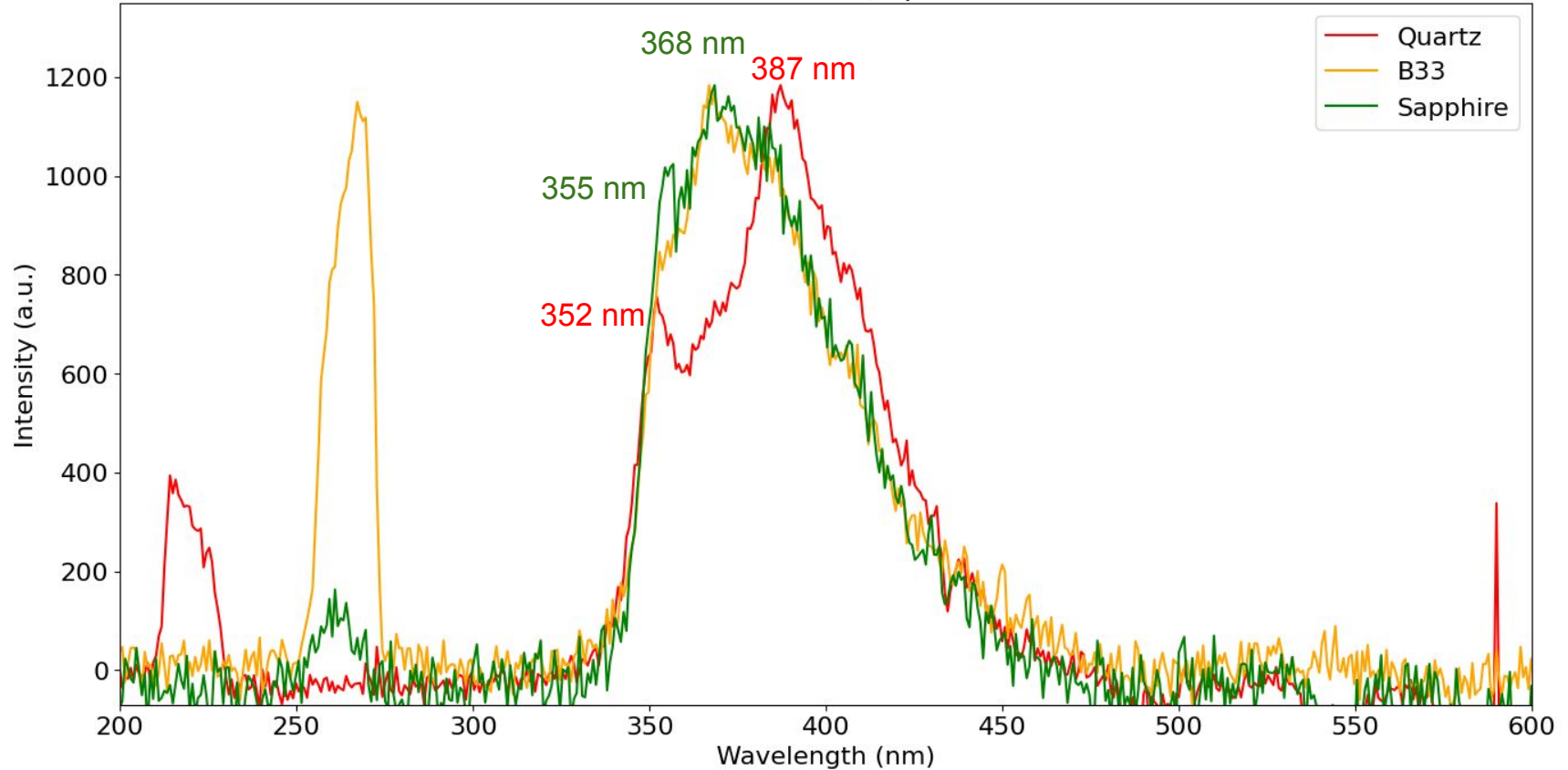


Reflection mode, spectro 4



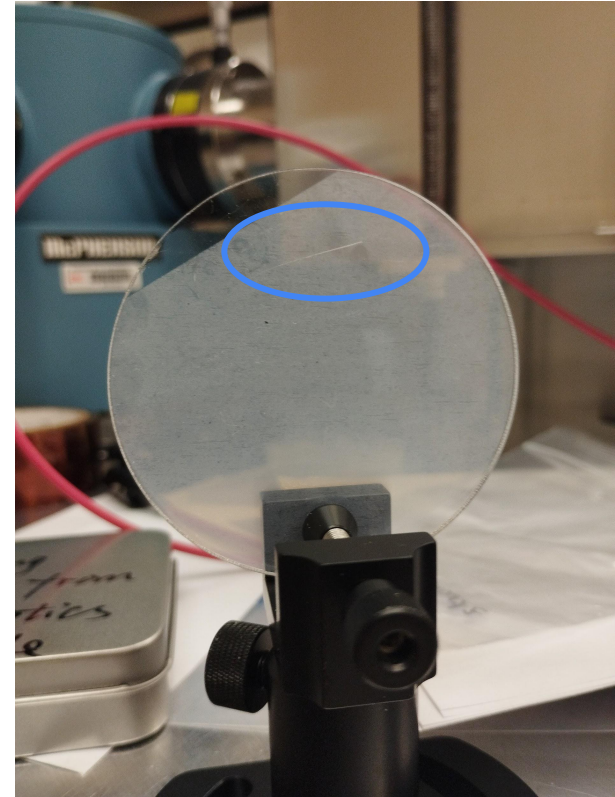
I got a smoother curve for the Quartz sample (longer integration time); the peaks don't really match

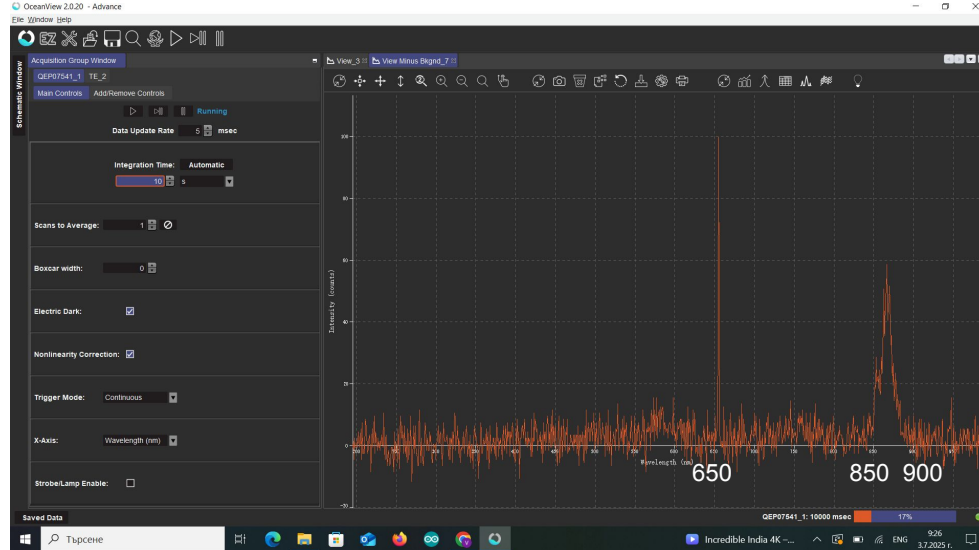
Our sample:

- Mass - 8.4 g
- Diameter - 69.54 mm
- Thickness - 1.87 mm

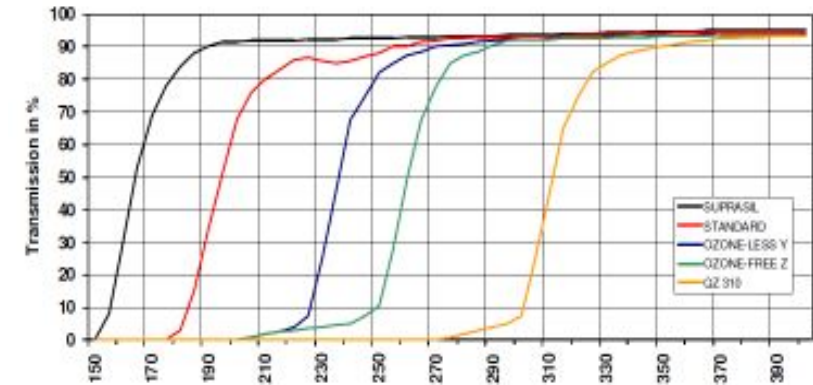
$$\Rightarrow \text{density} = 8.4 \text{ g} / 7.096 \text{ cm}^3 = 1.183 \text{ g/cm}^3$$

- Quartz should have a density around 2.6 g/cm^3
- Glass would have density above 2.2 g/cm^3
- Plastic (like PMMA) has lower density (1.18 g/cm^3)
- I accidentally scratched the sample (on the non-coated side) with the caliper
- Should it be that easy to scratch quartz?

