

## System for measuring the energy density (power) of a focused beam of pulsed laser radiation

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*A method is described for determining the energy density (power) of pulsed laser radiation when introducing a reference material into the optical processing plane, which makes it possible to eliminate the influence of the physicochemical properties of the materials under study. The parameters of the focused laser beam were determined by measuring the energy absorbed by the standard and the area of the irradiation spot remaining on it after interaction with the laser beam. In the event of destruction of the sample under study, it remains possible to determine the energy density (power) of the applied laser radiation. This method can be applied in the field of studying the interaction of laser radiation with matter, in particular, determining the optical resistance (strength) of materials.*

**Keywords:** laser, nanosecond pulse, irradiation spot area, laser radiation energy density, optical stability.

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