

# Influence of the spatial structure of a reference (reading) wave on the spatial selectivity of an amplitude dynamic hologram in a dye solution

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## Abstract

The paper investigates the angular dependence of diffraction efficiency of a dynamic hologram in a dye solution generated by a three- and four-level term scheme, taking into account the reference wave divergence. An expression is obtained that relates the band width of angles of a dynamic hologram to its optimal thickness and the reference wave angular divergence, the limits of the expression application are determined.

**Keywords:** diffraction, hologram, three- and four-level scheme, reference wave.

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