
AMERICAN NATIONAL STANDARD

**Sound Power Level Determination for
Sources Using a Single-source Position**

ANSI/ASA S12.58-2012

Accredited Standards Committee S12, Noise

Standards Secretariat
Acoustical Society of America
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Secretariat:

Acoustical Society of America

Approved by ANSI on:

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Abstract

This American National Standard describes a method for the determination of sound power levels of noise sources that emit broadband sound and/or discrete frequency sounds/tones using reverberation rooms. The standard applies when it is either undesirable or unfeasible to move the source to decrease the uncertainty of the measurement. The method described requires reverberation room pre-qualification through test and requires the use of the comparison method to determine sound power levels. This standard specifies the physical environment, procedures, and equipment used to qualify the reverberation room by test. Pre-qualifying the room ensures adequate modal density for the use of one source location to obtain acceptable accuracy and repeatability of results. The reference sound source (RSS) used for the comparison method relies on AHRI Standard 250 to accurately describe the requirements for and characterize sound power of the RSS at all frequencies of interest.

AMERICAN NATIONAL STANDARDS ON NOISE

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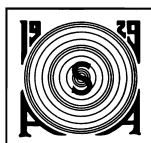
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Foreword

[This Foreword is for information only and is not a part of the American National Standard ANSI/ASA S12.58-2012 American National Standard Sound Power Level Determination for Sources Using a Single-source Position.]

This standard comprises a part of a group of definitions, standards, and specifications for use in noise. It was developed and approved by Accredited Standards Committee S12 Noise, under its approved operating procedures. Those procedures have been accredited by the American National Standards Institute (ANSI). The Scope of Accredited Standards Committee S12 is as follows:

Standards, specifications, and terminology in the field of acoustical noise pertaining to methods of measurement, evaluation, and control, including biological safety, tolerance and comfort, and physical acoustics as related to environmental and occupational noise.

This standard was developed from the Air-Conditioning, Heating and Refrigeration Institute's (AHRI) standard AHRI 220. It is published here with permission from AHRI after being approved by ballot in Accredited Standards Committee S12.

This standard is not comparable to any existing ISO Standard.

At the time this Standard was submitted to Accredited Standards Committee S12, Noise for approval, the membership was as follows:

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