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Title *Application of Wire Grid Structures for Broadbanding of Monolithic Radomes*

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Abstract

This report deals with the application of metallic wire grid structures for the enhancement of EM performance of monolithic radomes. Single and double wire grid structures and the wire grid embedded in the dielectric slab are the configurations selected for broadbanding. EM performance parameters, viz. power transmission, power reflection and insertion phase delay for both perpendicular and parallel polarizations are evaluated for a wide range of frequencies at different angles of incidence. The study shows that the wire grid structures improve the EM performance of the monolithic radomes significantly.