



REICHENBACH ENGINEERING



## CMOB-3

### LINE OUTPUT TRANSFORMER Bifilar Windings

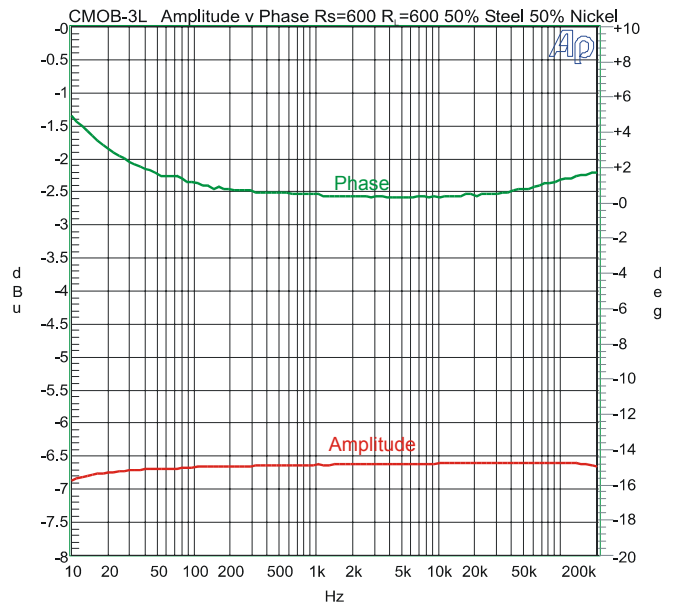
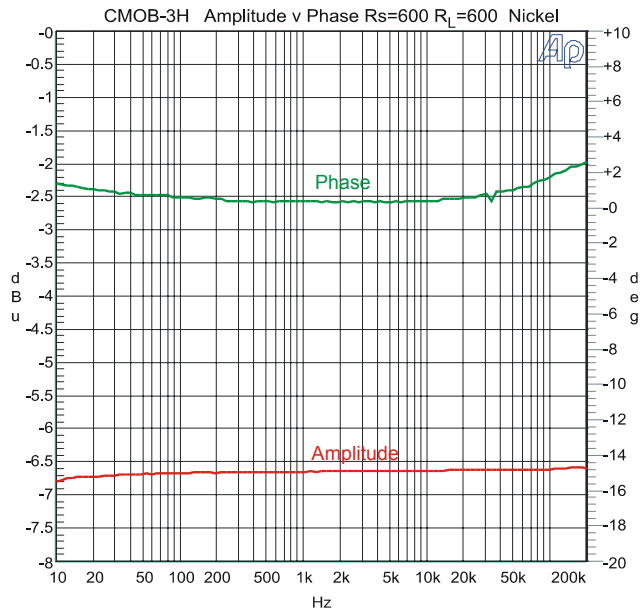
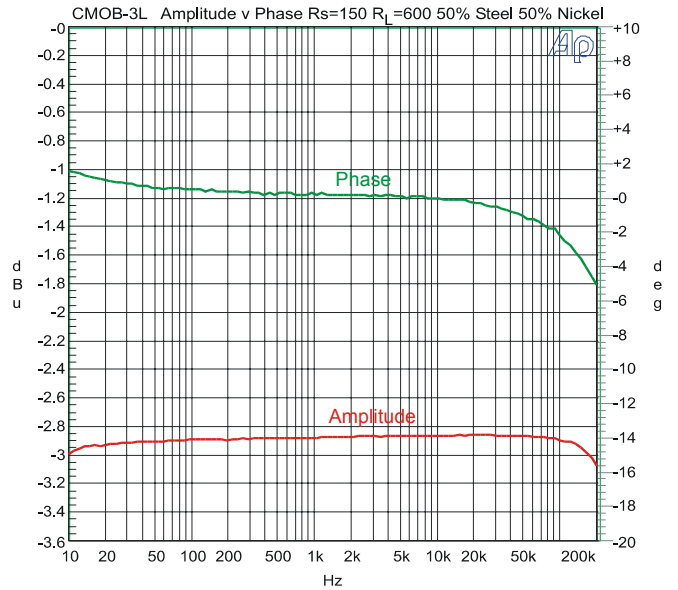
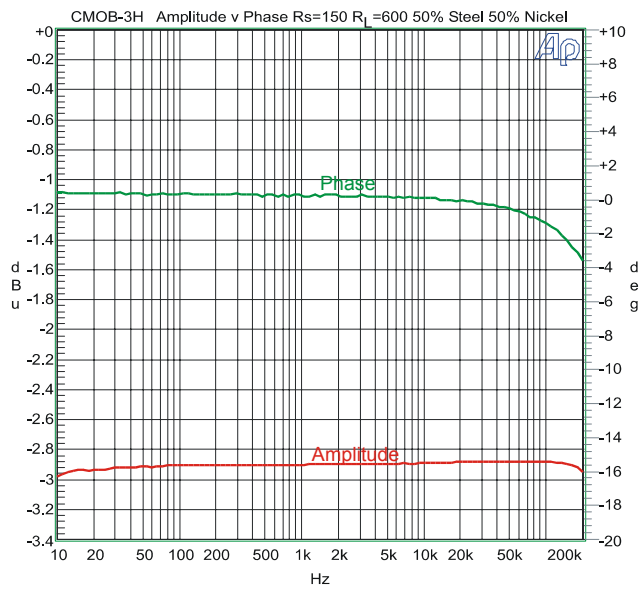
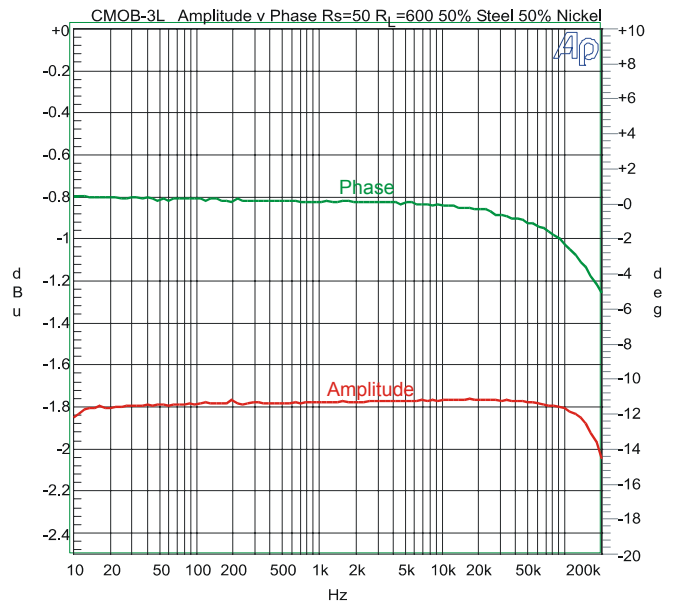
