Based on 25m distance, a 10 Vp signal requires $0.0368 \times 25^{0.944} = 1.76 \text{ mV peak}$ and a 20 Vpp signal requires $0.0739 \times 25^{1.095} = 2.18 \text{ mV peak}$.

Extending these out to 50 meters results in 1.0 mV peak for a 20Vpp signal and .9mV peak for a 10 driver signal.

So, based off of these measurements, we are expecting ≈3 mV peak at 25 meters and ≈1.2mV peak at 50 meters.