

## Scattering by a Ferrimagnetic Circular Cylinder in a Rectangular Waveguide

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A general and rigorous formulation of the scattering by a dc magnetized ferrimagnetic cylinder in a rectangular waveguide is derived. This formulation leads to an approximate solution whose error can be quantitatively estimated. As an example, the case in which the ferrimagnetic cylinder is centrally placed is solved. It is shown that previously existing approximate solutions are not valid for the resonant situation in view of their accuracy.

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