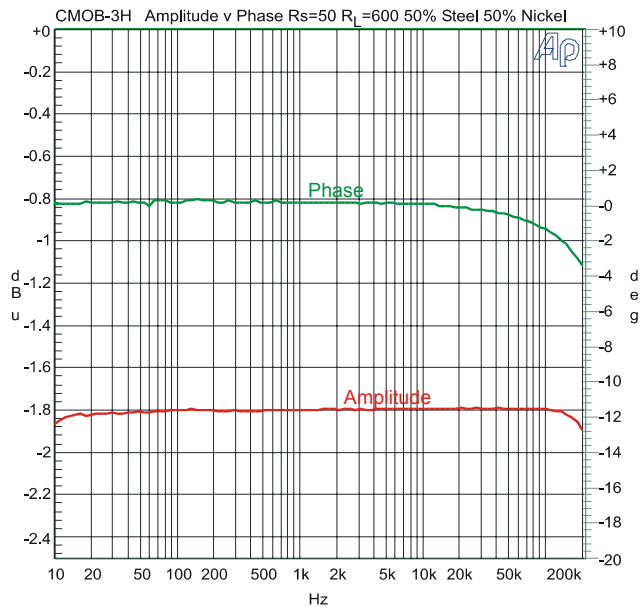
- Excellent bandwidth: -0.1 dB at 200 kHz,  
Rs=150Ω
- 80% Nickel ("H" suffix), or 50% Ni + 50% Steel laminations ("L") or steel ("S")
- Distortion ≤0.02% typ at 20 Hz, Rs=150Ω HiNi
- +19 dBu at 20 Hz, 1% THD+N Rs≤150Ω
- Phase Shift ~ -0.2° at 20 kHz, Rs=150Ω
- Low insertion loss

