



Superior Magnetics Since 1979



CMOQ-2

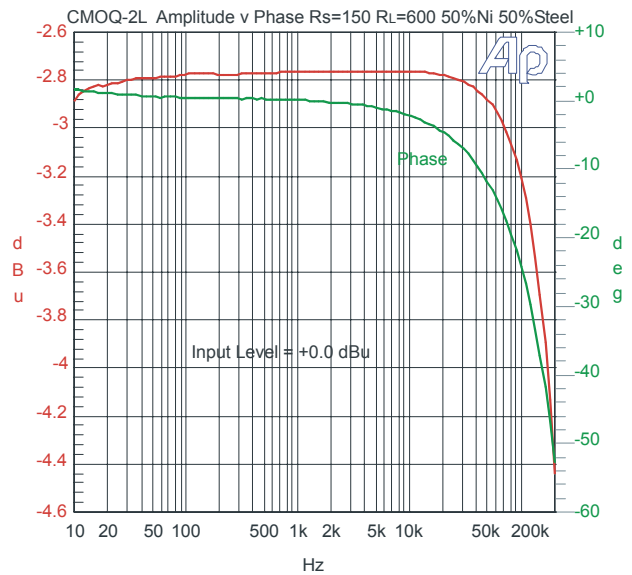
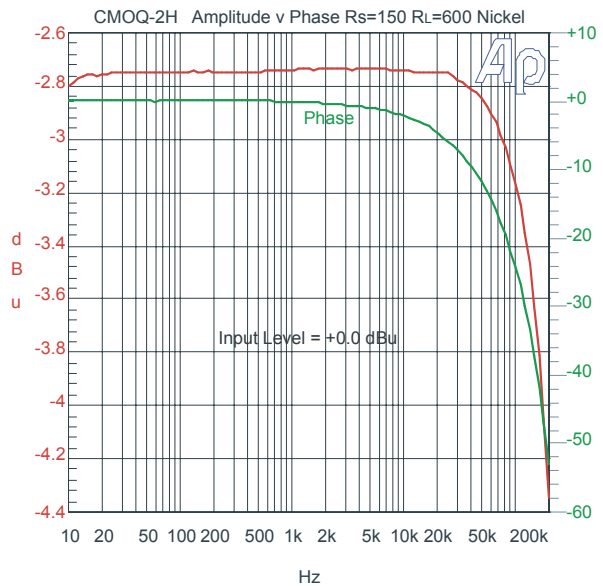
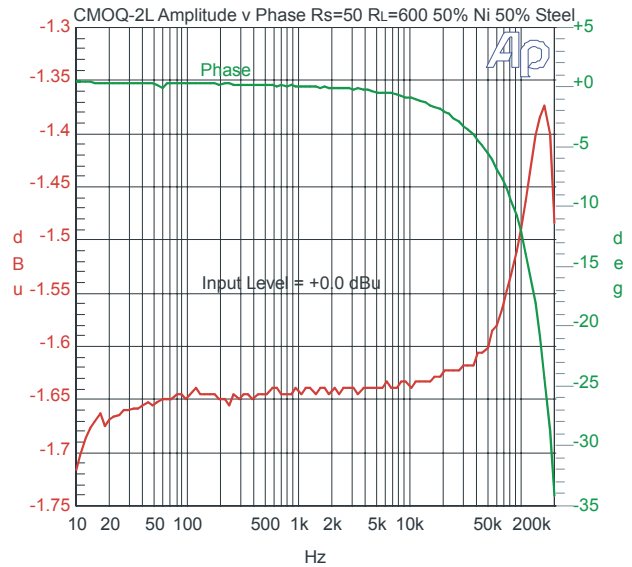
