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PEOPLE'S REPUBLIC OF CHINA**

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**Acoustics -- Measurement of airborne noise emitted by
information technology and telecommunications equipment
(English Translation)**

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Table of Contents

Foreword...	4
ISO Foreword...	5
0 Introduction...	6
1 Scope...	6
2 Normative References...	7
3 Terms and Definitions...	8
3.1 General definitions...	9
3.2 Acoustical definitions...	10
4 Conformance Requirements...	12
5 Installation and Operating Conditions...	13
5.1 Equipment installation...	13
5.2 Input voltage and frequency...	15
5.3 Equipment operation...	15

Foreword

This Standard equivalently adopted the international standard ISO 7779.1999 (E) Acoustics
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Measurement of Airborne Noise Emitted by Information Technology and
Telecommunications

Equipment.

This Standard provides a uniform method for the measurement of airborne noise emitted by
information technology and telecommunications equipment.

The Annexes A, B and C of this Standard are normative.

The Annexes D and E of this Standard are informative, only for reference.

This Standard was proposed by Chinese Academy of Sciences.

This Standard shall be under the jurisdiction of the National Technical Committee on
Acoustics

of Standardization Administration of China.

Drafting organizations of this Standard. The 15th Research Institute of Electronics, Ministry

of

Information Industry; and Shanghai Electrical Apparatus Research Institute.

Chief drafting staffs of this Standard. Gao Wenfeng, Chen Yeshao, Zhou Zhenni, and Lian Jinmei.

Acoustics - Measurement of Airborne Noise Emitted by

Information Technology and Telecommunications Equipment

0 Introduction

This Standard specifies methods for the measurement of airborne noise emitted by information

technology and telecommunications equipment. Hitherto, a wide variety of methods have been

applied by individual manufacturers and users to satisfy particular equipment or application needs. These diverse practices have, in many cases, made comparison of noise emission difficult. This Standard simplifies such comparisons and is the basis for the declaration of the

noise emission levels of information technology and telecommunications equipment.

In order to ensure accuracy, validity and acceptability, this Standard is based on the basic Standards for determining the sound power level and for determining the emission sound pressure level at the operator position(s) and bystander position(s). Furthermore, implementation is simplified by conformance with these Standards.

In many cases free-field conditions over a reflecting plane are realized by hemi-anechoic rooms.

These rooms may be particularly useful during product design to locate and to improve individual contributing noise sources. Reverberation rooms may be more economical for production control and for obtaining sound power levels for noise emission declaration purposes.

The method for measuring the emission sound pressure level at the operator or bystander positions (based on GB/T 17248.2) is specified in a separate clause, as this level is not considered to be primary noise emission declaration information. The measurements can,

however, be carried out in conjunction with those for sound power determination in a free field

over a reflecting plane.

For comparison of similar equipment, it is essential that the installation conditions and mode of

operation are the same. In Annex C these parameters are standardized for many categories of

equipment.

1 Scope

This Standard specifies procedures for measuring and reporting the noise emission of information technology and telecommunications equipment. This standard is considered part

of a noise test code for this type of equipment, and is based on basic noise emission standards

ISO 3741, GB/T 3767, GB/T 6882 and GB/T 17248.2. The basic emission quantity is the A-

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