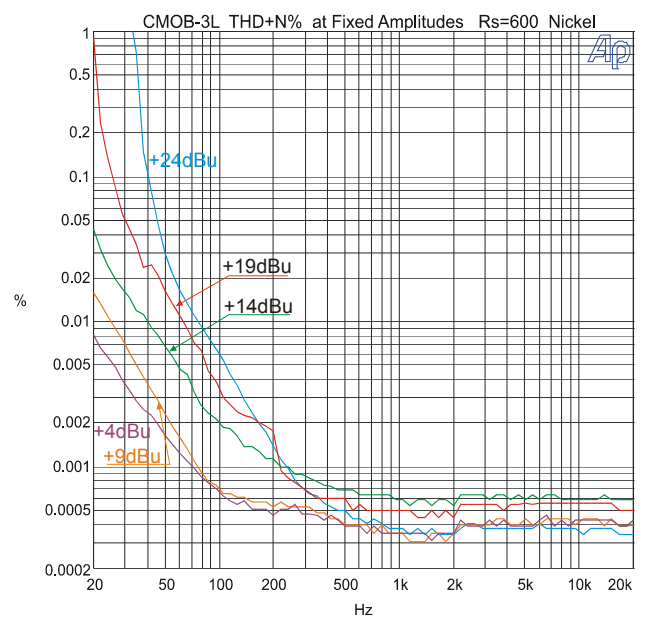
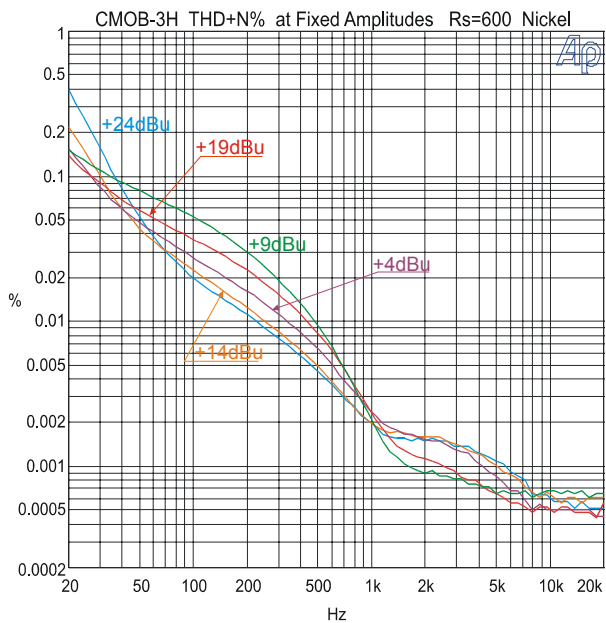
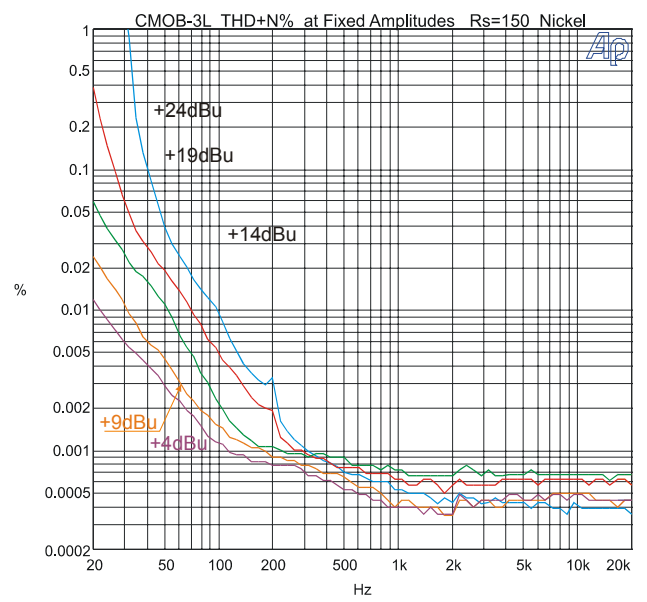
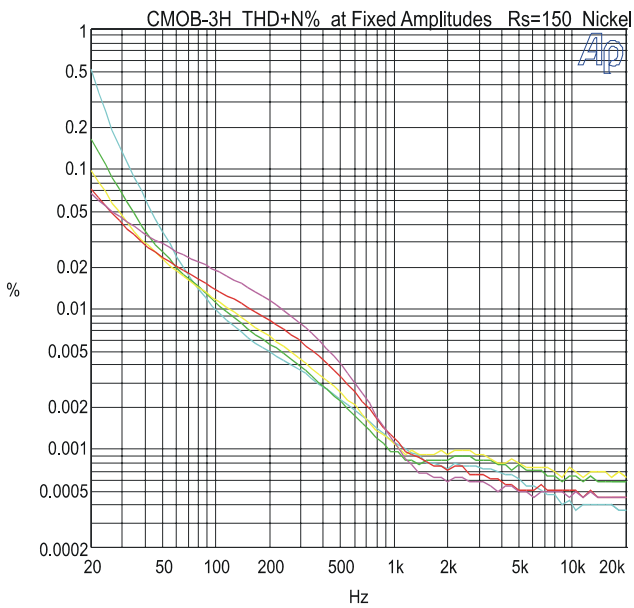
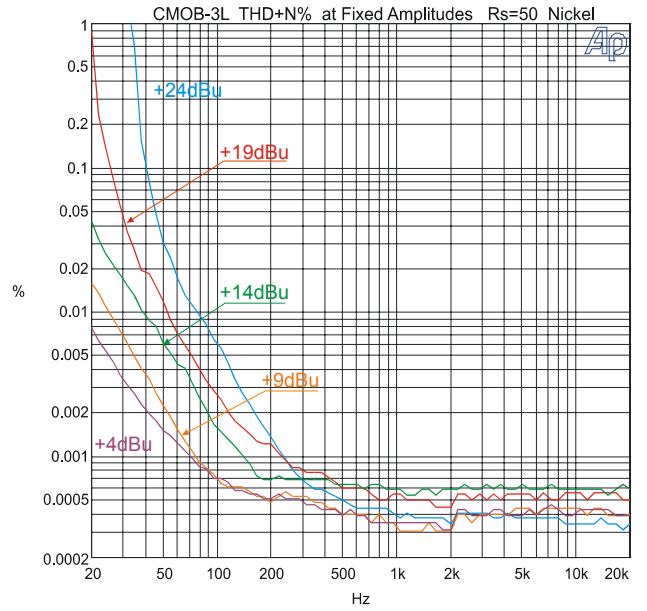
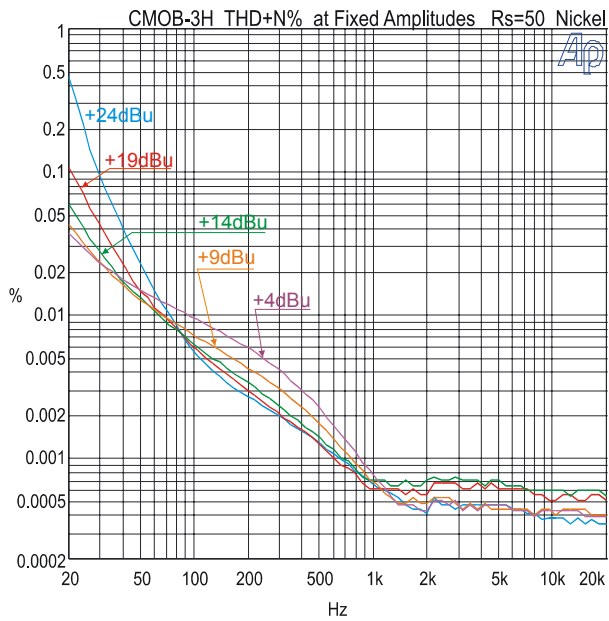
The CMOB-2 output transformer uses bifilar construction techniques. This two winding transformer delivers good coupling between windings providing very wide bandwidth. It is available with 80% nickel alloy ("H" suffix), 50% nickel + 50% steel ("L"), or all steel ("S"). It can be driven with source impedances of up to 600 Ohms. As with all line driving transformers the amplifier feeding it should be capable of cleanly delivering the power required to reach maximum operating level.

