

Start Counter



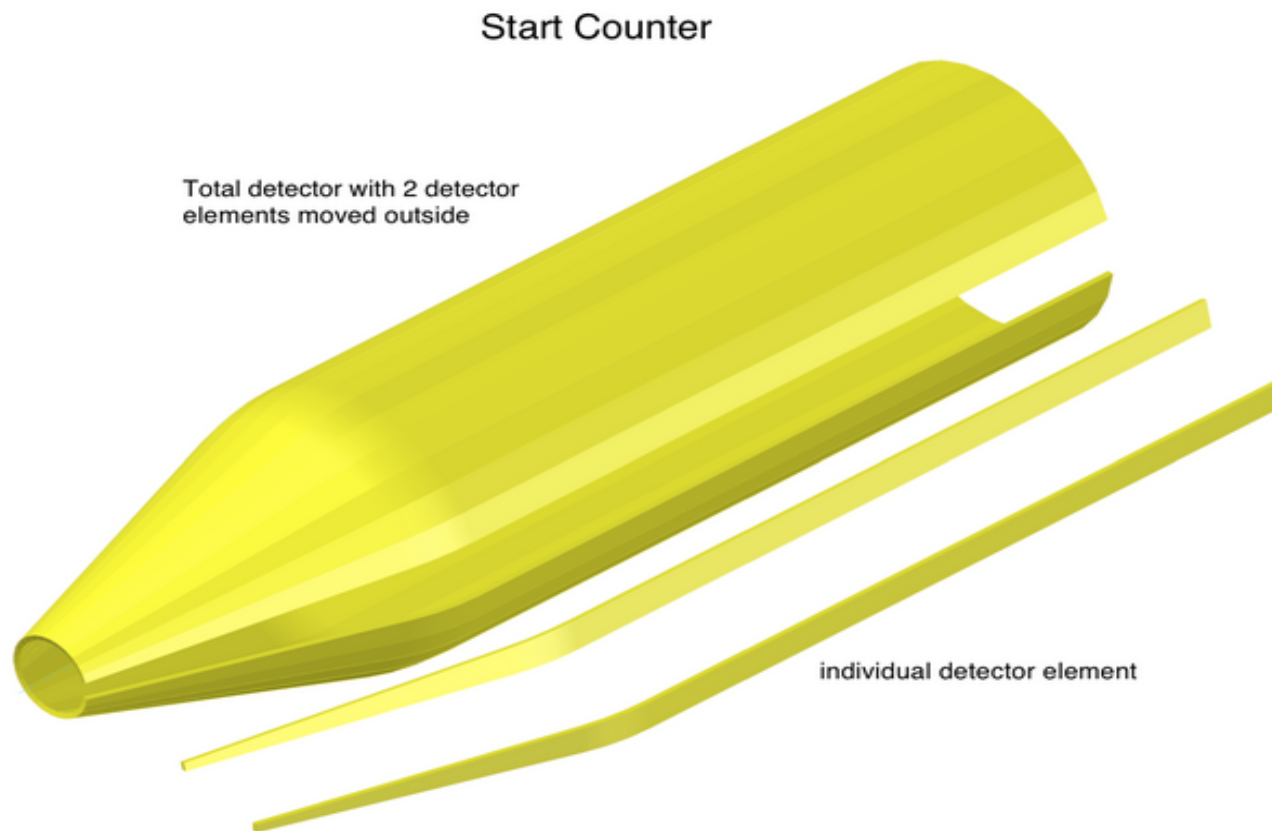
Eric Pooser

W. U. Boeglin

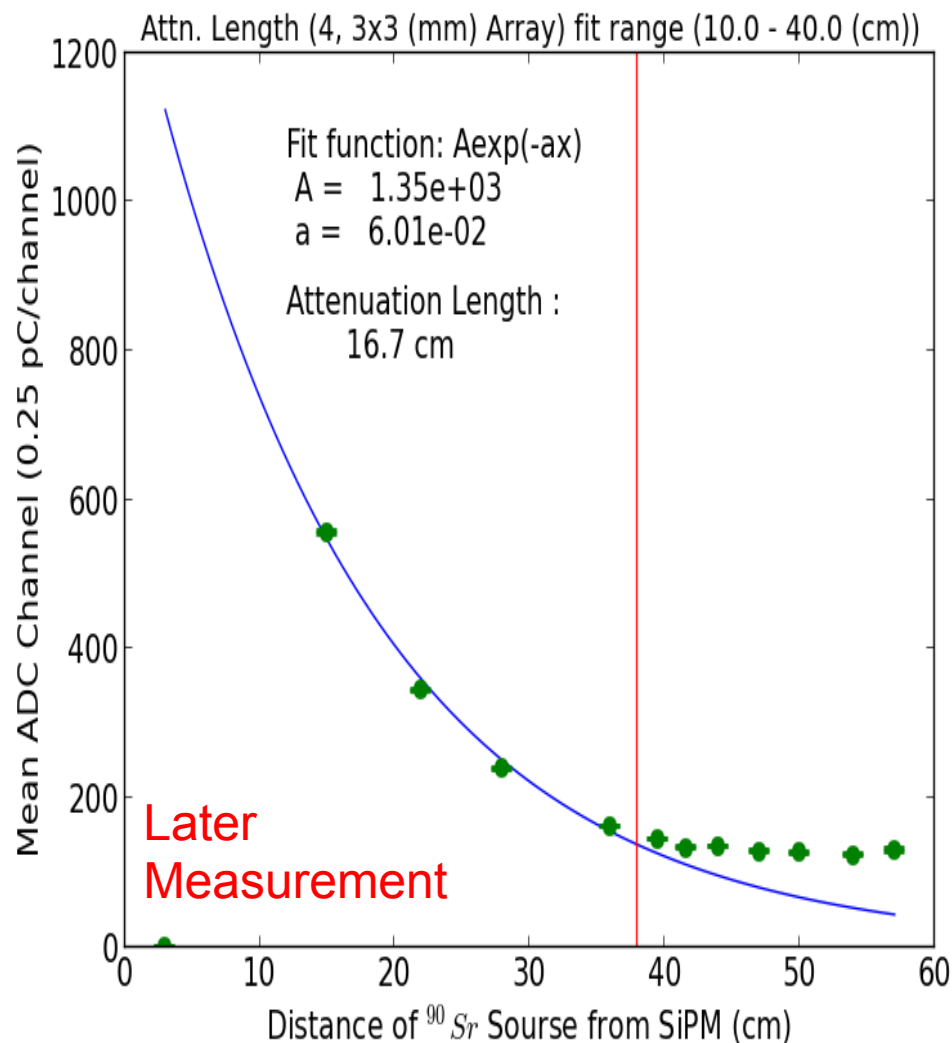
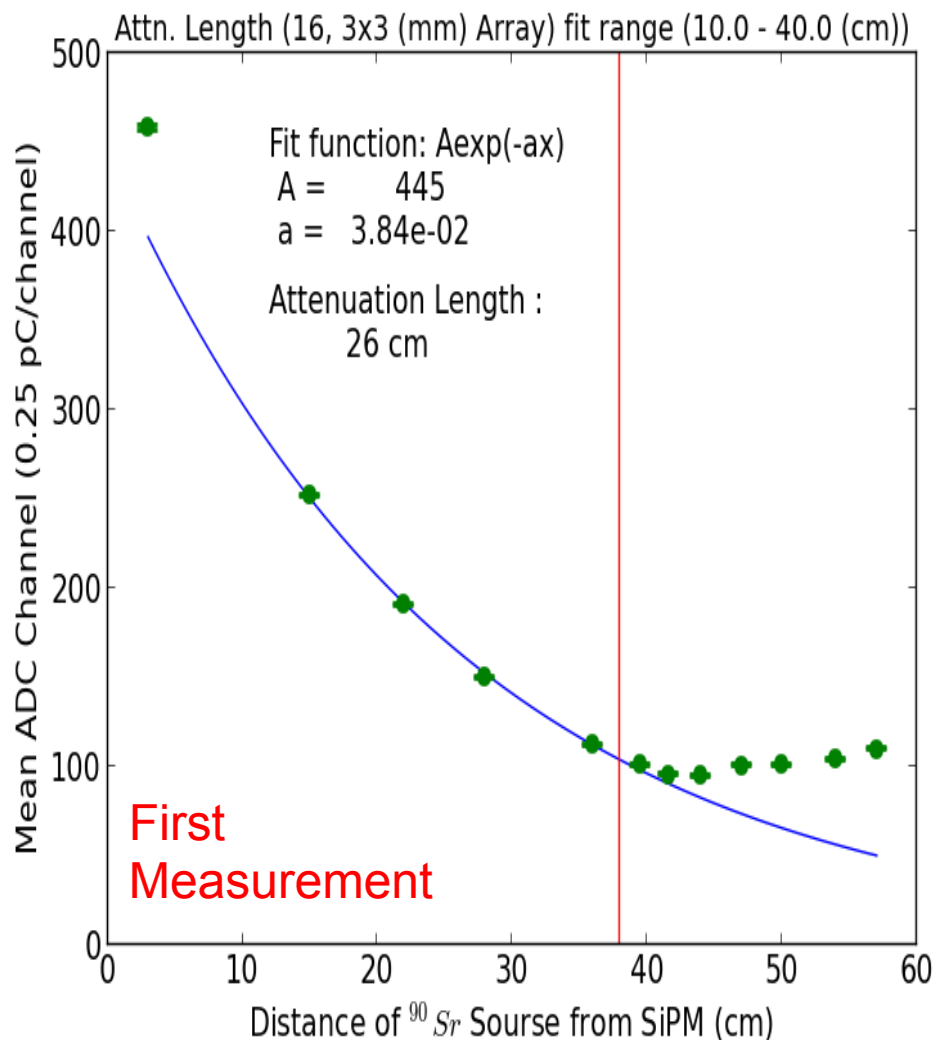
P. Khetarpal

L. Guo

- What is GlueX?
- What are scintillators?
- How do they work?
- How we measure them?
- Our measurements
- Apparent defects
- Proper handling

