

The influence of random errors in measurement of eye transverse aberrations on the accuracy of reconstructing wave aberration as well as ametropia (mean power) and astigmatism parameters is investigated. The dependence of mentioned errors on a ratio between the number of measurement points and the number of polynomial coefficients is found for different pupil location of measurement points. Recommendations are proposed for setting these ratios. Key words: wave-front deformation, eye transverse aberrations, Zernike polynomials, least-squares technique, astigmatism, errors.

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