

Scintillator Sheet Tests With LED (2mm)

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Setup

- All sheets have been repainted and marked (sheet number and type, i.e. 2mm, 2.6mm or 3mm)
- This time: test 2mm and 2.6mm
- First checks:
 - Align sheets
 - Find camera settings
- Same as in previous test:
 1. Illuminate all sheets
 2. Insert fibre 8 in each sheet



Full illumination

- Strong fluctuations seen \rightarrow fibres are quite different



Single fibre

- Background not constant!
- Overlap of light output



Overlap of light output

- Lense effect?
- Could play with focus and aperture to find out



Average light output per sheet

• Values within +- 25% (was+- 10% for 3mm sheets)



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Thickness measurement

- Calculate pixel thickness of single sheet light output at some constant light output value (I chose 5000)
- Plot sheet thickness in pixel vs sheet real thickness in mm
- Possible to distinguish two sets of 2mm and 2.6mm sheets

