
AMERICAN NATIONAL STANDARD

Reference Values for Levels Used in Acoustics and Vibrations

ANSI/ASA S1.8-2016

Accredited Standards Committee S1, Acoustics

Standards Secretariat
Acoustical Society of America
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Secretariat:

Acoustical Society of America

Approved on May 6, 2016, by:

American National Standards Institute, Inc.

Abstract

This standard provides certain reference values to be used for acoustical and vibratory levels. Levels, when used in this standard, refer to a descriptor of mathematical calculation in which a ratio is used. The reference value is the denominator of that ratio. Reference values are stated in the International System of Units (SI). The descriptor of most acoustical levels is the decibel, abbreviated “dB.” Levels are equal to ten times the common (base-10) logarithm (abbreviated lg) of an appropriate nondimensional ratio of a variable quantity (in the numerator) to a reference value of the same kind (in the denominator). The multiplier ten is used when the numerator is a power or power-like quantity (such as the time average of the square of a time-varying sound pressure or vibration acceleration) or an energy-like quantity (such as sound exposure).

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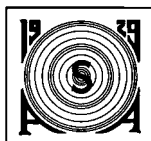
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