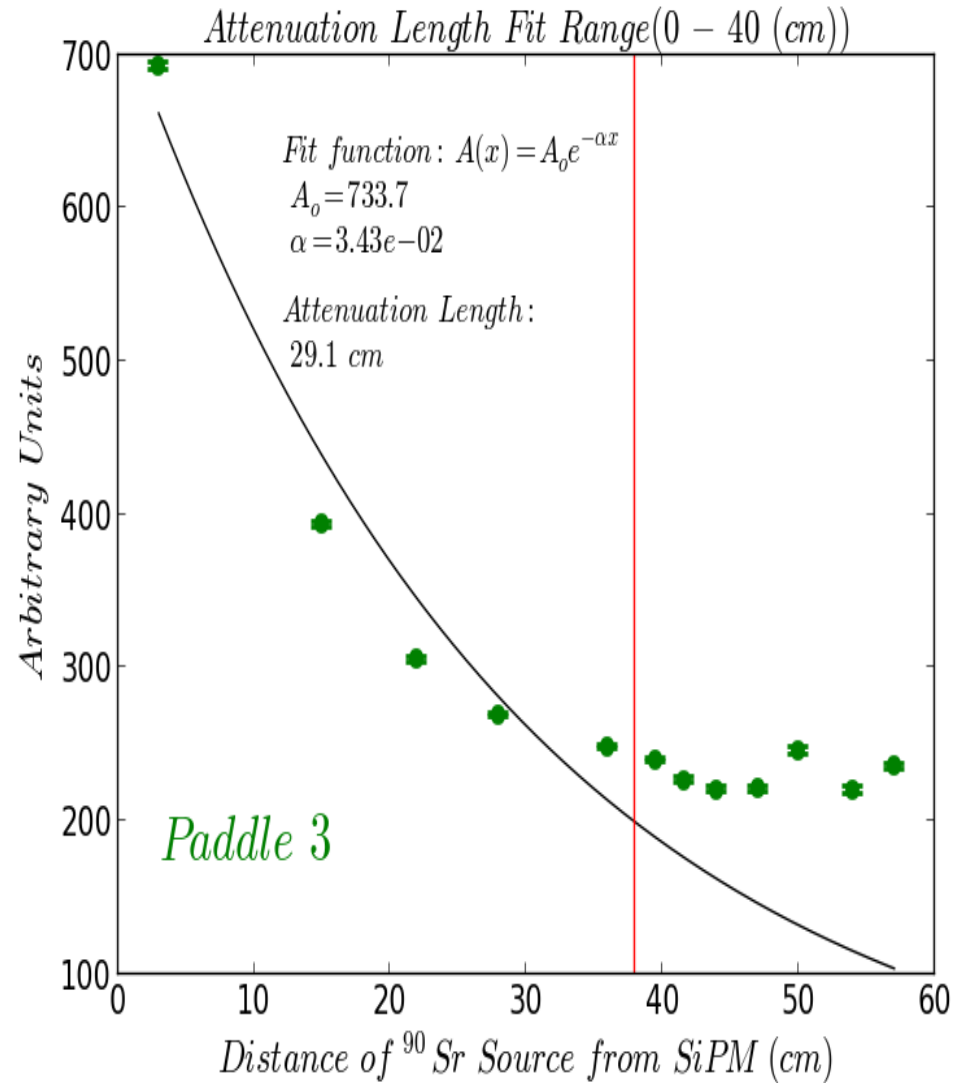
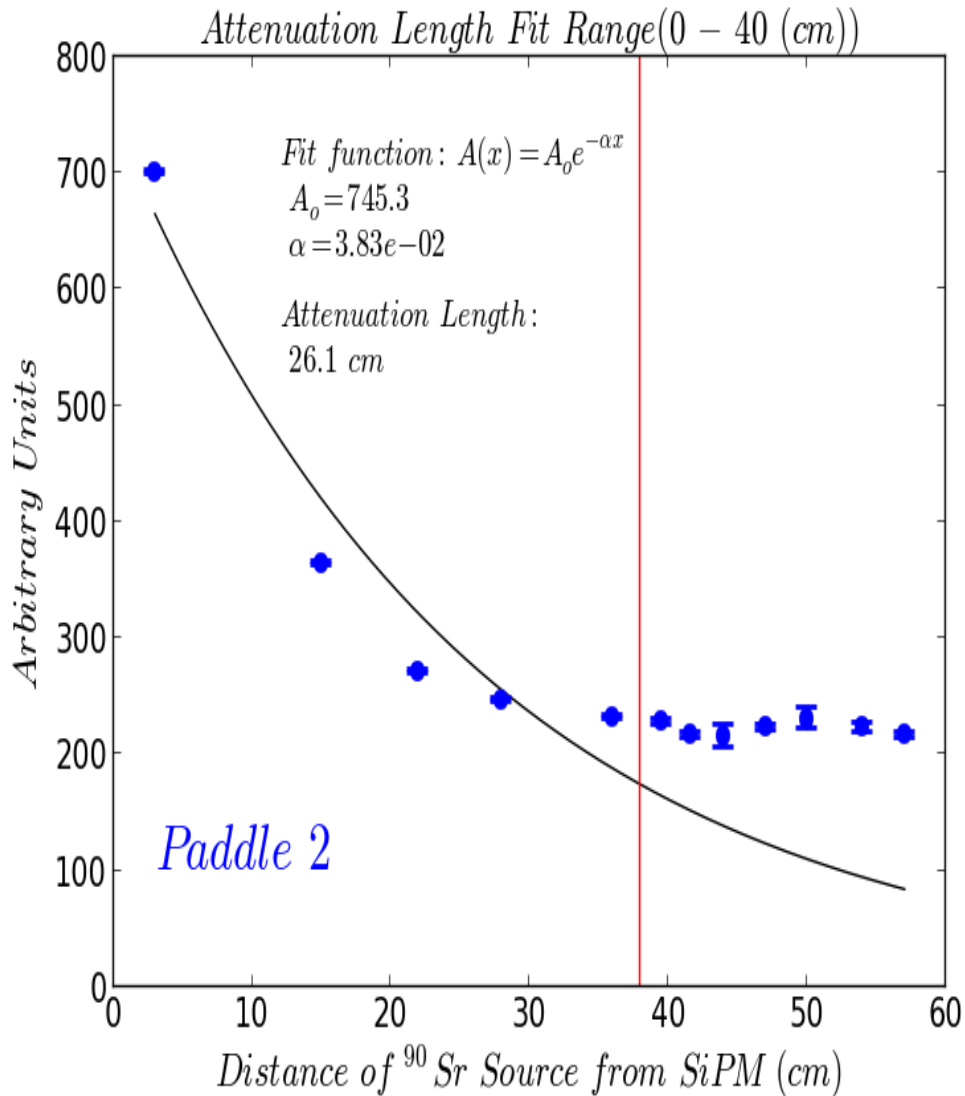


Attenuation Length (1st Batch)

