Thiele/Small Parameters

44L7S122

Name		Unit	Comment
Re	3.86	Ohm	electrical voice coil resistance at DC
Le	4.5005	mH	frequency independent part of voice coil inductance
Krm	0.018625	Ohm	WRIGHT inductance model
Erm	0.805		WRIGHT inductance model
Kxm	0.0866	Ohm	WRIGHT inductance model
Exm	0.68		WRIGHT inductance model
Cmes	843.6725	µF	electrical capacitance representing moving mass
Lces	31.7125	mH	electrical inductance representing driver compliance
Res	69.165	Ohm	resistance due to mechanical losses
fs	30.85	Hz	driver resonance frequency
Mms	281.75825	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	263.24075	g	mechanical mass of voice coil and diaphragm without air load
Rms	4.84575	kg/s	mechanical resistance of total-driver losses
Cms	0.09475	mm/N	mechanical compliance of driver suspension
Kms	10.5875	N/mm	mechanical stiffness of driver suspension
Bl	18.2875	N/A	force factor (Bl product)
Lambda	0.0485		suspension creep factor
Loss factors			
Qtp	0.7855		total Q-factor considering all losses
Qms	11.26875		mechanical Q-factor of driver in free air considering Rms only
Qes	0.6315		electrical Q-factor of driver in free air considering Re only
Qts	0.59775		total Q-factor considering Re and Rms only
Vas	55.76585	l	equivalent air volume of suspension
n0	0.25	%	reference efficiency (2 pi-radiation using Re)
Lm	86.1675	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	86.32	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.215	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.875	%	root-mean-square fitting error of transfer function Hx (f)
Sd	645.17	cm^2	diaphragm area
Xmax	16.25	mm	