

# Module Comparison Chart for IEC 60268-21

Document Revision 1.3

Chapter	Paragraph	Name	R&D Modules (Meas)	R&D Modules (SIM)	QC Modules	Test Templates	Comment
8		Test Signals					
8	1	Sinusoidal chirp	TRF	-	SPL, SPL-IMP		
8	2	Steady-state single-tone signal	DIS, (MTON)	SIM	EQA		
8	3	Steady-state two-tone signal	DIS, (MTON)	SIM	-		
8	4	Sparse multi-tone complex	MTON	-	-		
8	5	Broadband noise signal	LAA	LSIM, SIM-AUR	SAN		
8	6	Narrow-band noise signal	MTON	LSIM, SIM-AUR	SAN		
8	7	Hann-burst signal	TBM	SIM-AUR	-		
9		Acoustical Environment					
9	1	Free-field conditions	Any	Any	Any		
9	2	Half-space, free-field conditions	Any	Any	Any		
9	3	Simulated free-field conditions	TBM, TRF, NFS, ISC, DIS	-	SPL, SPL-IMP		
9	4	Half-space simulated free-field conditions	TBM, TRF, NFS, ISC, DIS	-	SPL, SPL-IMP		
9	5	Diffuse sound field conditions	Any	Any	Any		
9	6	Target application conditions	Any	Any	Any		
10		Positioning of the DUT					
11		Measurement equipment and test results					
11		Microphone Types	Any	-	Any		
11		Aspect Ratio	manual	manual	manual		
11		Preferred Frequencies	-	-	SPL, SPL-IMP, SAN		
12		Accuracy of the acoustical measurement					See spec sheets for hardware and software
13		Mounting of the DUT					
14		Preconditioning	DIS, TRF, MTON	SIM	QC-PreCond.		
15		Rated ambient conditions			IO, Control-Task		
16		Rated frequency range					
17		Input signal	PWT, LAA, MTON, TBM	SIM-AUR, LSIM	SAN	MTON Rated Umax based on SPLmax	
18		Sound-pressure output					
18	1	Rated maximum sound pressure	PWT, LAA, MTON, TBM	SIM-AUR, LSIM	SAN	MTON Max SPL	See note1: "DUT small usage band: sinusoidal signal: MTON, Hann burst: TBM"
18	3	Short term maximum sound pressure level	MTON, LAA	SIM-AUR	-	MTON Short term max SPL	
18	4	Long term maximum sound pressure level	MTON, LAA	SIM-AUR	-	MTON Long term max SPL	
18	6	Sound-pressure level in a stated frequency band	MTON, TRF*	SIM-AUR, L-SIM	SAN, SPL*, SPL-IMP*	MTON SPL in stated frequency band	* using sine chirp
18	8	Mean sound-pressure level in a stated frequency range					rarely used level definition
19		Frequency response of the fundamental component					
19	1	Transfer function	MTON, TRF, LAA	LSIM	SAN		
19	2	SPL frequency response	MTON, TRF, LAA, DIS	SIM, LSIM	SAN, SPL, SPL-IMP	TRF SPL frequency response	

