

## HeNe shootout

Steve, Tobin

We measured the intensity noise of three HeNe lasers using a ThorLabs PDA100A photodiode and the SR785. Spectra were taken with 1000 averages and 800 Hz bandwidth. Measurements of lasers #1 and #3 used -42 dBVpk input range while the measurement of laser #2 used the SR785's -46 dBVpk input range. Dark noise was recorded in both input ranges. The DC level for the three lasers were 2.42 volts, 5.2 volts, and 3.59 volts; the dark voltage was 22.5 mV.

The first plot contains the raw data:

