

EX-6 Block Vibration Data Part D

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10-13-2011

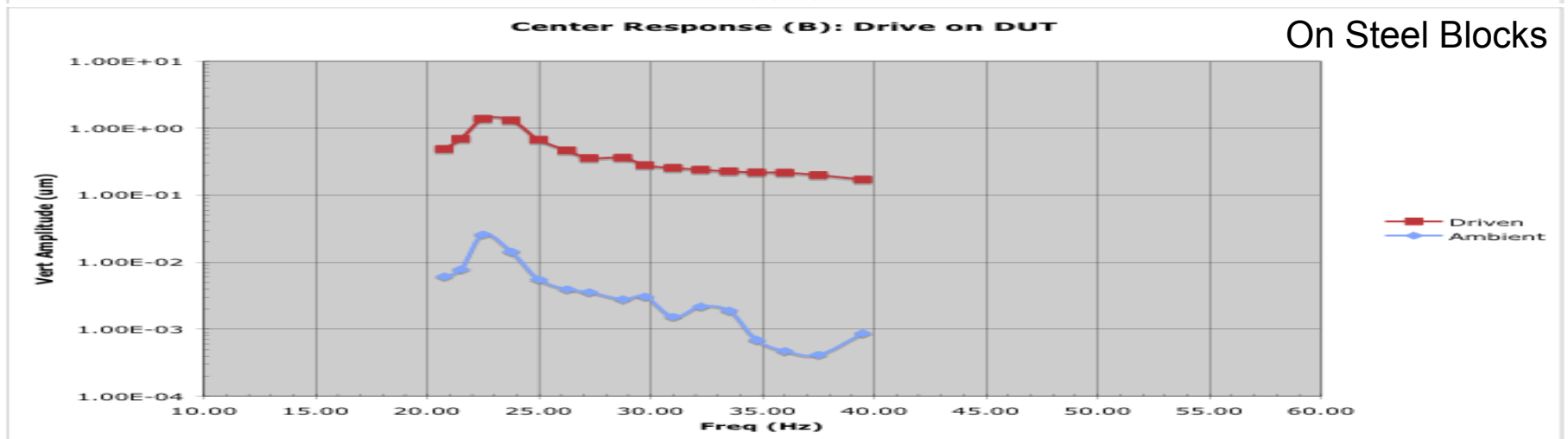
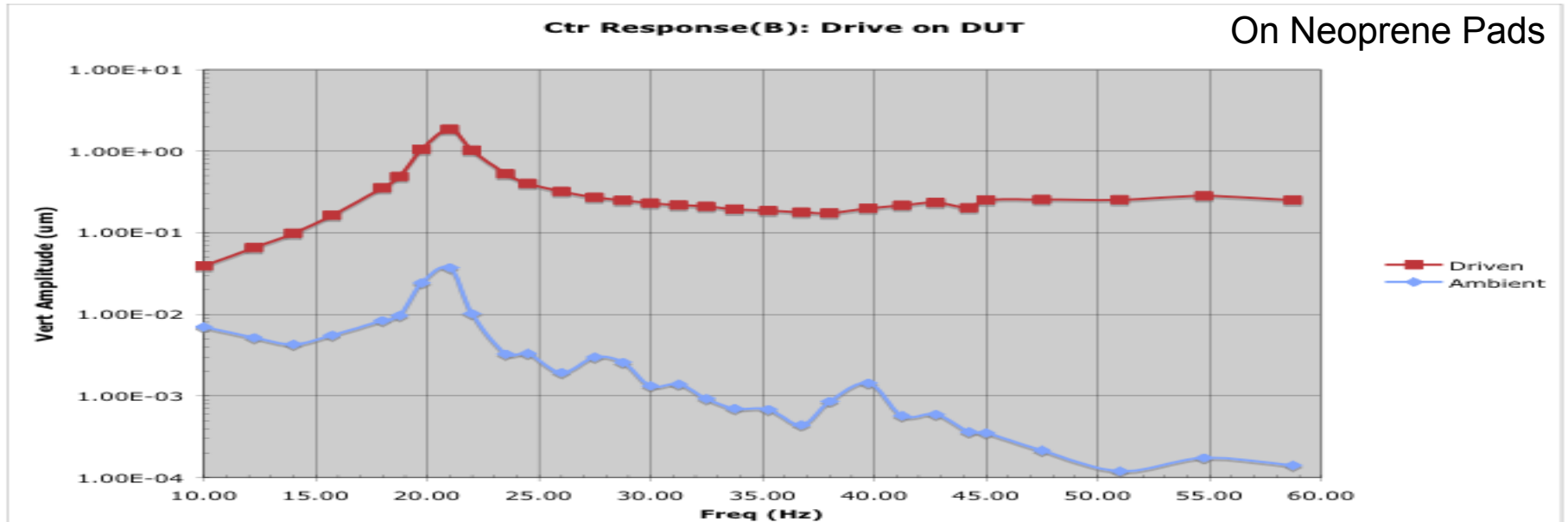
Setup and Measurements

