

DIN EN ISO 14880-3:2025-04 (E)

Optics and photonics - Microlens arrays - Part 3: Test methods for optical properties other than wavefront aberrations (ISO 14880-3:2024)

Contents

Page

European foreword.....	3
Foreword.....	4
Introduction.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	6
4 Substrate test.....	6
5 Microscope test method.....	6
5.1 Principle.....	6
5.2 Measurement arrangement and test equipment.....	7
5.2.1 General.....	7
5.2.2 Test system.....	8
6 Procedure.....	9
6.1 General.....	9
6.2 Measurement of effective back or front focal length.....	9
6.3 Measurement of chromatic aberration.....	9
6.4 Measurement of the uniformity of the focal spot positions.....	10
7 Results and uncertainties.....	10
8 Coupling efficiency, imaging quality.....	11
9 Test report.....	11
Annex A (informative) Measurements with wavefront measuring systems.....	13
Annex B (informative) Confocal measurement of effective back or front focal length of lens array.....	15
Annex C (informative) Coupling efficiency, imaging quality.....	17
Annex D (informative) Measurement of the uniformity of the focal spot positions of a microlens array.....	18
Bibliography.....	19