

# Thiele/Small Parameters

## 43CWR102

|         |         |                 |  |
|---------|---------|-----------------|--|
| Re      | 3.745   | Ohm             | electrical voice coil resistance at DC   |
| Krm     | 0.0031  | Ohm             | WRIGHT inductance model  |
| Erm     | 0.955   |                 | WRIGHT inductance model  |
| Kxm     | 0.02755 | Ohm             | WRIGHT inductance model  |
| Exm     | 0.785   |                 | WRIGHT inductance model  |
| Cmes    | 683.365 | µF              | electrical capacitance representing moving mass                                |
| Lces    | 37.885  | mH              | electrical inductance representing driver compliance                           |
| Res     | 82.24   | Ohm             | resistance due to mechanical losses  |
| fs      | 31.25   | Hz              | driver resonance frequency   |
| Mms     | 145.829 | g               | mechanical mass of driver diaphragm assembly including air load and voice coil |
| Mmd     | 138.545 | g               | mechanical mass of voice coil and diaphragm without air load                   |
| Rms     | 2.5965  | kg/s            | mechanical resistance of total-driver losses                                   |
| Cms     | 0.1775  | mm/N            | mechanical compliance of driver suspension                                     |
| Kms     | 5.635   | N/mm            | mechanical stiffness of driver suspension                                      |
| Bl      | 14.6085 | Tm              | force factor (Bl product)  |
| Lambda  | 0.005   |                 | suspension creep factor  |
| Qtp     | 0.5395  |                 | total Q-factor considering all losses  |
| Qms     | 11.0435 |                 | mechanical Q-factor of driver in free air considering Rms only                 |
| Qes     | 0.503   |                 | electrical Q-factor of driver in free air considering Re only                  |
| Qts     | 0.4815  |                 | total Q-factor considering Re and Rms only                                     |
| Vas     | 30.1393 | l               | equivalent air volume of suspension  |
| n0      | 0.176   |                 | reference efficiency (2 pi-radiation using Re)                                 |
| Lm      | 84.66   | dB              | characteristic sound pressure level (SPL at 1m for 1W @ Re)                    |
| Ln0m    | 84.945  | dB              | nominal sensitivity (SPL at 1m for 1W @ Zn)                                    |
| rmse Z  | 3.9     |                 | root-mean-square fitting error of driver impedance Z(f)                        |
| rmse Hx | 2.285   |                 | root-mean-square fitting error of transfer function Hx (f)                     |
| Sd      | 346.36  | cm <sup>2</sup> | diaphragm area   |
| Xmax    | 14      | mm              |  |