

# Optimization technology for three-dimensional DOEs with preset focusing properties in the far zone

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## Abstract

Over the past century, considerable progress has been achieved in the research of diffractive optical elements (DOEs) in the microwave and millimeter wavelength range [1, 2]. The works [3, 4] summarize the recent research results on the focusing and frequency properties of DOEs in the millimeter wavelength range (MMWR). For the computational experiments aimed at research and optimization of the focusing properties of MMDV DOEs on an arbitrary surface, it seems relevant to highlight the main patterns describing the dependence of the DOE properties on certain parameters, and use the data obtained to develop a technology and general structure of an algorithm for optimizing DOE focusing properties in the far zone.

**Keywords:** diffractive optical elements, DOEs, microwave range, millimeter wavelength, MMWR, focusing propertie.

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[Access full text \(in Russian\)](#)

## References

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