- EX-6 block with 3-point support, on neoprene pads
- Vibrator mounted to EX-6 block
- Sensor Locations:
 - Sensor 0 on either end of block, above supports
 - Sensor 1 at center of block

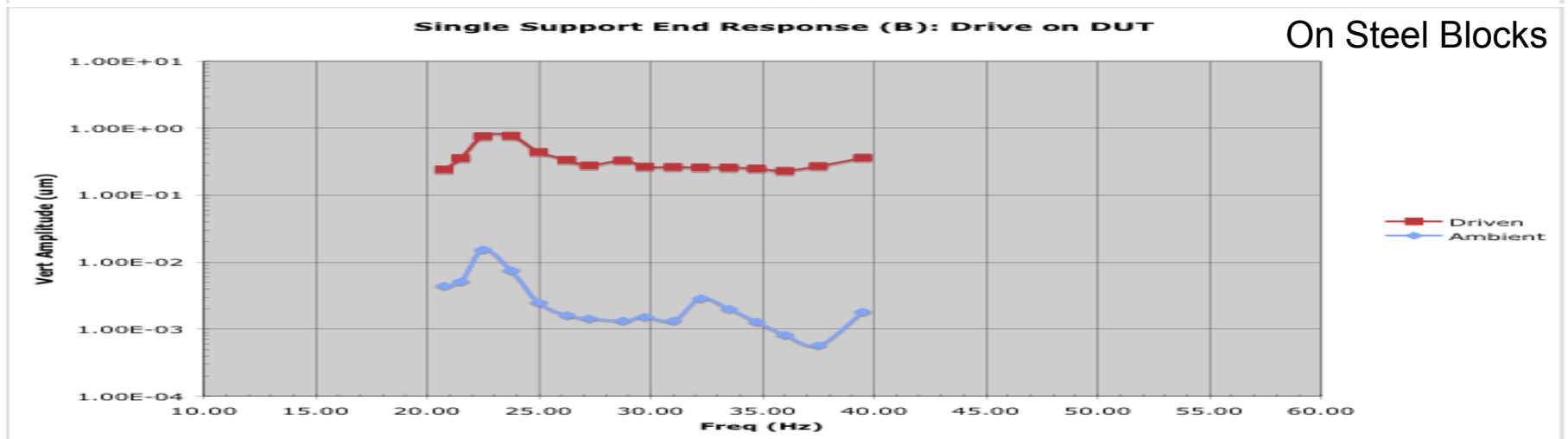
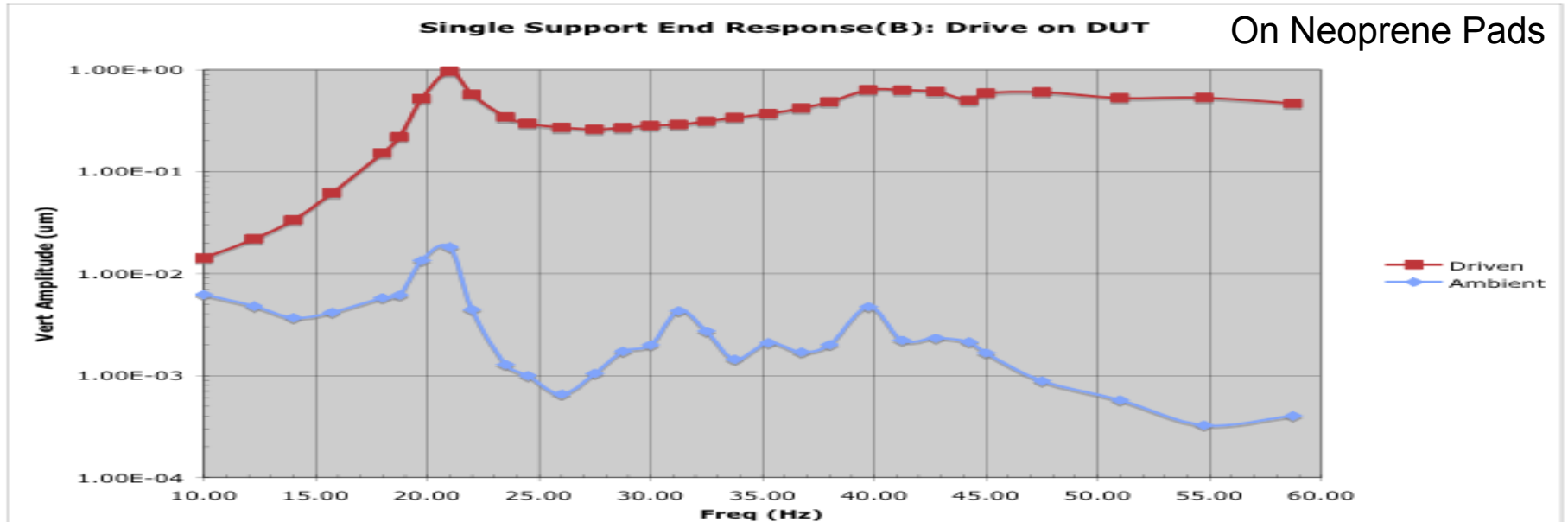
Measurements at Single-Supported End



