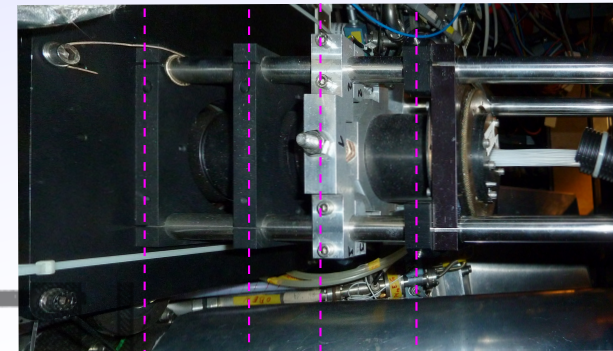
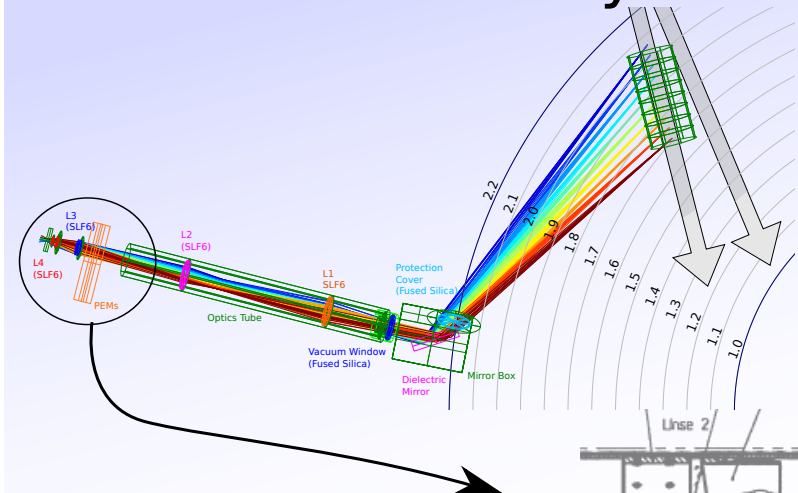
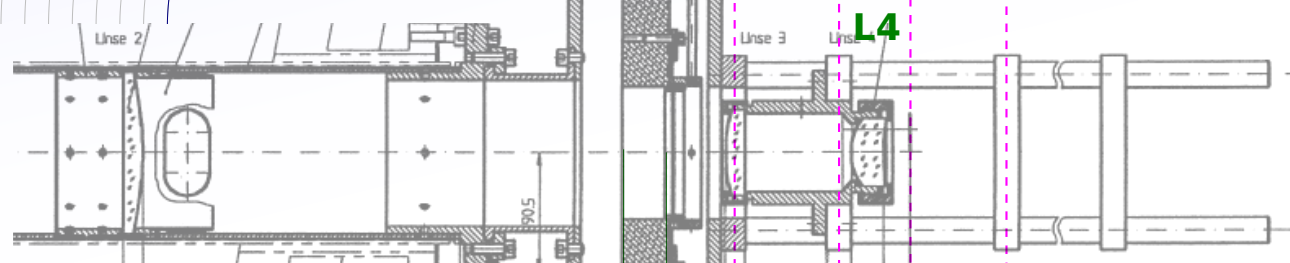




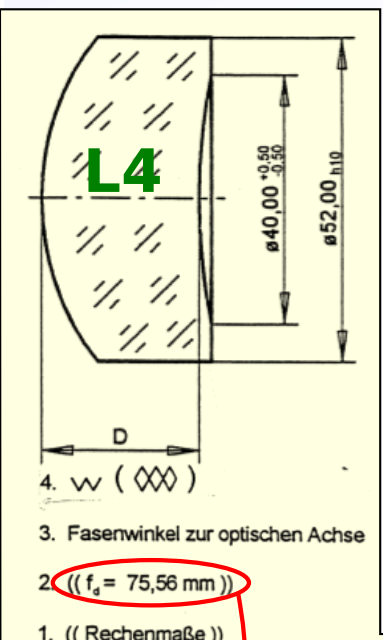
Ray Tracing - What's wrong with Lens 4?



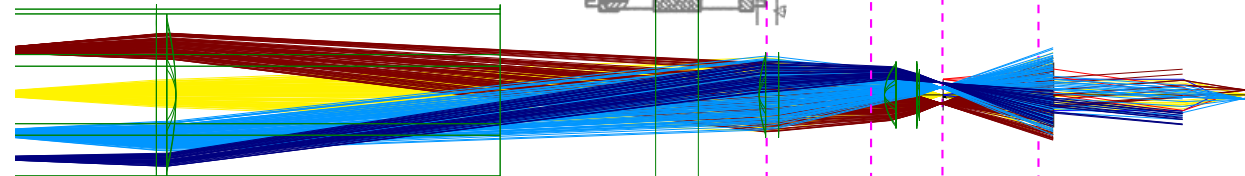
Photograph (28/03/12) (Perspective corrected).



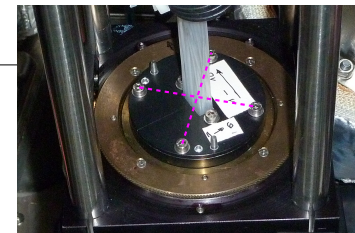
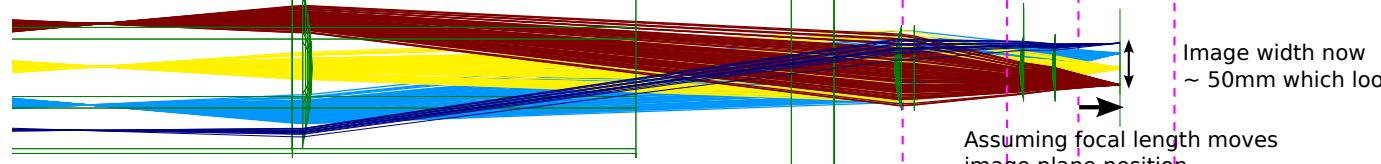
Technical Drawing



1) Trust curvature Radii:



2) Trust focal length, move image plane:

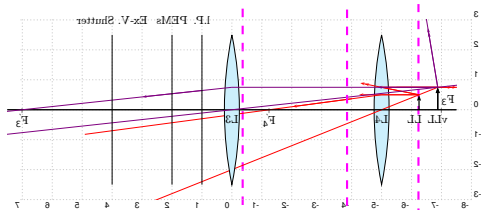


Curvature radii and thickness don't agree [T. Löbhard]

$R = 42,322 (4360)$	$n_d = 1,80518 \pm 0,0010$	$R = -102,408 (7030)$
freier \varnothing 47,0	$v_d = 25,39 \pm 0,8 \%$	freier \varnothing 35,0
3/5 (2) -	1/1 x 0,40	3/5 (2) -
4/0'	2/02	4/4'
5/3 x 0,25 ; R0,5	6/10	5/3 x 0,25
$\otimes T_{656 \text{ nm}}$		$\otimes T_{656 \text{ nm}}$
Fase 0,0	$D = 25,0 \pm 0,3$	Fase 0,5 $\pm 0,1/45^\circ$

2) Trust focal length, change something else.

T. Löbhard assumed focal length but kept image position. Implies rays parallel through PEMs (which is compelling) but would require something else to be wrong.



Where is the image plane??