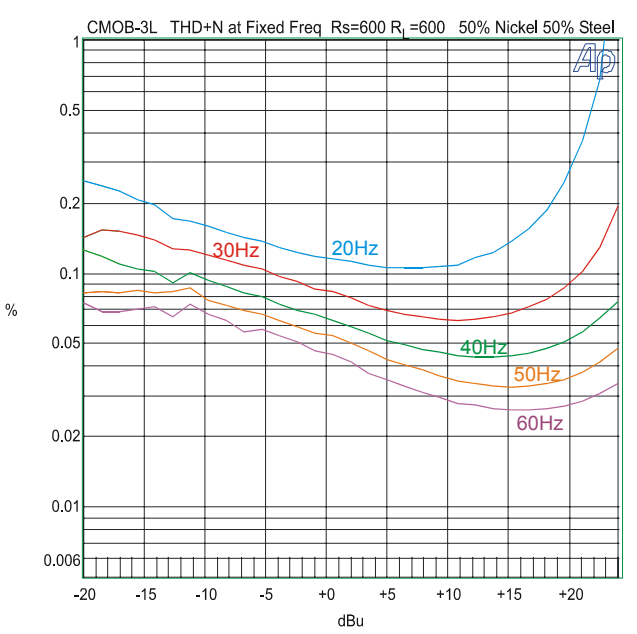
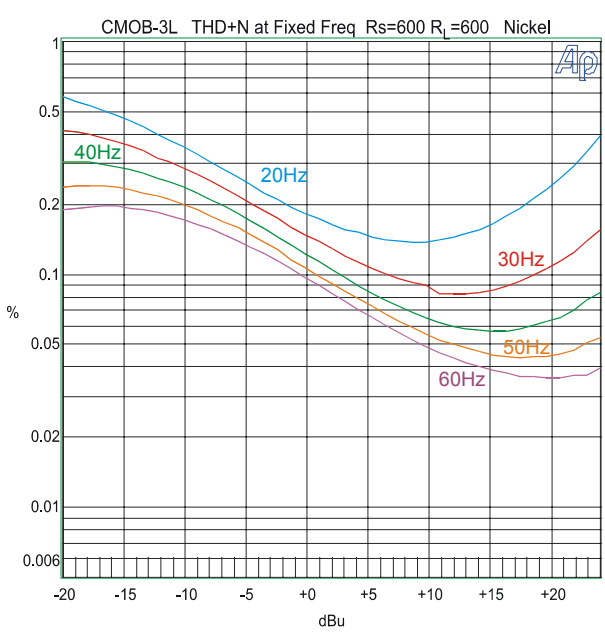
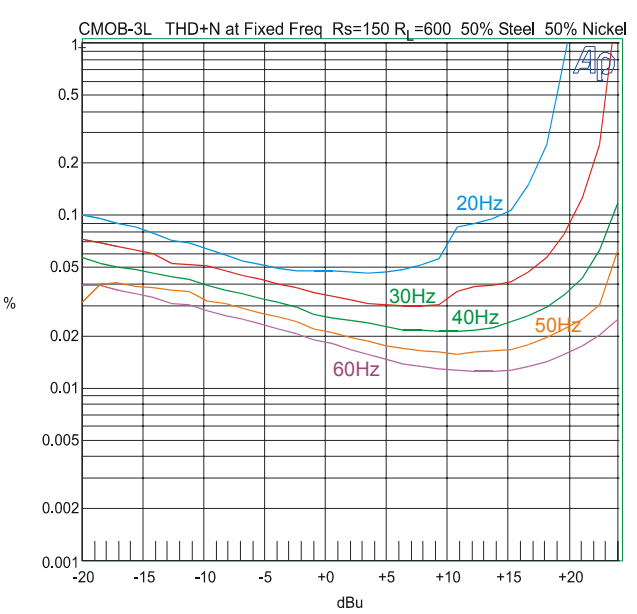
