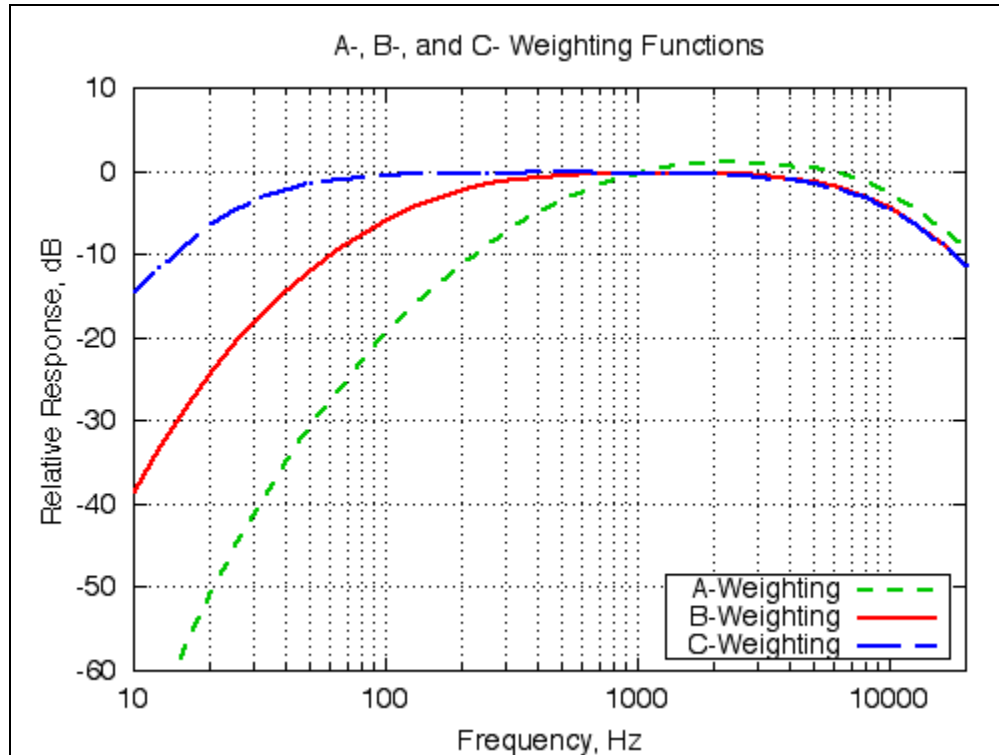


Broadband Frequency weighting correction tables used in Sound level meters and Noise Dosimeters

Center frequency (Hz)		A Weighting (dB)		B Weighting (dB)		C Weighting (dB)	
Octave	1/3 Octave	Oct	1/3 Oct	Octave	1/3 Oct	Octave	1/3 Oct
	10.0		-70.40		-38.20		-14.30
	12.5		-63.40		-33.20		-11.20
16.0	16.0	-56.7	-56.70	-28.5	-28.50	-8.5	-8.50
	20.0		-50.50		-24.20		-6.20
	25.0		-44.70		-20.40		-4.40
31.5	31.5	-39.4	-39.40	-17.1	-17.10	-3.0	-3.00
	40.0		-34.60		-14.20		-2.00
	50.0		-30.20		-11.60		-1.30
63.0	63.0	-26.2	-26.20	-9.3	-9.30	-0.8	-0.80
	80.0		-22.50		-7.40		-0.50
	100		-19.10		-5.60		-0.30
125	125	-16.1	-16.10	-4.2	-4.20	-0.2	-0.20
	160		-13.40		-3.00		-0.10
	200		-10.90		-2.00		0.00
250	250	-8.6	-8.60	-1.3	-1.30	0	0.00
	315		-6.60		-0.80		0.00
	400		-4.80		-0.50		0.00
500	500	-3.9	-3.20	-0.3	-0.30	0	0.00
	630		-1.90		-0.10		0.00
	800		-0.80		0.00		0.00
1k0	1k0	0	0.00	0	0.00	0	0.00
	1k25		0.60		0.00		0.00
	1k6		1.00		0.00		-0.10
2k0	2k0	1.2	1.20	-0.1	-0.10	-0.2	-0.20
	2k5		1.30		-0.20		-0.30
	3k15		1.20		-0.40		-0.50
4k0	4k0	-1.0	1.00	-0.7	-0.70	-0.8	-0.80
	5k0		0.50		-1.20		-1.50
	6k3		-0.10		-1.90		-2.00
8k0	8k0	-1.1	-1.10	-2.9	-2.90	-3.0	-3.00
	10k		-2.50		-4.30		-4.40
	125		-4.30		-6.10		-6.20
16k	16k	-6.6	-6.60	-8.4	-8.40	-8.5	-8.50
	20k		-9.30		-11.10		-11.20

- All correction figures shown above are relative to the response at 1 kHz.



Graphical representation of the A, B and C Frequency weightings

Other broadband frequency weightings have also been used in the past such as the 'D' weighting specifically for the assessment of the effect of single events caused by jet aircraft over flights. The International regulatory bodies no longer recommend this and the 'D' frequency weighting has been withdrawn from use by the ISO.

An international standard issued by the ISO, called EN 61012, covers the range of frequencies considered to be in the ultrasonic range beyond the normal limit of human hearing at 20 kHz. Limits are specified in third octave bands from 10 kHz up to 40 kHz where all frequencies up to and including 10 kHz have a zero dB correction. For frequencies above 10 kHz the following correction values are specified.

Center frequency Octave (Hz)	Center frequency 1/3 Octave (Hz)	Octave correction (dB)	1/3 octave correction (dB)
8k	8k	0.0	0.0
	10k		0.0
	12k5		-2.8
16k	16k	-13.0	-13.0
	20k		-25.3
	25k		-37.6
	31k5		-49.7
31k5	31k5	-49.7	-49.7
	40k		-61.8

Ultrasonic broadband frequency weighting after EN 61012