

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Household and similar electrical appliances – Test code for the determination of
airborne acoustical noise –
Part 1: General requirements**

**Appareils électrodomestiques et analogues – Code d’essai pour la détermination
du bruit aérien –
Partie 1: Exigences générales**



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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope and object.....	7
1.1 Scope.....	7
1.1.1 General	7
1.1.2 Types of noise	7
1.1.3 Size of the source.....	7
1.2 Object	7
1.3 Measurement uncertainty	8
2 Normative references	8
3 Terms and definitions	9
4 Measurement methods and acoustical environments	10
4.1 General.....	10
4.2 Direct method.....	10
4.3 Comparison method	11
4.4 Acoustical environments.....	11
4.4.1 General requirements and criterion for adequacy of the test environment	11
4.4.2 Criterion for background noise level	11
4.4.3 Environmental conditions.....	12
5 Instrumentation	12
5.1 Instrumentation for measuring acoustical data.....	12
5.2 Instrumentation for measuring climatic conditions.....	12
5.3 Instrumentation for measuring operating conditions.....	12
6 Operation and location of appliances under test	12
6.1 Equipping and pre-conditioning of appliances.....	12
6.2 Supply of electric energy and of water or gas	13
6.3 Climatic conditions	13
6.4 Loading and operating of appliances during tests	14
6.5 Location and mounting of appliances.....	14
7 Measurement of sound pressure levels.....	16
7.1 Microphone array, measurement surface and RSS location for essentially free field conditions over reflecting plane(s)	16
7.2 Microphone array and RSS location in hard-walled test rooms	18
7.3 Microphone array and RSS location in special reverberation test rooms	18
7.4 Measurements.....	19
8 Calculation of sound pressure and sound power levels	19
8.1 General.....	19
8.2 Corrections for background noise levels	20
8.3 Corrections for the test environment.....	20
8.4 Calculation of sound pressure level averaged over the microphone positions	20
8.5 Calculation of sound power levels with the comparison method	21
8.6 Calculation of sound power levels in free field conditions over a reflecting plane.....	21
8.7 Calculation of A-weighted sound power level with the direct method in special reverberation test rooms.....	21

9	Information to be recorded.....	22
9.1	General data	22
9.2	Description of appliance under test	22
9.3	Measurement method.....	22
9.4	Acoustical test environment.....	22
9.5	Instrumentation	23
9.6	Equipment and pre-conditioning of appliance under test.....	23
9.7	Electric supply, water supply, etc.	23
9.8	Climatic conditions	23
9.9	Operation of the appliance under test.....	23
9.10	Location and mounting of the appliance under test.....	23
9.11	Microphone array	23
9.12	Measurement data.....	24
9.13	Calculated sound pressure and sound power levels	24
10	Information to be reported	24
10.1	General data 9.1	24
10.2	Appliance under test 9.2.....	24
10.3	Test conditions for the appliance	25
10.4	Acoustical data.....	25
	Annex A (normative) Standard test table.....	31
	Annex B (normative) Test enclosure	32
	Annex C (informative) Guidelines for the design of simple test rooms with essentially free field conditions	33
	Bibliography.....	34
	Figure 1 – Measurement surface – parallelepiped – with key microphone positions, for floor free-standing appliances	26
	Figure 2 – Measurement surface – parallelepiped – with key microphone positions, for floor standing appliances placed against a wall.....	26
	Figure 3 – Measurement surface – parallelepiped – with key microphone positions, for high floor-standing appliances placed against a wall.....	27
	Figure 4 – Measurement surface – hemisphere – with key microphone positions, for hand-held, table type and floor-treatment appliances	28
	Figure 5 – Measurement surface – quarter-sphere – with key microphone positions, for small floor-standing appliances placed against a wall	29
	Figure 6 – Measurement surface – parallelepiped – with five or nine microphone positions for stand-type appliances	30
	Figure A.1 – Example of standard test table.....	31
	Figure B.1 – Test enclosure	32

INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – TEST CODE FOR THE DETERMINATION OF AIRBORNE ACOUSTICAL NOISE –

Part 1: General requirements

FOREWORD

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International Standard IEC 60704-1 has been prepared by IEC technical committee 59: Performance of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 1997 and constitutes an update and an editorial revision. It also includes the description of an appropriate test enclosure for appliances to be built in.

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

FDIS	Report on voting
59/546/FDIS	59/549/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 the parts in the IEC 60704 series, under the general title *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise*, can be found on the IEC website.

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.

INTRODUCTION

Although the noise emitted by household appliances does not generally present a hazard to the hearing of the operator and other exposed persons, the need for standardization procedures for the determination of the noise emitted has been recognized for a long time. Such procedures should be specified, not only for special types of appliances, but also the principles should be applicable to the majority of appliances in general use.

Generally, the determination of noise levels is only part of a comprehensive testing procedure covering many aspects of the properties and performances of the appliance. It is therefore important that the requirements for noise measurements (such as test environment, instrumentation, and amount of labour involved) should be kept at a modest level.

The results of noise measurements will be used for many purposes, for example for noise declaration, as well as for comparing the noise emitted by a specific appliance to the noise emitted by other appliances of the same family. In other cases, the results will be taken as a basis for engineering action in the development stages of new pieces of equipment, or in deciding on means for sound insulation. For all purposes, it is important to specify procedures with known accuracy so that the results of measurements taken by different laboratories can be compared.

These conditions have, as far as possible, been taken into account in the preparation of this test code. The acoustic measuring methods are based on those described in ISO 3743-1, ISO 3743-2 and ISO 3744.

The adoption of these methods permits the use of semi-anechoic rooms, special reverberation test rooms and hard-walled test rooms. The result of the measurements is the sound power level of the appliance. Within the measuring uncertainty specific to these methods, the results from the determination under free field conditions over a reflecting plane are equal to those obtained in reverberant fields. The use of intensity methods as described in ISO 9614-1 and ISO 9614-2 is subject to a specific part 2.

It should be emphasized that this test code is concerned with airborne noise only. In some cases, structure-borne noise, for example transmitted to the adjoining room, may be of importance.