

Piece by Piece FD Calibration Future Plans?

Auger Collaboration Meeting

Malargue, Argentina

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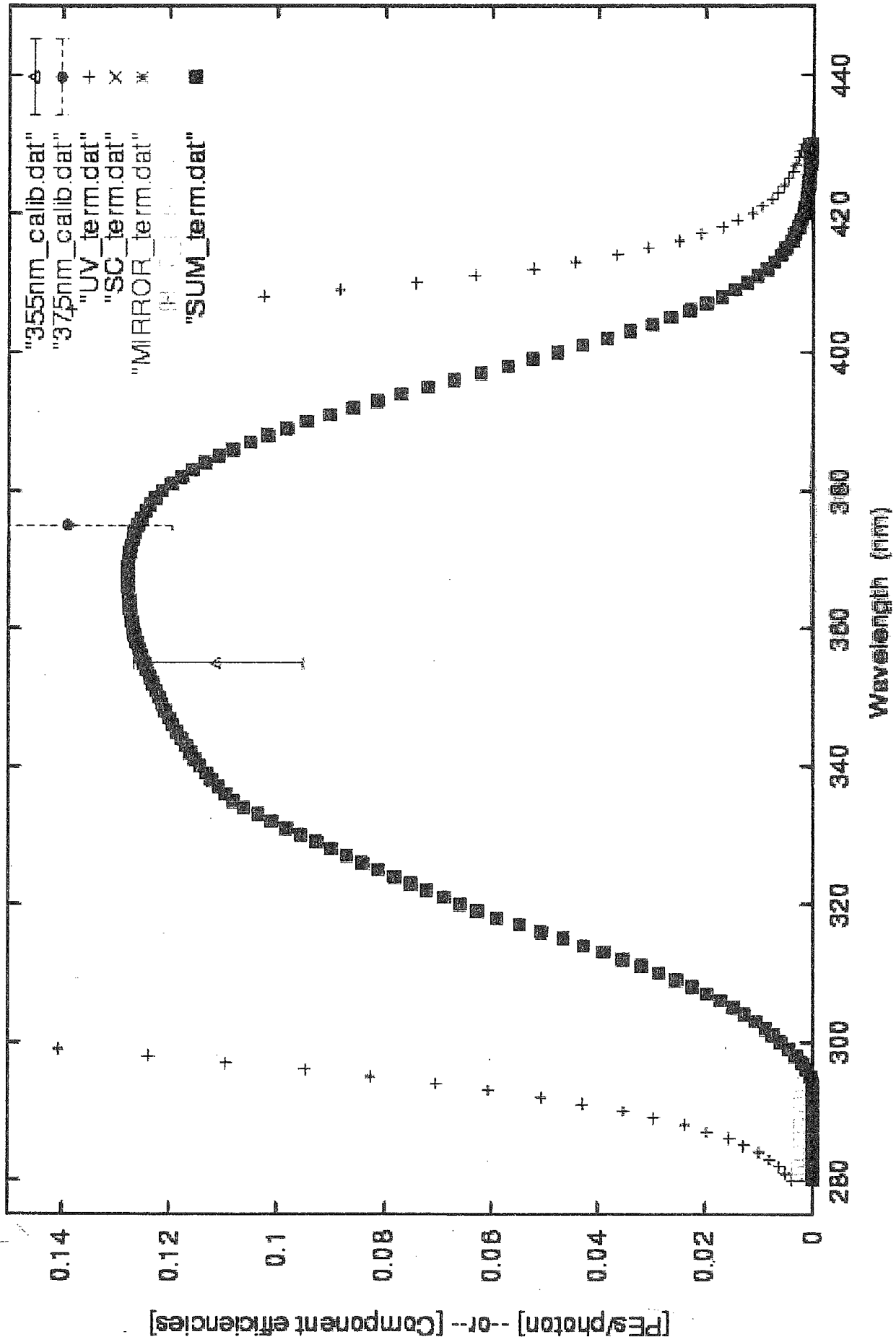
1. Why did we do it?

