

DIN EN ISO 6926:2016-08 (E)

Acoustics - Requirements for the performance and calibration of reference sound sources used for the determination of sound power levels (ISO 6926:2016)

Contents		Page
European foreword	.....	4
Foreword	.....	5
Introduction	.....	6
1 Scope	.....	7
2 Normative references	.....	8
3 Terms and definitions	.....	8
4 Reference meteorological conditions	.....	10
5 Performance requirements	.....	11
5.1 General	.....	11
5.2 Temporal steadiness (stability) of sound power output	.....	11
5.3 Total broadband sound power level	.....	11
5.4 Spectral characteristics	.....	11
5.5 Directivity	.....	12
5.6 Recalibration	.....	12
6 Instrumentation	.....	13
6.1 General	.....	13
6.2 Microphone in a hemi-anechoic room	.....	13
6.3 Microphone in a reverberation test room	.....	13
6.4 Microphone frequency response correction	.....	13
6.5 Verification	.....	14
6.6 Microphone calibration check	.....	14
7 Installation and operation of the reference sound source during calibration	.....	14
7.1 General	.....	14
7.2 Requirements in hemi-anechoic rooms	.....	15
7.3 Requirements in reverberation rooms	.....	15
8 Calibration procedure in hemi-anechoic rooms	.....	15
8.1 Test environment	.....	15
8.2 Microphone positions	.....	15
8.2.1 General	.....	15
8.2.2 Meridional paths	.....	15
8.2.3 Spiral path	.....	15
8.2.4 Fixed point array	.....	15
8.2.5 Coaxial circular paths	.....	15
8.3 Measurements	.....	16
8.3.1 General	.....	16
8.3.2 Directivity index	.....	16
8.3.3 Temporal steadiness	.....	16
8.4 Calculations	.....	17
9 Calibration procedure in reverberation test rooms	.....	18
9.1 Test environment	.....	18
9.2 Microphone positions	.....	18
9.3 Measurements	.....	18
9.3.1 General	.....	18
9.3.2 Temporal steadiness	.....	19
9.4 Calculations	.....	19

10	Alternative calibration procedure at low frequencies	19
11	Measurement uncertainty	19
11.1	General	19
11.2	Typical values of the reproducibility standard deviation	20
12	Information to be recorded	21
13	Information to be reported	21
Annex A	(informative) Guidance on the determination of C_2	22
Annex B	(normative) Alternative calibration procedure at low frequencies	24
Bibliography	.....	25