

ISO 21395-2:2022-02 (E)

Optics and photonics - Test method for refractive index of optical glasses - Part 2: V-block refracto meter method

Contents	Page
Foreword.....	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principles	2
5 Measuring equipment	3
5.1 General.....	3
5.2 Light source.....	4
5.3 Bandpass filter.....	5
5.4 Slit.....	5
5.5 Collimator lens.....	5
5.6 V-block prism.....	5
5.7 Origin-point reference block.....	6
5.8 Telescope.....	6
5.9 Detector.....	7
5.10 Deviation-angle measuring device.....	7
5.11 Refractive index matching liquid.....	7
6 Shapes of origin-point reference block and specimen	7
6.1 General.....	7
6.2 Apex angle.....	7
6.3 Contact face with V-block prism.....	7
7 Measurement method	8
7.1 Measurement environment.....	8
7.1.1 Temperature.....	8
7.1.2 Atmospheric pressure.....	8
7.2 Measurement.....	8
7.2.1 General.....	8
7.2.2 Preparation for measurement.....	8
7.2.3 Setting of deviation-angle origin point (0°).....	8
7.2.4 Adjustment of V-block prism.....	9
7.2.5 Measurement of deviation angle.....	9
7.2.6 Calculation of refractive index.....	10
8 Indication	10
9 Test report	10
Annex A (normative) Refractive index matching liquid	12
Annex B (informative) Telescope with autocollimation function	14
Annex C (normative) Alternative measurement	15
Annex D (normative) Measurement with reference specimen	24
Bibliography	26