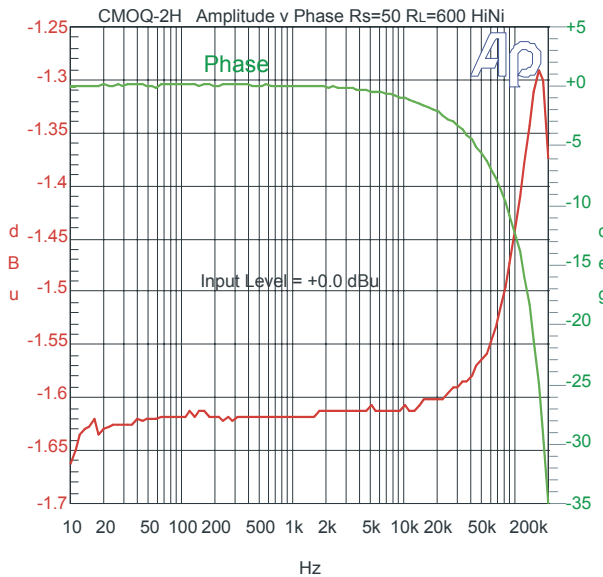
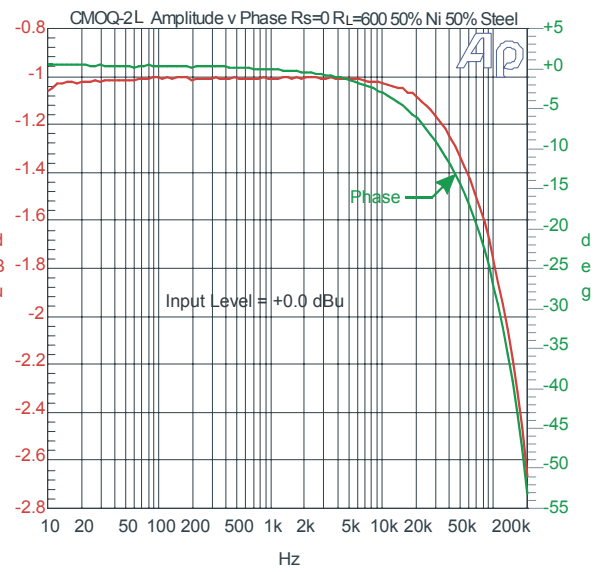
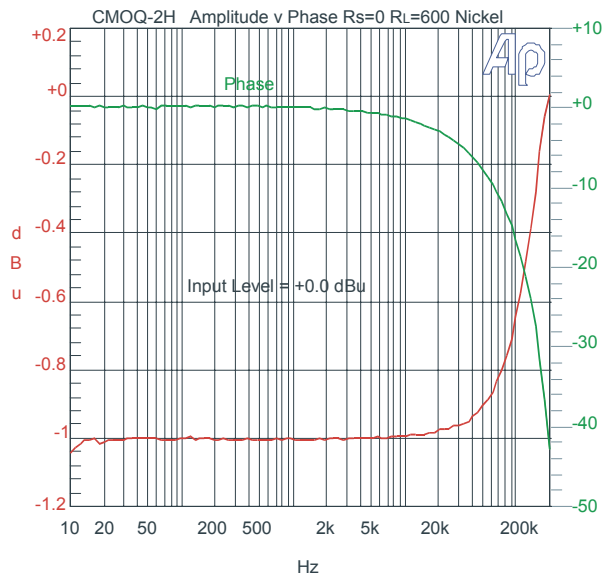
LINE OUTPUT TRANSFORMER Quadfilar Windings