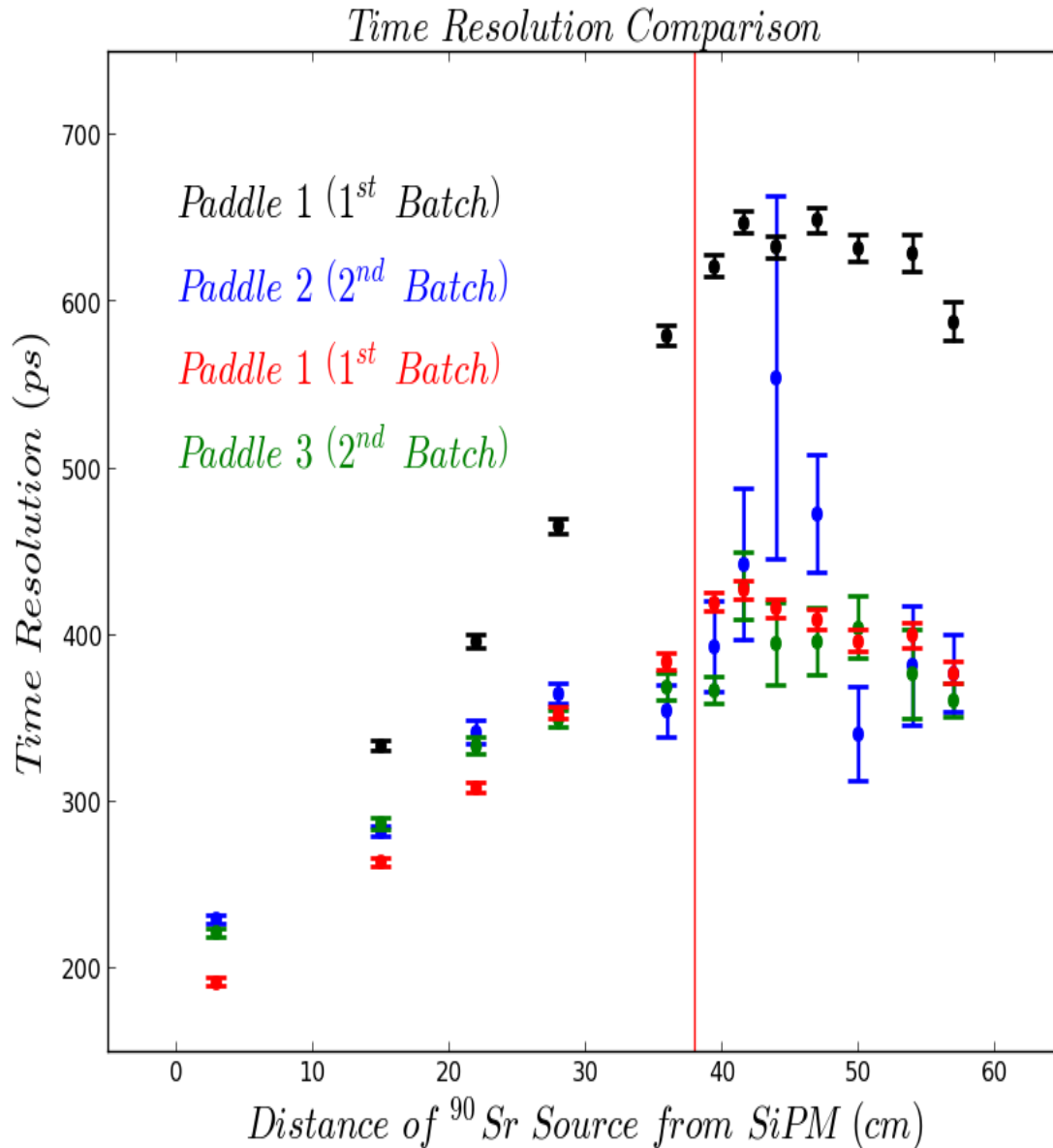


- **Five months** have elapsed between these two measurements
- ~35% change in attenuation length measurements

Attenuation Length (McNeal)

