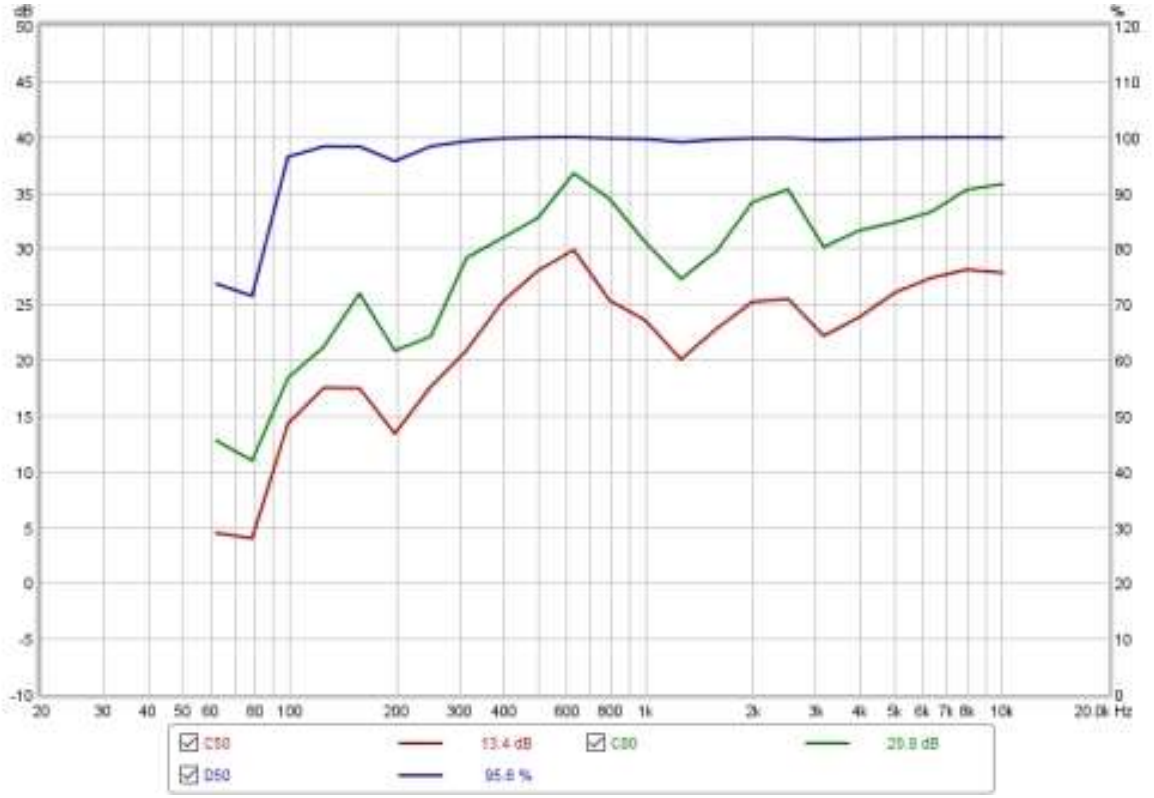
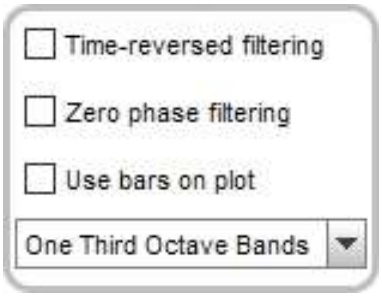
# Clarity Graph

The C50, C80 and D50 clarity and definition curves at each octave or one-third octave filter centre frequency are displayed on this graph. See below for descriptions of each of these parameters.




## Controls

The control panel for the Clarity graph has these controls:




The **Time reversed filtering** control applies the octave band filters backwards in time, this greatly reduces the effect of the filter's own delay.

**Zero phase filtering** applies 4th order bandpass filters in two passes through the data, one forwards and one reversed, to give a response with overall zero phase shift. This also reduces the effect of the filter's delay.

The plot can show horizontal bars centred on each filter frequency and spanning the filter's bandwidth, or lines joining the filter centre frequencies, according to the **Use bars on plot** control setting. The clarity measures available are:

### *Clarity C50*

The early to late energy ratio in dB, using sound energy in the first 50 ms as the 'early' part. C50 is most often used as an indicator of speech clarity.

### *Clarity C80*

The early to late energy ratio in dB, using sound energy in the first 80 ms as the 'early' part. C80 is most often used as an indicator of music clarity.

### *Definition D50*

The early to total energy ratio as a percentage, using sound energy in the first 50 ms as the 'early' part

The parameter values (RT60 and clarity) for the current measurement can be written to a text file using the File -> Export -> **RT60 data as text** menu entry.

Help Index