# SCHOTT RealView® – High Index Glass Wafer for Augmented Reality


## Product Information

The still unimaginable cosmos of Augmented Reality experience is expected to change our everyday life – during work, during leisure time, the way we communicate.

High index glass wafer are a key component in the optical system influencing the visual user experience, such as Field-of-View (FoV) and image quality.

Our customers have in SCHOTT a strong partner, committed to innovation, high quality and reliable mass production.

| **Augmented Reality device requirement** | **Customizeable properties of SCHOTT RealView®** | **Typical properties** |
|---|---|---|
| Field of view | Refractive index | 1.5, 1.6, 1.7, 1.8, 1.9 |
| Image quality (resolution, contrast, brightness, ...) | High transmission | Optical glass grade |
| | Low birefringence | No polarization dependency of waveguide |
| | High homogeneity | Optical glass grade |
| | Flatness and thickness homogeneity | TTV < 0.8 µm |
| | | Local slope < 0.16 arcmin |
| | | Wedge < 0.03 arcmin |
| | | Warp* uncoated / coated < 20 µm / < 50 µm |
| | | BOW* uncoated / coated < 10 µm / < 20 µm |
| | Roughness uncoated / coated | $R_a$ < 1.0 nm / 1.5 nm |
| | Anti reflective coating | Tailormade to customer requirements |
| | Cosmetic | 40 / 20 scratch / dig |
| Form factor (light, weight, thin) | Low wafer thickness | ≥ 0.3 mm |
| | Specific weight | Depending on glass type |
| | Glass strength and stability | Compatible with automated wafer handling equipment |
| Mass manufacturing process | Wafer size | 150 mm, 200 mm, 300 mm |
| | High volume processing and quality control | Full metrology capabilitites in mass production environment. Statistical process control established. |

All data can be adapted on request. Please contact your SCHOTT representative.

*depending on wafer size, thickness and coating

SCHOTT
glass made of ideas

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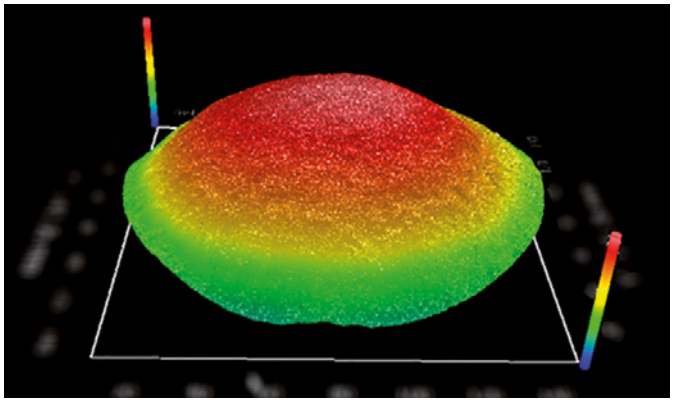
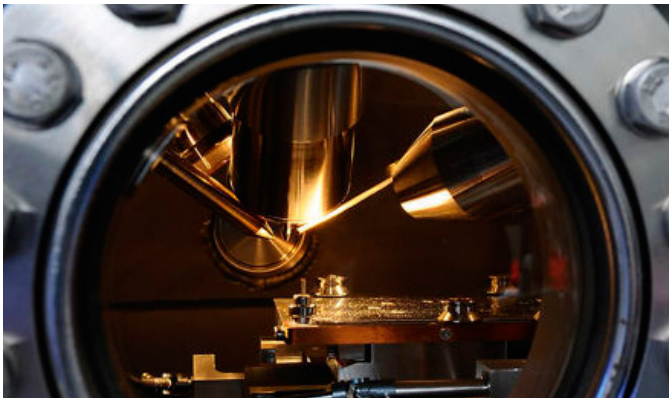


