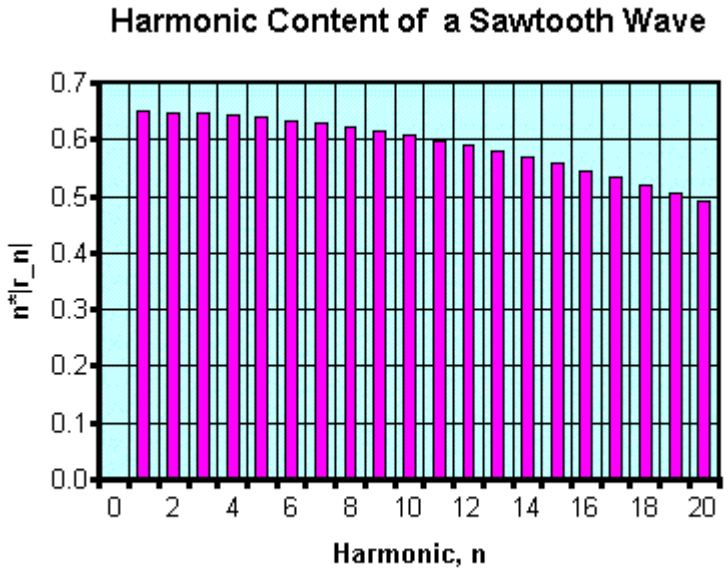

The following plot shows the loudness ratios, L_n / L_1 for the first twenty harmonics (i.e. $n < 20$) associated with the bipolar sawtooth wave, for $\beta_{pick} = 0.02$, for loudness values of the fundamental of $L_1 = 60\ dB$ (~ quiet) and for $L_1 = 100\ dB$ (~ quite loud). This is what the human ear perceives as the loudness of the harmonics relative to that of the fundamental. Note that the decrease in the loudness ratio, L_n / L_1 with increasing harmonic #, n is extremely slow, in comparison to that associated with the triangle wave, with $\beta_{pick} = ½$, and for the sawtooth wave, with $\beta_{pick} = ¼$.