

INTERNATIONAL STANDARD

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BASIC EMC PUBLICATION
PUBLICATION FONDAMENTALE EN CEM

**Electromagnetic compatibility (EMC) –
Part 4-20: Testing and measurement techniques – Emission and immunity
testing in transverse electromagnetic (TEM) waveguides**

**Compatibilité électromagnétique (CEM) –
Partie 4-20: Techniques d'essai et de mesure – Essais d'émission et d'immunité
dans les guides d'onde TEM**

WAVEGUIDE



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland
Email: inmail@iec.ch
Web: www.iec.ch

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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope and object.....	7
2 Normative references	7
3 Terms, definitions and abbreviations	8
3.1 Terms and definitions	8
3.2 Abbreviations	11
4 General	11
5 TEM waveguide requirements.....	12
5.1 General.....	12
5.2 General requirements for the use of TEM waveguides.....	12
5.2.1 TEM mode verification	12
5.2.2 Test volume and maximum EUT size	12
5.2.3 Validation of usable test volume	13
5.3 Special requirements and recommendations for certain types of TEM waveguides	15
5.3.1 Set-up of open TEM waveguides	15
5.3.2 Alternative TEM mode verification for a two-port TEM waveguide	16
6 Overview of EUT types	16
6.1 General.....	16
6.2 Small EUT.....	16
6.3 Large EUT.....	16
7 Laboratory test conditions	17
7.1 General.....	17
7.2 Climatic conditions	17
7.3 Electromagnetic conditions.....	17
8 Evaluation and reporting of test results.....	17
Annex A (normative) Emission testing in TEM waveguides.....	19
Annex B (normative) Immunity testing in TEM waveguides.....	40
Annex C (normative) HEMP transient testing in TEM waveguides	46
Annex D (informative) TEM waveguide characterization.....	53
Annex E (informative) Calibration method for E-field probes in TEM waveguides	61
Bibliography.....	71
Figure A.1 – Routing the exit cable to the corner at the ortho-angle and the lower edge of the test volume	30
Figure A.2 – Basic ortho-axis positioner or manipulator	31
Figure A.3 – Three orthogonal axis-rotation positions for emission measurements.....	32
Figure A.4 – Twelve-face (surface) and axis orientations for a typical EUT	33
Figure A.5 – Open-area test site (OATS) geometry	34
Figure A.6 – Two-port TEM cell (symmetric septum)	35
Figure A.7 – One-port TEM cell (asymmetric septum)	36
Figure A.8 – Stripline (two plates).....	38
Figure A.9 – Stripline (four plates, balanced feeding).....	39

Figure B.1 – Example of test set-up for single-polarization TEM waveguides	44
Figure B.2 – Uniform area calibration points in TEM waveguide	45
Figure C.1 – Frequency domain spectral magnitude between 100 kHz and 300 MHz	52
Figure D.1 – Simple waveguide (no TEM mode).....	59
Figure D.2 – Example waveguides for TEM-mode propagation.....	59
Figure D.3 – Polarization vector	59
Figure D.4 – Transmission line model for TEM propagation	59
Figure D.5 – One- and two-port TEM waveguides	60
Figure E.1 – An example of the measurement points for the validation.....	62
Figure E.2 – Setup for validation of perturbation	63
Figure E.3 – Setup for measuring net power to a transmitting device	66
Figure E.4 – Example of setup for calibration of E-field probe	67
Figure E.5 – Setup for calibration of E-field probe by another method.....	69
Figure E.6 – Equivalent circuit of antenna and measurement apparatus.....	70
Table 1 – Values K for expanded uncertainty with normal distribution	15
Table B.1 – Uniform area calibration points.....	42
Table B.2 – Test levels	42
Table C.1 – Radiated immunity test levels defined in the present standard	52
Table E.1 – Calibration frequencies	63
Table E.2 – Calibration field strength level.....	64

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY (EMC) –**Part 4-20: Testing and measurement techniques –
Emission and immunity testing in
transverse electromagnetic (TEM) waveguides**

FOREWORD

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International Standard IEC 61000-4-20 has been prepared by 77B: High-frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility, in cooperation with CISPR (International Special Committee on Radio Interference) subcommittee A: Radio interference measurements and statistical methods.

This second edition cancels and replaces the first edition published in 2003 and its amendment 1 (2006), and constitutes a technical revision.

It forms Part 4-20 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107.

The main changes with respect to the first edition of this standard and its amendment are the following:

- consistency of terms (e.g. test, measurement, etc.) has been improved;

- clauses covering test considerations, evaluations and the test report have been added;
- references to large TEM waveguides have been eliminated;
- a new informative annex has been added to deal with calibration of E-field probes.

The text of this standard is based on the following documents:

FDIS	Report on voting
77B/637/FDIS	77B/641/RVD

Full information on the voting for the approval of this standard 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.

A list of all parts of the IEC 61000 series, published under the general title *Electromagnetic compatibility (EMC)*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the stability result 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.

Withdrawn

INTRODUCTION

IEC 61000 is published in separate parts according to the following structure:

Part 1: General

General considerations (introduction, fundamental principles)

Definitions, terminology

Part 2: Environment

Description of the environment

Classification of the environment

Compatibility levels

Part 3: Limits

Emission limits

Immunity limits (in so far as they do not fall under the responsibility of the product committees)

Part 4: Testing and measurement techniques

Measurement techniques

Testing techniques

Part 5: Installation and mitigation guidelines

Installation guidelines

Mitigation methods and devices

Part 6: Generic Standards

Part 9: Miscellaneous

Each part is further subdivided into several parts, published either as International Standards, Technical Specifications or Technical Reports, some of which have already been published as sections. Others are and will be published with the part number followed by a dash and a second number identifying the subdivision (example: IEC 61000-6-1).

This part of IEC 61000 is an International Standard which gives emission, immunity and HEMP transient testing requirements.