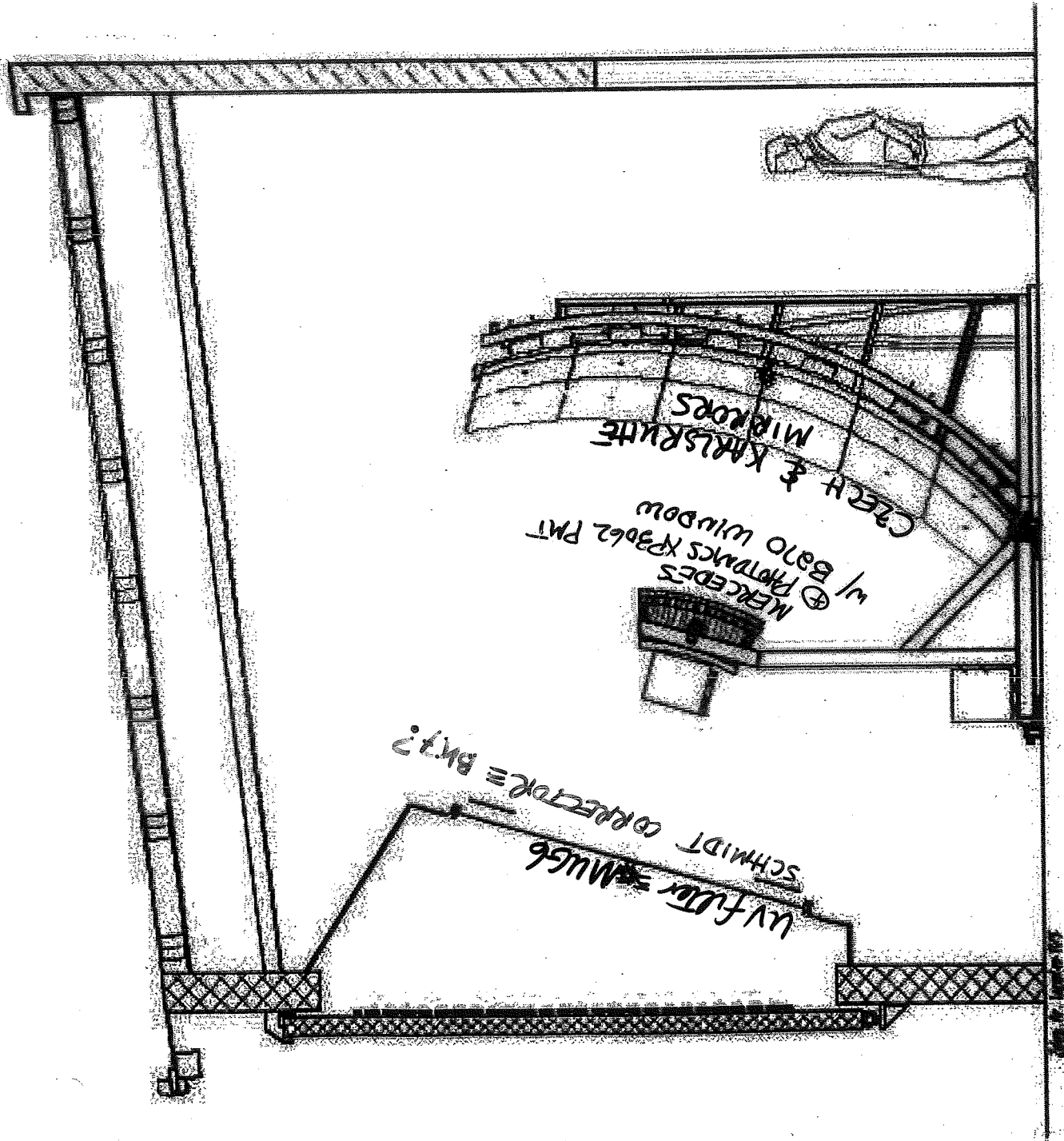
- Cross check of *end-to-end* calibration
- Provided wavelength dependence
- Helped to identify potential problems