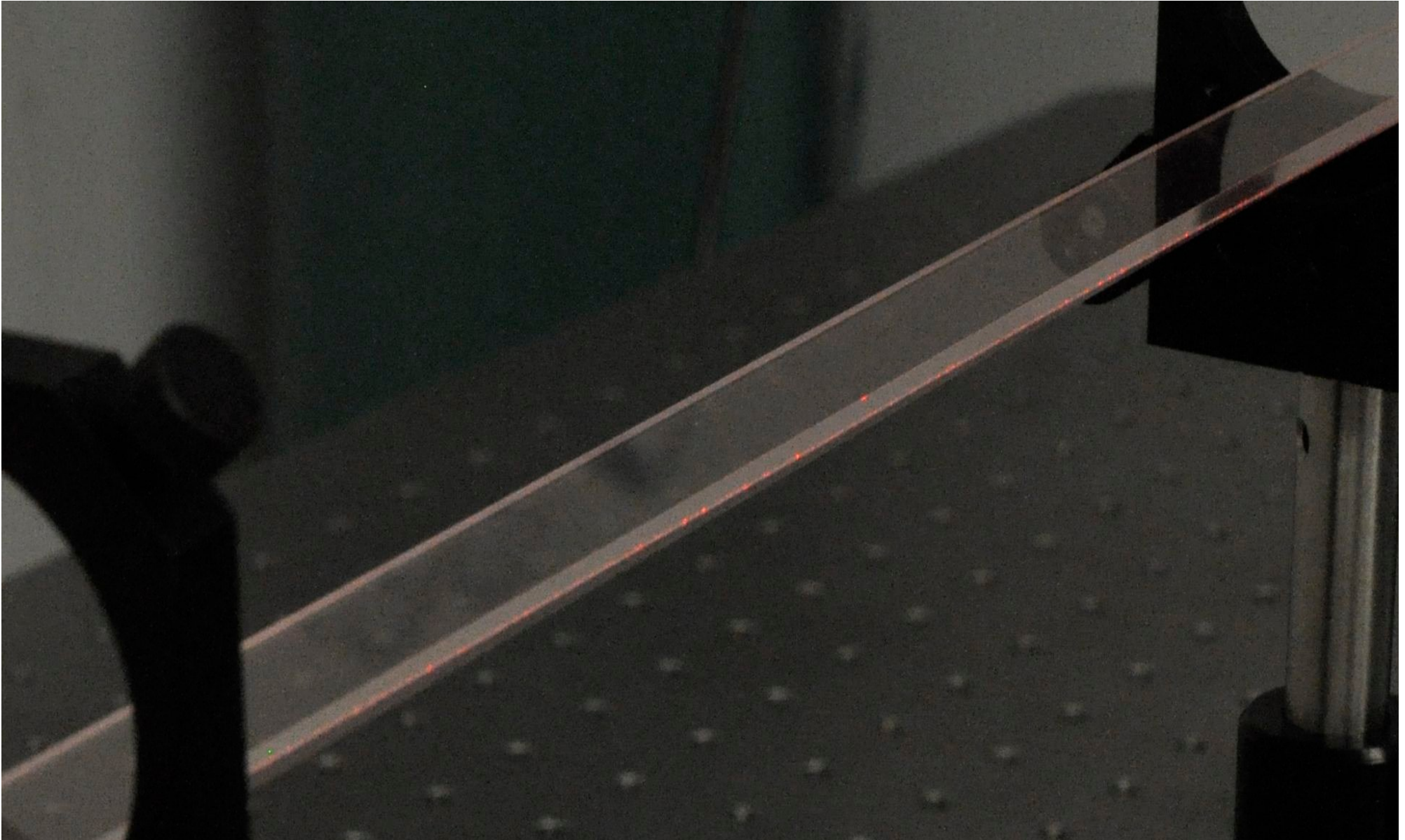


Time Resolution Studies

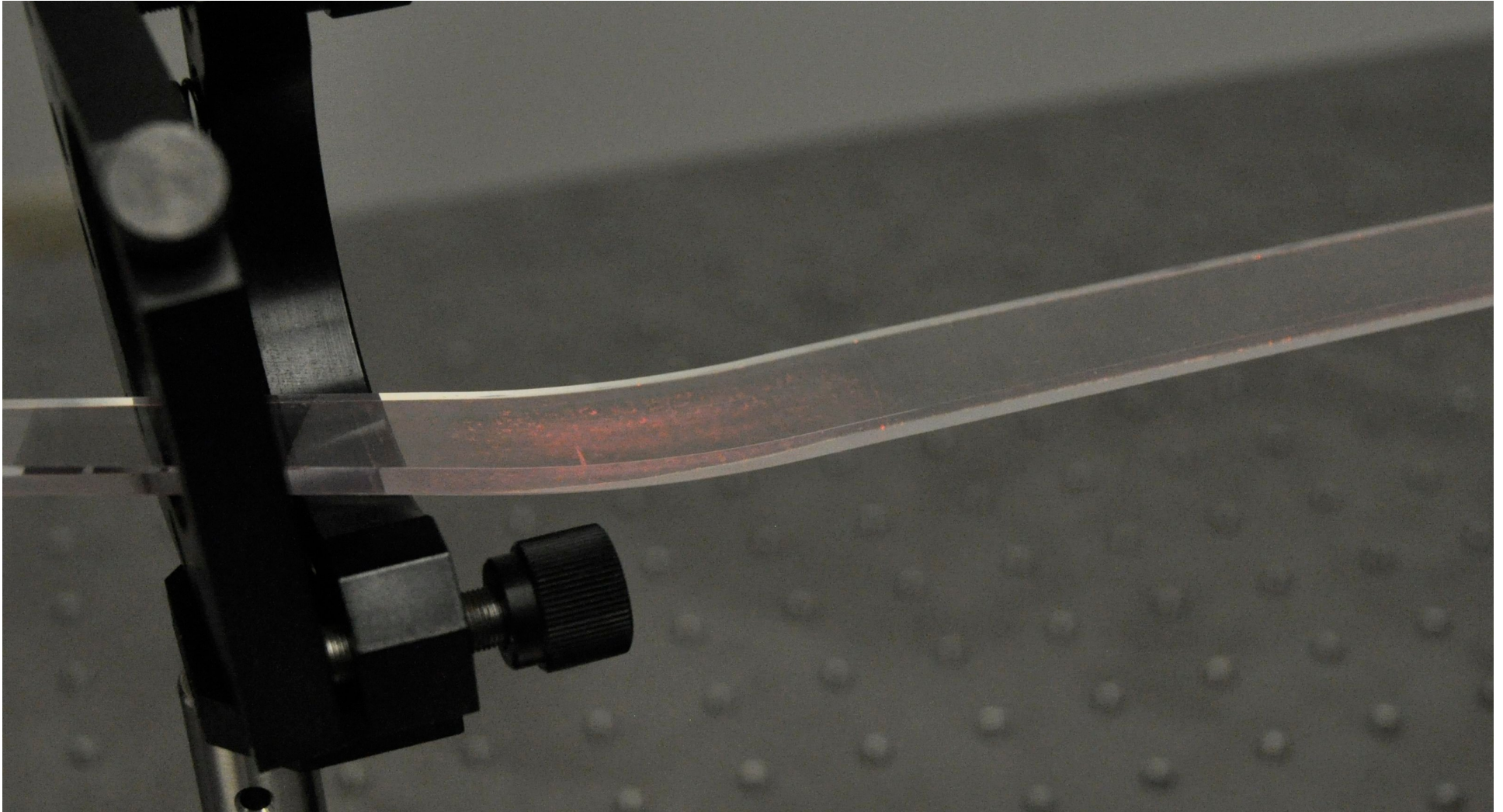


- Deteriorated paddle
 - Unacceptable
- Tape removed upon arrival and measured 1 month later
 - Unacceptable
- Suitable if this quality did not deteriorate over time
