Record Nr. UNINA9911006642803321 Autore Kitchen Ronald Titolo RF and microwave radiation safety handbook / / Ronald Kitchen Pubbl/distr/stampa Oxford,: Newnes, 2001 **ISBN** 9786611013219 9781281013217 1281013218 9780080498065 008049806X Edizione [2nd ed.] 1 online resource (443 p.) Descrizione fisica Altri autori (Persone) KitchenRonald 621.384110289 Disciplina Soggetti Radio frequency - Safety measures Radio frequency - Physiological effect Radiation - Safety measures Radiation - Physiological effect Microwaves - Safety measures Microwaves - Physiological effect Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "First published 1993 by Butterworth-Heinemann as RF Radiation Safety Note generali Handbook"--T.p. verso. Nota di bibliografia Includes bibliographical references (p. 422-427) and index. Nota di contenuto Front Cover; RF and Microwave Radiation Safety Handbook; Copyright Page: Contents: Preface: Chapter 1. Introduction to RF and microwave radiation; Chapter 2. Sources of radio frequency radiation; Chapter 3. Effects of radio frequency radiation; Part 1 The exposure of human beings to RF radiation; Part 2 Incidents and accidents relating to RF exposure; Chapter 4. The development of standards for human safety; Part 1 Basic concepts of RF safety standards and guides for human exposure: Part 2 Typical current safety standards for human exposure Part 3 Safety calculations for structures involving flammable vapoursChapter 5. The calculation of RF field quantities; Part 1 Microwave antenna calculations and safety with moving microwave beams; Part 2 Other antenna system calculations; Part 3 Simultaneous irradiations and peak pulse power limits; Chapter 6. Mobile

communications systems; Chapter 7. RF radiation measuring

instruments and methods; Chapter 8. X-rays and X-ray measuring instruments; Chapter 9. Planning surveys and measurements; Chapter 10. Conducting radiation measurements and surveys; Part 1 Leakage surveys

Part 2 Exposure measurementsChapter 11. Designing to reduce radiation hazards; Chapter 12. Radio frequency radiation safety management and training; Appendix 1. Useful data and relationships; Appendix 2. Technical and organisation abbreviations; Appendix 3. Information sources including the Internet; References; Index

## Sommario/riassunto

The leading professional guide to RF and microwave safety issuesA practical handbook for all involved in electronic design and safety assessment, RF and Microwave Radiation Safety covers the problems of RF safety management, including the use of measuring instruments and methods, radiation hazards and risks resulting from electromagnetic interference, as well as reviewing current safety standards and the implications for RF design. The second edition takes into account a wide range of technical and legislative changes, and has been revised in line with the lates