2. Need to continue for all 12 telescopes!

3. **But we need *your* optical components characterized!**

Fluorescence Detector Efficiency VS Wavelength





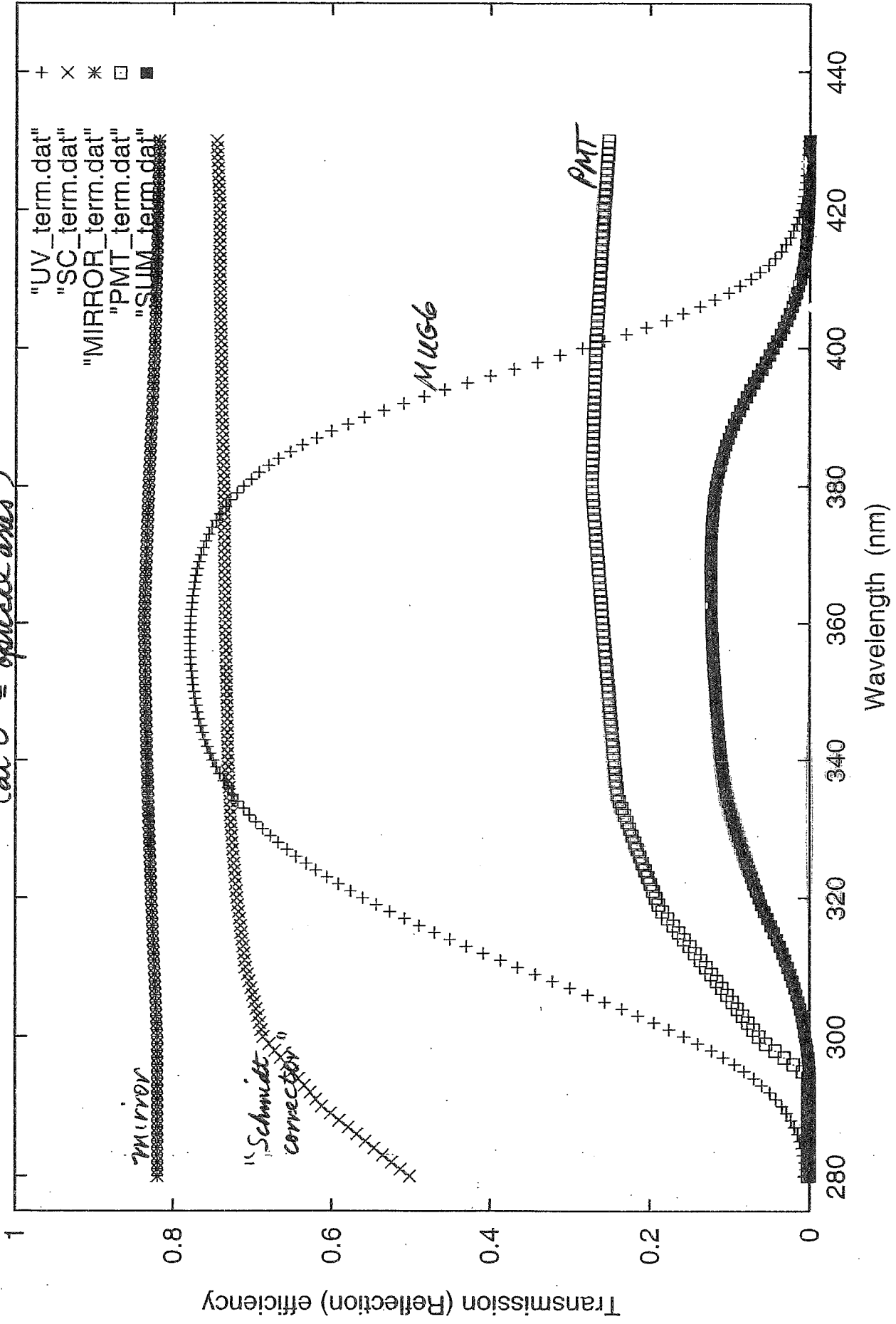
Hand-drawn sketch of a desk and chair in the upper right corner of the room.

