

These waveforms are the best quality but they suggest well.

The upper waveform, well balanced typical UL stage without UL-A snubber components. Waveforms optimised for ultimate flat response without amplifier ringing.

The middle waveform after significant compensation correction of both o/p stage and 1<sup>st</sup> stage snubbers is taken with an UL 2K A-A 150W commercially produced 14 section design E&I output transformer with a high prim/sec interwinding capacitance of roughly 3nF; the projected -3dB bandwidth 15Hz-50Khz:

Circuit stability margin 18dB on top of 20dB nom global nfb.

The lower waveform is the same impedance of above except a Williamson E&I winding technique 18 section design resulting in a prim/sec interwinding cap of slightly less than 2nF. With the upper -3dB higher at 75Khz.

Both are exceptional quality transformers but with differences. Again circuit stability margin 18dB on top of 20dB nom global nfb.

At first sight there isn't much difference between the two but examining the slew rate then relating this to frequency response big differences result. The middle waveform with higher interwinding capacitance using yellow polyester tape has a more pronounced rise and fall slope.

This subtleness in slew response implies a massive change to the open loop responses and the approaches taken for ultimate stability.

Audio quality is noticeable: the transformer with higher interwinding capacitance sounds duller on definition..

