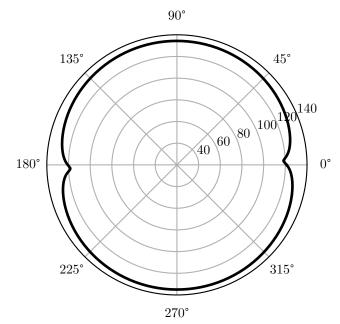
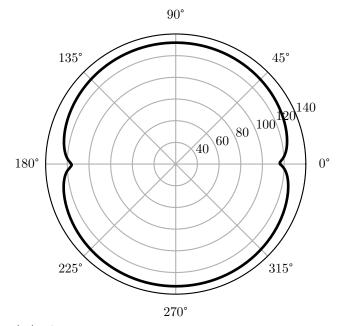


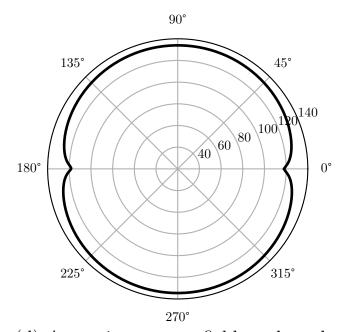
(a) Acoustic pressure field at the tube exterior for  $\hat{p}_0(\theta, k_z) = \sin(\theta)$  (dB re  $1\mu \text{Pa}^2/\text{Hz}$ )



(c) Acoustic pressure field at the tube interior at 100Hz (dB re  $1\mu$  Pa<sup>2</sup>/Hz)



(b) Acoustic pressure field at the tube interior at 10Hz (dB re  $1\mu$  Pa<sup>2</sup>/Hz)



(d) Acoustic pressure field at the tube interior at 1000Hz (dB re  $1\mu$  Pa<sup>2</sup>/Hz)