



CERTIFICATE OF CALIBRATION



0653

Date of Issue: 11 July 2025

Calibrated at & Certificate issued by:
ANV Measurement Systems

Beaufort Court

17 Roebuck Way

Milton Keynes MK5 8HL

Telephone 01908 642846 Fax 01908 642814

E-Mail: info@noise-and-vibration.co.uk

Web: www.noise-and-vibration.co.uk

Acoustics Noise and Vibration Ltd trading as ANV Measurement Systems

Certificate Number: UCRT25/2030

Page 1 of 2 Pages
Approved Signatory

CUSTOMER
RBA Acoustics Ltd
44 Borough Road
London
SE1 0AJ

ORDER No REDNOR2025 **Job No** UKAS25/07533

DATE OF RECEIPT 10 July 2025

PROCEDURE Procedure TP 1 Calibration of Sound Calibrators

IDENTIFICATION Sound Calibrator Norsonic type 1251 serial number 34057 with one-inch housing and adapter type 1443 for half-inch microphone

CALIBRATED ON 11 July 2025

PREVIOUS CALIBRATION Calibrated on 14 June 2023, Certificate No. U44500 issued by a UKAS accredited calibration laboratory No. 0789

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

CERTIFICATE OF CALIBRATION

UKAS ACCREDITED CALIBRATION LABORATORY No 0653

Certificate No UCRT25/2030

Page 2 of 2 Pages

MEASUREMENTS

The sound pressure level generated by the Sound Calibrator in its half-inch configuration was measured using a B&K type 4134 microphone with the protective grid in position. The microphone sensitivity was traceable to National Standards.

RESULTS

The mean level of the calibrator output was

$$113.92 \pm 0.10 \text{ dB rel } 20 \mu\text{Pa}$$

The fundamental frequency of the sound output was $999.31 \pm 0.12 \text{ Hz}$, and its total distortion was $(0.01 \pm 0.05) \%$.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

During the measurements the laboratory environmental conditions were:

Temperature: 22.33 to 23.26 °C

Atmospheric pressure: 100.891 to 100.975 kPa

Relative humidity: 46.0 to 53.0 %

The tests carried out were as specified in Annex B of BS EN 60942:2003, but with five determinations of sound pressure level, and limited to the above level(s) & freq(s). The sound calibrator has been shown to conform to the class 1 requirements for periodic testing in Annex B of IEC 60942:2003 for the sound pressure level and frequency stated, for the environmental conditions under which the tests were performed. However, as public evidence was not available, from a testing organisation responsible for pattern approval, to demonstrate that the model of sound calibrator conformed to the requirements for pattern evaluation described in Annex A of IEC 60942:2003, no general statement or conclusion can be made about conformance of the sound calibrator to the requirements of IEC 60942:2003. However it has successfully undergone pattern evaluation to the earlier Standard IEC 942:1988

The results on this certificate only relate to the items calibrated as identified above.

Calibrator adjusted

No

END

R 2