- Tape removed one month after arrival and measured immediately
 - Shows good surface quality except for the bent region and adhesive stuck to surface

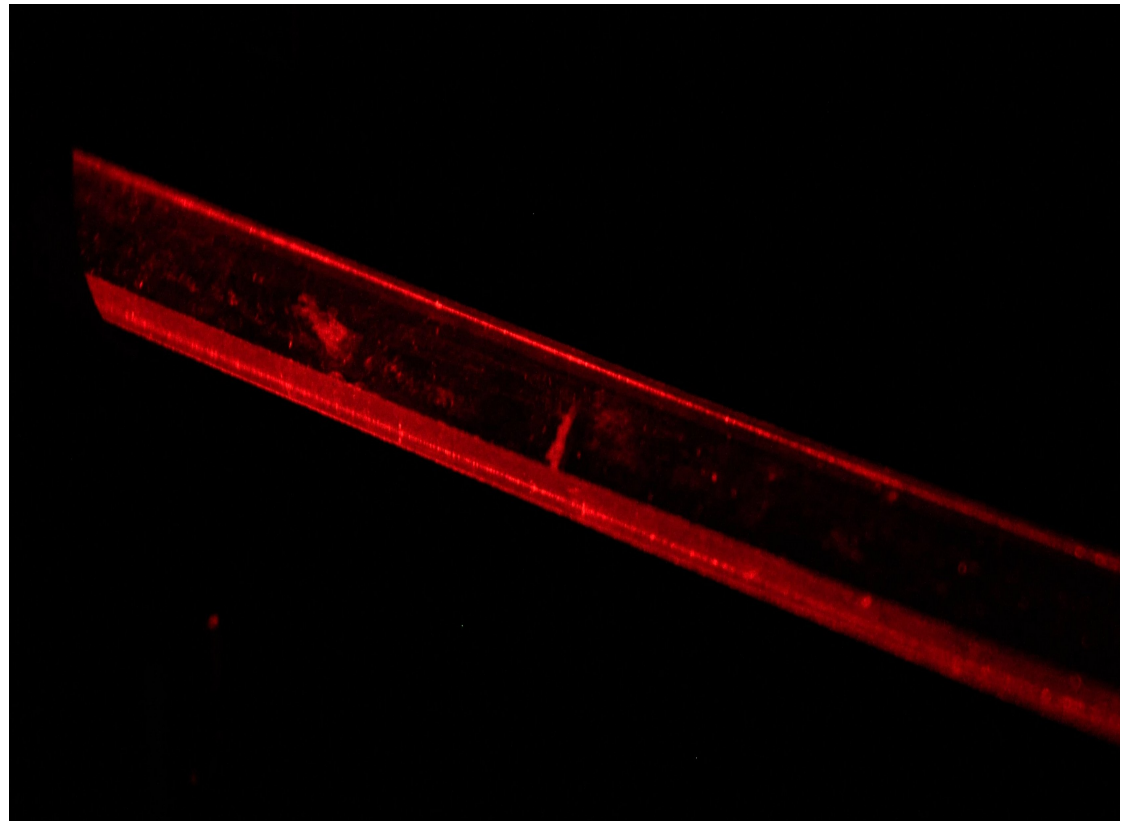
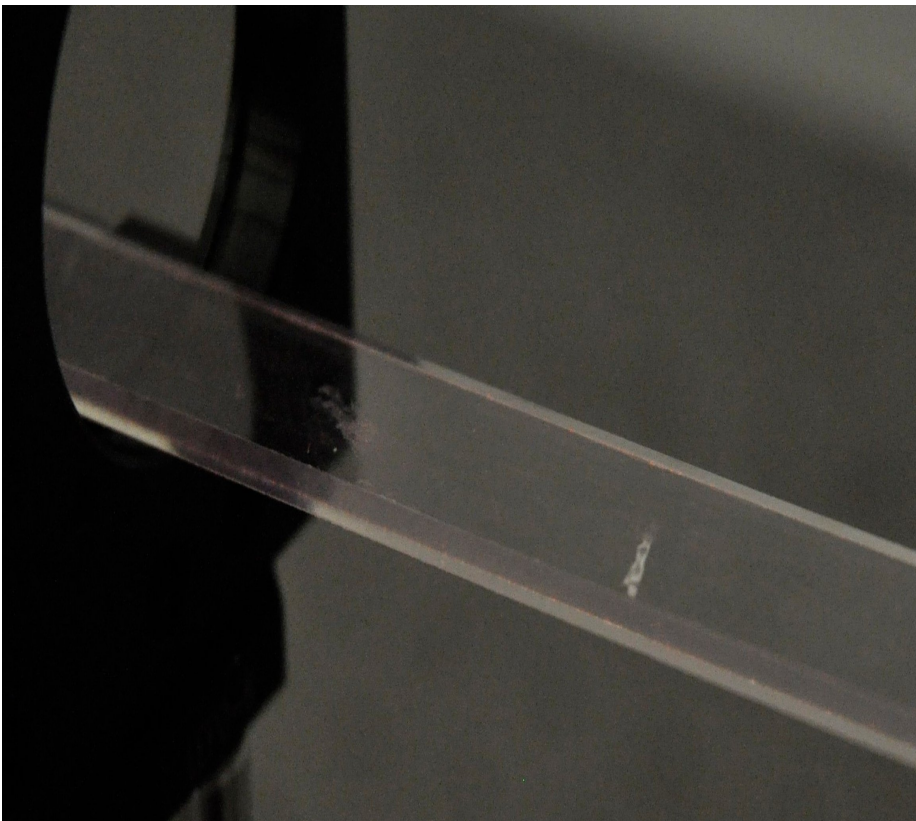
EJ204 Straight Bar



