REPRODUCIBILITY OF THE STATISTICAL DISTRIBUTION OF GAUSSIAN OPTICAL FIELD COUNTS ON A LINEAR INTEGRAL TRANSFORMATION

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S u m m a r y

The paper deals with the problem of linear integral transformations of Gaussian optical fields and the statistical distribution of photocounts. For the case of incoherent optical radiation which can be described in terms of a scalar normal Markovian complex process, it is shown that generating functions of these distributions are similar. We suggest to use the similarity of generating function to estimate the radiation spectral line width.