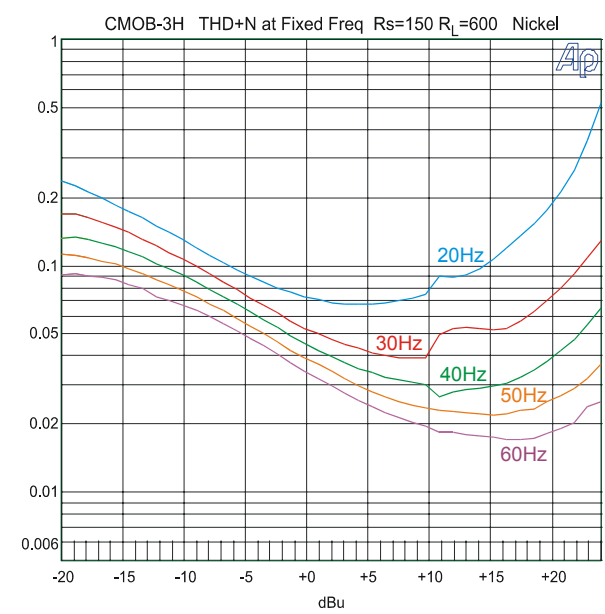
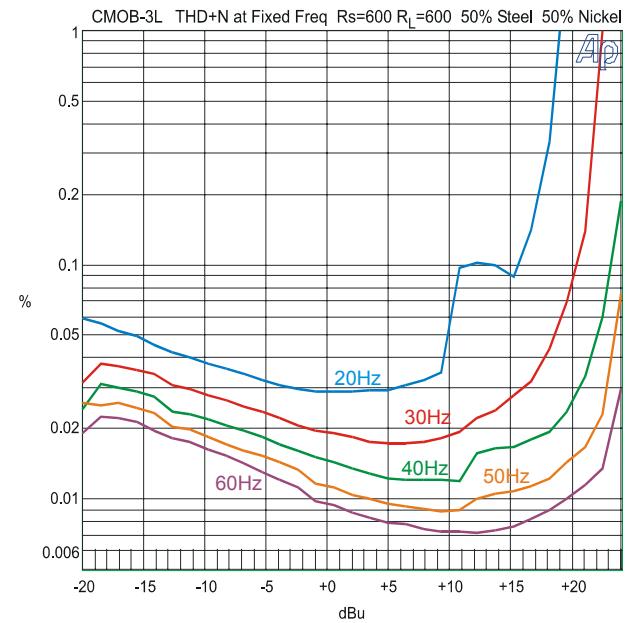
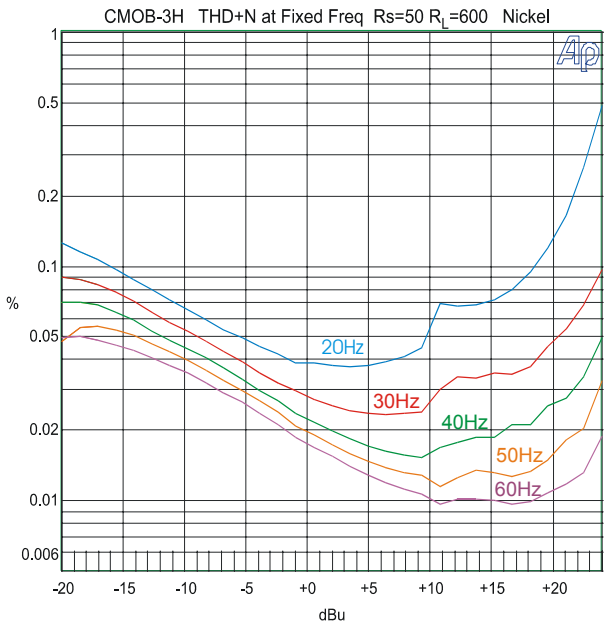
### CMOB-3H / CMOB-3L / CMOB-3S

