

Title: RETRACTED ARTICLE: Signal propagation parameters estimation through designed multi layer fibre with higher dominant modes using OptiFibre simulation

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Abstract: The aim and scope of the paper is to simulate the signal propagation parameters estimation through designed multi-layer fibre with higher dominant modes by using OptiFibre simulation software. The multi-layer fibre profile has a length of 1000 m is designed and clarified with six layers. RI difference profile variations are clarified with radial distance variations. Modal/group index, group delay, dispersion, mode field diameter and total fibre losses are demonstrated with the fibre wavelength variations. All the dominant mode field distribution for multi-layer fibre are simulated and demonstrated. The other modes for designed multi-layer fibre with the theoretical fibre cutoff values for the different modes based the designed multi-layer fibre are analyzed and clarified clearly in details.

Keywords: dominant modes; multi layer fibre; parameters estimation; signal propagation

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