

Post-amplified reversed S-shaped Brillouin-erbium fiber laser

ABSTRACT

We demonstrate a Brillouin-erbium fiber laser (BEFL) based on a reversed S-shaped loop that generates multiple shifted wavelengths that utilizes two 5km long single mode fiber (SMF). At Brillouin pump power of 5mW and EDF pump power of 150 mW, up to 8 Stokes lines that are above - 10dBm and a tuning range of 35 nm, from 1542.5 nm to 1577.5 nm, are the results obtained.

Keyword: Brillouin scattering; Optical fiber amplifiers; Fiber lasers