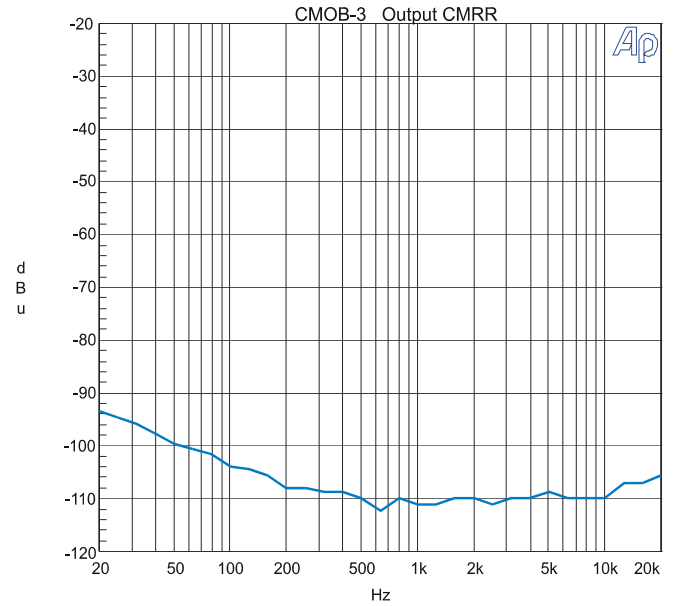
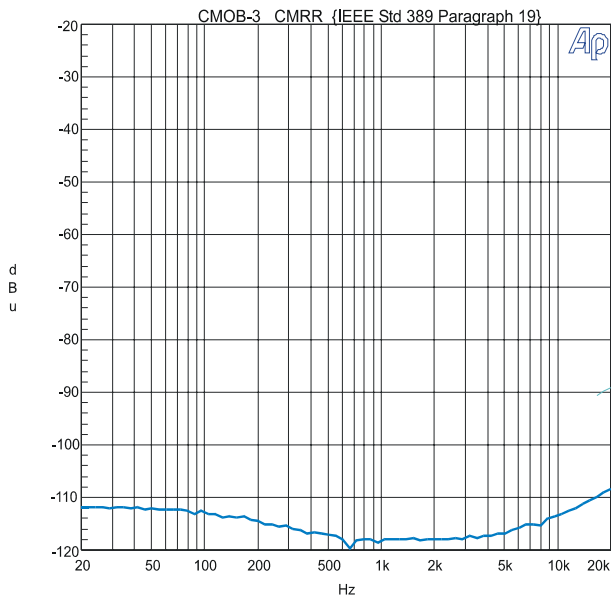
Parameter	Conditions	Typ
Turns Ratio		1 : 1.00
Input Impedance, Zi	20 Hz to 20 kHz, 0 dBu Test Circuit 3	637Ω
Voltage Gain	1 kHz HiNi Core, Rs=150 1 kHz 50% Nickel/50% Steel Core, Rs=150	-2.82 dB -2.83dB
Distortion (THD+N%)	1 kHz, +4 dBu, Rs=150 HiNi Test Circuit 1 1 kHz, +4 dBu, Rs=150 50%Ni/50% Steel	0.0004% 0.0013%
Max 20 Hz input level	1.0% THD+N, Rs≤150 HiNi Test Circuit 1 1.0% THD+N, Rs≤150 50% Ni 50% Steel	>+24 dB +20 dB
Response, ref 1 kHz	20 Hz Rs=150Ω 50%Ni50%Steel Test Circuit 1 20 kHz Rs=150Ω 50%Ni50%Steel Test Circuit 1 200 kHz Rs=150Ω Test Circuit 1	-0.02 dB +0.01 dB -0.1 dB
Phase Shift at 20Hz Phase Shift at 20 kHz	Referenced to source generator Test Circuit 1	+0.8° -0.2°
CMRR	60 Hz Test Circuit 4 per IEEE Std 389-1996 ¶19 1 kHz Test Circuit 4 per IEEE Std 389-1996 ¶19	92 dB 98dB
Output CMRR	60 Hz Test Circuit 2 1 kHz Test Circuit 2	112 dB 118 dB
Operating Temp Range	Operation and storage	0° C Min 70° C Max