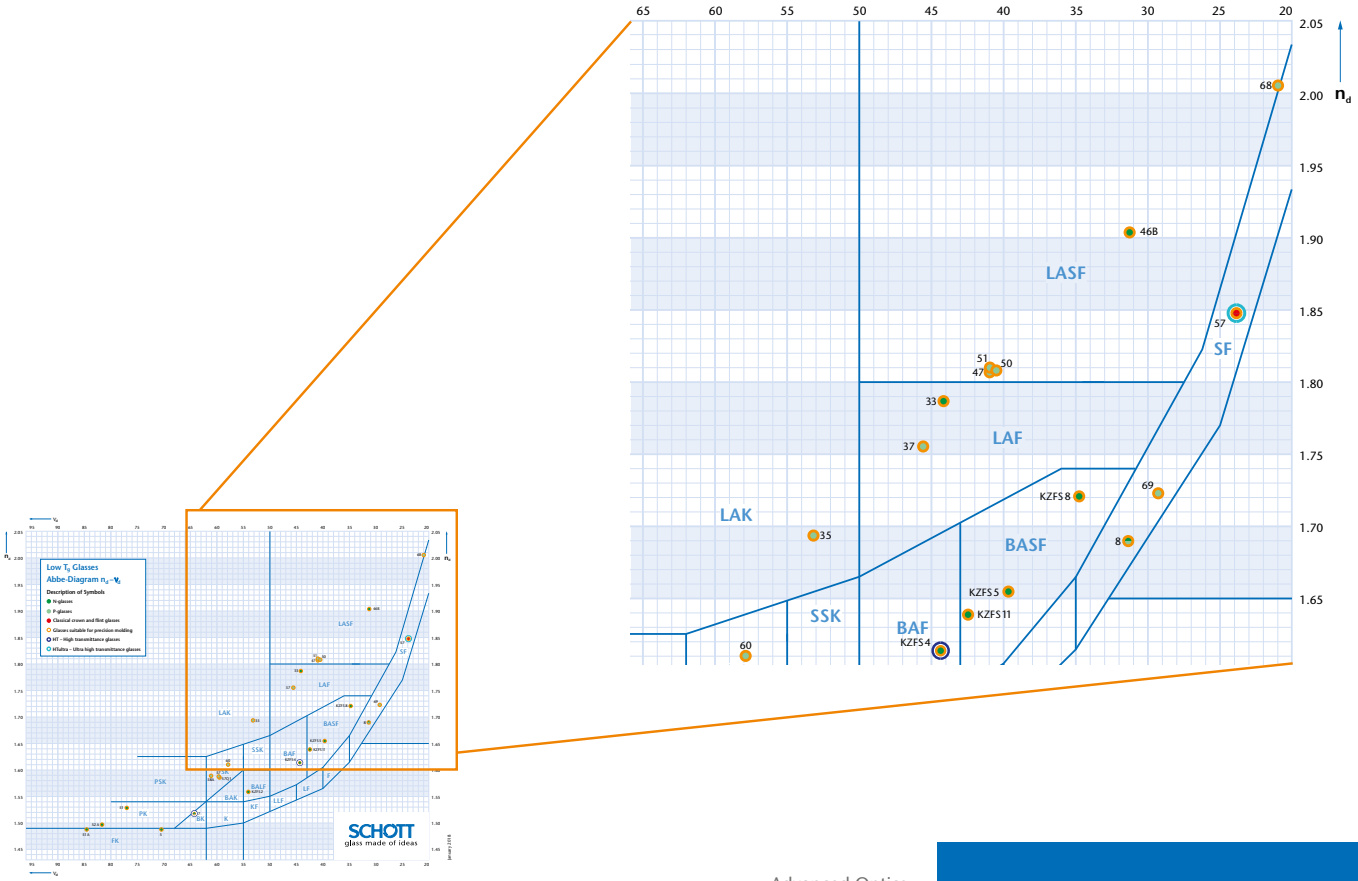
TTV Metrology



Coating Chamber

With our portfolio of more than 120 optical glasses, SCHOTT is an expert in mass manufacturing optical materials with properties tailored for our customer's applications. Our manufacturing capabilities cover raw glass melting, wafer manufacturing, optical coatings fulfilling the tightest specifications of the industry.

**Our team is keen to learn more about your needs!**






Advanced Optics
**SCHOTT AG**
Hattenbergstrasse 10
55122 Mainz
Germany
Phone +49 (0)6131/66-1695
real.view@schott.com

**www.schott.com/advanced_optics**

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