

CERTIFICATE OF CALIBRATION

ISSUED BY AV CALIBRATION

Date of issue 23 April 2013

Certificate N° 07104



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REF. - Job N° UKAS13/04083/01

DATE OF RECEIPT 9 April 2013

PROCEDURE AV Calibration Engineer's Handbook, Section 2

IDENTIFICATION Sound calibrator Rion type NC-74 serial number 34372738, with one-inch housing and adapter type NC-74-002 for half-inch microphone.

CALIBRATED ON 15 April 2013

PREVIOUS CALIBRATION Calibrated on 27 April 2012
Certificate N° 06490 issued by this laboratory

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to recognised national standards, and to units of measurement realised at the National Physical Laboratory or other recognised national standards laboratories.

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UKAS ACCREDITED CALIBRATION LABORATORY No 0653

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MEASUREMENTS

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

RESULTS

The mean level of the calibrator output, corrected to the standard atmospheric pressure of 101.3 kPa using manufacturers' data, was

$$94.11 \pm 0.12 \text{ dB rel } 20 \mu\text{Pa}$$

The fundamental frequency of the sound output was 1002 Hz \pm 0.06%, and its total distortion was (1.32 \pm 0.1) %.

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

During the measurements the laboratory environmental conditions were:

temperature: 23 to 24 °C
barometric pressure: 101.0 to 101.1 kPa
relative humidity 35 to 46 %.