



- 1 *Monolithic freeform lens design for night vision devices.*
- 2 *Manufactured prototype.*

OPTICAL SYSTEM DEVELOPMENT FROM THE IDEA TO PROTOTYPE

The Fraunhofer IOF offers you the entire development of optical systems from one source. You have a contact person who will accompany you from your idea to the prototype or to system integration. The Fraunhofer IOF coordinates and ensures the processing of all individual areas through its excellent experts.

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System conception

- Development of optimized solutions meeting the economic boundary conditions

Optical design

- Imaging and non-imaging optics
- Standard and diffractive optical components

System analysis

- Simulation of optical components and assemblies
- Stray light analysis

Tolerancing

- Component tolerances
- Alignment tolerances

Mechanical construction

- Functional modules
- Adjustment strategies, tools, and machines

Mechanical simulation

- Thermal analysis
- Stress and deformation analysis

Prototype manufacturing, assembly, and test

- Assembly and test
- Measurement of key parameters

System integration

- Support with integration in final product
- Transfer to production