

OTL-amplifier

TubeSociety 2022-2023

The circuit

I applied the basic schematic from Menno, but used a different B+ high voltage supply for the ECC88 and the Mosfets quiescent current was set at 500mA.

For the B+ supply I use a Maida regulator with the LT3080. The filament is created with ac from the transformer. The Mosfet current amplifier power supply is a simple circuit with 2x 10.000 uf capacitors. This is probably too low for the current that both amplifier are using.

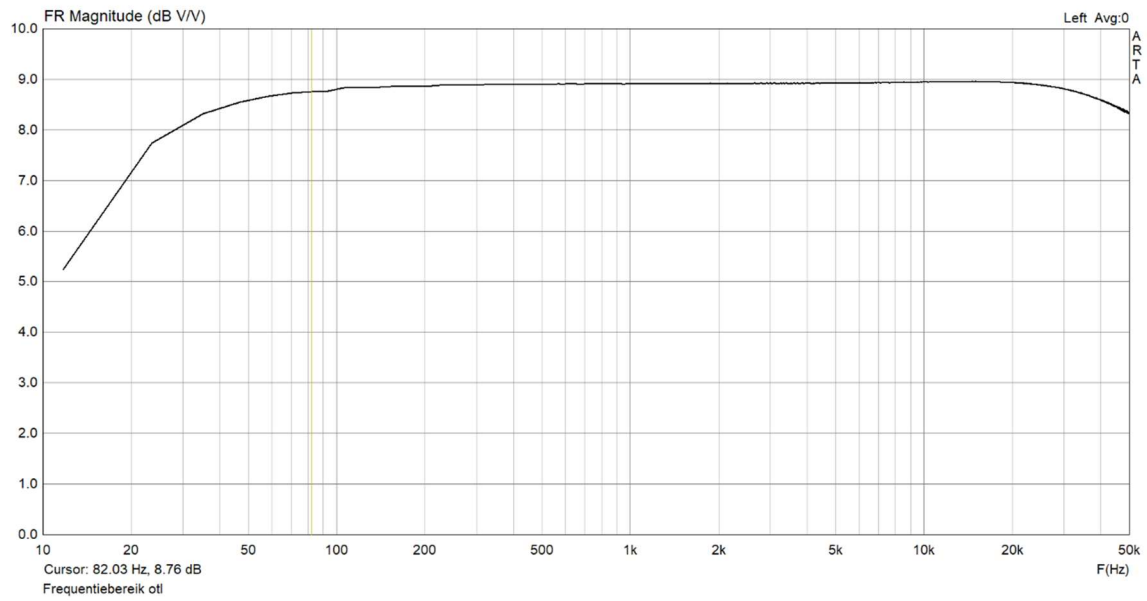
Components:

E88CC from Philips for the voltage amp
TRAFCO-VDV TS-2022-OTL-MAINS
ecx10p20 and ecx10n20 for the current amp
AC 6,3v filament supply
Maida regulator B+ high voltage supply