CECH & KARLSRUHE
MIRRORS

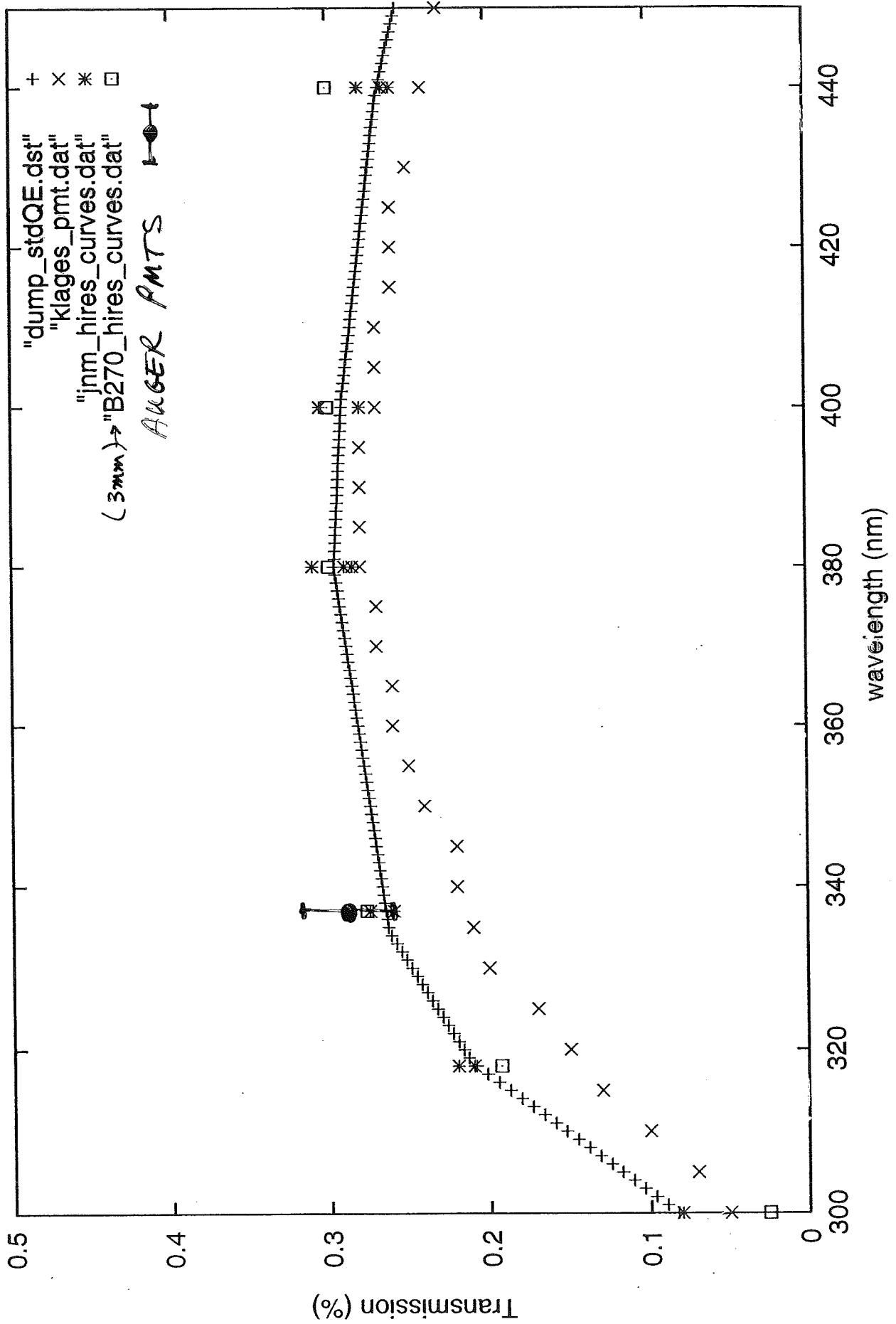
MERCEDES
w/ PHOTOMAX X3062 PMT
w/ BATO WINDOW

