

# Thiele/Small Parameters

## 45L7R124

Re	6.885	Ohm	electrical voice coil resistance at DC
Krm	0.01415	Ohm	WRIGHT inductance model
Erm	0.885		WRIGHT inductance model
Kxm	0.08725	Ohm	WRIGHT inductance model
Exm	0.73		WRIGHT inductance model
Cmes	444.565	µF	electrical capacitance representing moving mass
Lces	63.655	mH	electrical inductance representing driver compliance
Res	98.32	Ohm	resistance due to mechanical losses
fs	29.9	Hz	driver resonance frequency
Mms	236.4885	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	217.971	g	mechanical mass of voice coil and diaphragm without air load
Rms	5.4835	kg/s	mechanical resistance of total-driver losses
Cms	0.1195	mm/N	mechanical compliance of driver suspension
Kms	8.36	N/mm	mechanical stiffness of driver suspension
Bl	23.065	Tm	force factor (Bl product)
Lambda	0.059		suspension creep factor
Qtp	0.642		total Q-factor considering all losses
Qms	8.2155		mechanical Q-factor of driver in free air considering Rms only
Qes	0.5755		electrical Q-factor of driver in free air considering Re only
Qts	0.5375		total Q-factor considering Re and Rms only
Vas	70.52065	l	equivalent air volume of suspension
n0	0.3155		reference efficiency (2 pi-radiation using Re)
Lm	87.19	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	87.84	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.41		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.435		root-mean-square fitting error of transfer function Hx (f)
Sd	645.17	cm <sup>2</sup>	diaphragm area
Xmax	13.9	mm	