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TECHNICAL REPORT



Case studies supporting IEC 62232 – Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CASE STUDIES SUPPORTING IEC 62232 – DETERMINATION OF RF FIELD STRENGTH AND SAR IN THE VICINITY OF RADIOCOMMUNICATION BASE STATIONS FOR THE PURPOSE OF EVALUATING HUMAN EXPOSURE

FOREWORD

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IEC 62669, which is a technical report, has been prepared by IEC technical committee 106: Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure.

This publication contains attached files in the form of a CD-ROM for the paper version and embedded files for the electronic version. These files are intended to be used as a complement and do not form an integral part of the technical report.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
106/199/DTR	106/208/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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INTRODUCTION

This technical report contains a series of case studies for the evaluation of electromagnetic (EM) sources in the frequency range 100 kHz - 300 GHz to support the methods detailed in the international standard IEC 62232, *Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure*. Using the methods detailed in the standard, each case study has been chosen to illustrate a typical radio base station (RBS) evaluation scenario.

CASE STUDIES SUPPORTING IEC 62232 – DETERMINATION OF RF FIELD STRENGTH AND SAR IN THE VICINITY OF RADIOCOMMUNICATION BASE STATIONS FOR THE PURPOSE OF EVALUATING HUMAN EXPOSURE

1 Scope

This technical report presents a series of case studies in which electromagnetic (EM) fields are evaluated in accordance with IEC 62232. It also provides a reporting template cross referenced to IEC 62232.

Each case study has been chosen to illustrate a typical radio base station (RBS) evaluation scenario and employs the methods detailed in IEC 62232. Some of the case studies demonstrate more than one evaluation method. However, in most situations only one method would be required to complete an evaluation.

The case studies documented in this report are provided for guidance only and are not a substitute for a thorough understanding of the requirements of IEC 62232.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62232: Determination of RF field strength and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure