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We present a detailed comparison between modeling and experiments on supercontinuum (SC) generation in a commercial ZBLAN step-index fiber. Special emphasis is put on identifying accurate material parameters by incorporating measurements of the ZBLAN Raman gain, fiber dispersion, and loss. This identification of accurate parameters is of great importance to substantiate numerical simulations of SC generation in soft-glass fibers. Good agreement between measurement and simulation is obtained when pumping both in the normal and anomalous dispersion regimes. © 2012 Optical Society of America

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