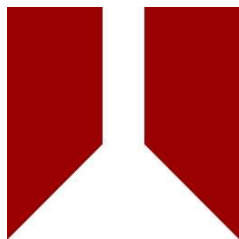


# CERTIFICATE OF CALIBRATION

ISSUED BY **Cirrus Research plc**  
DATE OF ISSUE **05 February 2024** CERTIFICATE NUMBER **208437**



**Cirrus Research plc**  
**Acoustic House**  
**Bridlington Road**  
**Hunmanby**  
**North Yorkshire**  
**YO14 0PH**  
**United Kingdom**

Page 1 of 2

Test engineer:  
D.Swalwell  
Electronically signed:

## Microphone

### Microphone capsule

Manufacturer: Cirrus Research plc

Model: MK:224

Serial Number: 218024A

### Calibration procedure

Date of calibration: 05 February 2024

Open circuit: 47.9 mV/Pa

Sensitivity at 1 kHz: -26.4 dB rel 1 V/Pa

The microphone capsule detailed above has been calibrated to the published data as described in the operating manual of the associated sound level meter (where applicable).

The frequency response was measured using an electrostatic actuator in accordance with BS EN 61094-6:2005 with the free-field response derived via standard correction data traceable to a National Measurement Institute.

The absolute sensitivity at 1 kHz was measured using an acoustic calibrator conforming to IEC 60942:2003 Class 1.

### Environmental conditions

Pressure: 100.40 kPa

Temperature: 22.0 °C

Humidity: 35.0 %

# CERTIFICATE OF CALIBRATION

Certificate Number:

208437

Page 2 of 2

## Free-Field Frequency Response : Tabular

Frequency (Hz)	Free-Field Sensitivity (dB rel 1 kHz)	Actuator Response (dB)
<b>63</b>	<b>0.11</b>	<b>-0.05</b>
80	0.13	0.08
100	0.24	0.23
<b>125</b>	<b>0.10</b>	<b>0.12</b>
160	0.10	0.14
200	0.09	0.15
<b>250</b>	<b>0.04</b>	<b>0.10</b>
315	0.08	0.11
400	0.07	0.12
<b>500</b>	<b>0.05</b>	<b>0.09</b>
630	0.05	0.09
800	0.05	0.08
<b>1 000</b>	<b>0.00</b>	<b>0.02</b>
1 250	0.01	0.00
1 600	0.02	-0.06
<b>2 000</b>	<b>0.01</b>	<b>-0.17</b>
2 500	0.03	-0.27
3 150	0.04	-0.49
<b>4 000</b>	<b>0.05</b>	<b>-0.81</b>
5 000	0.05	-1.26
6 300	0.10	-1.93
<b>8 000</b>	<b>0.18</b>	<b>-2.93</b>
10 000	0.19	-4.39
12 500	0.49	-5.98
<b>16 000</b>	<b>-0.18</b>	<b>-8.10</b>
20 000	-2.82	-11.90

## Free-Field Frequency Response : Graphical

