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4.2 Inorganic Materials; 4.3 Dual Mode (RF/IR) Materials; 4.3.1 Nonorganic Dual-Mode Materials; 4.3.2 Organic Dual-Mode Materials; 4.4 Effect of Radome Material on Antenna Performance; 4.4.1 Receiver Noise; 4.4.2 Noise Temperature Without Radome; 4.4.3 Noise Temperature with Radome; References; Part II Radome Analysis Techniques; 5 Dielectric Wall Constructions
5.1 Mathematical Formulation for Radome Wall Transmission
5.1.1 Mathematical Formulation for Radome Wall Transmission; 5.1.2 Transmission Coefficients for Circular Polarization; 5.1.3 Transmission for Elliptical Polarization; 5.2 Radome Types, Classes, and Styles
5.2.1 Definition; 5.2.1 Radome Type Definitions; 5.2.2 Radome Class Definitions; 5.2.3 Radome Style Definitions; 5.3 Wall Style Electrical Performance; 5.3.1 Half-Wave Wall Radomes (Style a); 5.3.2 Thin Walled Radomes (Style b); 5.3.3 A Sandwich Radome (Style c); 5.3.4 Multilayer Radomes (Style d); 5.3.5 B-Sandwich Radomes (Style e)

Sommario/riassunto

A radome is a structural, weatherproof enclosure that protects microwave and radar antenna from ice, freezing rain, wind, and debris. This new, updated edition to an Artech House classic provides a current, comprehensive overview of the design and analysis of radomes. The second edition includes a wealth of new material, including three new chapters on radome measurement techniques, environmental effects on radomes, and new radome technology. This unique book helps professionals to design radomes for top performance, understand the effect a radome has on a particular antenna's operation, and become knowledgeable about how to specify acceptable radome equipment. Over 130 illustrations and more than 250 equations support key topics throughout the book. CD-ROM Included! Includes powerful codes and highly useful tools that help professionals estimate the electrical performance degradation that may occur when an antenna system is enclosed by a radome.
