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# Acoustics — Reference zero for the calibration of audiometric equipment —

# Part 5:

Reference equivalent threshold sound pressure levels for pure tones in the frequency range 8 kHz to 16 kHz

Acoustique — Zéro de référence pour l'étalonnage d'équipements audiométriques —

Partie 5: Niveaux de référence équivalents de pression acoustique liminaire pour les sons purs dans le domaine de fréquences de 8 kHz à 16 kHz



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### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 389-5 was prepared by Technical Committee ISO/TC 43, Acoustics.

This first edition of ISO 389-5 cancels and replaces ISO/TR 389-5:1998, which has been technically revised.

ISO 389 consists of the following parts, under the general title *Acoustics* — *Reference zero for the calibration of audiometric equipment*:

- Part 1: Reference equivalent threshold sound pressure levels for pure tones and supra-aural earphones
- Part 2: Reference equivalent threshold sound pressure levels for pure tones and insert earphones
- Part 3: Reference equivalent threshold force levels for pure tones and bone vibrators
- Part 4: Reference levels for narrow-band masking noise
- Part 5: Reference equivalent threshold sound pressure levels for pure tones in the frequency range 8 kHz to 16 kHz
- Part 6: Reference hearing threshold levels for test signals of short duration
- Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions
- Part 8: Reference equivalent threshold sound pressure levels for pure tones and circumaural earphones

A part 9, dealing with the preferred test conditions for the determination of reference hearing threshold levels is under development.

## Introduction

An International Standard for extended high frequency audiometers has already been published as IEC 60645-4. Adaptors to be used with the IEC 60318-1 ear simulator to provide an interim acoustic coupler for the calibration of circumaural audiometric earphones in the extended high frequency range presently are standardized in IEC 60318-2 (to be included in a revised IEC 60318-1). The reference equivalent threshold sound pressure levels for specific circumaural and insert earphones described in this International Standard enable calibration of those audiometers which are equipped with these earphones, in order to promote agreement and uniformity in the expression of hearing threshold level measurements worldwide.

Annexes A and B of this part of ISO 389 are for information only. A Bibliography is given at the end of this International Standard.