1. Record Nr. UNINA9910780065903321

Autore	Wheelon Albert D (Albert Dewell), <1929-2013, >
Titolo	Electromagnetic scintillation . Volume 1 Geometrical optics / / Albert D. Wheelon [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2001
ISBN	1-107-12291-0 0-511-01338-8 1-280-43316-7 9786610433162 0-511-17436-5 0-511-15418-6 0-511-30359-9 0-511-53480-9 0-511-04773-8
Descrizione fisica	1 online resource (xviii, 455 pages) : digital, PDF file(s)
Disciplina	539.2
Soggetti	Electromagnetic waves - Transmission
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Geometrical optics.
Sommario/riassunto	Electromagnetic Scintillation describes the phase and amplitude fluctuations imposed on signals that travel through the atmosphere. The volumes that make up Electromagnetic Scintillation will provide a modern reference and comprehensive tutorial, treating both optical and microwave propagation and integrating measurements and predictions at each step of the development. This first volume deals with phase and angle-of-arrival measurement errors, accurately described by geometrical optics. It will be followed by a further volume examining weak scattering. In this book, measured properties of tropospheric and ionospheric irregularities are reviewed first. Electromagnetic fluctuations induced by these irregularities are then estimated for a wide range of applications. The book will be of interest to those working in the resolution of astronomical interferometers and large

single-aperture telescopes, as well as synthetic aperture radars and laser pointing/tracking systems. It is also directly relevant to those working in laser metrology, GPS location accuracy, and terrestrial and satellite communications.