Response of Block Center

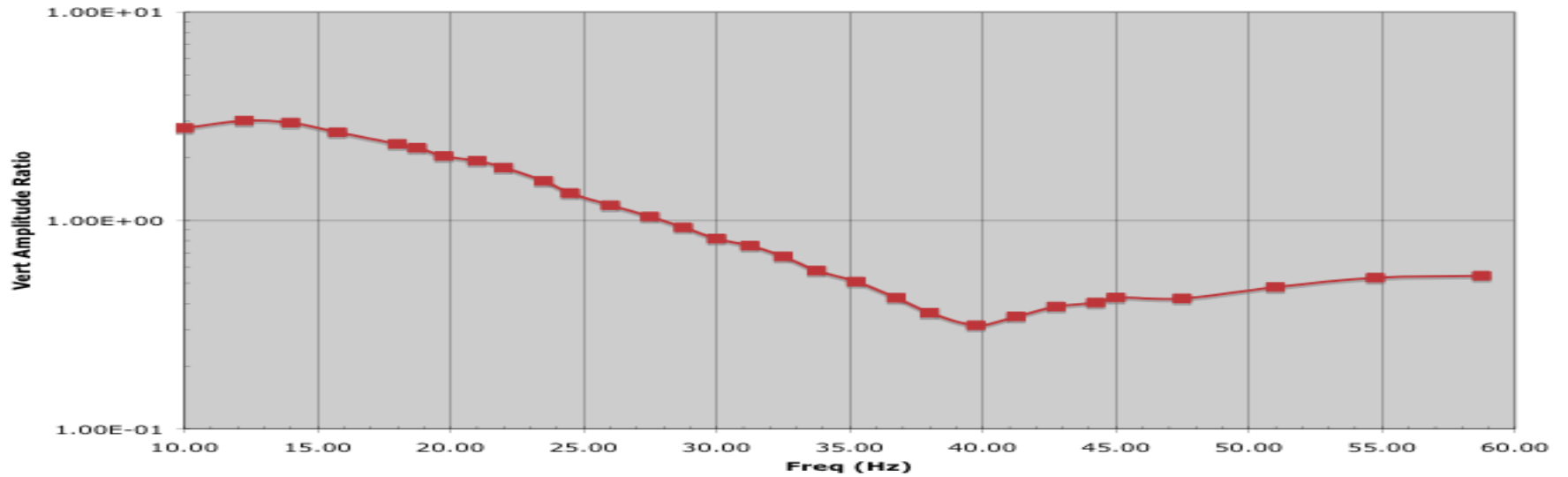


Response of Single End

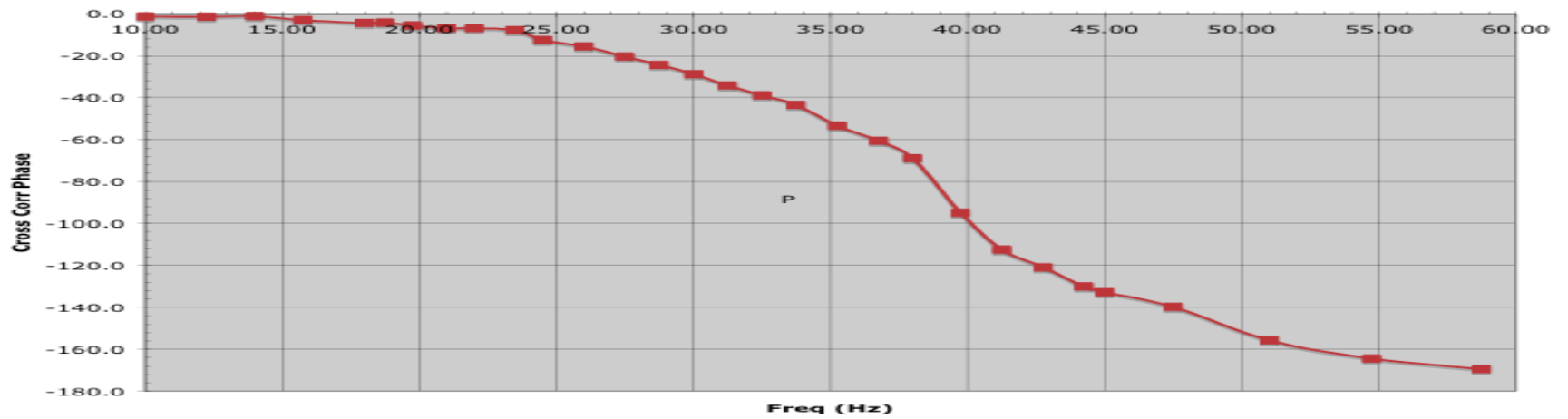


Response Ratio

