

DIN EN ISO 13694:2019-06 (E)

Optics and photonics - Lasers and laser-related equipment - Test methods for laser beam power (energy) density distribution (ISO 13694:2018)

Contents	Page
European foreword	3
Foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
3.1 Measured quantities	6
3.2 Characterizing parameters	8
4 Coordinate system	12
5 Characterizing parameters derived from the measured spatial distribution	12
6 Test principle	12
7 Measurement arrangement and test equipment	13
7.1 General	13
7.2 Preparation	13
7.3 Control of environment	13
7.4 Detector system	13
7.5 Beam-forming optics, optical attenuators, and beam splitters	14
8 Test procedure	14
8.1 Equipment preparation	14
8.2 Detector calibration procedure	15
8.2.1 Spatial calibration	15
8.2.2 Power (energy) calibration	15
8.3 Data recording and noise correction	15
8.3.1 General	15
8.3.2 Correction by background-map subtraction	16
8.3.3 Correction by average background subtraction	16
9 Evaluation	17
10 Test report	17
Annex A (informative) Test report	18
Bibliography	21