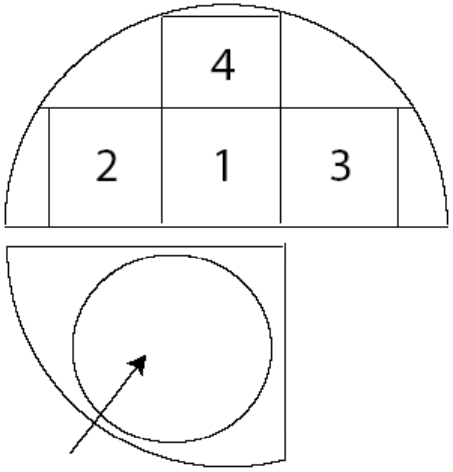
Ioffe Samples

- Measure one more sample from 7-483.
- X-ray diffraction analysis
- Polarization calibration using SVT GaAsP/GaAs superlattices.

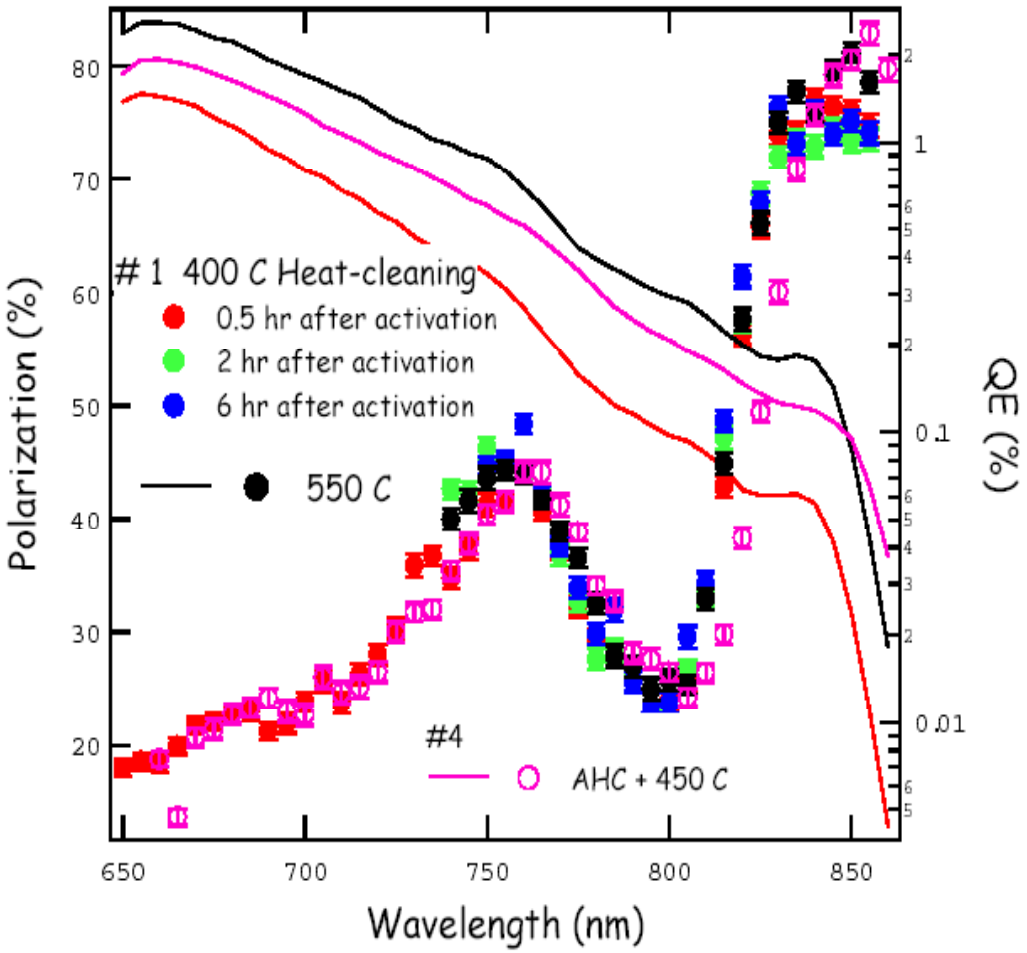
CTS measurements



SLC size cathode for charge limit measurement

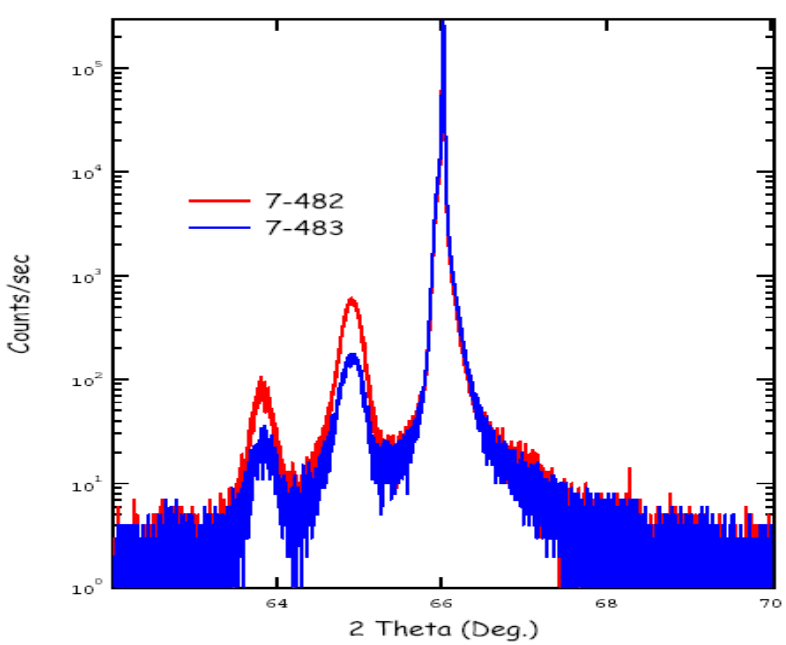
- 7-483
