

## Fraunhofer Diffraction of a Circular Aperture Partially Masked by Polarizers

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*ABSTRACT* : Fourier analysis has revealed several analogies between optics and communication theory, which lent better understanding of a number of optical phenomena in the light of communication theory. The phenomenon of polarization has now become important both in the field of optical imagery and communication. It is well-known that the imaging properties of optical systems are determined by the diffraction properties of their apertures. This calls for a systematic study of diffraction properties of different apertures in presence of zonal polarization masking devices. In the present paper we study the diffraction properties of a circular aperture zonally masked by two linear polarizers in presence of an linear polarizer at the output.

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*Key words* : **Polarization Fourier optics, Vector wave diffraction.**

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