3D shadowgram projection using a simple diffractive screen

José Joaquín Lunazzi,Noemí Inés Rodríguez Rivera
Laboratório de óptica, Instituto de Física - UNICAMP

We present a new system where a 3D object is projected on a diffractive screen, which is just a simple diffractive holographic lens. The object is illuminated with an extended filament of a white light lamp and no additional element is necessary. The system forms three-dimensional (3D) images with normal depth (orthoscopic) of the shadow type. The continuous parallax, perfect sharpness and additional characteristics of the image depend on the width and extension of the luminous filament and the properties of the diffractive lens.

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