion power penalty that is the furthest distance MRW 6.58829×10^{-11} at a wavelength of 1310 nm and 2.35262×10^{-6} at a wavelength of 1550 nm.

Key words: MSAN, dispersion, BER