

## Variational analysis of arbitrarily oriented thick iris coupling a rectangular and an elliptical waveguide

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Elliptical waveguide is receiving growing interest for likely application to tuningless dual mode filters. Its coupling to a rectangular waveguide takes often place via a thick rectangular iris that can be rotated with respect to the axes of both guides. In this contribution we develop an accurate fullwave multimode variational approach of the coupling iris including the complete Green's functions of both guides and accounting for the 90/spl deg/-edge condition in the field expansions on the iris apertures.

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