# Schedule of Accreditation

**issued by**

# United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

**10148**

**Accredited to ISO/IEC 17025:2017**

## Cirrus Research plc

**Issue No:** 004 **Issue date:** 07 February 2022


**Acoustic House**
**Bridlington Road**
**Hunmanby**
**YO14 0PH**

**Contact: Mr Craig Scott**
**Tel: +44 (0)1723 891655**
**E-Mail: craig.scott@cirrusresearch.com**
**Website: http://www.cirrusresearch.com**


**Calibration performed at the above address only**

Calibration and Measurement Capability (CMC)

| Measured Quantity Instrument or Gauge | Range | Expanded Measurement Uncertainty ($k$ = 2 | Remarks |
|---|---|---|---|
| **ACOUSTICS** | | | |
| **Sound Calibrators** | | | |
| Sound Pressure Level | 85 dB – 125 dB | 0.09 dB | Verification of Sound Calibrators according to IEC 60942:2003 (Withdrawn) Annex B or IEC 60942:2017 Annex B With G.R.A.S. microphone type 40AP |
| Frequency | 1000 Hz | 0.1 Hz | |
| Total Distortion | | 0.21 % | |
| **Sound Level Meters** | | | |
| Verification of Sound Level Meters | BS EN 61672-3:2006 (Withdrawn) | See remarks | Verification of Class 1 & 2 Sound Level Meters originally manufactured in accordance with IEC 61672-1:2002 (Withdrawn) and for which required correction factors are known and agreed. BS EN 61672-3:2006 (Withdrawn) |
| | BS EN 61672-3:2013 | See remarks | Verification of Class 1 & 2 Sound Level Meters originally manufactured in accordance with IEC 61672-1:2013 and for which required correction factors are known and agreed. |
| **Filters** – sound level meter based octave band filters | 16 Hz to 16 kHz<br>High<br>Mid<br>Low | <br>0.41 dB<br>0.18 dB<br>0.12 dB | Filters originally manufactured in accordance with IEC 61260:1995 (Withdrawn) (BS EN 61260:1996) (Withdrawn) or IEC 61260-3:2016 in combination with a sound level meter. |
| One-third octave band filters | 16 Hz to 16 kHz<br>High<br>Mid<br>Low | <br>0.41 dB<br>0.18 dB<br>0.12 dB | |

The Calibration Laboratory can perform withdrawn methods listed above on appropriate equipment requiring the relevant withdrawn method.

END

**10145**

**Accredited to ISO/IEC 17025:2017**

**Cirrus Research plc**

**Issue No:** 004 **Issue date:** 07 February 2022

**Calibration performed at main address only**

## Appendix - Calibration and Measurement Capabilities

**Introduction**

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

**Calibration and Measurement Capabilities (CMCs)**

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

**Expression of CMCs - symbols and units**

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand.
Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where $q$ is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: $Q[a, b] = [a^2 + b^2]^{1/2}$