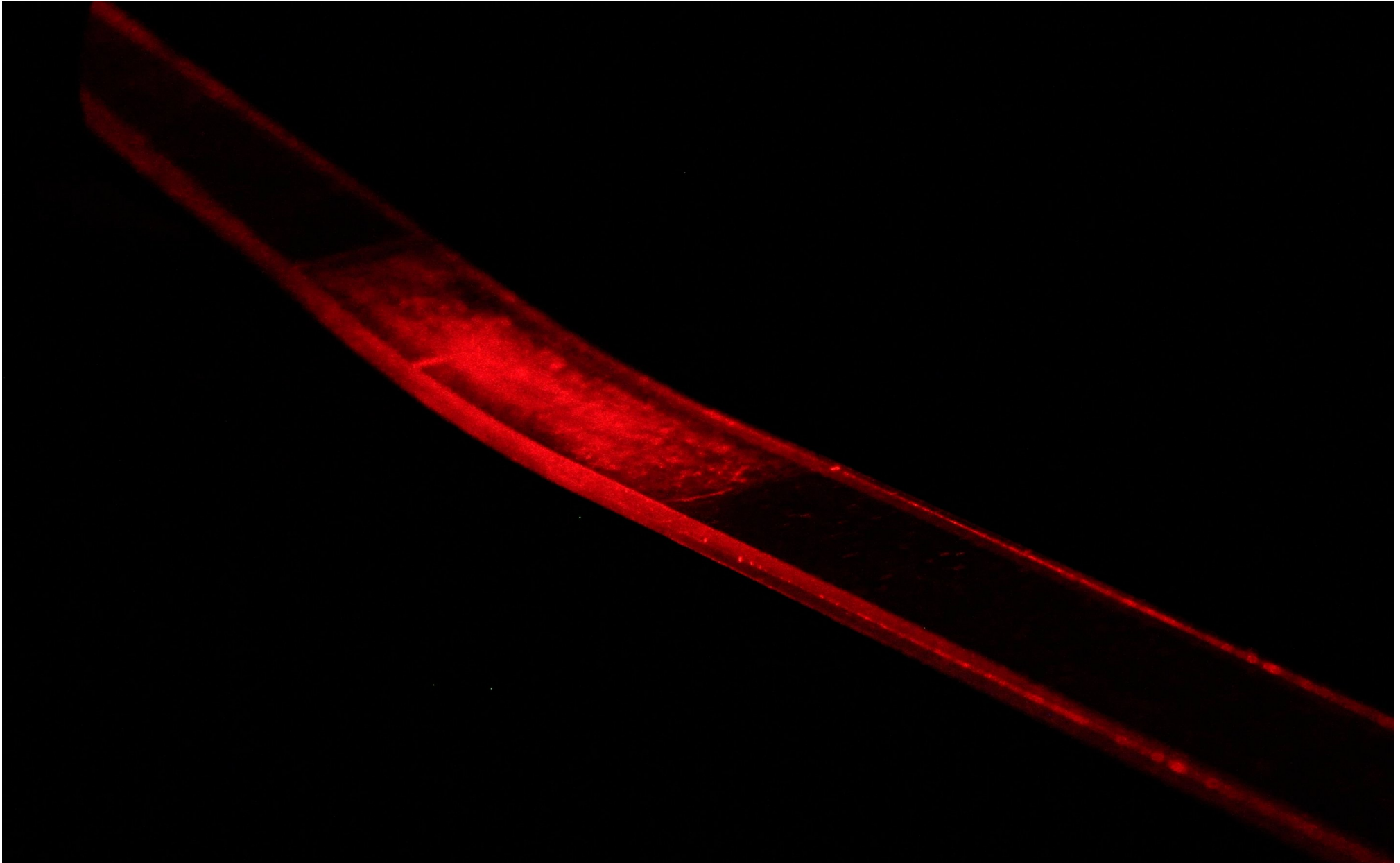
Paddle 2 (Bend region)



Paddle 3 (tape recently removed)

