Certificate of Calibration Issued by University of Salford (Acoustics Calibration Laboratory)

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UKAS ACCREDITED CALIBRATION LABORATORY NO. 0801

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APPROVED SIGNATORIES

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acoustic calibration laboratory

The University of Salford, Salford, Greater Manchester, M5 4WT, UK

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0161 295 3030/0161 295 3319 f 0161 295 4456 e

Certificate Number: 04455/1 Date of Issue: 26 September 2019

CALIBRATION OF A SOUND CALIBRATOR

FOR: noise.co.uk Ltd

The Hay Barn

Newnham Grounds Kings Newnham Lane

Bretford Warks CV23 0JU

FOR THE ATTENTION OF: Samantha Hargreaves

DESCRIPTION: Calibrator with housing for one inch

microphones and adaptor type 1443 for half

inch microphones.

MANUFACTURER: Norsonic

TYPE: 1251

SERIAL NUMBER: 31817

DATE OF CALIBRATION: 25/09/2019

TEST PROCEDURE: CTP06 (Laboratory Manual)

Test Engineer (initial):	CL	Name:	Claire Lomax

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MEASUREMENTS

The sound pressure level generated by the calibrator was measured using a calibrated, WS2P condenser microphone as specified in this certificate. The calibration was carried out with the calibrator in the half-inch configuration.

Five determinations of the sound pressure level, frequency and total distortion were made.

The results have been corrected to the reference pressure of 101.325 kPa using manufacturer's data.

RESULTS

Coupler configuration: Half-inch

Microphone type: GRAS 40AG

Output level (dB re 20μ Pa): $114.21 \text{ dB} \pm 0.10 \text{ dB}$

Frequency (Hz): $1000.74 \text{ Hz} \pm 0.12 \text{ Hz}$

Total Distortion (%): $<0.3\% \pm 0.32\%$

Average environmental conditions at the time of measurement were:

Pressure: $99.499 \text{ kPa} \pm 0.015 \text{ kPa}$

Temperature: $22.4 \,^{\circ}\text{C} \pm 0.4 \,^{\circ}\text{C}$ Relative humidity: $62.3 \,\% \pm 2.4 \,\%$

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.

All measurement results are retained at the acoustic calibration laboratory for at least four years.

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