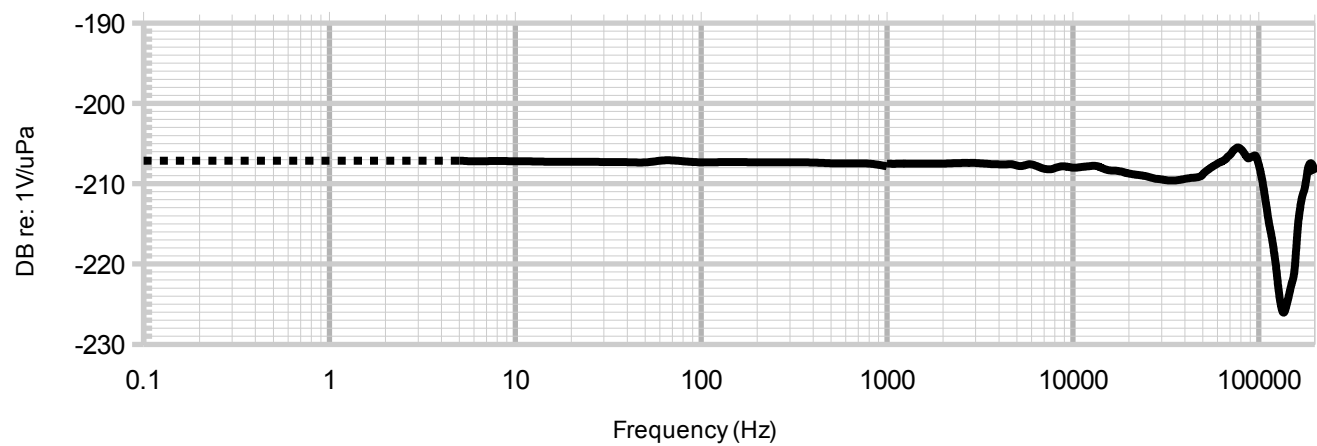
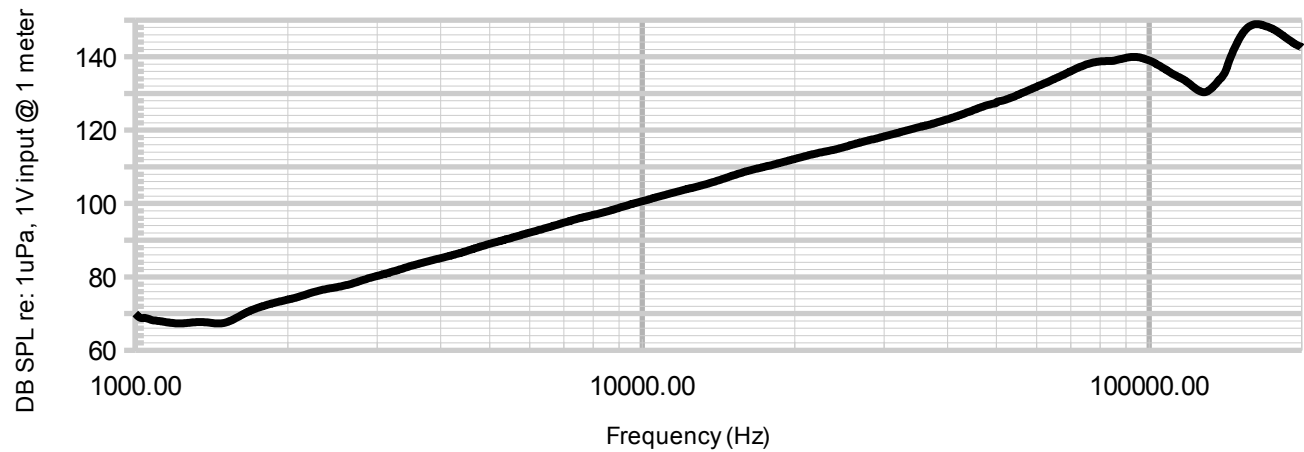


