

Title: Study of physical parameters of Diffractive Optical Elements, fabricated using a new technique.

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Abstract : Photoresists have the property of light sensitivity, which has brought about revolutionary changes in electronics industry, and they are now being routinely used in the fabrication of Diffractive Optical Elements (DOEs), for wide spread applications in designing sophisticated optical systems, in optoelectronics and other fields of modern optics. We describe a technique for the fabrication of DOEs which combines the principles of colorimetry and computer graphics to fabricate primary masks, that has yielded wonderful results. The physical characteristics like the width and depth of the fine structures fabricated using this method have been analysed to gain insight into the accuracy of the methodology.