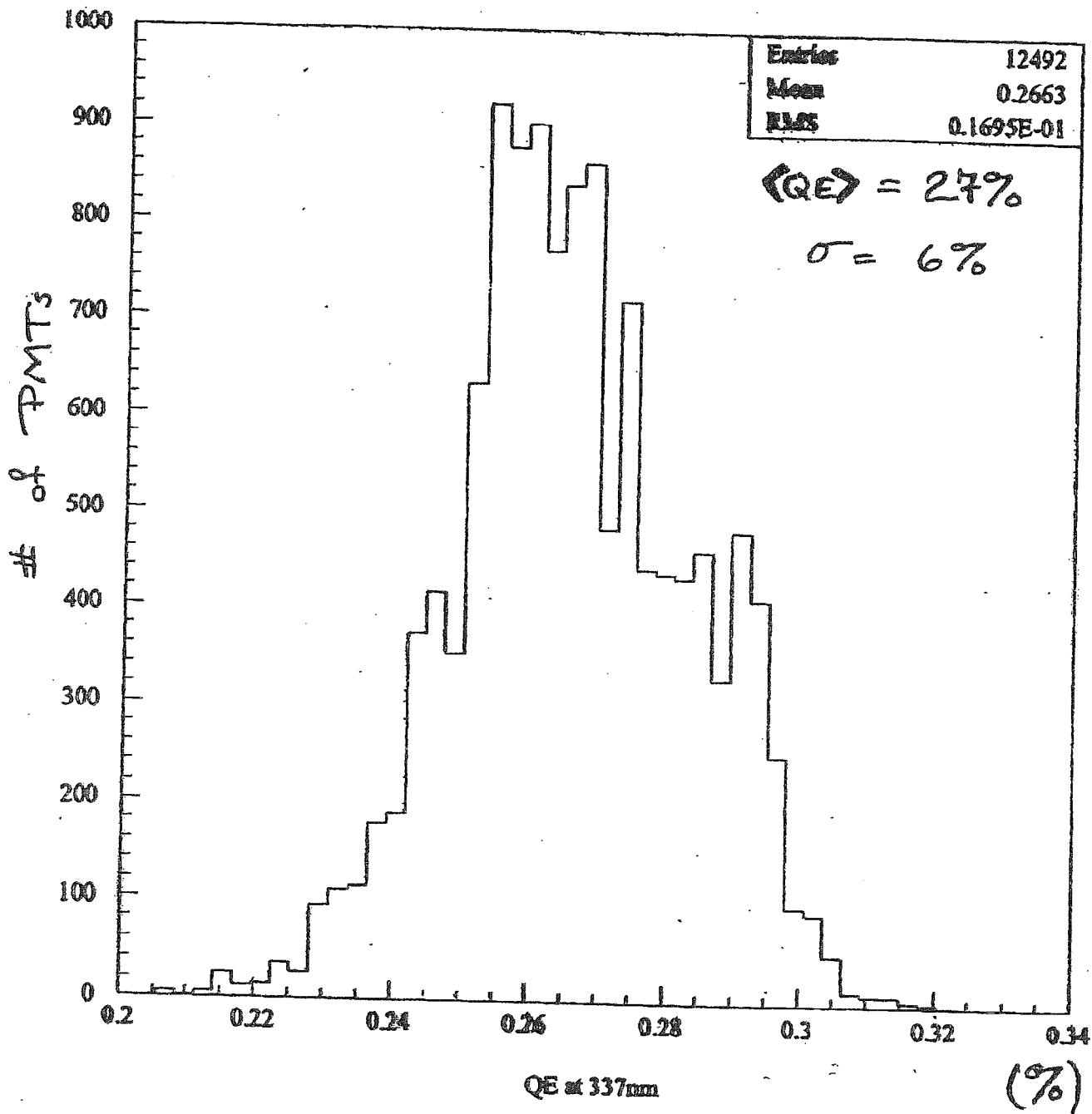
UV FLUX = MUG6
SCHMIDT CORPCTOR = BK7?