  - Sample #1
    - No chem cleaning
    - Heat-cleaned at 400° C
    - Heat-cleaned at 550° C
  - Sample #4
    - NH_4OH stripping
    - AHC+450° C heat-cleaning

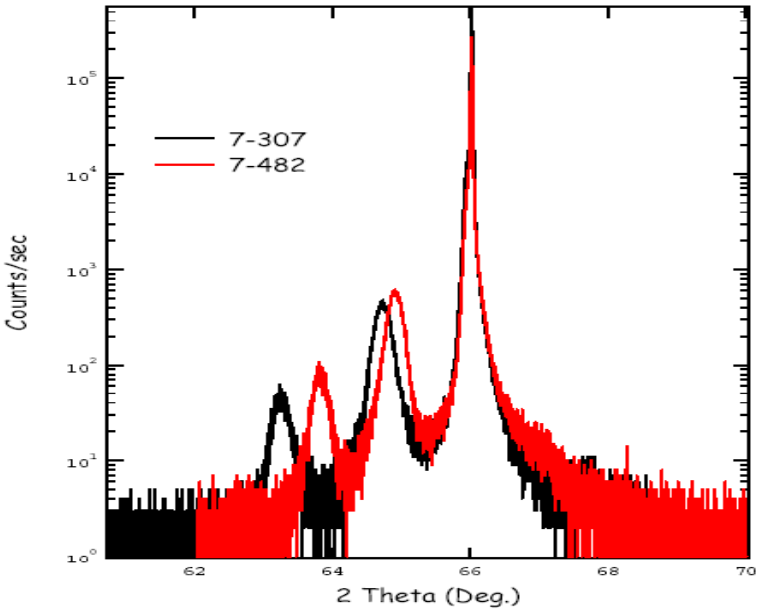
7-483 – Sample #1 and #4



- Peak polarization is 80%.
- Wavelength dependence is different – parameter variation over the wafer?

