

**Calibration Chart for
Condenser Microphone
Cartridge Type 4134**



Brüel & Kjær
Copenhagen

Serial No. *258639*

Sensitivity at 250 Hz, and with 200 V polarization voltage.

Measured at the output of a cathode-follower with input capacity 3 pF and gain -0.9 dB (B & K Cathode Follower Type 2614-2615):

0.22 mV/ μ bar + *61.7* dB re. 1 V/ μ bar
K*) = *15.7* dB

Cartridge open circuit sensitivity:

1.96 mV/ μ bar + *59.5* dB re. 1 V/ μ bar
K*) = *13.5* dB

This calibration is traceable to The National Bureau of Standards Washington D. C.

Cartridge Capacity at 1 kHz with 200 V polarization

voltage: *186* pF

*) Correction Factor, for direct sound level reading on B & K instruments adjusted to 5 mV/ μ bar = -46 dB re. 1 V/ μ bar:

Individual Frequency Response

The upper frequency response curve is valid for the Microphone Cartridge with protecting grid, mounted on Cathode Follower 2614 or 2615 and used in a diffuse sound field. The random incidence sensitivity is calculated in accordance to the IEC. recommendations.

The lower curve is the pressure response recorded with electrostatic actuator.

Conditions of Test

Temperature *22* °C

Barometric Pressure *760* mm Hg

Relative Humidity *42* %

Date *14-1-78*; Signature *F.L.*

Summarized Specifications

Outside Diameter: 0.5 inch (12.7 mm), without protecting grid.

Grid Thread (coupler mounting): 0.5 inch (12.7 mm) - 60 - NS 2.

Equivalent Air Volume at 1 atm. and 1 kHz less than 0.01 cm³.

Resonant Frequency: approx. 25 kHz (overdamped).

Temperature coefficient between -50 and +60°C. Less than ± 0.01 dB/°C.

Ambient pressure coefficient: approx. -0.1 dB for +10 % pressure change.

Relative Humidity influence: Less than 0.1 dB, in the absence of condensation.

Dynamic Range:

4 % distortion upper limit: 160 dB re. 0.0002 μ bar
Safety limit: 174 dB re. 0.0002 μ bar

