

DIN EN ISO 11146-1:2021-11 (E)

Lasers and laser-related equipment - Test methods for laser beam widths, divergence angles and beam propagation ratios - Part 1: Stigmatic and simple astigmatic beams (ISO 11146-1:2 021)

Contents		Page
European foreword.....		3
Foreword.....		4
Introduction.....		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Coordinate systems	12
5	Test principles	12
5.1	Applicability.....	12
5.2	Beam widths and beam diameter.....	12
5.3	Beam divergence angles.....	13
5.4	Beam propagation ratios.....	13
5.5	Combined measurement of beam waist locations, beam widths, beam divergence angles and beam propagation ratios.....	13
6	Measurement arrangement and test equipment	13
6.1	General.....	13
6.2	Preparation.....	13
6.3	Control of environment.....	14
6.4	Detector system.....	14
6.5	Beam-forming optics and optical attenuators.....	14
6.6	Focusing system.....	15
7	Beam widths and beam diameter measurement	15
7.1	Test procedure.....	15
7.2	Evaluation.....	15
8	Measurement of divergence angles	17
8.1	Test procedure.....	17
8.2	Evaluation.....	17
9	Combined determination of beam waist locations, beam widths, divergence angles and beam propagation ratios	17
10	Test report	19
Bibliography		22