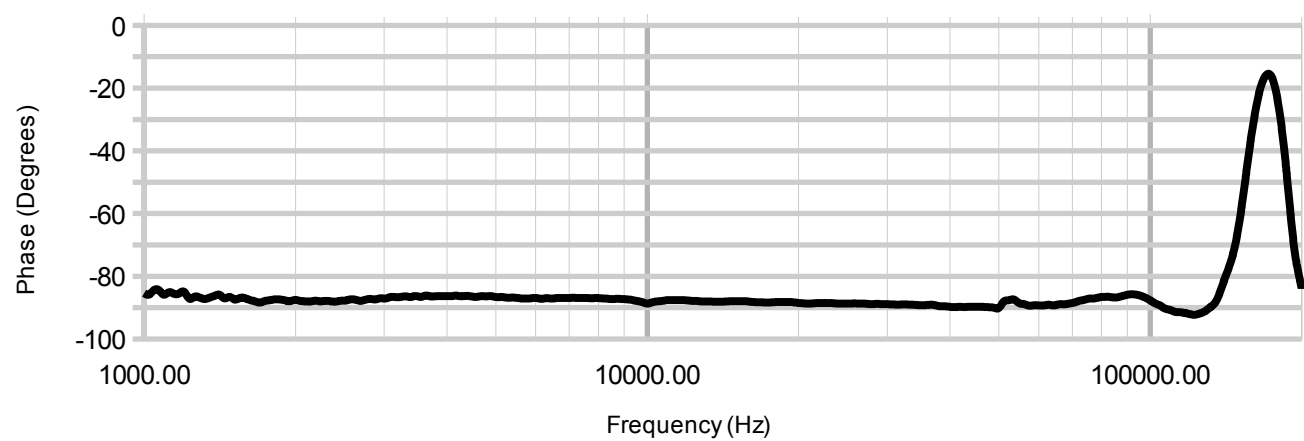
Free Field Voltage Sensitivity



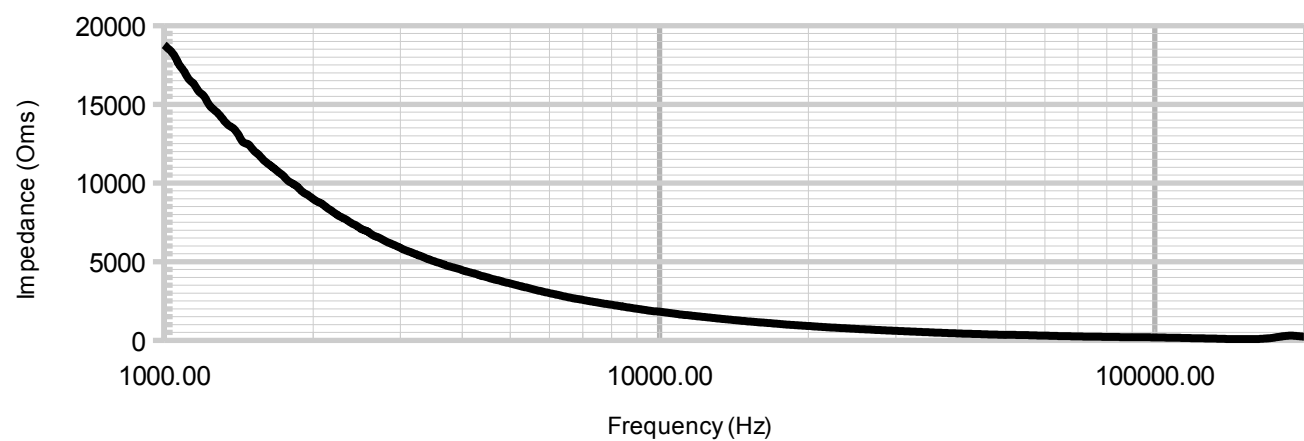
Transmitting Voltage Response



Impedance Phase



Impedance Magnitude

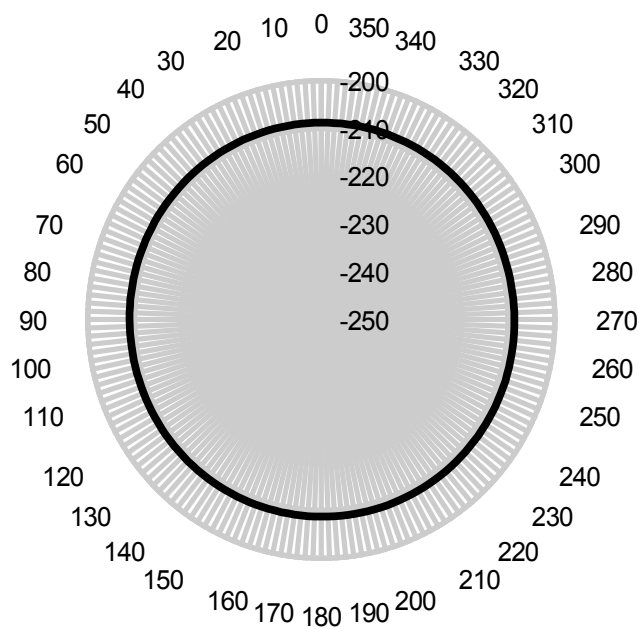


FFVS: Nominal 5Hz – 100KHz, -207.6 (+2.1 / -2.0) dB re: 1V/uPa. Not tested (theoretical) below 5Hz.