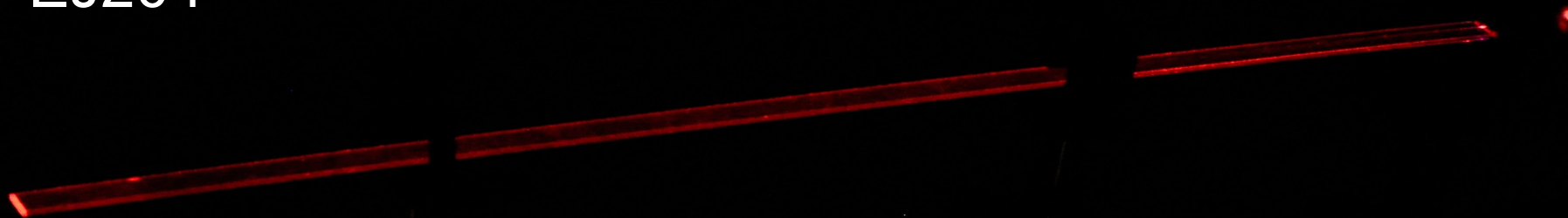


Paddle 3 (bend region)

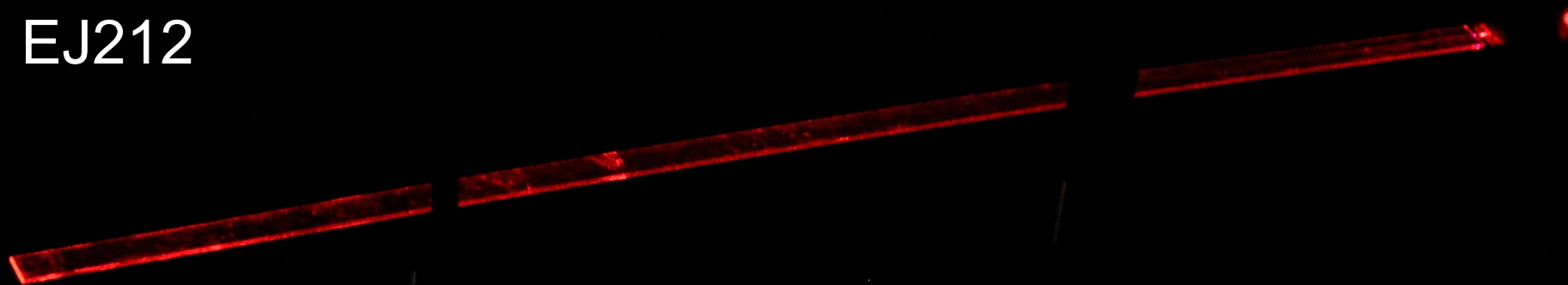


EJ204 (FIU) and EJ212 (McNeal)

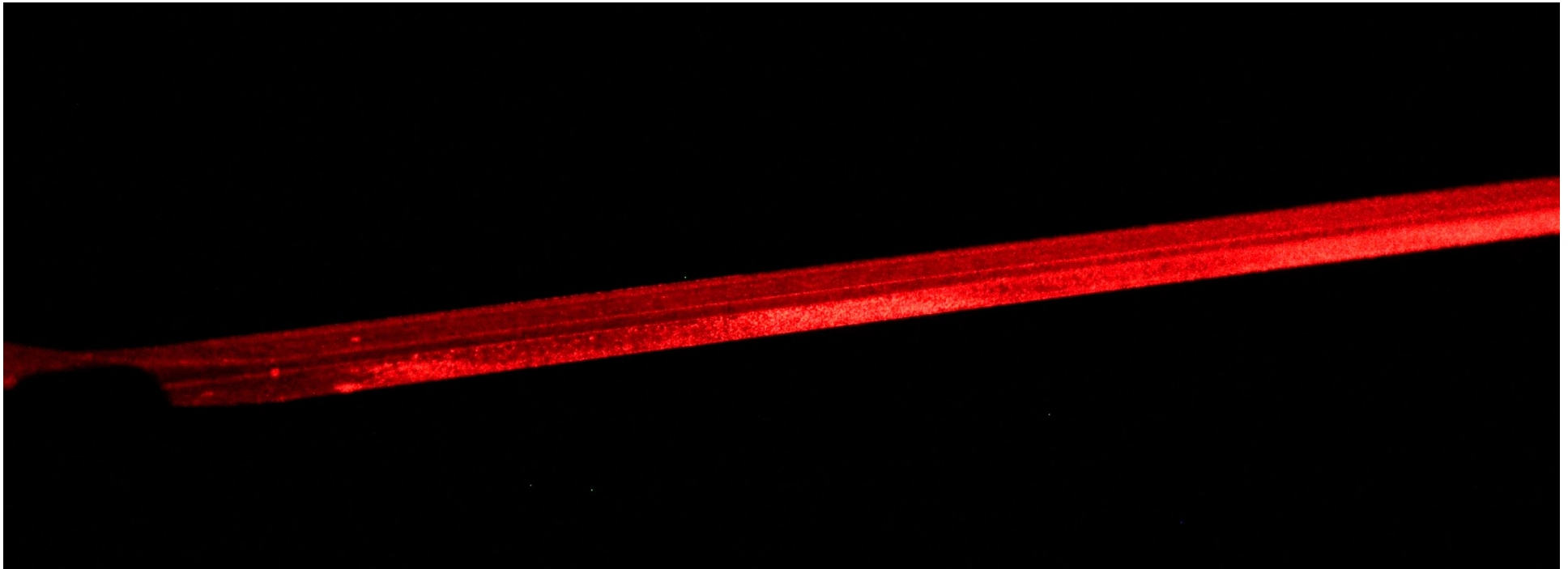
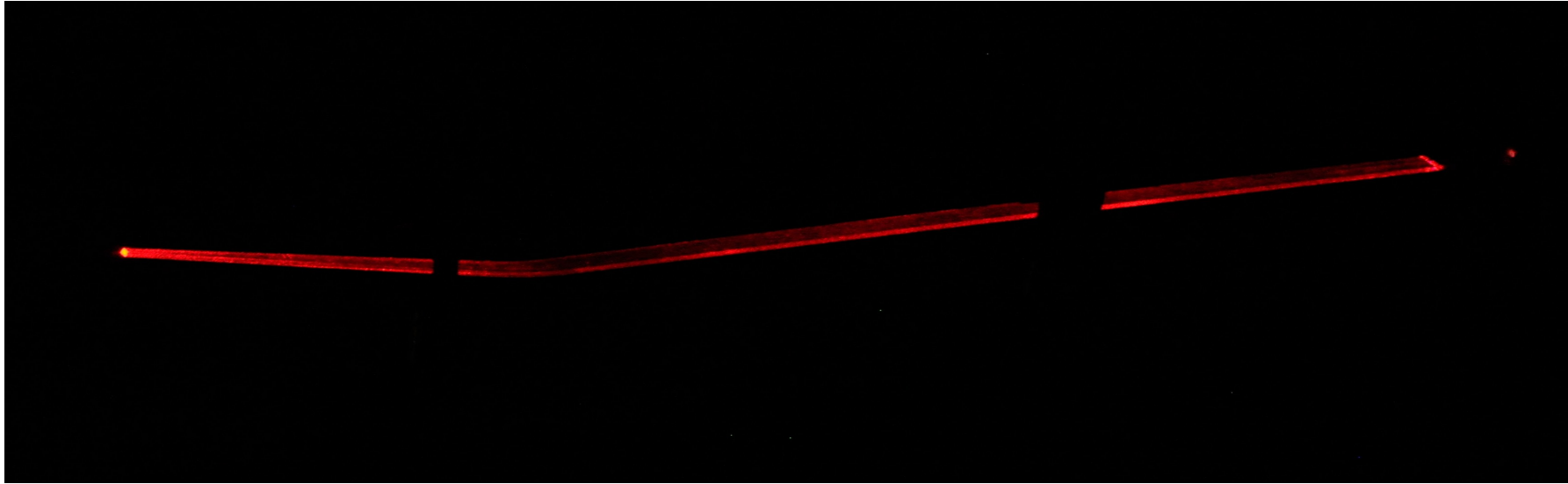
EJ204