Ctr/SingleEnd Amplitude Ratio: Drive on Block



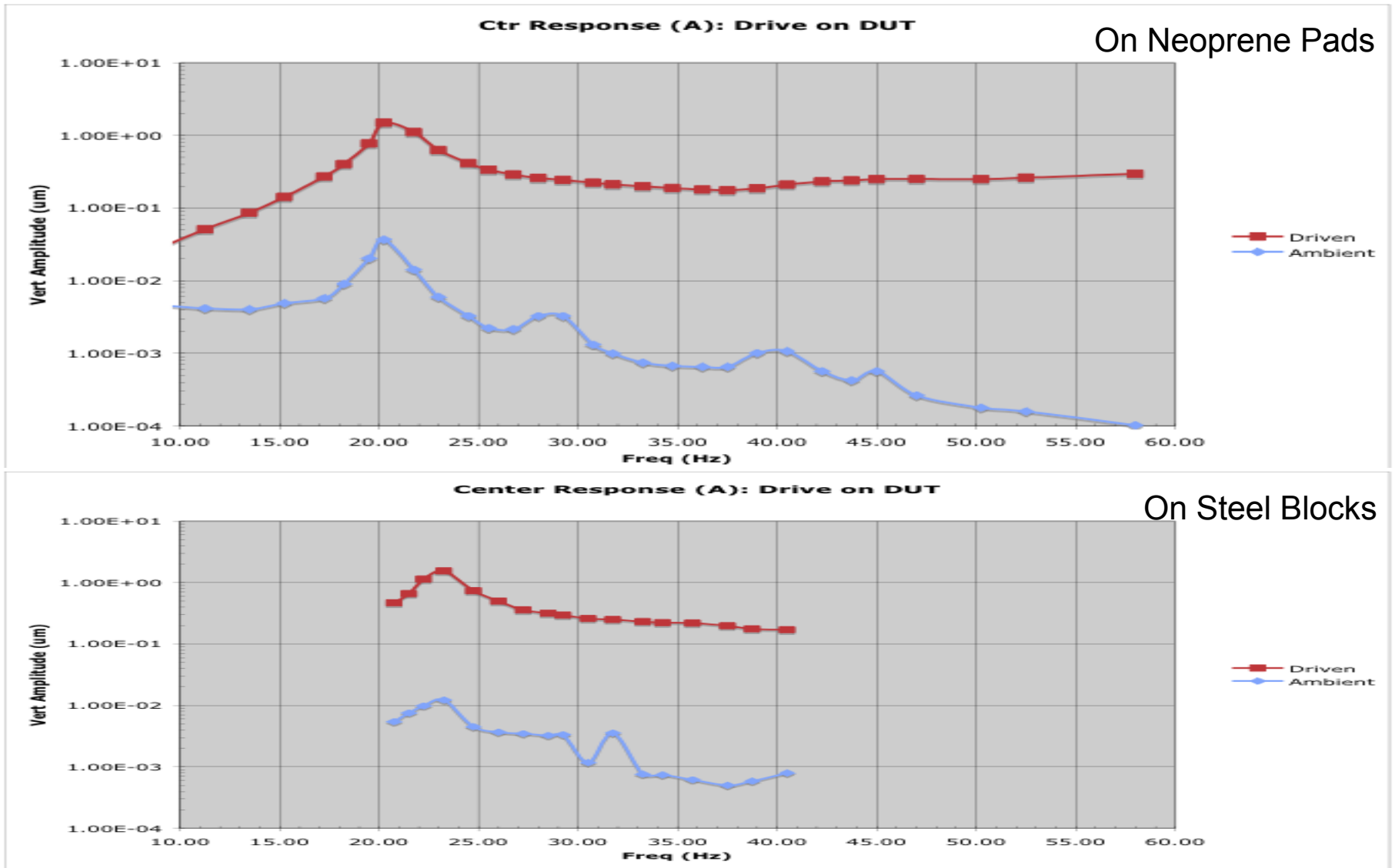
Ctr/SingleEnd Phase Difference: Drive on Block