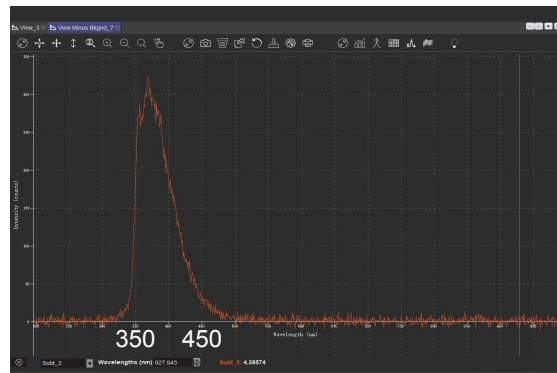
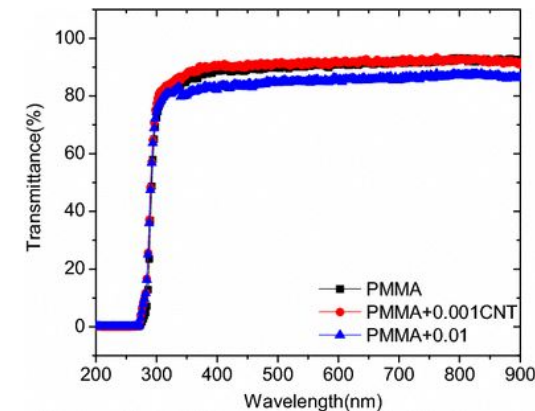




- I tried flipping the sample (266 nm light → substrate → pTP → fiber optic cable)
- Quartz:**