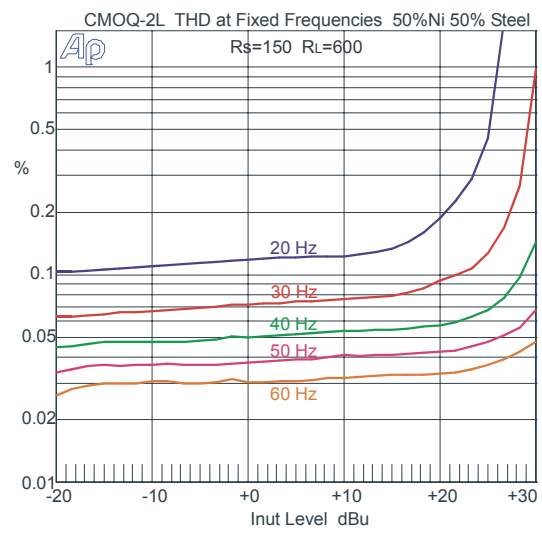
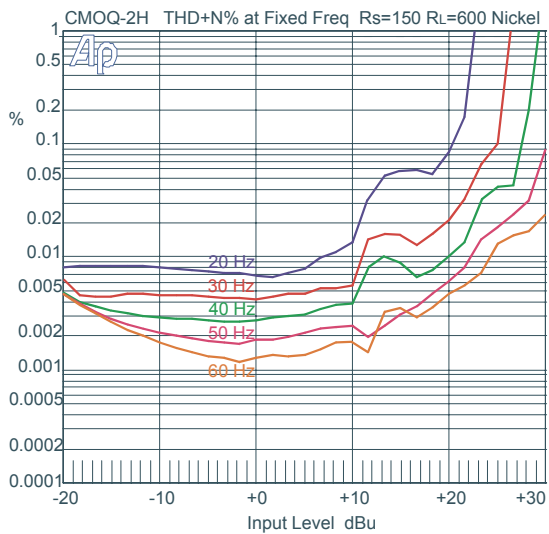
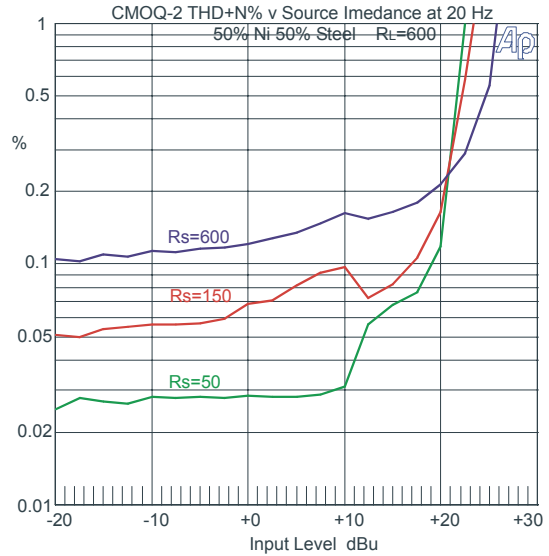
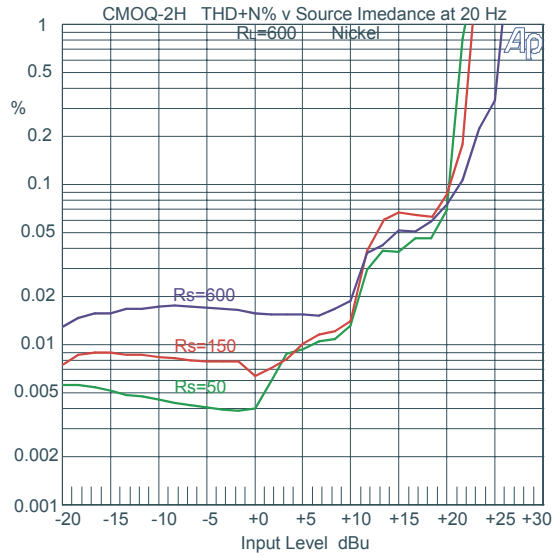
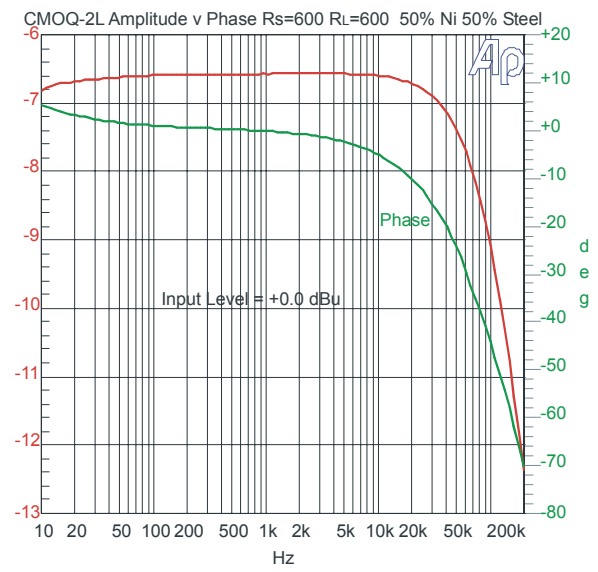
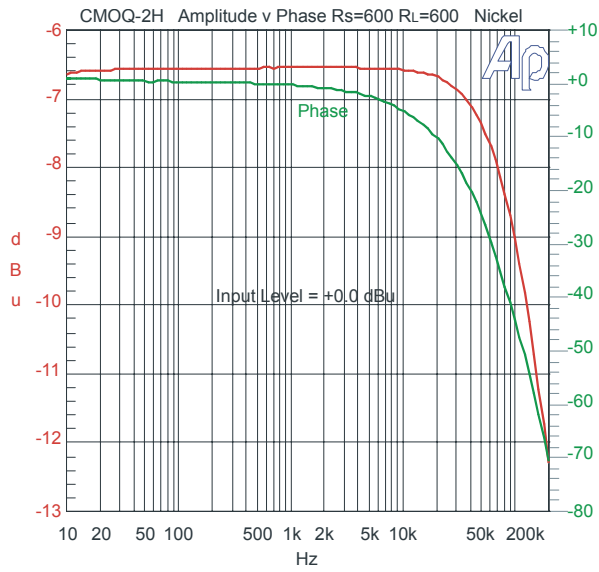
- Excellent bandwidth -0.35 dB at 200 kHz
- $R_s=150\Omega$ 80% Nickel (“HiNi”) laminations
- Distortion 0.01% typ at 20 Hz, $R_s=150\Omega$ HiNi
- +23 dBm at 20 Hz, 1% THD+N $R_s\leq 150\Omega$
- Phase Shift -5° at 20 kHz, $R_s=150\Omega$
- Low insertion loss