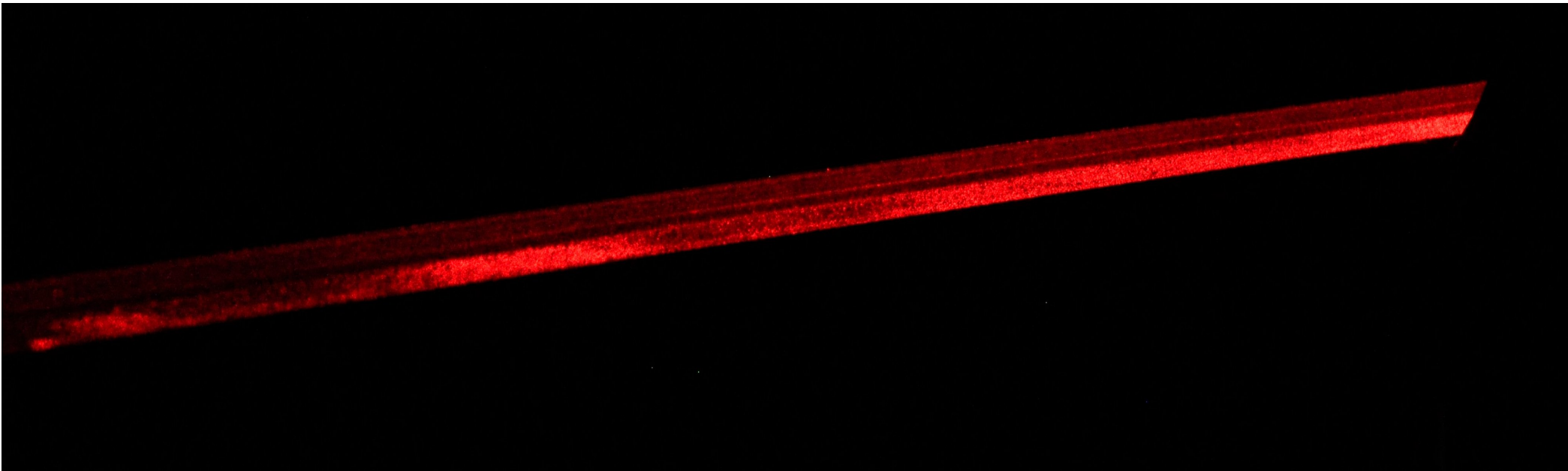
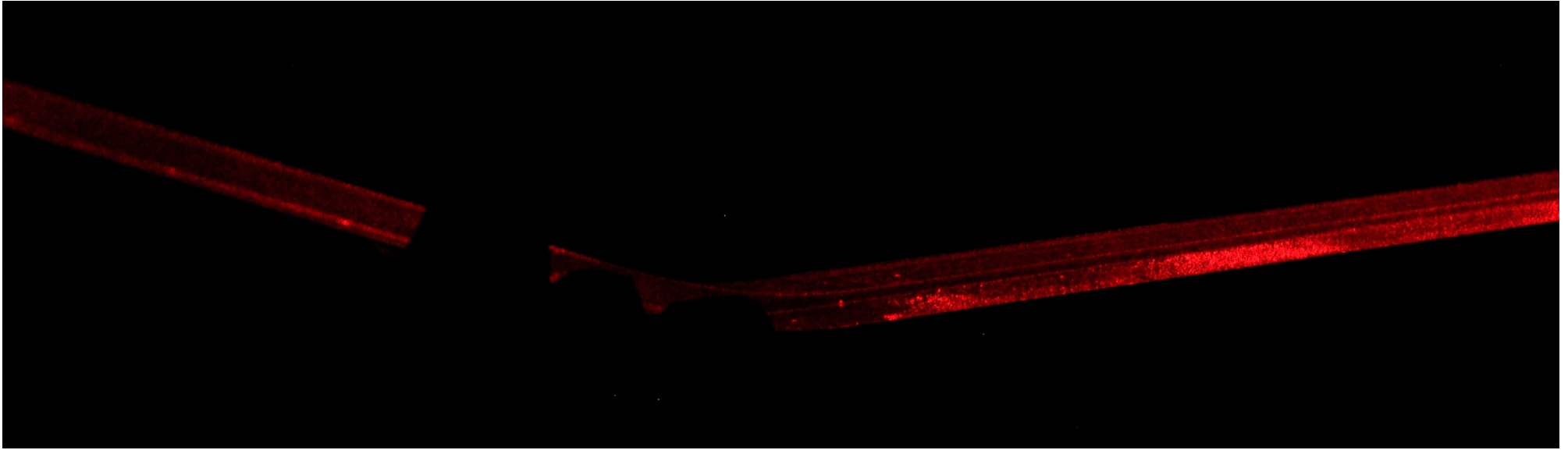
EJ212



Paddle 1 (Deteriorated Paddle)



Paddle 1 (Crazing)



Thank you for your time!

Questions?

Back-up Slides

Time Resolution Studies

- Batch # 1:
 - 2 paddles received, 1 is ruined
 - Measurements:
 - Paddle 1: upon arrival
 - Paddle 1: after 5 months
- Batch # 2:
 - 3 paddles received, 1 is broken
 - Measurements:
 - Paddle 2: Tape removed upon arrival but measurements performed one month later
 - Paddle 3: Tape removed one month later but measured immediately