

## Radiation Pattern Prediction of the Unidirectional Dielectric Radiator (UDR)

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*H. An, K. Wu and R.G. Bosisio. "Radiation Pattern Prediction of the Unidirectional Dielectric Radiator (UDR)." 1994 Microwave and Guided Wave Letters 4.11 (Nov. 1994 [MGWL]): 367-369.*

This letter presents a theoretical prediction of the radiation patterns of the unidirectional dielectric radiator (UDR) using a cavity approximation. The antenna structure is first modeled as an NRD resonator, and the electromagnetic fields at the radiating aperture of the antenna structure are then determined and used to calculate the radiation fields and the radiation patterns of the antenna. The validity of the analysis is confirmed by the measurement results.

 [Return to main document.](#)