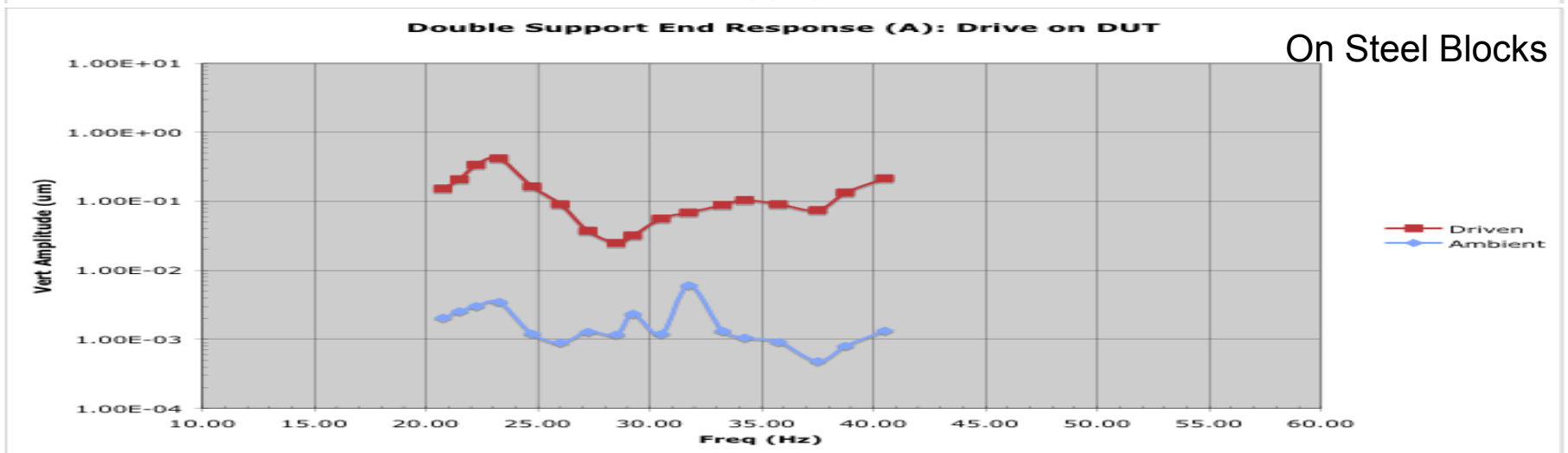
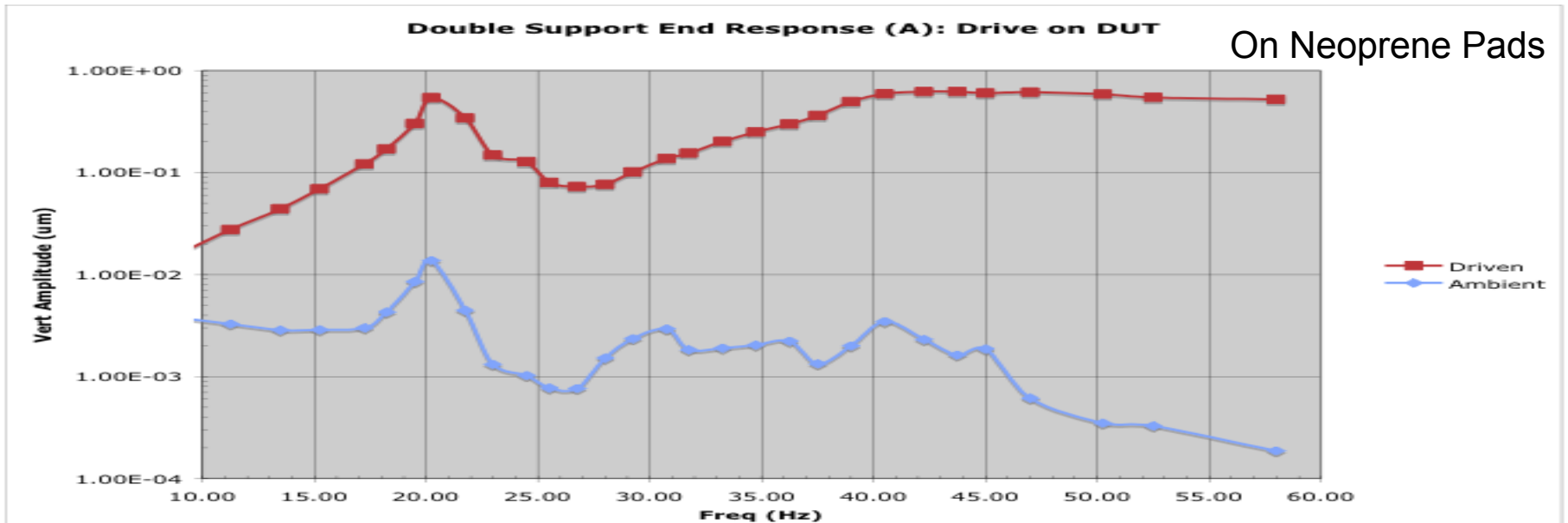
Measurements at Double-Supported End