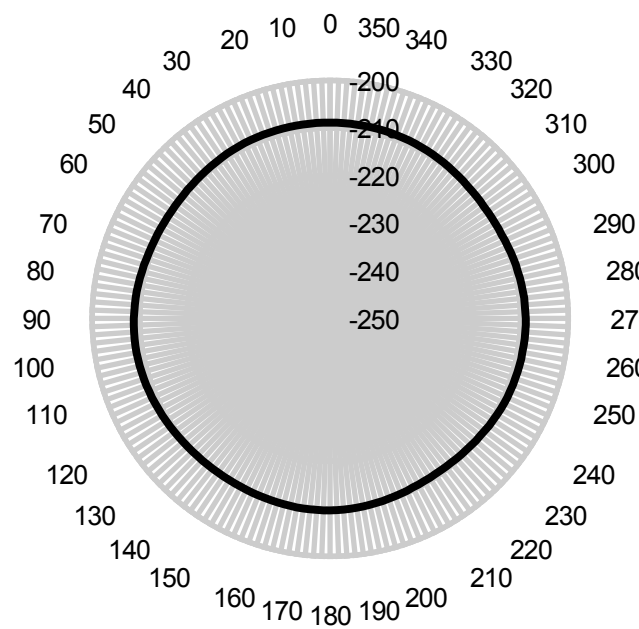
AS-1 hydrophone

SN#: (typical)

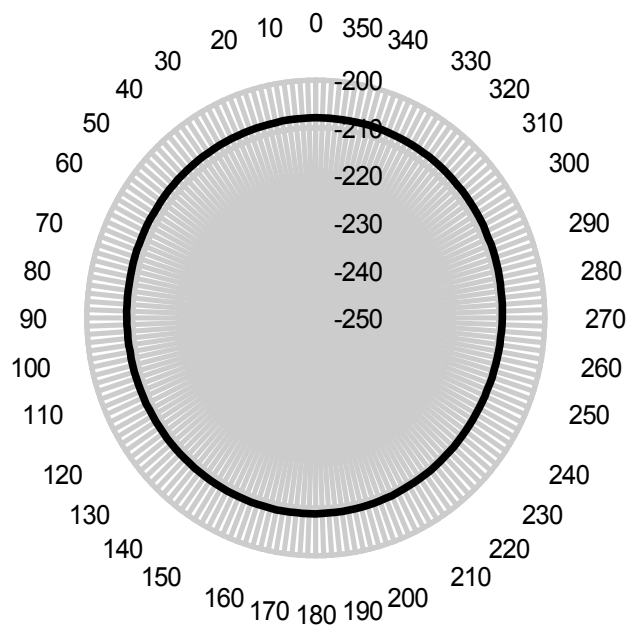
Directional Response, 20KHz XY (Horizontal)



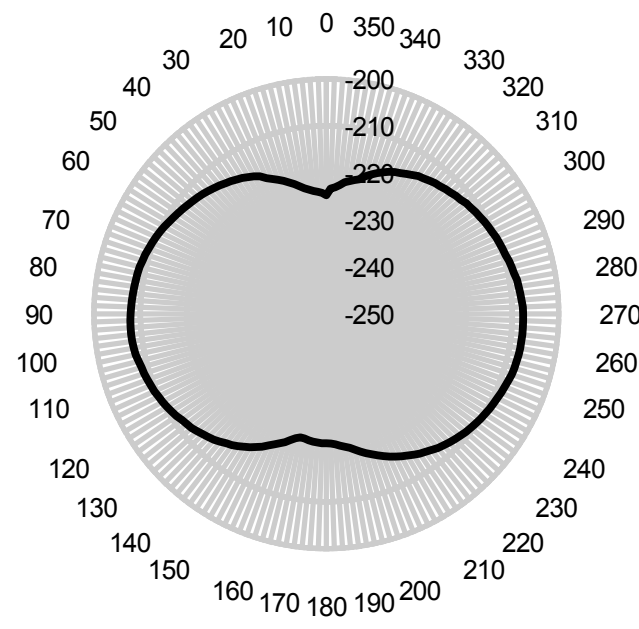
Directional Response, 20KHz XZ (Vertical)



Directional Response, 100KHz XY (Horizontal)



Directional Response, 100KHz XZ (Vertical)



NOTES:

Data obtained from US Navy, Underwater Sound Reference Division, Newport. Average of three samples measured, June 2013.

Measurements taken at end of 9-meter cable

FFVS Low frequency response is limited by amplifier input impedance. $F_c = 1/4.71e-8$ (amplifier input impedance) – Approximately 1Mohm for 20Hz cutoff; 22Mohm for 1Hz; 220Mohm for 0.1Hz.

Directional Response: Hydrophone rotated on same axis as the cable for XY measurements. XZ measurements are made with rotation perpendicular to the cable and with origin (0 degrees) facing end opposite the cable.