
Investigation and design of a compact periscope-type zoom lens

© V.G. Pospikhov, A.V. Krioukov

Bauman Moscow State Technical University, Moscow, 105005, Russia

Design of a compact periscope-type zoom lens is considered. The problems of basic (thin component) scheme design and aberration correction are covered. The scheme is based on a two moving component zoom system. Modeling of merit functions for the scheme optimization by different special software such as OPAL and ZEMAX is discussed.

Keywords: *periscope-type zoom lens, compact zoom lens, optical system optimization, mobile phone lens, built-in camera of a tab-computer*

Pospikhov V.G. (b. 1937) graduated from Bauman Moscow Higher Technical School in 1961. Ph.D., Assoc. Professor of the Optoelectronic Research Devices Department of Bauman Moscow State Technical University. Author of more than 50 scientific publications in the field of optical systems design. e-mail: vychposp@yandex.ru

Krioukov A.V. (b. 1973) graduated from Bauman Moscow State Technical University in 1998. Ph.D., Assoc. Professor of the Optoelectronic Research Devices Department of the Bauman Moscow State Technical University. Author of more than 30 scientific publications in the field of optical systems design. e-mail: alex_krioukov@mail.ru
