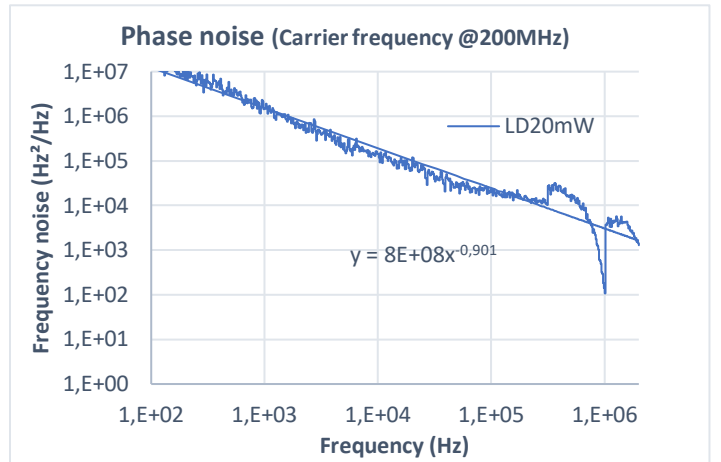
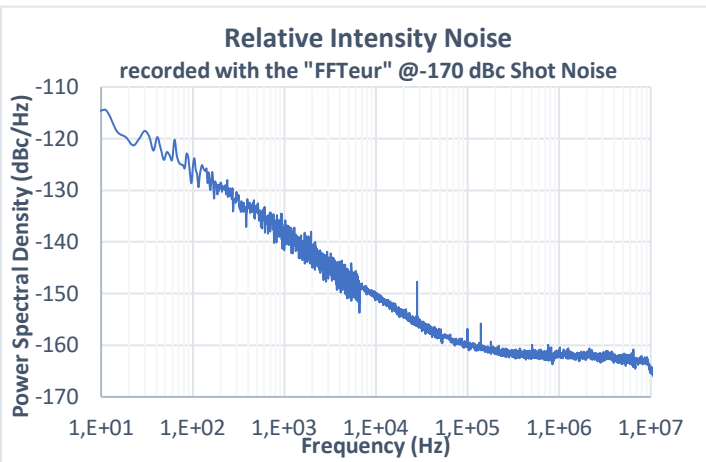
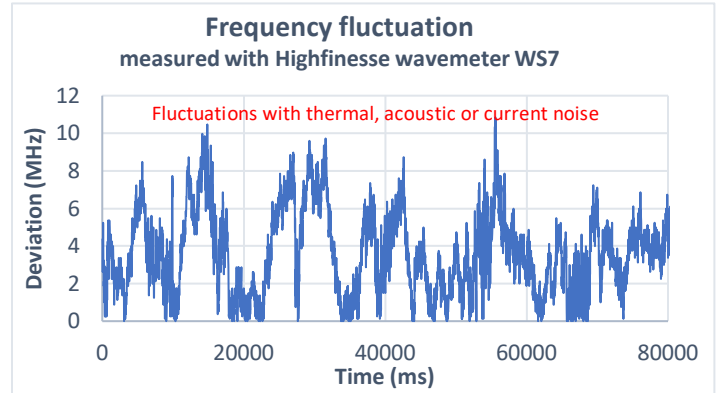
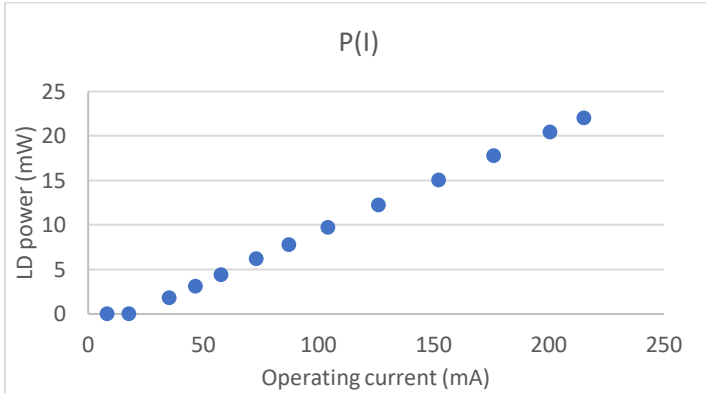


AeroDiODE

1550 nm laser diode

20 mW narrow-linewidth / DFB / Butterfly package



Recorded at 20 mW LD power with :

- Attenuation to 500 μ W for frequency stability measurement
- Attenuation to 8 mW for RIN measurement

$$\text{Lorentzian Fit} = 10 * \log_{10} \left(\frac{10^A}{2 * \pi * \left(\left(\frac{\text{gamma}}{4} \right) + \left(\frac{x-x_0}{\text{gamma}} \right)^2 \right)} + 10^{\text{offset}} \right)$$

Self-Heterodyne Measurements with 12 km delay fiber

Important note : the linewidth measurements were obtained with our optimized experimental setup. It is probable that the linewidth we measured is still limited by the overall noise of our non-ideal setup. We estimate an even narrower real linewidth for this diode, most probably <10 kHz.

