Spectral variation in Brillouin-Raman fiber laser

ABSTRACT

This article discusses the optical-SNR variation of Stokes lines in Brillouin-Raman fiber laser. This variation is partly attributed to the cavity modes interaction through intraline-FWM residing the same spectral width. The worst OSNR is obtained at 650mW Raman pump power (RPP) and 1555nm Brillouin pump wavelength (BPW). The improvement is obtained for the RPP beyond 650mW.

Keyword: Brillouin-Raman; Fiber laser; Optical-SNR variation; Stokes lines