Response of Block Center

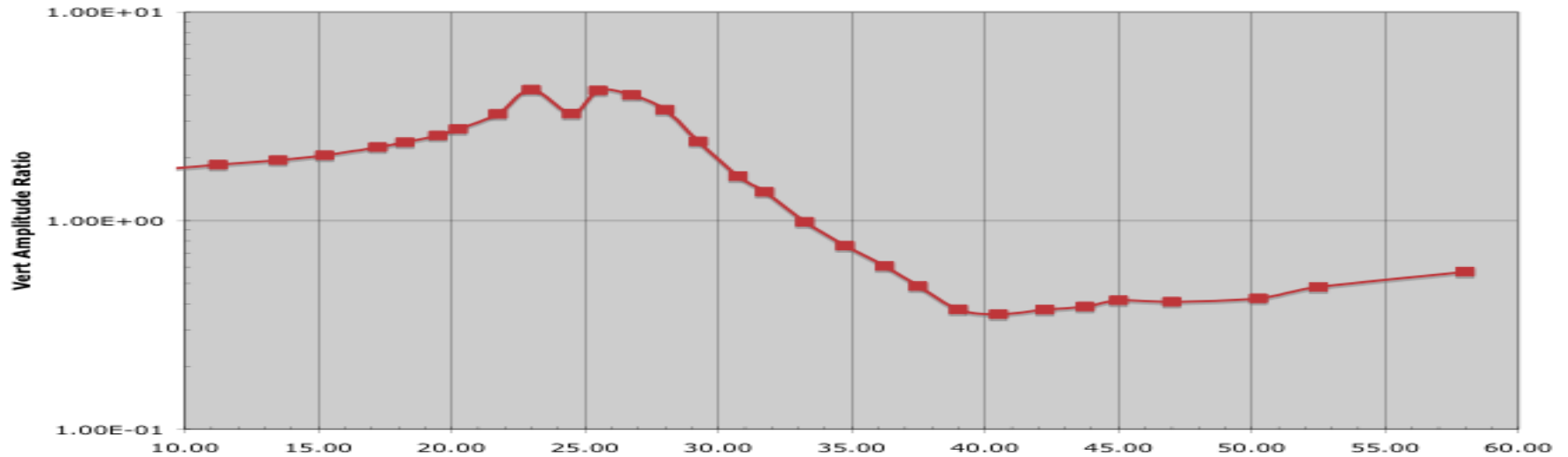


Response of Double End

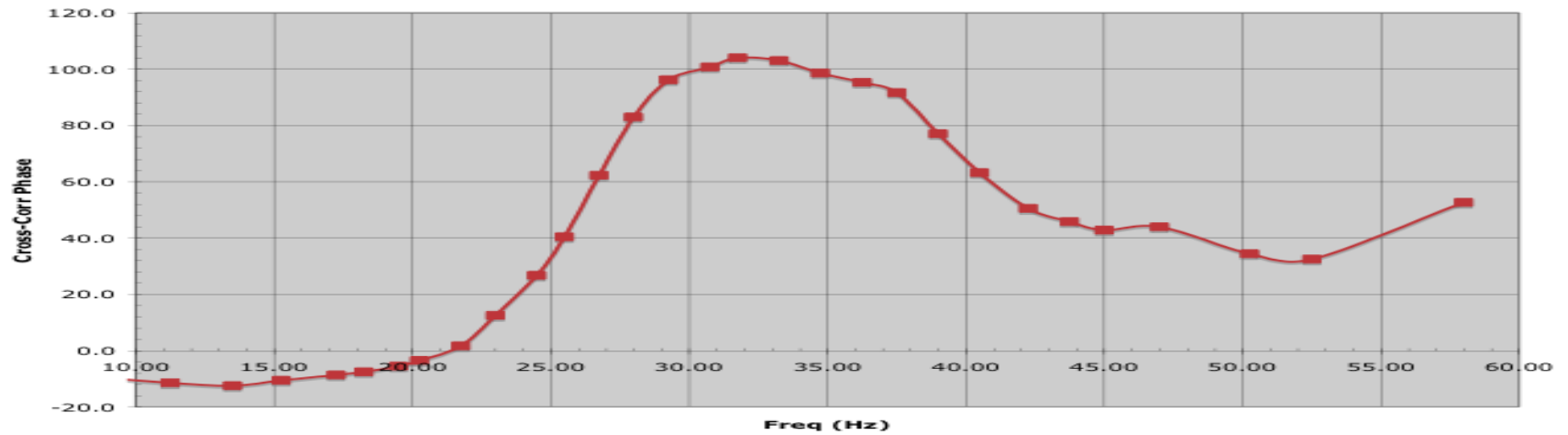


Response Ratio

Ctr/DoubleEnd Amplitude Ratio: Drive on Block



Ctr/DoubleEnd Phase Difference: Drive on Block



Comments

- Neoprene pads shifted fundamental freq downward as expected
 - But shift is much less than expected ($\sim 10\%$ instead of $\sim 3x$)
 - Modes are still coupled
- Coupled modes
 - Block bending mode coupled to mass-spring mode?
 - Resonances $\sim 20, 27,$ and 40 Hz?
- To Do:
 - Impulse data with current setup
 - Spongier support or hang from crane??