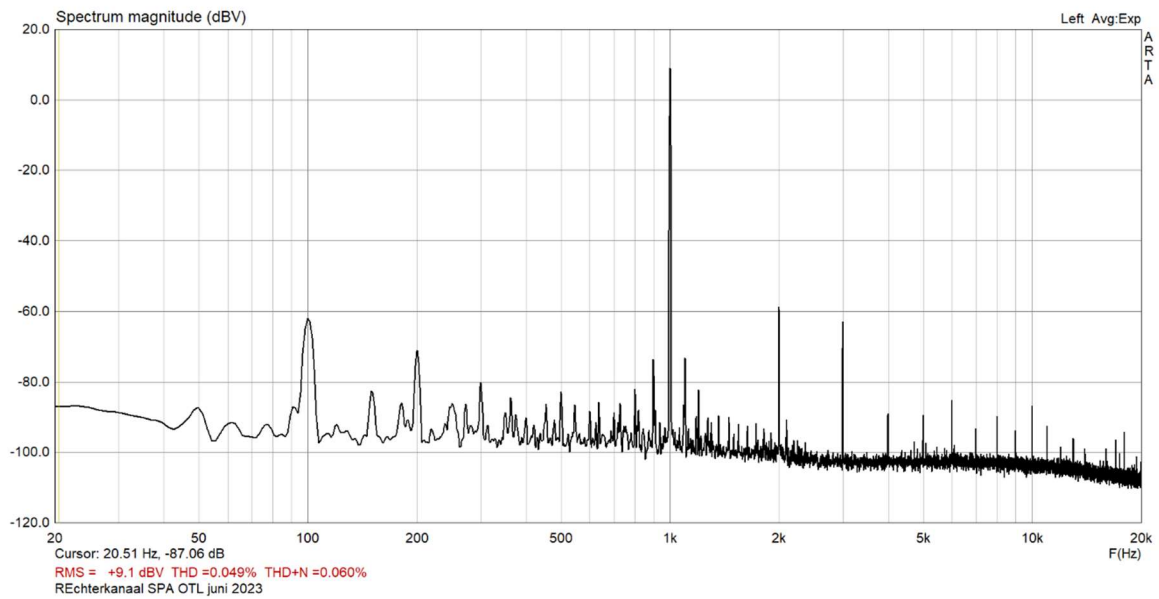
Specifications:

Frequency response	15 Hz to above 60 kHz
Amplification	around 15 x = 24 dB
Distortion 1 kHz @ 1W in 8 Ohm	0.049 %

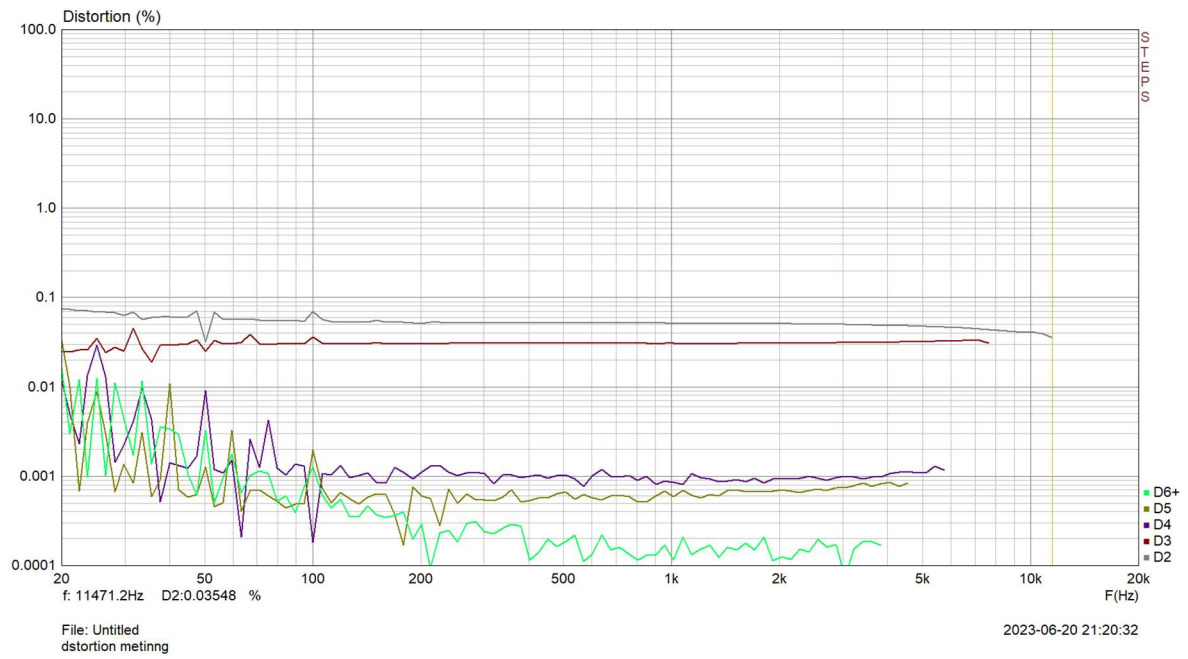
Frequentie response



Distortion at 1kHz with 1W in 8 ohm load



Harmonic distortion



The schematic:

My schematic is in the basic form as first presented to the students

