

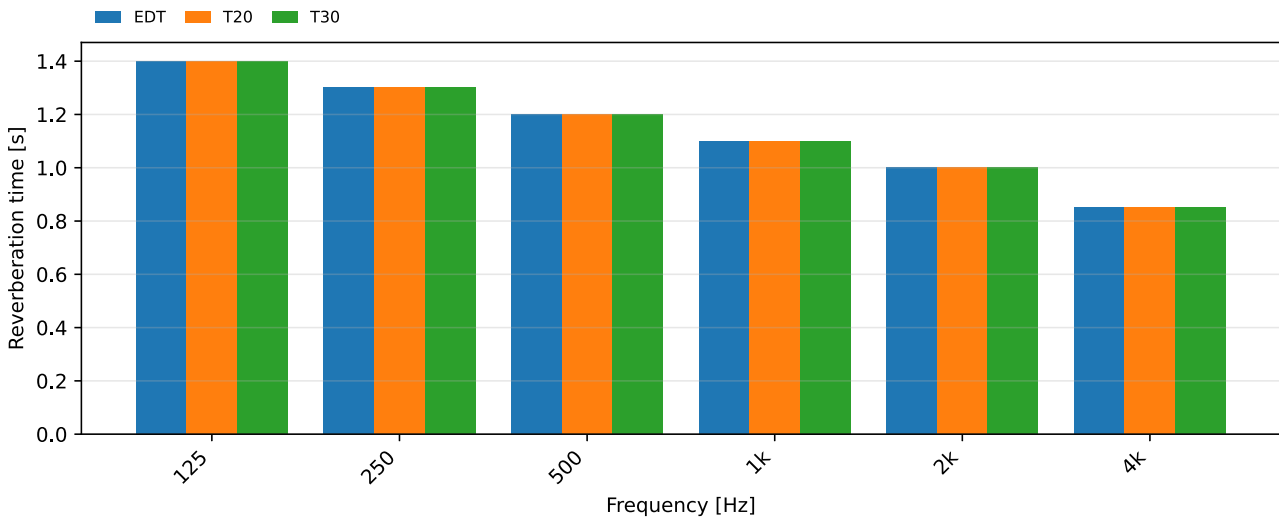
Room acoustic parameters

ISO 3382-1 measurement of room acoustic parameters by the integrated impulse-response method (ISO 3382-1:2009 / ISO 3382-2:2008).

Client:	Example client	Room:	Auditorium A (example)
Description:	Small auditorium, unoccupied, fully furnished	Room volume V [m ³]:	2830
Floor area S [m ²]:	340	Source positions:	2
Microphone positions:	8	Instrumentation:	Omnidirectional source + 1/2 in. microphone (example)
Temperature [°C]:	21	Relative humidity [%]:	45
Ambient pressure [kPa]:	101.1	Date of test:	2026-07-20

Octave-band parameters

f [Hz]	T ₂₀ [s]	T ₃₀ [s]	EDT [s]	C ₅₀ [dB]	C ₈₀ [dB]	D ₅₀	T _s [ms]
125	1.40	1.40	1.40	-2.7	0.3	0.35	108
250	1.30	1.30	1.30	-2.0	0.9	0.39	98
500	1.20	1.20	1.20	-1.3	1.6	0.42	89
1000	1.10	1.10	1.10	-0.7	2.3	0.46	81
2000	1.00	1.00	1.00	-0.1	3.0	0.50	73
4000	0.85	0.85	0.85	1.0	4.2	0.55	62



T_{mid} (500-1000 Hz) = 1.15 s

EDT_{mid} = 1.15 s

Result vs requirement: T_{mid} = 1.15 s, required ≤ 1.30 s → **PASS**

Decay curves by Schroeder backward integration with noise truncation and tail compensation (ISO 3382-1:2009, 5.3.3); T20 over -5 to -25 dB, T30 over -5 to -35 dB, EDT over 0 to -10 dB, each extrapolated to 60 dB (ISO 3382-2:2008, Clause 6; ISO 3382-1:2009, A.2.2).

C50/C80, D50 and T_s follow ISO 3382-1:2009 Equations (A.10), (A.11) and (A.13). The just-noticeable differences (Table A.1) are 5 % for EDT/T, 1 dB for C80, 0.05 for D50 and 10 ms for T_s.

Laboratory: Phonometry reference example

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Operator: phonometry Signature: _____

■ The results relate only to the tested specimen.

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