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Nota di contenuto	Reflectarray Antennas Analysis, Design, Fabrication, and Measurement; Contents; CHAPTER 1 Introduction; 1.1 General Background; 1.2 Why Reflectarrays?; 1.3 The Structure of the Book; References; CHAPTER 2 Fundamentals of Reflectarray and General Design Guidelines; 2.1 General Design Equations; 2.2 Aperture Efficiency of Reflectarray and Comparison with Conventional Parabolic Reflector; 2.2.1 Illumination Efficiency; 2.2.2 Spillover Efficiency; 2.2.3 Polarization Efficiency; 2.2.4 Phase Efficiency; 2.2.5 Blockage Efficiency; 2.2.6 Dielectric and Conductor Loss. 2.3 Simplest Reflectarray Cell Element: Microstrip Patch 2.3.1 Phase Versus Length Curves; 2.3.2 General Trends for Phase-Length Characteristics of the Patch; References; CHAPTER 3 Different Types of Cell Elements for Reflectarrays; 3.1 Resonant Cell Elements; 3.1.1 Patch Element; 3.1.2 Multiresonant Patch Cell Elements; 3.2 Loop Elements; 3.3 Phase Shift by Loading Resonant E.
Sommario/riassunto	Reflectarray antennas refer to the class of radiating structures that are comprised of an array of radiating elements, re-radiating the energy that is impinged on them from one or more radiating feeds that are located in free space. The constituent radiators that build a reflectarray can be shaped to bring about some flexibility in the way that antenna operates such as multi band/polarization operation. The printed nature of these elements allow integration of active elements that can further

enhance the functionality of the reflectarray. This allows for capabilities such as power amplification, adaptive beam shaping, and beam switching. This resource presents readers with design guidelines along with an ample amount of material on different types of reflectarrays and methods of analysis. This book begins with introductory material on reflectarray antennas and progresses to the presentation of state-of-the-art research in the field. A direct comparison with conventional reflector antennas is provided, focusing on conventional efficiency figures of reflectors. Moreover, this book offers remarks on the future direction of reflectarray research and also potential applications of the technology in face of the emergence of new fabrication techniques to accommodate both passive and active elements.