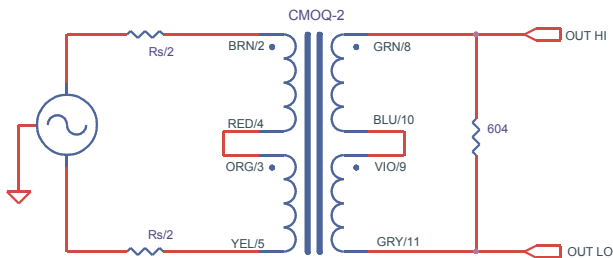
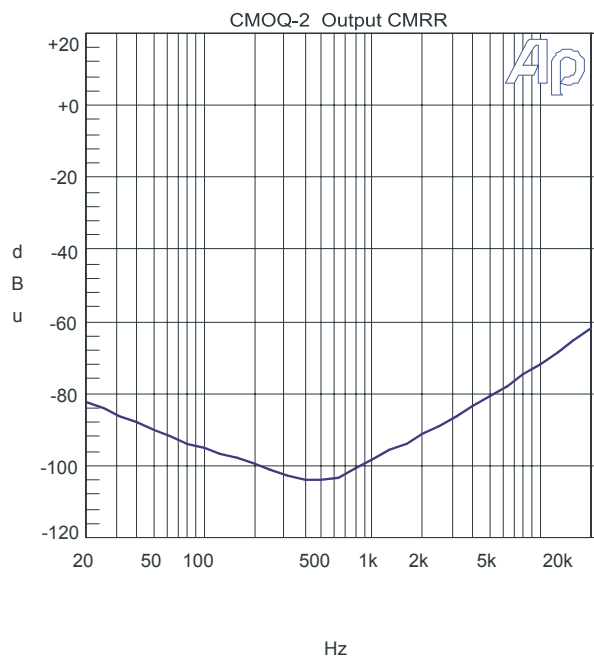
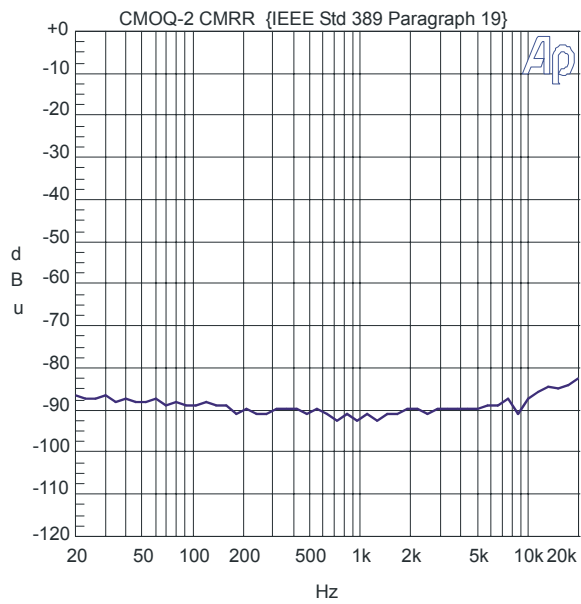
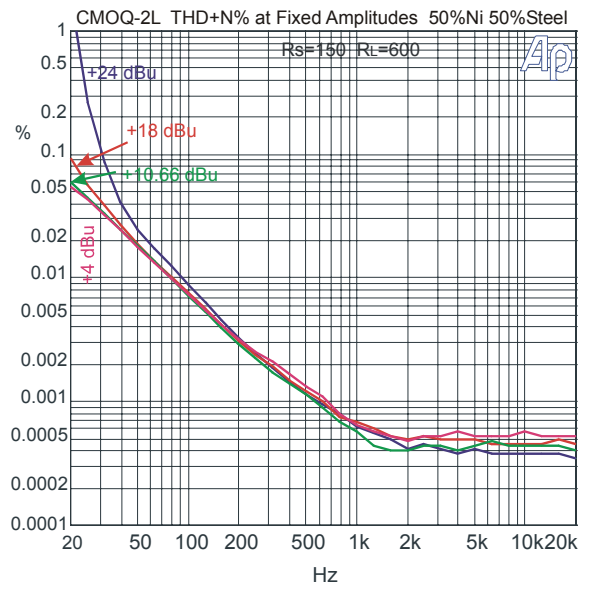
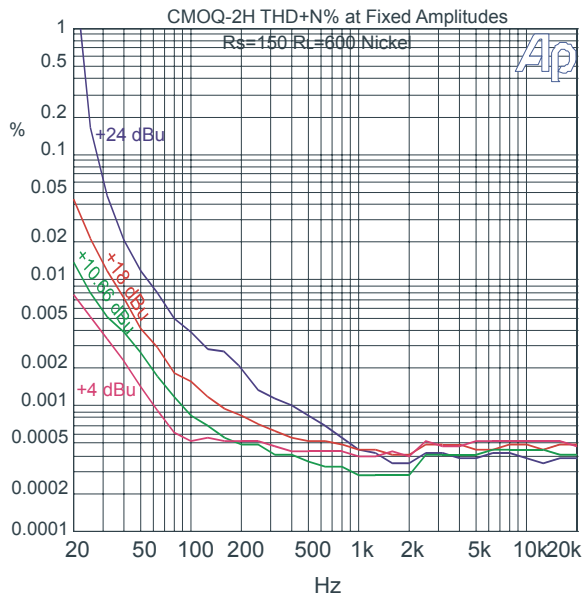
The CineMag CMOQ-2 output transformer uses quadfilar construction techniques. This four-winding transformer delivers good coupling between windings as well as excellent bandwidth. It is available both with 80% Nickel (“HiNi”) and 50% Nickel/50% Steel laminations. It can be driven with source impedances of up to 600 Ω . As with all line driving devices, the amplifier feeding it should be capable of cleanly delivering the power required to reach maximum operating level. See AN-102. Steel core available.

