

ISO 11146-1:2005-01 (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

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Coordinate systems	6
5	Test principles	6
5.1	Applicability	6
5.2	Beam widths and beam diameter	6
5.3	Beam divergence angles	6
5.4	Beam propagation ratios	6
5.5	Combined measurement of beam waist locations, beam widths, beam divergence angles and beam propagation ratios	7
6	Measurement arrangement and test equipment	7
6.1	General	7
6.2	Preparation	7
6.3	Control of environment	7
6.4	Detector system	7
6.5	Beam-forming optics and optical attenuators	8
6.6	Focusing system	8
7	Beam widths and beam diameter measurement	8
7.1	Test procedure	8
7.2	Evaluation	8
8	Measurement of divergence angles	10
8.1	Test procedure	10
8.2	Evaluation	10
9	Combined determination of beam waist locations, beam widths, divergence angles and beam propagation ratios	11
10	Test report	13
Bibliography		16