ISO 10110-8:2019-11 (E)

Optics and photonics - Preparation of drawings for optical elements and systems - Part 8: Surface text ure

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Description of surface texture 7
4.1 General 7
4.2 Description of matt surfaces 8
4.3 Description of optically smooth surfaces 8
4.3.1 Description methods 8
4.3.2 Rms roughness and rms waviness 8
4.3.3 Polish grades 9
4.3.4 Power spectral density (PSD) function 9
4.3.5 Area power spectral density (APSD) function 10
4.3.6 Rms slope 11
4.3.7 Area rms slope 11

5 Indication in drawings 11
5.1 General 11
5.2 Indication for matt surface texture 11
5.3 Indication for optically smooth surface texture 12
5.3.1 Optically smooth surface without quantitative modification 12
5.3.2 Indication of smoothness by polish grade 12
5.3.3 Indication of rms roughness and rms waviness 13
5.3.4 Indication of PSD function specification 13
5.3.5 Indication of APSD function specification 13
5.3.6 Indication of rms or area rms slope specification 14
5.3.7 Indication of lay 14
5.4 Location 15

Annex A (informative) Relationship between surface texture and scattering characteristic of textured surfaces 16

Annex B (informative) Examples of indication of surface texture requirements 18

Bibliography 22