Cumulative Fluorescence Detector Efficiency
(at 0° = optical axis)



HiRes PMT effic VS wavelength





Quantum Efficiency at $\lambda = 337\text{nm}$

- ▷ Need QE at several wavelengths
- ▷ QE should include efficiency for e^- capture on 1st dynode Photons

*P. Facal San Luis
& P. Privitera, GAP-2000-010*

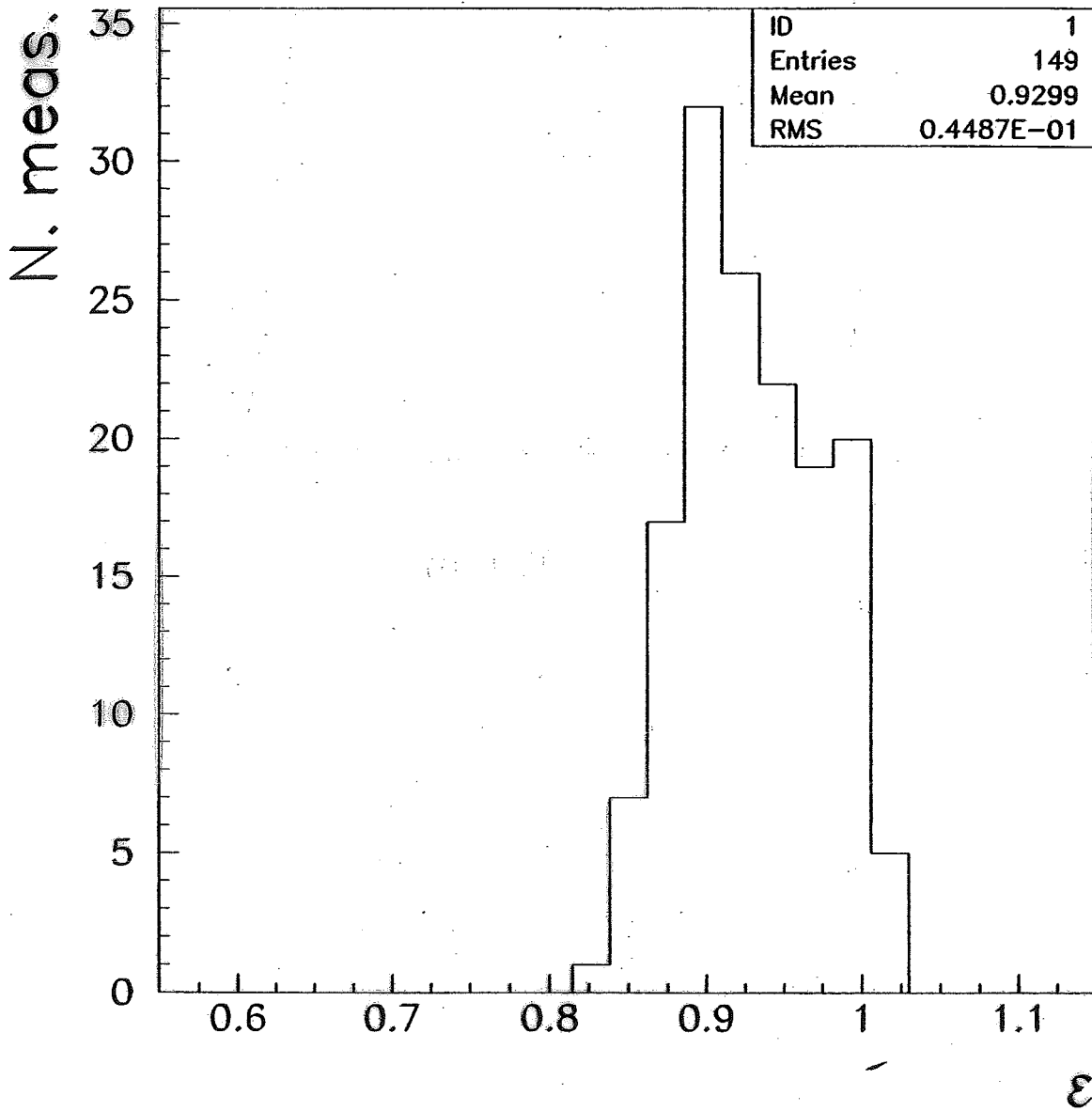


Figure 13: Distribution of the light collection efficiency ϵ in the central pixel.

*Need to update this measurement
for larger angle rays with the
Schmidt corrector ...*