

BANDWIDTH CORRECTION

1. NOTATION

Δf	bandwidth	Hz
f_c	centre frequency of band	Hz
L_f	spectrum level at frequency f_c	dB
L	level in band with centre frequency f_c	dB
ΔL	$L - L_f$	dB

2. NOTES

This Data Item gives the relation between the spectrum level at a particular frequency and the level in a band of known width centred on that frequency.

In Figure 1, ΔL is plotted against Δf for arbitrary bandwidths. For octave and 1/3 octave bandwidths ΔL is plotted against f_c in Figure 2.

The Data Item applies only to continuous spectral distributions with small rates of change of level with frequency.

3. DERIVATION

$$\Delta L = 10 \log_{10} \Delta f$$

- HARRIS, C.M. (Editor) *Handbook of noise control*. McGraw-Hill, New York, 1957.

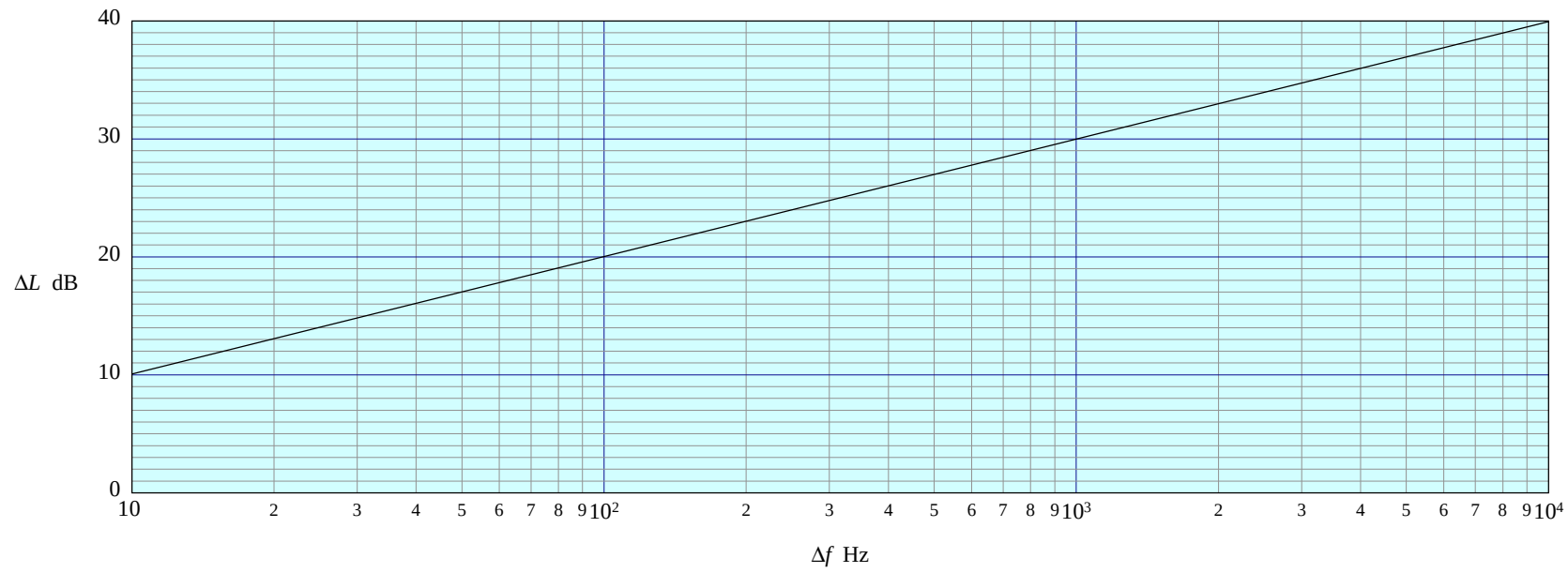


FIGURE 1

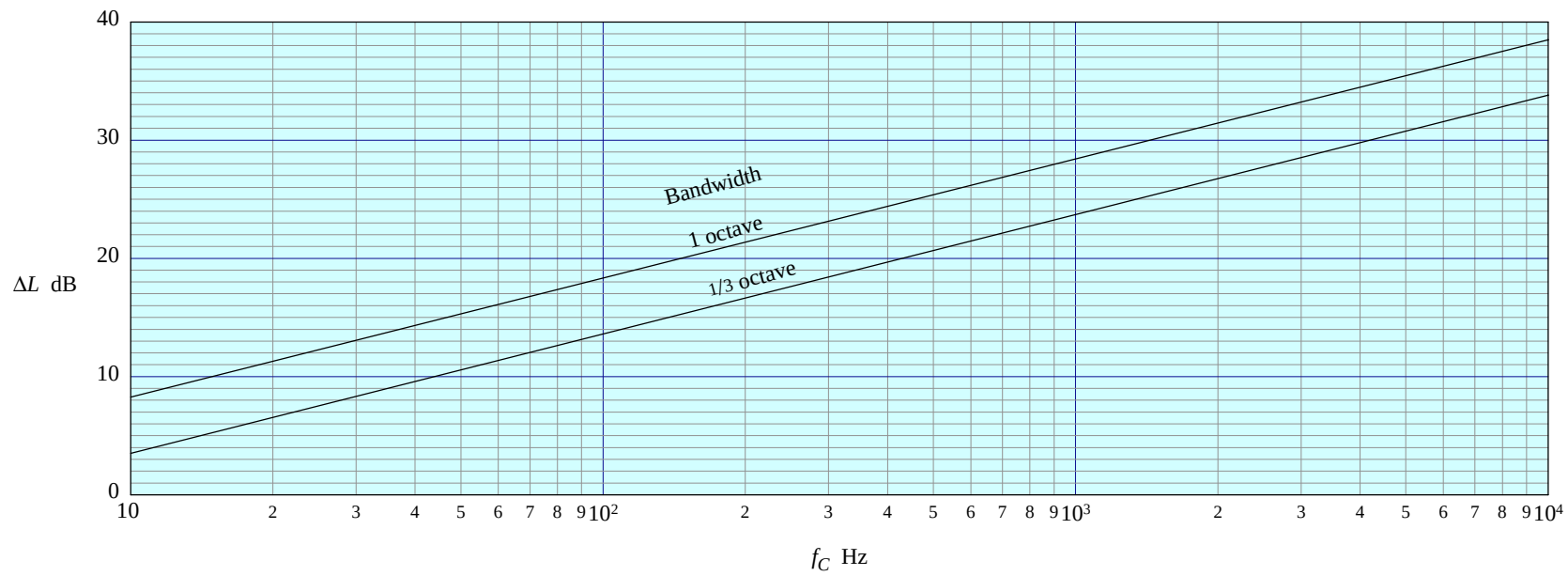


FIGURE 2