

ISO 17411:2022-12 (E)

Optics and photonics - Optical materials and components - Test method for homogeneity of optical glasses by laser interferometry

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Measuring apparatus	2
5.1	General	2
5.2	Laser interferometer	3
5.3	Interferogram analysis device	3
5.4	Thermostatic chamber	3
5.5	Vibration isolation device	3
5.6	Biaxial adjustment platform	3
6	Preparation of test part	4
6.1	General	4
6.2	Transmission method	4
6.3	PHom method	4
6.4	Oil-on plate method	4
6.5	FT-PSI and SCI method	4
7	Operation	4
8	Measurement	5
8.1	General	5
8.2	Transmission method	5
8.3	PHom method	5
8.4	Oil-on plate method	6
8.5	FT-PSI method and SCI method	6
9	Calculation	6
10	Test report	7
10.1	Requirements	7
10.2	Optional	7
Annex A (informative) Laser interferometer		8
Annex B (informative) Temperature stability for homogeneity measurements		11
Annex C (normative) Measurement using oil-on plate method		14
Annex D (informative) Flatness of the test part		19
Annex E (informative) Method for obtaining WPV		20

Annex F (informative) Measurement using PHom (Polished test part Homogeneity) method	22
Annex G (normative) Method that can measure the linear change among the refractive index variations	24
Bibliography	27