

Custom Special Optical Lenses Optical Performance Test Report

Felix Glass Brand Intro & Document ID

Felix Glass specializes in custom precision optical components for machine vision, laser systems, medical optics, spectroscopy and industrial imaging. OEM & ODM manufacturing services are available worldwide. Document No. : FG-CUSL-001 | Rev.1.0 | Issue Date:2026

Test Equipment

Interferometer, spectrophotometer, centration tester, laser damage threshold tester, beam propagation analyzer, thermal cycling test chamber

Full Test Parameters for Custom Lenses

- Dimensional tolerance of diameter, thickness and curvature
- Focal length accuracy and wavefront distortion
 - Lens centration deviation & surface flatness grade
- Spectral transmittance curve at customer specified wavelength
- Coating adhesion, temperature shock and scratch resistance
- Laser induced damage threshold (LIDT) for laser custom lenses
- Imaging distortion and chromatic aberration correction effect for achromatic lenses

Batch Test Summary

- Achromatic doublets: Obvious chromatic aberration elimination, high resolution for multi-band imaging
- Cylindrical lenses: Uniform linear beam output, low distortion for scanning systems
- IR ZnSe custom lenses: Stable mid-infrared transmittance for thermal imaging devices
- Aerospace ultra-precision lenses: Ultra-low tolerance wavefront error for airborne optical systems
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Test Conclusion

Every batch of custom special lenses passes full optical performance testing; complete customized test data reports can be provided for customer project audit and third-party certification review.

The information contained in this document is provided for reference only. Final specifications are subject to mutually approved engineering drawings, production capability review, and customer project requirements.

Hong Kong Felix Glass Co., Limited Custom Optical Components ManufactureR www.felixglass.com | sales@felixglass.com