Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Unidirectional amplification. Experimentally measured transverse velocity wave field in

response to excitation on the left. The incident wave is a tone burst signal centred at 2 kHz.

File name: Supplementary Movie 2

Description: Unidirectional attenuation. Experimentally measured transverse velocity wave field in response to excitation on the right. The incident wave is a tone burst signal centered at 2 kHz.