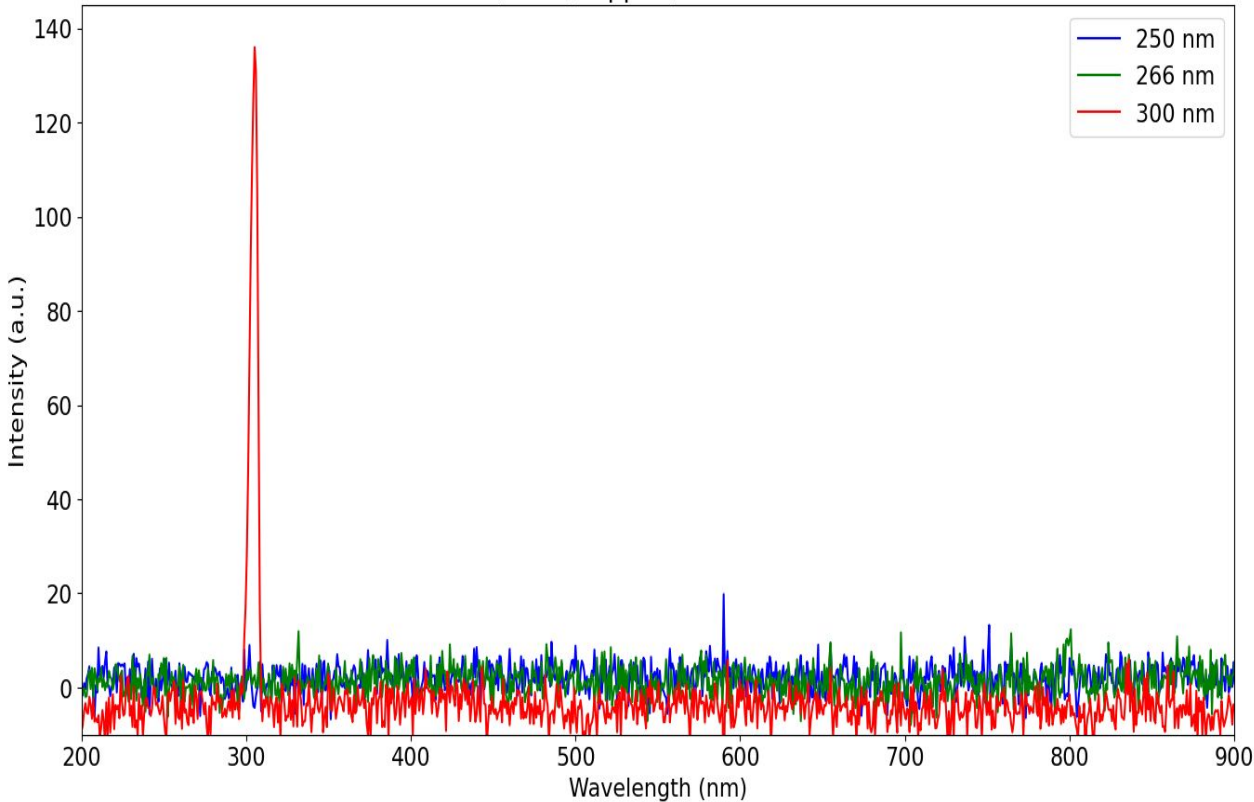


- PMMA:**

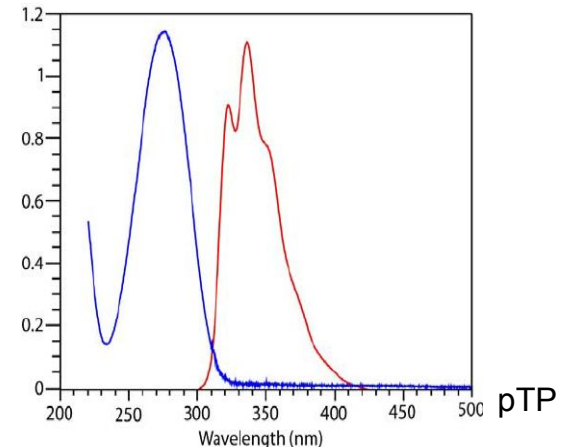


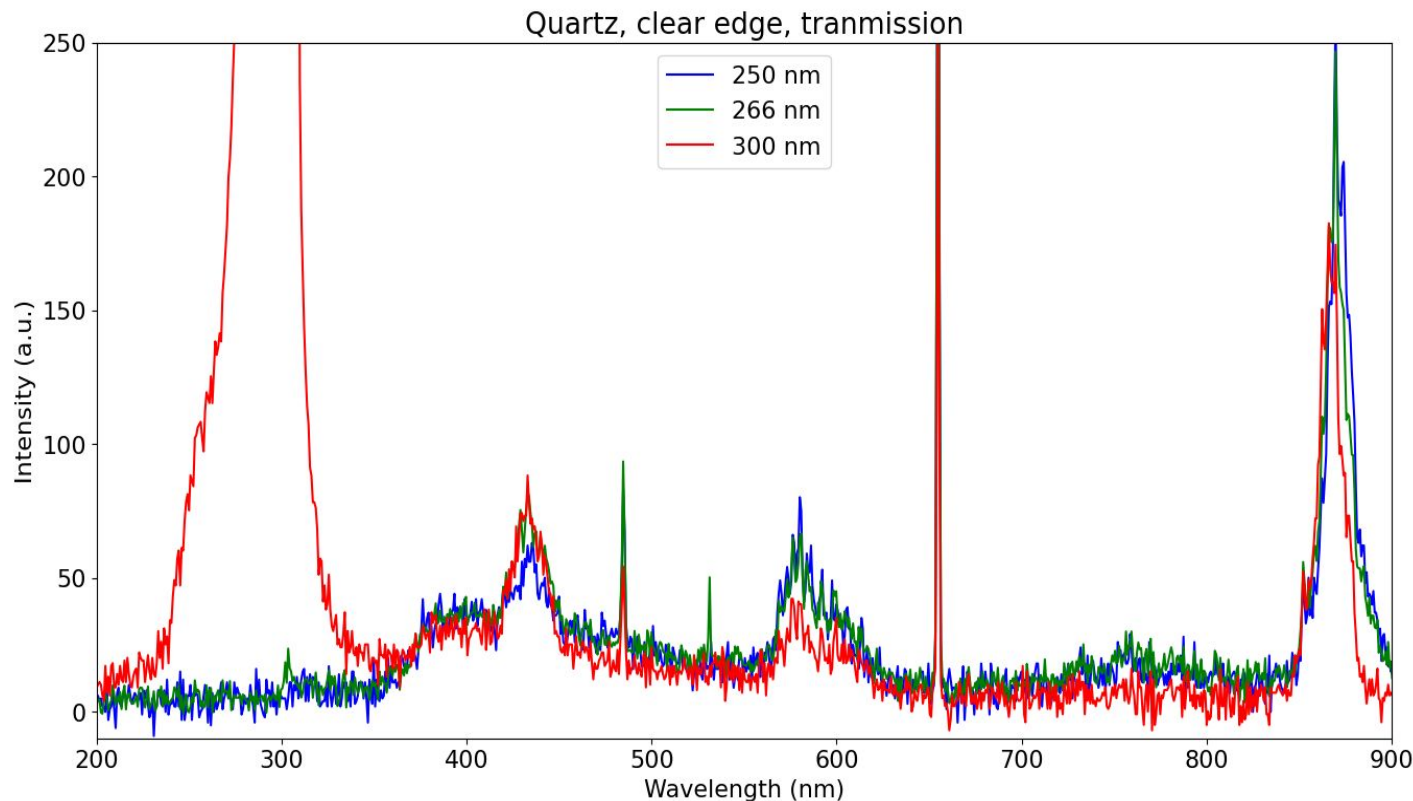
Sapphire, flipped (250 nm)

Quartz, flipped, transmission



- No transmission up to 266 nm
- Transmission after 300 nm
- pTP doesn't absorb well after 300 nm, so input=output light wavelength





- I aimed for the clear edge (not coated with pTP)
- Weird peaks, but they do show transmission at 300 nm and not for the two