CMOQ-2H / CMOQ-2L / CMOQ-2S

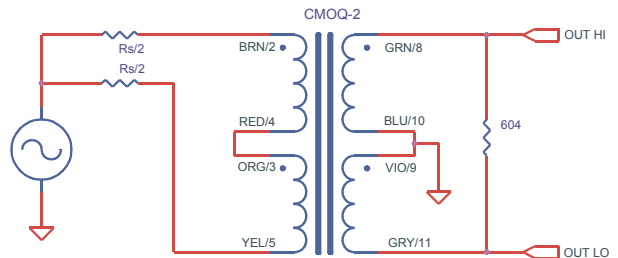
Parameter	Conditions	Typ
Turns Ratio		1 : 1.00
Input Impedance, Zi	20 Hz to 20 kHz, 0 dBu Test Circuit 4	680 Ω
Voltage Gain	1 kHz HiNi Core, $R_s=150$ Test Circuit 1 1 kHz 50% Nickel/50% Steel Core, $R_s=150$	-2.75 dB -2.78 dB
Distortion (THD+N%)	1 kHz, +4 dBu, $R_s=150$ HiNi Test Circuit 1 1 kHz, +4 dBu, $R_s=150$ 50%Ni/50% Steel	0.0004% 0.0006%
Max 20 Hz input level	1.0% THD+N, $R_s\leq 150$ HiNi Test Circuit 1 1.0% THD+N, $R_s\leq 150$ 50% Ni 50% Steel	+22 dB +22 dB
Response, ref 1 kHz	20 Hz $R_s=150\Omega$ HiNi Test Circuit 1 20 kHz $R_s=150\Omega$ HiNi Test Circuit 1 200 kHz $R_s=150\Omega$ HiNi Test Circuit 1	-0.02 dB -0.02 dB -1.45 dB
Phase Shift at 20Hz Phase Shift at 20 kHz	Referenced to source generator Test Circuit 1	+1° -5°
CMRR	60 Hz Test Circuit 2 per IEEE Std 389-1996 ¶19 1 kHz Test Circuit 2 per IEEE Std 389-1996 ¶19	88 dB 92 dB
Output CMRR	60 Hz Test Circuit 3 1 kHz Test Circuit 3	92 dB 98 dB
Operating Temp Range	Operation and storage	0° C Min 70° C Max



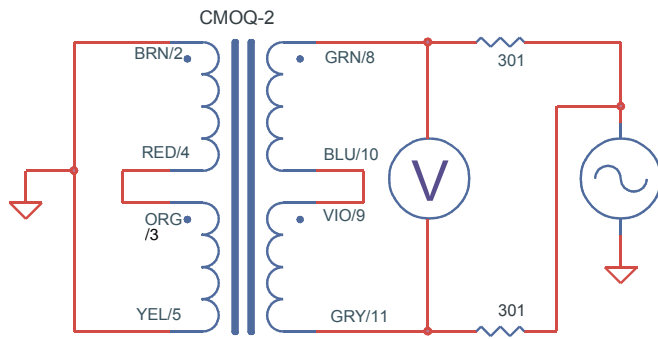




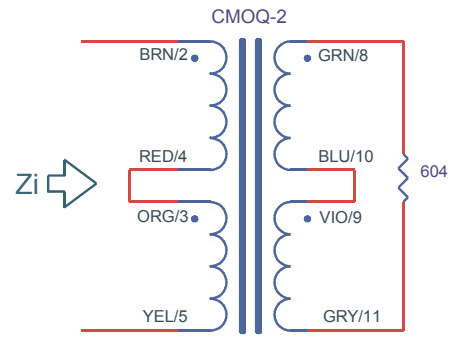
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



TEST CIRCUIT 4

NOTES:

1. All graphs generated from one (1) randomly chosen device. No statistical averaging or weighting. Data from one sweep.
2. $R_L = 604$ unless otherwise noted.