4487 Ish Drive , Simi Valley, CA 93063 (818) 993-4644 cinemag@cinemag.biz <http://www.cinemag.biz>



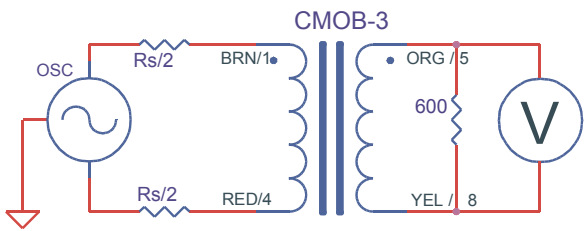




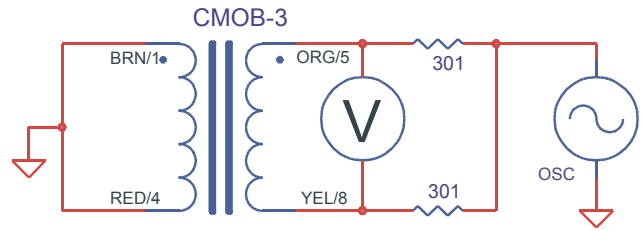


NOTES:

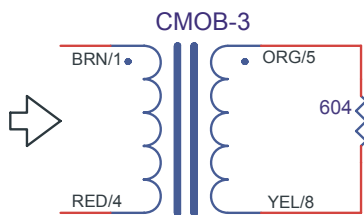
1. All graphs generated from one (1) randomly chosen device. No statistical averaging or weighting. Data from one sweep.
2.  $R_L = 604$  unless otherwise noted.



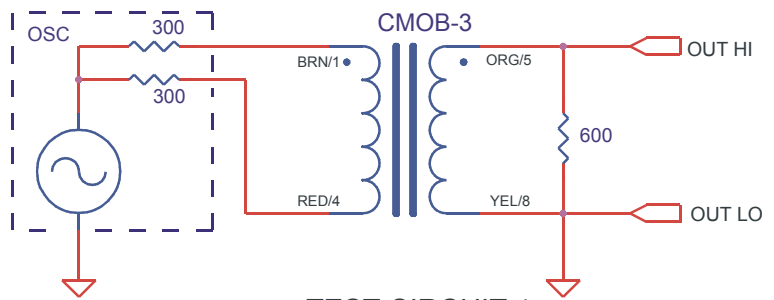
TEST CIRCUIT 1



TEST CIRCUIT 2



TEST CIRCUIT 3



TEST CIRCUIT 4

