

# DIN EN ISO 3741:2011-01 (E)

Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms (ISO 3741:2010)

---

<b>Contents</b>	<b>Page</b>
Foreword .....	3
Introduction .....	4
1 Scope .....	5
2 Normative references .....	6
3 Terms and definitions .....	6
4 Reference meteorological conditions .....	10
5 Reverberation test room .....	10
6 Instrumentation and measurement equipment .....	14
7 Definition, location, installation, and operation of noise source under test .....	14
8 Measurements in the reverberation test room .....	16
9 Determination of sound power levels and sound energy levels .....	23
10 Measurement uncertainty .....	31
11 Information to be recorded .....	34
12 Test report .....	35
Annex A (informative) Guidelines for the design of reverberation test rooms .....	36
Annex B (informative) Guidelines for the design of rotating diffusing vanes .....	38
Annex C (normative) Reverberation test room qualification procedure for the measurement of broad-band sound .....	39
Annex D (normative) Reverberation test room qualification procedure for the measurement of discrete-frequency components .....	41
Annex E (informative) Extension of frequency range to frequencies below 100 Hz .....	46
Annex F (normative) Calculation of octave band sound power levels and sound energy levels, A-weighted sound power levels and A-weighted sound energy levels from one-third-octave band levels .....	49
Annex G (informative) Guidelines on the development of information on measurement uncertainty .....	52
Bibliography .....	64
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC .....	66