X-ray diffraction analysis

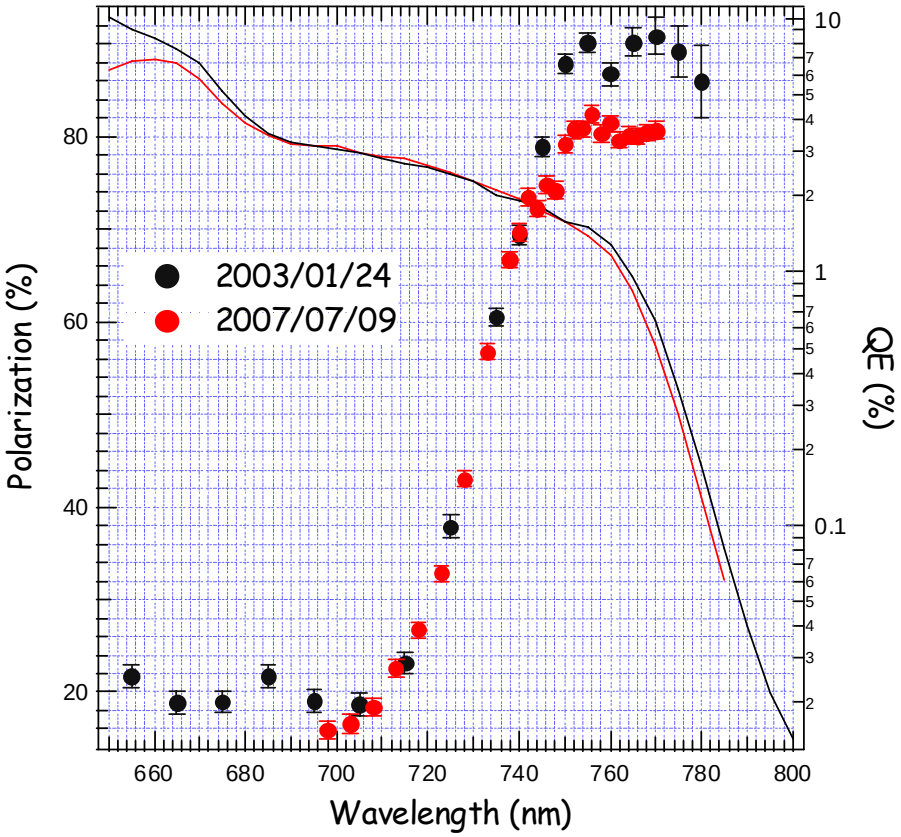




- 7-482 and 7-483 look the same – good reproducibility.
- 7-482 is different from 7-307 which we wanted to duplicate.

	New wafers	7-307
Indium Fraction	19%	22%
SL Period	9.5 nm	7.0 nm

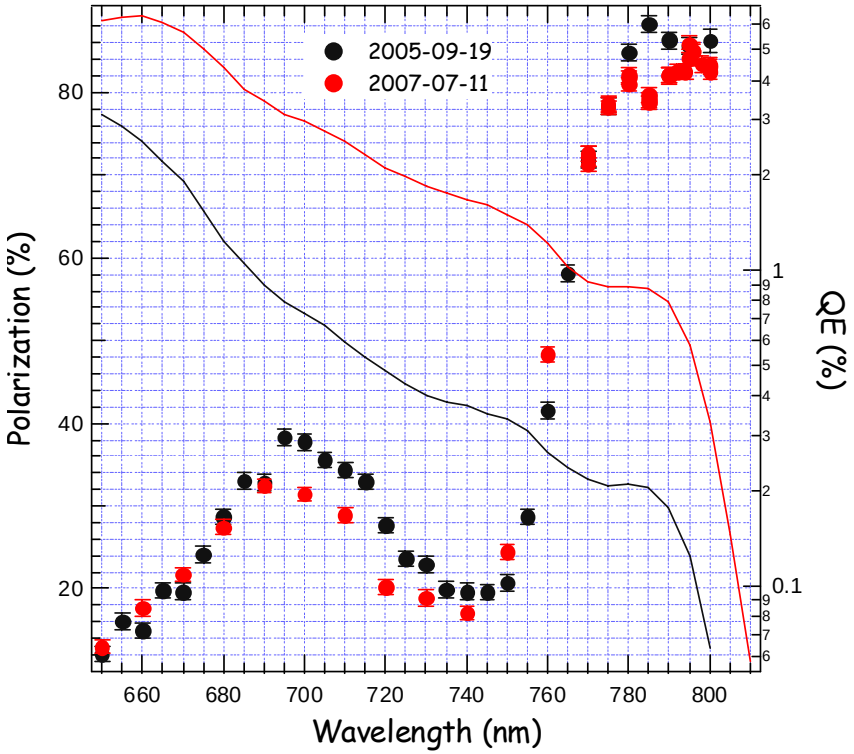
Polarization calibration #1



- SVT-3682
  - Un-used sample
  - NH_4OH stripping
  - AHC + 450° C heat-cleaning.

Polarization could be off by 5%, but this could be due to parameter variation over the wafer.

Polarization calibration #2



- SVT-4252
  - Used sample measured on 2005-09-19.
  - NH_4OH stripping
  - AHC + 450° C heat-cleaning.

Polarization may be 3% off.