

Study of the Ghost effect on tunable lens

Conception of testbench and characterisation

Design and building of a testbench to characterise flare on TLens

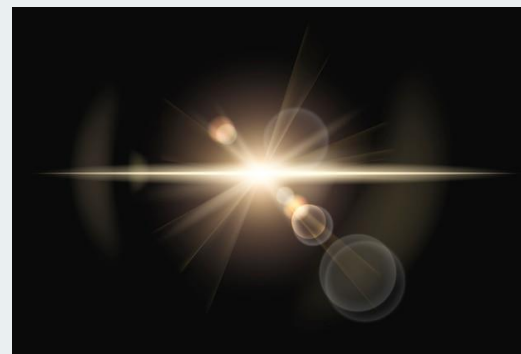
Polight AS developed a tunable lens called TLens, a new technology of optical lens, focusing by changing physical form.

New technology brings new possibilities but also new challenges. One of the unknown principle around this TLens is how the light beam reflects inside the lens, and what kind of interference is created. The most visible parasite is known as “ghost effect”.

We design here a testbench to systematically test all new camera modules or lenses.

Results

Changing the position of the TLens inside the camera module gives possibilities to reduce flares but decrease the capabilities of the lens itself. Other methodes such as coating gives also good results. There is here many possible upgrades anf fields of research, such as increase resolution or study by polymer characteristics.



- Ghost effect



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